

SPEEDTOUCH 610

CLI Reference Guide

Business DSL Routers



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About this Document

Welcome to the **SpeedTouch™ 610 Command Line Interface (CLI) Reference Guide !**

For the Service Provider this Reference Guide aims to give a concise and practical document for creating a customized configuration profile file, based on the SpeedTouch™ 610 CLI command set, to be used by the end-user to configure the SpeedTouch™ 610 and PC(s).

For the fastidious user this Reference Guide aims to give a handbook for advanced and detailed configuration and troubleshooting of the SpeedTouch™ 610 via its character based Command Line Interface.

This CLI Reference Guide covers the CLI commands of the following Alcatel DSL Speed Touch products:

- ▶ **Alcatel SpeedTouch™ 610**
- ▶ **Alcatel SpeedTouch™ 610i**
- ▶ **Alcatel SpeedTouch™ 610s**
- ▶ **Alcatel SpeedTouch™ 610v**

The Reference Guide consists of three main parts:

- ▶ **Part 1 : CLI Navigation**

This part is meant to make the user familiar with the use and operation of the SpeedTouch™ 610 CLI. In brief some general manipulations are described to navigate through and to perform some operations on the CLI.

- ▶ **Part 2 : CLI Command Description**

This part forms the main part of this Reference Guide. Here all available CLI commands of the SpeedTouch™ 610 are alphabetically described per command group.

Each command is described in a systematic manner:

- The full name of the CLI command (including the group selection)
- A short description of the CLI command, if needed completed by a description of the possible impact on the user and/or the SpeedTouch™ 610
- The syntax of the command with a description of each parameter
- An example to demonstrate the use of the CLI command
- A list of related CLI commands.

- ▶ **Part 3 : CLI Command Index**

This part allows the user to look up a command alphabetically in its incomplete form.

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► **Updates**

Due to the continuous evolution of the Alcatel DSL technology, existing products are regularly upgraded. Alcatel documentation changes accordingly.

For more information on the newest technological changes and documents, please consult the Alcatel web site at following URL:

<http://www.speedtouch.com>

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SpeedTouch™ 610

CLI Navigation

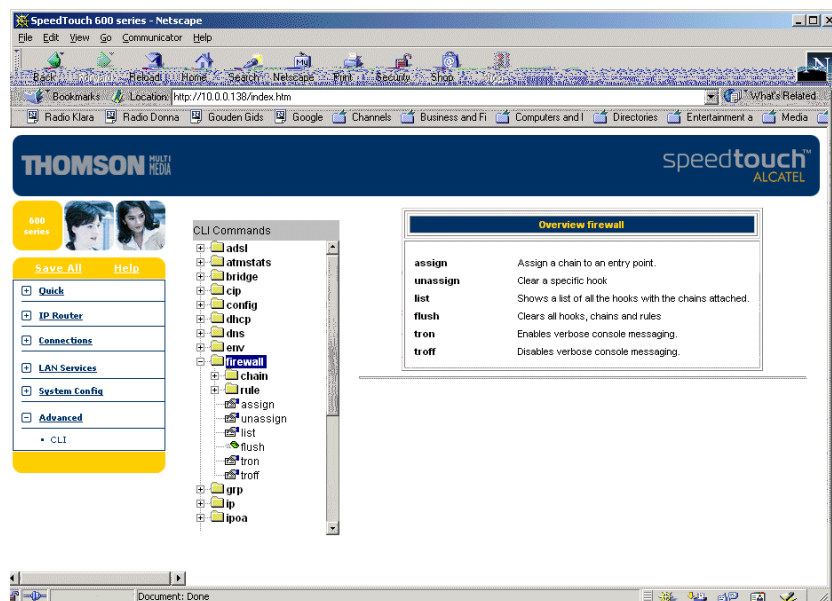
Accessing the Command Line Interface


Users can access the Command Line Interface via:


- ▶ The SpeedTouch™ 610 CLI web pages
This requires that TCP/IP connectivity exists between the host from which the web browser is opened and the SpeedTouch™ 610
- ▶ A Telnet session
This requires that TCP/IP connectivity exists between the host from which the Telnet session is opened and the SpeedTouch™ 610
- ▶ The serial 'Console' interface.


Access via the Web Pages

The SpeedTouch™ 610 CLI is accessible via its web interface. Browse to the SpeedTouch™ 610 web pages and click *Advanced – CLI* in the left frame. As a result the CLI web menu is opened:



All CLI groups and commands are placed in a menu. You can open a group by clicking the  mark next to a group name, or clicking the group name.

Clicking on a command name will execute it. Commands without parameters are indicated with  and are executed immediately.

Commands which require additional parameters are indicated with . After you configured all parameters click *Apply* to execute the command.

Access via a Telnet Session or Serial Console

As soon a session to the CLI is opened, the SpeedTouch™ 610 banner pops up, followed by the CLI prompt.

In case the SpeedTouch™ 610 is protected by a System password, authentication will be required before access is granted.

The following figure shows an example of the SpeedTouch™ 610 banner after opening a session and authentication.

EXAMPLE:

```
/home/doejohn{1}$ telnet 10.0.0.138
Trying 10.0.0.138...
Connected to 10.0.0.138.
Username :
Password : #####
-----
*
*
*                                     SpeedTouch 610
*                                     Version R4.1.1.0
*                                     Copyright (c) 1999-2002,
*                                     THOMSON multimedia
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=>
```

Basic Navigation and Manipulation

Manipulation commands are commands that manipulate operations on the command line, for example changing the command group, go to the beginning of the command line, go to the end of the command line, etc.

Command group Navigation

From top level, you can change to a command group by executing the name of the desired command group.

To obtain a list of all available command groups, execute **help** from the top level.

EXAMPLE:

```
=>help
Following commands are available :
help      : Displays this help information
menu      : Displays menu
?         : Displays this help information
exit      : Exits this shell.
..        : Exits group selection.

Following command groups are available :

adsl      atm      atmf      bridge    cip
config    dhcp      dns       env        eth
firewall  grp       ip        ipoa      ipsec
mer       nat       phonebook ppp        pptp
qosbook   shdsl    snmp      sntp      software
syslog    system   td        vdsl

=>
```

The example above shows every possible CLI command group. However:

- ▶ *ipsec* is only available on SpeedTouch™ 610 routers with the IPSEC_VPN software key enabled
- ▶ *atmf* is only available on SpeedTouch™ 610 variants equipped with an ATMF-25.6Mb/s port
- ▶ *eth* is only available on SpeedTouch™ 610 variants equipped with a single Ethernet port
- ▶ *adsl* is only available for the SpeedTouch™ 610 ADSL/POTS and SpeedTouch™ 610i ADSL/ISDN variants
- ▶ *shdsl* is only available for the SpeedTouch™ 610s SHDSL variant
- ▶ *vdsl* is only available for the SpeedTouch™ 610v VDSL variant.

To return to top level, or to descend one level (in case of nested command groups) execute ..

EXAMPLE:

```
=>phonebook
[phonebook]=>
[phonebook]=>..
=>
```

The Help Command

Execute *help* or *?* from top level to list all available command groups for the SpeedTouch™ 610.

EXAMPLE:

```
=>help
Following commands are available :
help      : Displays this help information
menu      : Displays menu
?         : Displays this help information
exit      : Exits this shell.
..        : Exits group selection.

Following command groups are available :

adsl      atmstats   bridge    cip        config
dhcp      dns          env       eth        firewall
grp       ip           ipoa     ipsec     mer
nat       phonebook   ppp      pptp      qosbook
snmp      sntp        software  stream    syslog
system    td

=>
```

You can execute the *help* or *?* command from each command group selection. This results in a list of the available commands (and nested command groups, if available) in this particular command group.

EXAMPLE:

```
=>firewall
[firewall]=>
[firewall]=>?
Following commands are available :

tron      : Enables verbose console messaging.
troff     : Disables verbose console messaging.
match     : Defines an ip packet match.
assign    : Assign a chain to an entry point.
list      : Shows a list of all the hooks with the chain attached.
flush     : Clears all hooks. If a hook is provided, that hook is cleared.

Following command groups are available :

chain     rule

[firewall]=>
```

As both *help* and *?* have the exact same functionality in the SpeedTouch™ 610 CLI, the *help* command may always be equally replaced by the *?* command.

Executing e.g. *help firewall* from top level gives the same result as executing *help* from the firewall command group selection.

EXAMPLE:

```
=>firewall help
Following commands are available :

tron          : Enables verbose console messaging.
troff         : Disables verbose console messaging.
match         : Defines an ip packet match.
assign        : Assign a chain to an entry point.
list          : Shows a list of all the hooks with the chain attached.
flush         : Clears all hooks. If a hook is provided, that hook is cleared.

Following command groups are available :

chain         rule

=>
```

Entering *help* followed by a specific command, e.g. *help firewall assign* (starting from top level) or *help assign* (executed from the the firewall command group selection) results in a description of the syntax for the command.

EXAMPLE:

```
=>help firewall assign
Assign a chain to an entry point.
Syntax : assign hook = <{input|sink|forward|source|output}> chain = <string>

parameters :
  hook = <{input|sink|forward|source|output}>
    Name of hook to assign chain to.
  chain = <string>
    Name of chain to use.

=>
```

Executing *help all* will generate the complete listing of all available CLI commands with syntax description.

Command Completion

The CLI features command completion, which means that when starting to enter a command it can be completed by pressing the TAB key.

For the completion to be successful, the part to be added must be unique. Completion works for the command groups, for the commands, for the options, but *not* for values.

For example, pressing *a* and TAB at the firewall command group selection results in the full *assign* command being completed. Entering *firewall a* and pressing the TAB key from top level gives the same result.

EXAMPLE:

```
=>firewall  
[firewall]=>"a+TAB"  
[firewall]=>assign
```

Going to the beginning or end of the Command Line

Go to the beginning of the current Command Line by pressing CTRL+A; to go to the end of the current Command Line press CTRL+E.

Breaking off Commands

You can break off a command by pressing CTRL+G. This can be useful in a situation where a user is prompted to enter a value which it does not know and wants to abort the command. Instead of being prompted over and over again for the same value, this allows to break of the command.

In the example below CTRL+G is pressed after the third prompt *chain =*. The command is broken of and the user returns to the command line prompt.

EXAMPLE:

```
[firewall]=>match  
chain =  
chain =  
chain = "CTRL+G"  
[firewall]=>
```

History of Commands

To retake previous commands press the UP ARROW key and come back to more recent commands with the DOWN ARROW key. Press ENTER to select and execute the retaken command.

EXAMPLE:

```
=>firewall
[firewall]=>list
assign hook=input chain=input
assign hook=sink chain=sink
assign hook=forward chain=forward
assign hook=source chain=source
[firewall]=> "UP ARROW"
[firewall]=>:firewall list
```

Command Line Interface Top Level Structure

The following command groups are always available:

- ▶ **atm**
- ▶ **bridge**
- ▶ **cip**
- ▶ **config**
- ▶ **dhcp**
- ▶ **dns**
- ▶ **env**
- ▶ **firewall**
- ▶ **grp**
- ▶ **ip**
- ▶ **ipoa**
- ▶ **mer**
- ▶ **nat**
- ▶ **phonebook**
- ▶ **ppp**
- ▶ **pptp**
- ▶ **qosbook**
- ▶ **snmp**
- ▶ **sntp**
- ▶ **software**
- ▶ **syslog**
- ▶ **system**
- ▶ **td**

Following command groups are optional:

- ▶ **adsl** (only applicable for the SpeedTouch™ 610 ADSL/POTS and SpeedTouch™ 610i ADSL/ISDN variants)
- ▶ **atmf** (only applicable for models equipped with an ATMF-25.6Mb/s port)
- ▶ **eth** (only applicable for models equipped with a single 10/100Base-T Ethernet port)
- ▶ **ipsec** (only applicable in case a valid IPSec software key is activated)
- ▶ **shdsl** (only applicable for the SpeedTouch™ 610s SHDSL variant)
- ▶ **vdsl** (only applicable for the SpeedTouch™ 610v VDSL variant)

Command Line Interface Commands

All CLI commands are commands that operate on, or configure, the SpeedTouch™ 610 settings.

You can execute these commands from top level, preceded by the name of the command group from which the command should be executed (e. g. *firewall list*).

You can also execute the commands from the command group itself, using the reduced form of the command (e.g. *list* at the firewall command group selection).

! in a command means 'NOT', e.g. the *[!]syn* parameter in the *firewall rule create* command.

EXAMPLE:

```
=>firewall list
assign hook=input   chain=input
assign hook=sink    chain=sink
assign hook=forward chain=forward
assign hook=source  chain=source
=>firewall
[firewall]=>list
assign hook=input   chain=input
assign hook=sink    chain=sink
assign hook=forward chain=forward
assign hook=source  chain=source
[firewall]=>
```

Instead of entering a completely built-up command with all its parameters, you can also enter just the command itself, without its parameters. After this you are prompted to complete the command with the required and the optional parameters. For the optional parameters you can simply press enter without giving a value.

The example below is the equivalent of *firewall assign hook=input chain=input*. To break of such incomplete command press CTRL+G.

EXAMPLE:

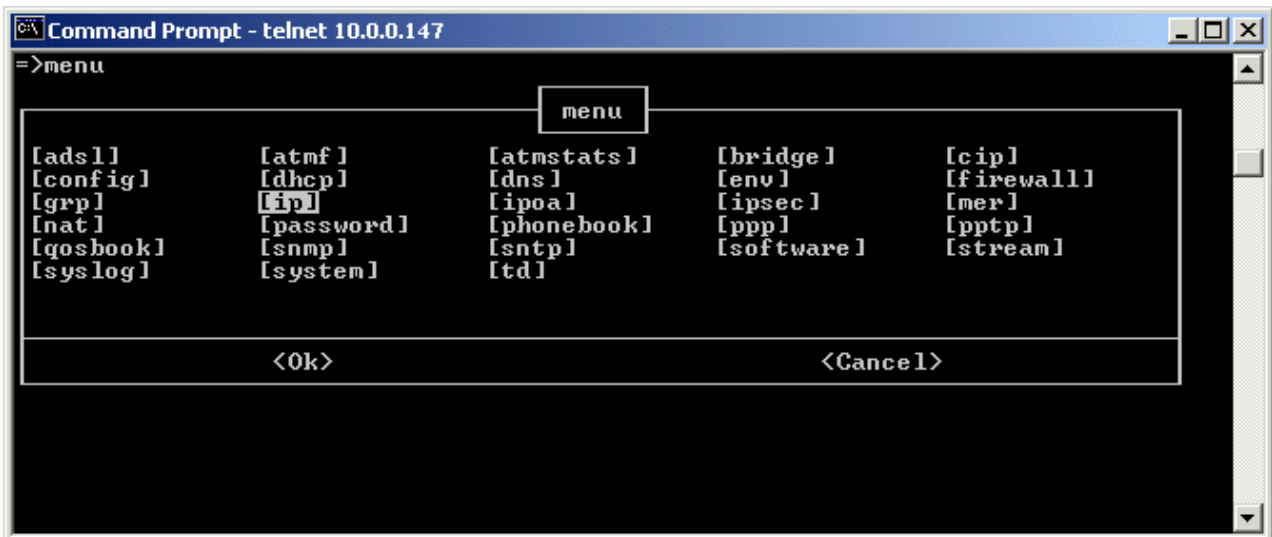
```
=>firewall assign
hook = input
chain= input
=>
```

Menu-driven CLI Navigation

To improve the user-friendliness of the SpeedTouch™ 610 CLI, the CLI features a menu-driven interface.

To enter the menu-driven interface, simply execute *menu* from the CLI prompt:

EXAMPLE:



The semi-graphical CLI offers you an attractive and easy-to-use configuration environment for the CLI.

You can browse through the CLI command groups via the ARROW keys. Pressing ENTER executes your selection. From each level you can execute '..' to go one level up.

Use the TAB key to change from the CLI command menu to the control menu and vice versa.

To setup a CLI command, simply press ENTER on its name. You can configure and overview its various parameters at one time. In case the parameter provides preset values, you can go through these via the ARROW keys.. If you are satisfied, use the TAB key to go to the OK field and press ENTER.

Note: Do not forget to save your changes by executing *saveall* (from any CLI prompt).

Configuration Profile Files and the CLI

Configuration Profile Files

The configuration profile files, used by the Setup wizard, or directly uploaded via the SpeedTouch™ 610 web pages, consist of a set of CLI commands. Only CLI commands, which are part of the SpeedTouch™ 610 CLI command set may be used in the .ini and .def files. For readability, configuration profile files are partitioned in paragraphs. These paragraphs reflect a CLI command group selection in the SpeedTouch™ 610 CLI. However, due to internal processing, not all paragraph names are the same as their corresponding CLI command group selection.

In the following overview the relationship between the available SpeedTouch™610 CLI commands and the [`<configuration>.ini`] paragraphs is given:

- ▶ [`env.ini`]
Commands present in the **env** CLI command group.
- ▶ [`snmp.ini`]
Commands present in the **snmp** CLI command group.
- ▶ [`phone.ini`]
Commands present in the **phonebook** CLI command group.
- ▶ [`qos.ini`]
Commands present in the **qosbook** CLI command group.
- ▶ [`oam.ini`]
Commands present in the **atm oam** CLI command subgroup.
- ▶ [`atmf.ini`]
Commands present in the **atmf** CLI command group.
- ▶ [`bridge.ini`]
Commands present in the **bridge** CLI command group.
- ▶ [`mer.ini`]
Commands present in the **mer** CLI command group.
- ▶ [`pptp.ini`]
Commands present in the **pptp** CLI command group.
- ▶ [`ppp.ini`]
Commands present in the **ppp** CLI command group.
- ▶ [`ipoa.ini`]
Commands present in the **cip** CLI command group.
- ▶ [`cip.ini`]
Commands present in the **cip** CLI command group.
- ▶ [`nat.ini`]
Commands present in the **nat** CLI command group.
- ▶ [`pfilter.ini`]
Commands present in the **firewall chain** CLI command subgroup and present in the **firewall rule** CLI command subgroup.

-
- ▶ **[pfirewall.ini]**
Commands present in the **firewall** CLI command group (except those part of the **firewall chain** and **firewall rule** CLI command subgroups).
 - ▶ **[brfilter.ini]**
Commands present in the hidden **brfilter** CLI command group.
 - ▶ **[ip.ini]**
Commands present in the **ip** CLI command group.
 - ▶ **[grp.ini]**
Commands present in the **grp** CLI command group (except those part of the **grp rip** CLI command subgroup).
 - ▶ **[rip.ini]**
Commands present in the **grp rip** CLI command subgroup.
 - ▶ **[dhcp.ini]**
Commands present in the **dhcp server** CLI command subgroup.
 - ▶ **[dhcc.ini]**
Commands present in the **dhcp client** CLI command subgroup.
 - ▶ **[dnssd.ini]**
All commands present in the **dns** CLI command group.
 - ▶ **[sntpc.ini]**
All commands present in the **sntp** CLI command group.
 - ▶ **[syslog.ini]**
All commands present in the **syslog** CLI command group.
 - ▶ **[ipsec.ini]**
All commands present in the **ipsec**, **ipsec cert**, **ipsec connections**, **ipsec descriptor**, and **ipsec peer** CLI command subgroups.
 - ▶ **[policy.ini]**
All commands present in the **ipsec policy** and **ipsec policy chain** CLI command subgroups.
 - ▶ **[polrules.ini]**
All commands present in the **ipsec policy rules** CLI command subgroup.
 - ▶ **[swk.ini]**
All commands present in the **software addon** CLI command subgroup.
 - ▶ **[eth.ini]**
All commands present in the **eth** CLI command group.
 - ▶ **[system.ini]**
All commands present in the **system** CLI command group.
 - ▶ **[adslpots.ini]**
All commands present in the **adsl** CLI command group in case of a ADSL/POTS variant.
 - ▶ **[adslisdn.ini]**
All commands present in the **adsl** CLI command group in case of a ADSL/ISDN variant.
 - ▶ **[shdsl.ini]**
All commands present in the **adsl** CLI command group.
 - ▶ **[vdsl.ini]**
All commands present in the **adsl** CLI command group.

CLI Commands in Configuration Profile Files

CLI commands in a paragraph of a configuration profile file should always be constructed in their complete form. Uncompleted CLI commands, i.e. commands in which required parameters are not specified, used in a configuration profile file will be discarded by the CLI command interpreter. This may result in a wrongly configured SpeedTouch™610.

In configuration profile files, the use of customization variables, allow the Setup wizard to invite the end-user to provide some input regarding the settings of the SpeedTouch™610. The declaration of such variables must be done in the `[env.ini]` paragraph. Further use of the resulting variable TAG is allowed through all other paragraphs, even multiple times.

To make sure that a variable always will result in a valid variable TAG, the `[env.ini]` paragraph also allows to declare a preset value for the variable.

In case the variable TAG is used in a CLI command, the value of the variable should always be in conformity with the syntax of the CLI command.

Customizing Configuration Profile Files

For more information on the customization possibilities of the SpeedTouch™610, the Setup wizard and the configuration profile files, please check the SpeedTouch™ support pages at:

<http://www.speedtouch.com>

Direct FTP Access

The SpeedTouch™ 610 File System

The SpeedTouch™610 permanent storage, further referred to as 'file system', exists of nonvolatile memory responsible for storing, retrieving and maintaining the SpeedTouch™610 software image(s), configuration profile files and optionally default settings files.

The file system of the SpeedTouch™610 is accessible via the FTP transport protocol. This allows to transfer the SpeedTouch™610 software image(s) and/or configuration profile files and default settings files.

Moreover, via FTP's **quote site** command you can execute CLI commands from the FTP prompt.

Proceed as indicated in the example below to open an FTP session to the SpeedTouch™610 file system:

EXAMPLE:

```
/home/doejohn{1}$ftp 10.0.0.138
Connected to 10.0.0.138
220 Inactivity timer = 120 seconds. Use 'site idle <secs>' to change.
Name (10.0.0.138:doejohn):
331 SpeedTouch (00-90-D0-01-02-03) User 'doejohn' OK. Password required.
Password : #####
330 OK
ftp>
```

SpeedTouch™ 610 File System Structure

The files system features a tiny multilevel directory structure with a single root node called 'root' and two leaf nodes called 'active' and 'dl'.

The 'root' contains next to the two subdirectories 'active' and 'dl' all necessary files for the SpeedTouch™610 to boot correctly.

The 'active' subdirectory always contains the software image in execution.

The 'dl' directory contains dormant software image. In case you have made changes to the SpeedTouch™610 configuration and saved them, be it via a Telnet session, via the web pages or via the Setup wizard, a *user.ini* configuration profile file is created in the 'dl' subdirectory.

In other words, after each 'Save all', or *config save* call, the *user.ini* configuration profile file present in the 'dl' subdirectory reflects the current configuration of the SpeedTouch™610.

SpeedTouch™ 610 File System Access Rights

Following access rights apply on the file system:

- ▶ **'root' Directory**
Listing of 'root' directory files (**dir**)
- ▶ **'active' Subdirectory**
Listing of 'active' subdirectory files (**dir**)
FTP (**m**)**get** of (multiple) 'active' subdirectory files
- ▶ **'dl' Subdirectory**
Listing of 'dl' subdirectory files (**dir**)
FTP (**m**)**get** of (multiple) 'dl' subdirectory files
FTP (**m**)**put** of (multiple) 'dl' subdirectory files
FTP (**m**)**delete** of (multiple) 'dl' subdirectory files..

FTP File Transfer

To allow correct file transfers the transfer mode must be set to "binary". Moreover, it is suggested to turn on the hashing option to be able to see how the file transfer proceeds:

EXAMPLE:

```
/home/doejohn{1}$ftp 10.0.0.138
Connected to 10.0.0.138
220 Inactivity timer = 120 seconds. Use 'site idle <secs>' to change.
Name (10.0.0.138:doejohn):
331 SpeedTouch (00-90-D0-01-02-03) User 'doejohn' OK. Password required.
Password : #####
330 OK
ftp>
ftp>bin
200 TYPE is now 8-bit binary
ftp>
ftp>hash
200Hash mark printing on (8192 bytes/hash mark).
ftp>
```

SpeedTouch™ 610

CLI Command Description

1 ADSL Commands

The `adsl` command group is only applicable to the SpeedTouch™ 610 ADSL/POTS and ADSL/ISDN variants, NOT to the SpeedTouch™ 610s, or SpeedTouch™ 610v variants.

adsl (to access the ADSL level)

adsl config

adsl info

adsl config

Show/set the Asymmetric Digital Subscriber Line (ADSL) configuration.

Although the same command for both SpeedTouch™ 610 ADSL/POTS router and SpeedTouch™ 610i ADSL/ISDN router, the command features specific parameter values per variant:

SYNTAX FOR ADSL/Plain Old Telephone Service (POTS) variants:

adsl config	[opermode = <{ansi g.dmt_annex_a g.lite multimode}>] [maxbitspertoneUS = <number{10-14}>]
--------------------	--

<i>[opermode]</i>	The SpeedTouch™ 610 physical ADSL/POTS layer's operational mode. Choose between: <ul style="list-style-type: none"> ▪ ansi ▪ g.dmt_annex_a ▪ g.lite ▪ multimode By default the SpeedTouch™ 610 will start in multimode.	OPTIONAL
<i>maxbitspertoneUS</i>	A number between 10 and 14 (bits per tone). Represents the maximum number of bits which can be allocated to each ADSL DMT tone in the upstream direction. By default the modem will use up to 13 bits per tone.	OPTIONAL

SYNTAX FOR ADSL/Integrated Services Digital Network (ISDN) variants:

adsl config	[opermode = <{etsi g.dmt_annex_b multimode}>] [maxbitspertoneUS = <number{10-14}>]
--------------------	---

<i>[opermode]</i>	The SpeedTouch™ 610i physical ADSL/ISDN layer's operational mode. Choose between: <ul style="list-style-type: none"> ▪ ansi ▪ g.dmt_annex_b ▪ multimode By default the SpeedTouch™ 610i will start in multimode.	OPTIONAL
<i>maxbitspertoneUS</i>	A number between 10 and 14 (bits per tone). Represents the maximum number of bits which hcan be allocated to each ADSL DMT tone in the upstream direction. By default the modem will use up to 13 bits per tone.	OPTIONAL

Executing the `:adsl config` without specifying parameters, show the current ADSL configuration.

adsl info

Show ADSL statistics and information about the SpeedTouch™ 610 DSL line status.

Although the same command for both SpeedTouch™ 610 ADSL/POTS router and SpeedTouch™ 610i ADSL/ISDN router, the command features specific output parameters and counters:

SYNTAX:

```
adsl info
```

EXAMPLE (for an SpeedTouch™ 610 ADSL/POTS variant):

```
=>adsl info
Modemstate           : up
Operation Mode       : G.DMT Annex A [POTS Overlay Mode]
Channel Mode         : fast
Number of resets     : 1

Vendor (ITU)
Country              :          Local          Remote
Vendor               :          ALCB          ALCB
VendorSpecific       :          0000          0000
StandardRevisionNr  :          01           01

Margin [dB]          :          Downstream  Upstream
Attenuation [dB]     :          31           31
                    :          26           15

Available Bandwidth  :          Cells/s      Kbit/s
Downstream           :          2641          1120
Upstream             :          301           128

Transfer statistics
Total since power On :          Cells      Kbit
Downstream           :          10153          4304
Upstream             :          3399          1441
Current Connection
Downstream           :          10153          4304
Upstream             :          3399          1441
Errors
Received FEC         :          0
Received CRC         :          0
Received HEC         :          0
```

.. Continued output on following page ..

.. Continued output ..

```
Far End Failure
  No Failure
Near end failure
  No failure
Far end failures since reset
  Loss of frame:      0 failures
  Loss of signal:    0 failures
  Loss of power:     0 failures
  Loss of link:      0 failures
  Errored seconds:   0 seconds
Far end failures last 15 minutes
  Loss of frame:      0 seconds
  Loss of signal:    0 seconds
  Loss of power:     0 seconds
  Loss of link:      0 seconds
  Errored seconds:   0 seconds
Far end failures current day
  Errored seconds:   0 seconds
Far end failures previous day
  Errored seconds:   0 seconds
Near end failures since reset
  Loss of frame:      0 failures
  Loss of signal:    0 failures
  Loss of power:     0 failures
  Errored seconds:   0 seconds
Near end failures last 15 minutes
  Loss of frame:      0 seconds
  Loss of signal:    0 seconds
  Loss of power:     0 seconds
  Errored seconds:   0 seconds
Near end failures current day
  Errored seconds:   0 seconds
Near end failures previous day
  Errored seconds:   0 seconds
=>
```

2 ATM Commands

atm (to access the ATM level)

atm portstats

atm oam (to access the ATM OAM level)

atm oam config

atm oam mode

atm oam status

atm portstats

Show port specific Asynchronous Transfer Mode (ATM) statistics.

SYNTAX:

atm portstats	port = <{DSL0 ATM ATMF25 ATM3 ATM4 ATM5} or number>
----------------------	--

<i>port</i>	The port to show the ATM statistics of. Choose between: <ul style="list-style-type: none">▪ DSL0▪ ATM▪ ATMF25▪ ATM3▪ ATM5 Or specify a port number.	REQUIRED
-------------	--	----------

EXAMPLE:

```
=>atm portstats port=DSL0
# of received octets = 547649.
# of transmitted octets = 191648.
# of received cells = 10333.
# of transmitted cells = 3616.
# of unknown cells = 0.
# of errors on the input = 0.
# of errors on output = 0.
=>
```


atm oam config

Configure Operation and Maintenance (OAM) cell settings.

SYNTAX:

atm oam config	clp = <number{0-1}>
<i>clp</i>	The CLP bit value of the OAM cells. Select either: <ul style="list-style-type: none">▪ 0▪ 1

REQUIRED

atm oam mode

Configure the OAM data blocking mode.

SYNTAX:

atm oam mode	port = <{DSL0 ATM ATMF25 ATM3 ATM4 ATM5} or number> blocking = <{disabled enabled}>
---------------------	--

<i>port</i>	The port to set the OAM data blocking mode of. Choose between: <ul style="list-style-type: none">▪ DSL0▪ ATM▪ ATMF25▪ ATM3▪ ATM5 Or specify a port number.	REQUIRED
<i>blocking</i>	Enable (enabled) or disable (disabled) the OAM data blocking mode on this port. By default OAM data blocking is enabled on all ports.	REQUIRED

atm oam status

Show OAM data blocking mode of all ports.

SYNTAX:

```
atm oam status
```

EXAMPLE:

```
=>atm oam status
  OAM config dump
-----
      CLP bit value : 1
OAM data blocking mode
-----
      Port DSL0   : blocking
      Port ATM    : blocking
      Port ATMF25: blocking
      Port ATM3   : blocking
      Port ATM4   : blocking
      Port ATM5   : blocking
=>
```


3 ATMF Commands

The `atmf` command group is only applicable to SpeedTouch™ 610 variants equipped with an ATM Forum (ATMF)-25.6Mb/s port.

atmf (to access the ATMF level)

atmf add

atmf ccconfig

atmf cclist

atmf ccsend

atmf config

atmf delete

atmf flush

atmf list

atmf add

Add a Virtual Path (VP) or Virtual Channel (VC) cross-connection between the ATMF-25.6Mb/s interface and the WAN interface.

SYNTAX:

atmf add	vpi = <number {0-7}> [vci = <number {0-511}>] [qos = <{default}>] [framediscard = <{disabled enabled}>]
-----------------	--

<i>vpi</i>	A number between 0 and 7. Represents the Virtual Path identifier.	REQUIRED
<i>[vci]</i>	A number between 0 and 511. Represents the Virtual Channel identifier. Use VCI=0, or do not specify for a VP cross-connection.	OPTIONAL
<i>[qos]</i>	The name of the Quality of Service (QoS) book entry to apply on this cross-connection. Use <i>qosbook list</i> for a list of available qosbook entries. By default the default qosbook is assumed.	OPTIONAL
<i>[framediscard]</i>	Enable (enabled) or disable (disabled) frame discard. By default frame discard is disabled.	OPTIONAL

RELATED COMMANDS:

atmf delete

Delete a cross-connection on the ATMF-25.6Mb/s interface.

atmf list

Show current ATMF-25.6Mb/s interface configuration.

atmf cconfig

Configure Continuity Check (CC) on a ATMF-25.6Mb/s interface cross-connection.

SYNTAX:

atmf cconfig	vpi = <number{0-7}> [vci = <number{0-511}>] [transmit = <{disabled enabled}>] [receive = <{disabled enabled}>] [auto = <{disabled enabled}>]
---------------------	---

<i>vpi</i>	A number between 0 and 7. Represents the Virtual Path identifier.	REQUIRED
<i>[vci]</i>	A number between 0 and 511. Represents the Virtual Channel identifier. Use VCI=0, or do not specify for a VP cross-connection.	OPTIONAL
<i>[transmit]</i>	Enable (enabled) or disable (disabled) transmission of CC cells. By default transmission of CC cells is disabled.	OPTIONAL
<i>[receive]</i>	Enable (enabled) or disable (disabled) loss of continuity. By default loss of continuity is disabled.	OPTIONAL
<i>[auto]</i>	Enable (enabled) or disable (disabled) remote CC activation and deactivation. By default remote CC activation/deactivation is disabled.	OPTIONAL

RELATED COMMANDS:

atmf cclist	Show current CC configuration on ATMF-25.6Mb/s interface cross-connections.
atmf ccsend	Send CC activate/deactivate to connection.

atmf cclist

Show current Continuity Check (CC) configuration of ATMF-25.6Mb/s interface cross-connections.

SYNTAX:

```
atmf cclist
```

EXAMPLE (default configuration):

```
=>atmf cclist
VPI = 0 VCI = 0 Mode = Auto
VPI = 1 VCI = 0 Mode = Auto
VPI = 2 VCI = 0 Mode = Auto
VPI = 3 VCI = 0 Mode = Auto
VPI = 4 VCI = 0 Mode = Auto
VPI = 5 VCI = 0 Mode = Auto
VPI = 6 VCI = 0 Mode = Auto
VPI = 7 VCI = 0 Mode = Auto
=>
```

RELATED COMMANDS:

atmf cconfig

Configure CC of a ATMF-25.6Mb/s interface cross-connection.

atmf ccsend

Send CC activate/deactivate to connection.

atmf ccsend

Send CC activate/deactivate request to connection on ATMF-25.6Mb/s interface cross-connection.

SYNTAX:

atmf ccsend	vpi = <number{0-7}> [vci = <number{0-511}>] [action = <{activate deactivate}>] [direction = <{source sink both}>]
--------------------	--

vpi	A number between 0 and 7. Represents the Virtual Path identifier.	REQUIRED
[vci]	A number between 0 and 511. Represents the Virtual Channel identifier. Use VCI=0, or do not specify for a VP cross-connection.	OPTIONAL
[action]	Enable (activate) or disable (deactivate) CC. By default CC is disabled.	OPTIONAL
[direction]	Indicates the direction of CC activity. Select either: <ul style="list-style-type: none"> ▪ source ▪ sink ▪ both. If not specified CC is activated/deactivated for both directions.	OPTIONAL

RELATED COMMANDS:

atmf ccconfig
atmf cclist

Configure CC of a ATMF-25.6Mb/s interface cross-connection.
Show current CC configuration on ATMF-25.6Mb/s interface cross-connections.

atmf config

Show/set the ATMF-25.6Mb/s interface configuration.

SYNTAX:

atmf config	[status = <line on>]
--------------------	-----------------------------------

<i>[status]</i>	Let the SpeedTouch™ assume that the physical link of the ATMF connection is always enabled (on) or allow to check the physical link. By default the ATMF-25.6Mb/s physical link status will be assumed always to allow physical link checking (line), in which case the SpeedTouch™ may be the source of F4/F5 AIS OAM cells.	OPTIONAL
-----------------	--	----------

EXAMPLE (default configuration):

<pre>=>atmf config ATM-Forum state = LINE =></pre>
--

atmf delete

Delete a cross-connection on the ATMF-25.6Mb/s interface.

SYNTAX:

atmf delete	vpi = <number {0-7}> [vci = <number {0-511}>]
--------------------	--

<i>vpi</i>	A number between 0 and 7. Represents the Virtual Path identifier.	REQUIRED
<i>[vci]</i>	A number between 0 and 511. Represents the Virtual Channel identifier. Use VCI=0 or do not specify to delete a VP cross-connection.	OPTIONAL

RELATED COMMANDS:

atmf add	Add a cross-connection on the ATMF-25.6Mb/s interface.
atmf list	Show current ATMF-25.6Mb/s interface configuration.

atmf flush

Flush complete ATMF-25.6Mb/s interface configuration, i.e. delete all cross-connections.

SYNTAX:

<i>atmf flush</i>

atmf list

Show all current ATMF-25.6Mb/s interface cross-connections .

SYNTAX:

```
atmf list
```

EXAMPLE (default configuration):

```
=>atmf list
VPI = 0 VCI = 0 QOS = default Framediscard = disabled
VPI = 1 VCI = 0 QOS = default Framediscard = disabled
VPI = 2 VCI = 0 QOS = default Framediscard = disabled
VPI = 3 VCI = 0 QOS = default Framediscard = disabled
VPI = 4 VCI = 0 QOS = default Framediscard = disabled
VPI = 5 VCI = 0 QOS = default Framediscard = disabled
VPI = 6 VCI = 0 QOS = default Framediscard = disabled
VPI = 7 VCI = 0 QOS = default Framediscard = disabled
=>
```

RELATED COMMANDS:

atmf add

Add an ATMF-25.6Mb/s interface cross-connection.

atmf delete

Delete a cross-connection on the ATMF-25.6Mb/s interface.

atmf flush

Delete all cross-connection on the ATMF-25.6Mb/s interface.

4 Bridge Commands

bridge (to access the Bridge level)

bridge config

bridge flush

bridge ifadd

bridge ifattach

bridge ifconfig

bridge ifdelete

bridge ifdetach

bridge iflist

bridge macadd

bridge macdelete

bridge maclist

bridge config

Show/set bridge ageing policy for dynamically learned Medium Access Control (MAC) addresses.

SYNTAX:

```
bridge config [age = <number {10 - 100000}>]
```

[age]	A number between 10 and 100000 (seconds). Represents the lifetime of a dynamically learned MAC address. By default the ageing timer is 300 seconds.	OPTIONAL
-------	---	----------

EXAMPLE:

```
=>bridge config  
Ageing : 300  
=>bridge config age=600  
=>bridge config  
Ageing : 600  
=>
```


bridge flush

Flush complete Bridging configuration.

SYNTAX:

<i>bridge flush</i>

bridge ifadd

Create a bridged Ethernet interface.

SYNTAX:

bridge ifadd	[intf = <string>] [dest = <available ETHoA phonebook entries>]
---------------------	---

[intf]	The bridged Ethernet interface name. If not specified, the destination parameter must be specified. In this case the name of the destination will double as interface name.	OPTIONAL
[dest]	The destination address for the new interface. Typically a phonebook entry. Browse through the available entries via the ARROW UP and ARROW DOWN keys.	OPTIONAL

EXAMPLE:

```
=>bridge iflist
OBC      : Internal
          Connection State: connected      Port:OBC      PortState: forwarding
          RX bytes: 75783      frames: 572
          TX bytes: 82768372  frames: 341221  dropframes: 0
eth0     : Internal
          Connection State: connected      Port:eth0     PortState: forwarding
          RX bytes: 156344216 frames: 5899238
          TX bytes: 75689      frames: 425      dropframes: 5558017
=>bridge ifadd intf=TestBridge dest=Br1
=>bridge iflist
OBC      : Internal
          Connection State: connected      Port:OBC      PortState: forwarding
          RX bytes: 75783      frames: 572
          TX bytes: 82843610  frames: 341554  dropframes: 0
eth0     : Internal
          Connection State: connected      Port:eth0     PortState: forwarding
          RX bytes: 156472129 frames: 5903256
          TX bytes: 75689      frames: 425      dropframes: 5561702
TestBridge : dest : Br1
          Retry: 10      QoS: default      Encaps: llc/snap      Fcs: off
          Connection State: not-connectedPort:(Unassigned) PortState: forwarding
=>
```

RELATED COMMANDS:

bridge ifattach	Attach a bridge interface.
bridge ifdetach	Detach a bridge interface.
bridge ifdelete	Delete a bridge interface.
bridge ifconfig	Configure a bridge interface.
bridge iflist	Show current bridge configuration.

bridge ifattach

Attach (i.e. connect) a bridged Ethernet interface.

SYNTAX:

bridge ifattach	intf = <available Bridged Ethernet interfaces>	
<i>intf</i>	The name of the interface to attach. Browse through the available entries via the ARROW UP and ARROW DOWN keys.	REQUIRED

EXAMPLE:

```
=>bridge iflist
OBC      : Internal
          Connection State: connected   Port:OBC      PortState: forwarding
          RX bytes: 75783      frames: 572
          TX bytes: 82843610   frames: 341554 dropframes: 0
eth0     : Internal
          Connection State: connected   Port:eth0    PortState: forwarding
          RX bytes: 156472129 frames: 5903256
          TX bytes: 75689      frames: 425    dropframes: 5561702
TestBridge : dest : Br1
          Retry: 10    QoS: default   Encaps: llc/snap  Fcs: off
          Connection State: not-connectedPort:(Unassigned) PortState: forwarding
=>bridge ifattach intf=TestBridge
=>bridge iflist
OBC      : Internal
          Connection State: connected   Port:OBC      PortState: forwarding
          RX bytes: 75783      frames: 572
          TX bytes: 82843610   frames: 341554 dropframes: 0
eth0     : Internal
          Connection State: connected   Port:eth0    PortState: forwarding
          RX bytes: 156472129 frames: 5903256
          TX bytes: 75689      frames: 425    dropframes: 5561702
TestBridge : dest : Br1
          Retry: 10    QoS: default   Encaps: llc/snap  Fcs: off
          Connection State: connected   Port:wan0    PortState: forwarding
          RX bytes: 75        frames: 12
          TX bytes: 30246     frames: 91    dropframes: 0
=>
```

RELATED COMMANDS:

bridge ifadd	Create a bridge interface.
bridge ifdetach	Detach a bridge interface.
bridge ifdelete	Delete a bridge interface.
bridge ifconfig	Configure a bridge interface.
bridge iflist	Show current bridge configuration.

bridge ifconfig

Configure a bridge interface.

SYNTAX:

bridge ifconfig	intf = <ifname> [dest = <available interface name>] [qos = <string>] [encaps = <{llc/snap vcmux}>] [fcs = <{off on}>] [portstate = <{disabled learning forwarding}>] [retry = <number {0-65535}>]
------------------------	--

<i>intf</i>	The name of the bridge interface to configure.	REQUIRED
<i>[dest]</i>	The destination for this interface. Typically a phonebook entry. This parameter needs only to be specified in case of an interface created without specified destination.	OPTIONAL
<i>[qos]</i>	The name of the Quality Of Service book entry to apply on this bridge interface.	OPTIONAL
<i>[encaps]</i>	The type of encapsulation to be used for this bridge interface. Choose between: <ul style="list-style-type: none"> ▪ llc/snap ▪ vcmux 	OPTIONAL
<i>[fcs]</i>	Whether or not to include the Ethernet FCS in the packet header on the WAN side. Choose between: <ul style="list-style-type: none"> ▪ off ▪ on 	OPTIONAL
<i>[portstate]</i>	The bridge portstate for this interface. Choose between: <ul style="list-style-type: none"> ▪ disabled ▪ learning ▪ forwarding 	OPTIONAL
<i>[retry]</i>	A number between 0 and 65535. Represents the number of WAN connection setup retries before giving up. By default the retry value is 10.	OPTIONAL

EXAMPLE:

```

=>bridge iflist intf=TestBridge
TestBridge : dest : Br1
             Retry: 10   QoS: default   Encaps: llc/snap   Fcs: off
             Connection State: connected   Port: wan0   PortState: forwarding
             RX bytes: 75           frames: 12
             TX bytes: 30246        frames: 91   dropframes: 0
=>bridge ifconfig intf=TestBridge encaps=vcmux retry=15
=>bridge iflist intf=TestBridge
TestBridge : dest : Br1
             Retry: 15   QoS: default   Encaps: vcmux   Fcs: off
             Connection State: connected   Port: wan0   PortState: forwarding
             RX bytes: 83           frames: 13
             TX bytes: 30740        frames: 102   dropframes: 0
=>

```

RELATED COMMANDS:

bridge ifadd	Create a bridge interface.
bridge ifattach	Attach a bridge interface.
bridge ifdetach	Detach a bridge interface.
bridge ifdelete	Delete a bridge interface.
bridge iflist	Show current bridge configuration.

bridge ifdelete

Delete a bridge interface.

bridge ifdelete	intf = <available Bridged Ethernet interfaces>
------------------------	---

<i>intf</i>	The name of the interface name to delete. Browse through the available entries via the ARROW UP and ARROW DOWN keys.	REQUIRED
-------------	---	----------

EXAMPLE:

```
=>bridge ifdelete intf=TestBridge
=>bridge iflist
OBC      : Internal
          Connection State:  connected      Port:OBC      PortState: forwarding
          RX bytes: 75783      frames: 572
          TX bytes: 82843610   frames: 341554 dropframes: 0
eth0     : Internal
          Connection State:  connected      Port:eth0     PortState: forwarding
          RX bytes: 156472129  frames: 5903256
          TX bytes: 75689      frames: 425    dropframes: 5561702
=>
```

RELATED COMMANDS:

bridge ifadd	Create a bridge interface.
bridge ifattach	Attach a bridge interface.
bridge ifconfig	Configure a bridge interface.
bridge ifdetach	Detach a bridge interface.
bridge iflist	Show current bridge configuration.

bridge ifdetach

Detach (i.e. disconnect) a bridge interface.

SYNTAX:

bridge ifdetach	intf = <available Bridged Ethernet interfaces>
------------------------	---

<i>intf</i>	The name of the bridge interface to detach. Browse through the available entries via the ARROW UP and ARROW DOWN keys.	REQUIRED
-------------	---	----------

EXAMPLE:

```
=>bridge iflist intf=TestBridge
TestBridge : dest : Br1
             Retry: 10   QoS: default   Encaps: llc/snap   Fcs: off
             Connection State: connected   Port: wan0   PortState: forwarding
             RX bytes: 75           frames: 12
             TX bytes: 30246        frames: 91       dropframes: 0
=>bridge ifattach intf=TestBridge
=>bridge iflist intf=TestBridge
TestBridge : dest : Br1
             Retry: 10   QoS: default   Encaps: llc/snap   Fcs: off
             Connection State: not-connectedPort: (Unassigned) PortState: forwarding
=>
```

RELATED COMMANDS:

bridge ifadd	Create a bridge interface.
bridge ifattach	Attach a bridge interface.
bridge ifconfig	Configure a bridge interface.
bridge ifdelete	Delete a bridge interface.
bridge iflist	Show current bridge configuration.

bridge iflist

Show the current state of all or the selected bridge interfaces.

SYNTAX:

bridge iflist	[intf = <available Bridged Ethernet interfaces>]
----------------------	---

<i>[intf]</i>	The name of the bridge interface to show the configuration of. Browse through the available entries via the ARROW UP and ARROW DOWN keys. If not specified all bridge interfaces are shown.	OPTIONAL
---------------	---	----------

EXAMPLE OUTPUT:

```

=>bridge iflist
OBC      : Internal
          Connection State: connected      Port: OBC      PortState: forwarding
          RX bytes: 75783      frames: 572
          TX bytes: 82768372   frames: 341221   dropframes: 0
eth0     : Internal
          Connection State: connected      Port: eth0     PortState: forwarding
          RX bytes: 156344216 frames: 5899238
          TX bytes: 75689      frames: 425      dropframes: 5558017
TestBridge : dest : Br1
          Retry: 15      QoS: default      Encaps: vcmux      Fcs: off
          Connection State: connected      Port: wan0     PortState: forwarding
          RX bytes: 83      frames: 13
          TX bytes: 30740   frames: 102      dropframes: 0
=>

```

DESCRIPTION:

'RX bytes' indicates the number of Received bytes, 'TX bytes' the number of Transmitted bytes. OBC is short for On Board Controller and indicates the physical bridge port.

RELATED COMMANDS:

bridge ifadd	Create a bridge interface.
bridge ifattach	Attach a created bridge interface.
bridge ifconfig	Configure a bridge interface.
bridge ifdelete	Delete a bridge interface.
bridge ifdetach	Detach a bridge interface.

bridge macadd

Add a static MAC address to the filtering database. Allows to manually add static addresses, which should normally be dynamically discovered by the bridge itself.

SYNTAX:

bridge macadd	intf = <available bridge interfaces> hwaddr = <hardware-address>
----------------------	---

<i>intf</i>	The name of the bridge interface to add the MAC address for.	REQUIRED
<i>hwaddr</i>	The MAC address of the new entry.	REQUIRED

EXAMPLE:

```
=>bridge maclist
00:90:d0:01:02:03 -- static, OBC
ff:ff:ff:ff:ff:ff -- static, OBC
01:80:c2:00:00:00 -- static, OBC
01:80:c2:00:00:01 -- static, OBC
...
01:80:c2:00:00:10 -- static, OBC
00:01:42:5f:7d:81 -- dynamic, eth0, 597 seconds
00:50:8b:31:cc:aa -- dynamic, eth0, 513 seconds
08:00:20:c1:9a:12 -- dynamic, eth0, 600 seconds
...
=>bridge macadd intf=eth0 hwaddr=00:80:9f:01:23:45
=>bridge maclist
00:90:d0:01:02:03 -- static, OBC
ff:ff:ff:ff:ff:ff -- static, OBC
01:80:c2:00:00:00 -- static, OBC
01:80:c2:00:00:01 -- static, OBC
...
01:80:c2:00:00:10 -- static, OBC
00:80:9f:01:23:45 -- permanent, OBC
00:01:42:5f:7d:81 -- dynamic, eth0, 598 seconds
00:50:8b:31:cc:aa -- dynamic, eth0, 379 seconds
08:00:20:c1:9a:12 -- dynamic, eth0, 600 seconds
00:08:c7:c3:5f:fc -- dynamic, eth0, 215 seconds
...
=>
```

RELATED COMMANDS:

bridge macdelete	Delete a MAC address entry.
bridge maclist	Show current filtering database.

bridge macdelete

Remove a MAC address from the filtering database.

SYNTAX:

```
bridge macdelete hwaddr = <hardware-address>
```

<i>hwaddr</i>	The MAC address of the entry to delete.	REQUIRED
---------------	---	----------

EXAMPLE:

```
=>bridge maclist
00:90:d0:01:02:03 -- static, OBC
ff:ff:ff:ff:ff:ff -- static, OBC
01:80:c2:00:00:00 -- static, OBC
01:80:c2:00:00:01 -- static, OBC
...
01:80:c2:00:00:10 -- static, OBC
00:80:9f:01:23:45 -- permanent, OBC
00:01:42:5f:7d:81 -- dynamic, eth0, 597 seconds
00:50:8b:31:cc:aa -- dynamic, eth0, 513 seconds
08:00:20:c1:9a:12 -- dynamic, eth0, 600 seconds
...
=>bridge macdelete hwaddr=00:80:9f:01:23:45
=>bridge maclist
00:90:d0:01:02:03 -- static, OBC
ff:ff:ff:ff:ff:ff -- static, OBC
01:80:c2:00:00:00 -- static, OBC
01:80:c2:00:00:01 -- static, OBC
...
01:80:c2:00:00:10 -- static, OBC
00:01:42:5f:7d:81 -- dynamic, eth0, 598 seconds
00:50:8b:31:cc:aa -- dynamic, eth0, 379 seconds
08:00:20:c1:9a:12 -- dynamic, eth0, 600 seconds
00:08:c7:c3:5f:fc -- dynamic, eth0, 215 seconds
...
=>
```

RELATED COMMANDS:

bridge macadd	Add a static MAC address entry.
bridge maclist	Show current filtering database.

bridge maclist

Show current MAC address filtering database.

SYNTAX:

```
bridge maclist
```

EXAMPLE:

```

=>bridge maclist
=>bridge maclist
00:90:d0:01:02:03 -- static, OBC
ff:ff:ff:ff:ff:ff -- static, OBC
01:80:c2:00:00:00 -- static, OBC
01:80:c2:00:00:01 -- static, OBC
...
01:80:c2:00:00:10 -- static, OBC
00:80:9f:24:ab:cf -- static, OBC
00:01:42:5f:7d:81 -- dynamic, eth0, 598 seconds
00:50:8b:31:cc:aa -- dynamic, eth0, 379 seconds
08:00:20:c1:9a:12 -- dynamic, eth0, 600 seconds
00:08:c7:c3:5f:fc -- dynamic, eth0, 215 seconds
08:00:20:a8:f4:34 -- dynamic, eth0, 600 seconds
08:00:20:83:b7:26 -- dynamic, eth0, 600 seconds
00:10:83:1b:13:18 -- dynamic, eth0, 599 seconds
...
=>

```

RELATED COMMANDS:

bridge macadd

Add a static MAC address entry.

bridge macdelete

Delete a MAC address entry.

5 CIP Commands

cip (to access the CIP level)

cip flush

cip ifadd

cip ifdelete

cip iflist

cip pvcadd

cip pvcdelete

cip pvclist

cip flush

Flush complete Classical IP over ATM (IPoA) configuration.

The flush command does not impact previously saved configurations.

SYNTAX:

<i>cip flush</i>

cip ifadd

Create a Classical IPoA interface at the local side of the Logical IP Subnet (LIS).

SYNTAX:

<i>cip ifadd</i>	<i>addr = <ip-address></i> <i>[netmask = <ip-mask (dotted or cidr)>]</i> <i>[uniaddr = <portspec:address[.selector]>]</i>
-------------------------	--

<i>addr</i>	The Classical IPoA interface's local IP address in the LIS.	REQUIRED
<i>netmask</i>	The LIS's subnetmask.	OPTIONAL
<i>uniaddr</i>	The UNI-address/port specification for incoming connections, e.g. 'A0:*.04': ADSL port, any address, selector 3. Only applicable in an Switched Virtual Channel (SVC) environment. In most cases the Classical IPoA LIS is built in a Permanent Virtual Channel (PVC) environment.	OPTIONAL

EXAMPLE:

```
=>cip iflist
cip1      addr = 172.16.0.5  mask = 255.255.255.0
          UNI address  = A0:*.04
          inarp_reqs_in  = 0    inarp_repl_in  = 0    inarp_inv_in  = 0
          inarp_reqs_out = 0    inarp_repl_out = 0    inarp_inv_out = 0
=>cip ifadd addr=172.16.1.1 netmask=255.255.255.0
=>cip iflist
cip1      addr = 172.16.0.5  mask = 255.255.255.0
          UNI address  = A0:*.04
          inarp_reqs_in  = 0    inarp_repl_in  = 0    inarp_inv_in  = 0
          inarp_reqs_out = 0    inarp_repl_out = 0    inarp_inv_out = 0
cip0      addr = 172.16.1.1  mask = 255.255.255.0
          UNI address  = A0:*.03
          inarp_reqs_in  = 0    inarp_repl_in  = 0    inarp_inv_in  = 0
          inarp_reqs_out = 0    inarp_repl_out = 0    inarp_inv_out = 0
=>
```

RELATED COMMANDS:

<i>cip ifdelete</i>	Delete a Classical IPoA interface.
<i>cip ifadd</i>	Show current Classical IPoA configuration.

cip ifdelete

Delete a Classical IPoA interface at the local side of the Logical IP Subnet (LIS).

SYNTAX:

<i>cip ifdelete</i>	<i>addr = <ip-address></i>
----------------------------	---

<i>addr</i>	The Classical IPoA interface's local IP address in the LIS.	REQUIRED
-------------	---	----------

EXAMPLE:

```

=>cip iflist
cip0      addr = 172.16.1.1   mask = 255.255.255.0
          UNI address   = A0:*.03
          inarp_reqs_in  = 0      inarp_repl_in  = 0      inarp_inv_in = 0
          inarp_reqs_out = 0      inarp_repl_out = 0      inarp_inv_out = 0
cip1      addr = 172.16.0.5   mask = 255.255.255.0
          UNI address   = A0:*.04
          inarp_reqs_in  = 0      inarp_repl_in  = 0      inarp_inv_in = 0
          inarp_reqs_out = 0      inarp_repl_out = 0      inarp_inv_out = 0
=>cip ifdelete addr=172.16.1.1
=>cip iflist
cip1      addr = 172.16.0.5   mask = 255.255.255.0
          UNI address   = A0:*.04
          inarp_reqs_in  = 0      inarp_repl_in  = 0      inarp_inv_in = 0
          inarp_reqs_out = 0      inarp_repl_out = 0      inarp_inv_out = 0
=>

```

RELATED COMMANDS:

<i>cip ifadd</i>	Create a Classical IPoA interface.
<i>cip iflist</i>	Show current Classical IPoA configuration.

cip iflist

Show current Classical IPoA configuration.

SYNTAX:

```
cip iflist
```

EXAMPLE OUTPUT:

```

=>cip iflist
cip0      addr = 172.16.1.1  mask = 255.255.255.0
          UNI address = A0:*.03
          inarp_reqs_in  = 0   inarp_repl_in  = 0   inarp_inv_in = 0
          inarp_reqs_out = 0   inarp_repl_out = 0   inarp_inv_out= 0
cip1      addr = 172.16.0.5  mask = 255.255.255.0
          UNI address = A0:*.04
          inarp_reqs_in  = 0   inarp_repl_in  = 0   inarp_inv_in = 0
          inarp_reqs_out = 0   inarp_repl_out = 0   inarp_inv_out= 0
=>

```

DESCRIPTION:

inarp_reqs_in/inarp_reqs_out : Incoming/outgoing inverse ARP requests

inarp_repl_in/inarp_repl_out : Incoming/outgoing inverse ARP replies

inarp_inv_in/inarp_inv_out : Incoming/outgoing invalid inverse ARP messages

EXAMPLE INPUT/OUTPUT: EVOLUTION OF ARP REQUESTS IN A NETWORKED ENVIRONMENT:

```

=>cip iflist
cip0      addr = 200.200.200.138 mask = 255.255.255.0
          UNI address = A0:*.03
          inarp_reqs_in  = 18   inarp_repl_in  = 75   inarp_inv_in = 0
          inarp_reqs_out = 18   inarp_repl_out = 75   inarp_inv_out= 0
=>cip iflist
cip0      addr = 200.200.200.138 mask = 255.255.255.0
          UNI address = A0:*.03
          inarp_reqs_in  = 22   inarp_repl_in  = 75   inarp_inv_in = 0
          inarp_reqs_out = 22   inarp_repl_out = 75   inarp_inv_out= 0
=>cip iflist
cip0      addr = 200.200.200.138 mask = 255.255.255.0
          UNI address = A0:*.03
          inarp_reqs_in  = 22   inarp_repl_in  = 76   inarp_inv_in = 0
          inarp_reqs_out = 22   inarp_repl_out = 76   inarp_inv_out= 0
=>

```

RELATED COMMANDS:

cip ifadd

Create a Classical IPoA interface.

cip ifdelete

Delete a Classical IPoA interface.

cip pvcadd

Create a PVC Address Resolution Protocol (ARP) entry for destinations which are not RFC 1577/RFC2225 compliant.

SYNTAX:

<i>cip pvcadd</i>	<i>dest = <phonebookname></i> <i>[destaddr = <ip-address>]</i> <i>[mtu = <number {273–20000}>]</i>
--------------------------	---

<i>dest</i>	The ATM address (hardware address) of the destination host. Typically a phonebook name.	REQUIRED
<i>[destaddr]</i>	The IP address of the destination host.	OPTIONAL
<i>[mtu]</i>	A number between 273 and 20000 (bytes). Represents the maximum ATM Adaption Layer 5 (AAL5) packet size for this connection. By default the mtu is 9180 bytes.	OPTIONAL

EXAMPLE:

```
=>phonebook list
Name      Type   Use  Address
Br1       bridge 1    8.35
Br2       bridge 1    8.36
Br3       bridge 1    8.37
Br4       bridge 0    8.38
RELAY_PPP1 ppp    0    8.48
RELAY_PPP2 ppp    0    8.49
RELAY_PPP3 ppp    0    8.50
RELAY_PPP4 ppp    0    8.51
PPP1      ppp    1    8.64
PPP2      ppp    1    8.65
PPP3      ppp    1    8.66
DHCP_SPOOF ppp    1    8.67
CIPPVC1   cip    0    8.80
CIPPVC2   cip    0    8.81
CIPPVC3   cip    0    8.82
CIPPVC4   cip    0    8.83
=>cip pvclist
=>cip pvcadd dest CIPPVC1 destaddr 172.16.1.2 mtu 546
=>cip pvclist
CIPPVC1      atmport = 0      vpi  = 8      vci  = 80      dest_ip = 172.16.1.2
              encaps = llc      mtu  = 546
=>
```

RELATED COMMANDS:

<i>cip pvdelete</i>	Delete a PVC ARP entry.
<i>cip pvclist</i>	Show current PVC ARP entries.

cip pvcdelete

Delete a PVC ARP entry.

SYNTAX:

<i>cip pvcdelete</i>	<i>dest = <phonebookname></i>
-----------------------------	--

<i>dest</i>	Typically a phonebook entry name. Represents the ATM address (hardware address) or name of the entry to delete.	REQUIRED
-------------	--	----------

EXAMPLE:

```
=>cip pvclist
CIPPVC1_____atmport = 0      vpi  = 8   vci  = 80   dest_ip = 172.16.1.2
                encaps  = llc   mtu   = 546
=>cip pvcdelete dest=CIPPVC1
=>cip pvclist
=>
```

RELATED COMMANDS:

<i>cip pvadd</i>	Create a PVC ARP entry.
<i>cip pvclist</i>	Show current PVC ARP entries.

cip pvclist

Show current PVC ARP entries.

SYNTAX:

```
cip pvclist
```

EXAMPLE OUTPUT:

```
=>cip pvclist
CIPPVC1      atmpport = 0      vpi = 8      vci = 80      dest_ip = 172.16.1.2
              encaps = llc      mtu = 546
=>
```

EXAMPLE INPUT/OUTPUT IN A NETWORKED ENVIRONMENT:

```
=>cip iflist
cip0          addr = 200.200.200.138      mask = 255.255.255.0
              UNI address = A0:*.03
              inarp_reqs_in = 0      inarp_repl_in = 75      inarp_inv_in = 0
              inarp_reqs_out = 0     inarp_repl_out = 75     inarp_inv_out = 0
=>cip pvclist
699          atmpport = 0      vpi = 6      vci = 99      dest_ip = 172.16.1.3
              encaps = llc      mtu = 9180
8.50        atmpport = 0      vpi = 8      vci = 50      dest_ip = 200.200.200.14
              encaps = llc      mtu = 9180
=>
```

RELATED COMMANDS:

cip pvdelete

Delete a PVC ARP entry.

cip pvadd

Create a PVC ARP entry.

6 Config Commands

config (to access the Config level)

config erase

config flush

config load

config save

config erase

Physically remove all saved configurations, i.e. the user configuration file, saved in the SpeedTouch™ permanent storage, is deleted.

SYNTAX:

config erase

RELATED COMMANDS:

config flush

Flush complete runtime configuration.

config load

Load complete saved or default configuration.

config save

Save complete runtime configuration.

config flush

Flush complete current configuration without affecting saved configurations.

This combines all flush commands: **atmf flush**, **bridge flush**, **cip flush**, **dhcp client flush**, **dhcp server flush**, **dns flush**, **env flush**, **firewall flush**, **firewall rule flush**, **grp flush**, **grp rip flush**, **ipoa flush**, **ipsec flush**, **ipsec policy flush**, **ipsec policy rule flush**, **mer flush**, **nat flush**, **phonebook flush**, **ppp flush**, **pptp flush**, **qosbook flush**, **snmp flush**, **sntp flush**, **stream flush**, **syslog flush**, **system flush** and optionally **ip flush**.

SYNTAX:

config flush	[flush_ip = <{no yes}>]
---------------------	--------------------------------------

[flush_ip]	Keep current IP configuration (yes) or not (no). Not keeping the IP settings could cause lost IP connectivity in the LAN. By default IP settings are preserved.	OPTIONAL
------------	--	----------

EXAMPLE:

```
=>ip rtlist
  Destination      Source           Gateway          Intf           Mtrc
  10.0.0.0/24      10.0.0.0/24    10.0.0.140     eth0           0
  172.16.0.5/32   0.0.0.0/0      172.16.0.5     cip1           0
  0.0.0.140/32    0.0.0.0/0      10.0.0.140     eth0           0
  127.0.0.1/32    0.0.0.0/0      127.0.0.1      loop           0
  10.0.0.0/24     0.0.0.0/0      10.0.0.140     eth0           0
  172.16.0.0/24   0.0.0.0/0      172.16.0.5     cip1           1
=>config flush flush_ip=no
=>ip rtlist
  Destination      Source           Gateway          Intf           Mtrc
  10.0.0.0/24      10.0.0.0/24    10.0.0.140     eth0           0
  10.0.0.140/32    0.0.0.0/0      10.0.0.140     eth0           0
  127.0.0.1/32    0.0.0.0/0      127.0.0.1      loop           0
  10.0.0.0/24     0.0.0.0/0      10.0.0.140     eth0           0
=>config flush flush_ip=yes

##### ALL TCP/IP CONNECTIVITY IS LOST #####
```

RELATED COMMANDS:

config erase	Physically remove all saved configurations.
config load	Load complete saved or default configuration.
config save	Save current runtime configuration.

config load

Load complete saved or default configuration. Execute **config flush** prior to **config load**.

SYNTAX:

config load	[load_ip = <{no yes}>] [defaults = <{yes no}>]
--------------------	---

<i>[load_ip]</i>	Load IP settings (yes) or not (no). Not keeping the IP settings could cause lost IP connectivity in the LAN.	OPTIONAL
------------------	---	----------

<i>[defaults]</i>	Load default configuration (yes) or saved configuration (no). Not specifying this parameter loads the saved configuration	OPTIONAL
-------------------	--	----------

EXAMPLE:

```
=>ip rtlist
  Destination      Source           Gateway          Intf    Mtrc
  10.0.0.0/24      10.0.0.0/24     10.0.0.140      eth0    0
  172.16.0.5/32   0.0.0.0/0       172.16.0.5      cip1    0
  0.0.0.140/32    0.0.0.0/0       10.0.0.140      eth0    0
  127.0.0.1/32    0.0.0.0/0       127.0.0.1       loop    0
  10.0.0.0/24     0.0.0.0/0       10.0.0.140      eth0    0
  172.16.0.0/24   0.0.0.0/0       172.16.0.5      cip1    1
=>config flush flush_ip=no
=>ip rtlist
  Destination      Source           Gateway          Intf    Mtrc
  10.0.0.0/24      10.0.0.0/24     10.0.0.140      eth0    0
  10.0.0.140/32    0.0.0.0/0       10.0.0.140      eth0    0
  127.0.0.1/32    0.0.0.0/0       127.0.0.1       loop    0
  10.0.0.0/24     0.0.0.0/0       10.0.0.140      eth0    0
=>config load load_ip=yes
=>ip rtlist
  Destination      Source           Gateway          Intf    Mtrc
  10.0.0.0/24      10.0.0.0/24     10.0.0.140      eth0    0
  10.0.0.140/32    0.0.0.0/0       10.0.0.140      eth0    0
  172.16.0.5/32   0.0.0.0/0       172.16.0.5      cip1    0
  127.0.0.1/32    0.0.0.0/0       127.0.0.1       loop    0
  10.0.0.0/24     0.0.0.0/0       10.0.0.140      eth0    0
  172.16.0.0/24   0.0.0.0/0       172.16.0.5      cip1    1
=>
```

RELATED COMMANDS:

config erase	Physically remove all saved configurations.
config flush	Flush complete runtime configuration.
config save	Save current runtime configuration.

config save

Save all existing configurations and modifications entered by the user.

The result of executing this command is a user.ini file saved in the SpeedTouch™ permanent storage. This file can be downloaded via the SpeedTouch™ web pages or via an FTP session.

SYNTAX:

```
config save
```

EXAMPLE:

```
=>config save  
=>
```

RELATED COMMANDS:

config erase

Physically remove all saved configurations.

config flush

Flush complete current configuration.

config load

Load complete saved or default configuration.

7 DHCP Commands

dhcp (to access the DHCP level)
dhcp client (to access the DHCP Client level)
dhcp client clear
dhcp client config
dhcp client flush
dhcp client ifadd
dhcp client ifattach
dhcp client ifconfig
dhcp client ifdelete
dhcp client iflist
dhcp client ifrelease
dhcp client ifrenew
dhcp client stats
dhcp server (to access the DHCP Server level)
dhcp server clear
dhcp server config
dhcp server policy
dhcp server spoof
dhcp server start
dhcp server stats
dhcp server stop

dhcp server lease (to access the server lease level)

dhcp server lease add

dhcp server lease delete

dhcp server lease flush

dhcp server lease list

dhcp server pool (to access the server pool level)

dhcp server pool add

dhcp server pool config

dhcp server pool delete

dhcp server pool flush

dhcp server pool list

dhcp client clear

Clear Dynamic Host Configuration Protocol (DHCP) client statistics.

SYNTAX:

```
dhcp client clear
```

EXAMPLE:

```
=>dhcp client stats
DHCP client statistics:
Corrupted packet recv      :          0
OFFERs  recv              :          0
ACKs  recv                 :          0
NAKs  recv                 :          0
Pure BOOTP REPLIES       :          0
Other message types       :          0
DISCOVERs sent           :         253
REQUESTs sent           :          9
DECLINEs sent             :          0
RELEASEs sent             :          0
INFORMs sent              :          0
Number of dynamic interfaces: 1
Memory usage:
Table size of dyn leases: 19,  in use: 1, free: 94 %
=>dhcp client clear
=>dhcp client stats
DHCP client statistics:
Corrupted packet recv      :          0
OFFERs  recv              :          0
ACKs  recv                 :          0
NAKs  recv                 :          0
Pure BOOTP REPLIES       :          0
Other message types       :          0
DISCOVERs sent           :          0
REQUESTs sent           :          0
DECLINEs sent             :          0
RELEASEs sent             :          0
INFORMs sent              :          0
Number of dynamic interfaces: 1
Memory usage:
Table size of dyn leases: 19,  in use: 1, free: 94 %
=>
```

RELATED COMMANDS:

dhcp client stats Show DHCP client statistics.

dhcp client config

Show/set DHCP client configuration.

SYNTAX:

dhcp client config	[trace = <{off on}>]
---------------------------	-----------------------------------

<i>[trace]</i>	Enable tracing (on) or not (off).	OPTIONAL
----------------	-----------------------------------	----------

EXAMPLE:

<pre>=>dhcp client config tracing:off =>dhcp client config trace=on =>dhcp client config tracing:on =></pre>
--

RELATED COMMANDS:

dhcp client ifconfig	Configure a DHCP lease created for a specific interface.
-----------------------------	--

dhcp client flush

Flush complete DHCP client configuration and dynamic interfaces.
The flush command does not impact previously saved configurations.

SYNTAX:

```
dhcp client flush
```

EXAMPLE:

```
=>dhcp client iflist
NewMer      : [SELECTING]
              flags= uc
              IP address   : 10.0.0.10
              HW address   : 0:90:d0:01:47:de
              DHCP server  : 255.255.255.255
              hostname     : NewLease
              req.lease time= 10800 s
              trying to get a lease for 8 min, 32 sec
              transmission of DISCOVER in 57 sec
              retransmission timeout: 64
              nbr of retransmissions: 14
Number of leases: 1
Total size of table: 19, in use: 1, free:94 %
=>dhcp client flush
=>dhcp client iflist
No dynamic interfaces defined.
=>
```

dhcp client ifadd

Create a DHCP lease for a specific interface.

SYNTAX:

dhcp client ifadd	intf = <interface name>
--------------------------	--------------------------------------

intf	The name of an existing interface, e.g. created via <i>:mer ifadd</i> .	REQUIRED
------	---	----------

EXAMPLE:

```
=>dhcp client iflist
No dynamic interfaces defined.
=>dhcp client ifadd intf=NewMer
=>dhcp client iflist
NewMer      : [INIT]
              flags= uc
              IP address   : 0.0.0.0
              HW address   : 00:90:d0:01:47:de
              DHCP server  : 255.255.255.255
Number of leases: 1
Total size of table: 19, in use: 1, free: 94 %
=>
```

RELATED COMMANDS:

dhcp client ifattach	Attach a DHCP lease to an interface.
dhcp client ifconfig	Configure a DHCP lease created for a specific interface.
dhcp client ifdelete	Delete a dynamic interface.
dhcp client iflist	Show all dynamic interfaces.

dhcp client ifattach

Attach a DHCP lease to a dynamic interface. Firstly create the interface with `:dhcp client ifadd`.

SYNTAX:

dhcp client ifattach	intf = <interface name>	
<i>intf</i>	The name of the dynamic interface.	REQUIRED

EXAMPLE:

```
=>dhcp client iflist
NewMer      : [INIT]
              flags= uc
              IP address   : 0.0.0.0
              HW address   : 00:90:d0:01:47:de
              DHCP server  : 255.255.255.255
Number of leases: 1
Total size of table: 19,  in use: 1, free:94 %
=>dhcp client ifattach intf=NewMer
=>dhcp client iflist
NewMer      : [SELECTING]
              flags= uc
              IP address   : 10.0.0.10
              HW address   : 0:90:d0:01:47:de
              DHCP server  : 255.255.255.255
              hostname    : NewLease
              req.lease time= 10800 s
              trying to get a lease for 8 min, 32 sec
              transmission of DISCOVER in 57 sec
              retransmission timeout: 64
              nbr of retransmissions: 14
Number of leases: 1
Total size of table: 19,  in use: 1, free:94 %
=>
```

RELATED COMMANDS:

dhcp client ifadd	Create a DHCP lease for a specific interface.
dhcp client ifconfig	Configure a DHCP lease created for a specific interface.
dhcp client ifrelease	Release a lease attached to a dynamic interface.
dhcp client iflist	Show all dynamic interfaces.

dhcp client ifconfig

Show/set the configuration of DHCP lease created for a specific interface.

Execute the **dhcp client ifrelease** command prior to configuring it.

SYNTAX:

dhcp client ifconfig	<pre> intf = <interface name> [clientid = <{client-id none}>] [hostname = <hostname "">] [addr = <ip-address>] [leasetime = <number>] [addrtrans = <{none pat}>] [dns = <{off on}>] [gateway = <{off on}>] [metric = <number{0-100}>] </pre>
-----------------------------	---

<i>intf</i>	The name of the dynamic interface to be configured.	REQUIRED
<i>[clientid]</i>	The client identity to be associated with the lease. Use none in case no clientid should be associated with this lease.	OPTIONAL
<i>[hostname]</i>	The host name of the client to be associated with the lease. Use "" in case no hostname should not be associated with this lease.	OPTIONAL
<i>[addr]</i>	The preferred dynamic IP address.	OPTIONAL
<i>[leasetime]</i>	A number between 0 and 1814400 (seconds). Represents the preferred time the client wants to use an address. By default the leasetime is 7200 seconds (2 hours). Specifying -1 makes the lease permanent.	OPTIONAL
<i>[addrtrans]</i>	Automatically enable address translation for this dynamic interface (pat) or not (none).	OPTIONAL
<i>[dns]</i>	Request (and accept) DNS server IP addresses (on) or not (off).	OPTIONAL
<i>[gateway]</i>	Request (and accept) gateway IP addresses (on) or not (off).	OPTIONAL
<i>[metric]</i>	A number between 10 and 100000. Represents the gateway route metric By default the gateway route metric is 1.	OPTIONAL

EXAMPLE:

```

=>dhcp client iflist
NewMer      : [INIT]
             flags= uc
             IP address   : 0.0.0.0
             HW address   : 00:90:d0:01:47:de
             DHCP server  : 255.255.255.255
Number of leases: 1
Total size of table: 19,  in use: 1, free:94 %
=>dhcp client ifconfig intf=NewMer hostname=NewLease addr=10.0.0.10 leasetime=10800
=>dhcp client iflist
NewMer      : [INIT]
             flags= uc
             IP address   : 10.0.0.10
             HW address   : 00:90:d0:01:47:de
             DHCP server  : 255.255.255.255
             hostname     : NewLease
             req.leasetime= 10800 s
Number of leases: 1
Total size of table: 19,  in use: 1, free:94 %
=>

```

RELATED COMMANDS:

dhcp client ifadd	Create a DHCP lease for a specific interface.
dhcp client ifdelete	Delete a dynamic interface.
dhcp client iflist	Show all dynamic interfaces.
dhcp client ifrelease	Release a lease attached to a dynamic interface.

dhcp client ifdelete

Delete a dynamic interface.

SYNTAX:

dhcp client ifdelete	intf = <interface name>
-----------------------------	--------------------------------------

<i>intf</i>	The name of the dynamic interface.	REQUIRED
-------------	------------------------------------	----------

EXAMPLE:

```
=>dhcp client iflist
NewMer      : [SELECTING]
              flags= uc
              IP address   : 10.0.0.10
              HW address   : 0:90:d0:01:47:de
              DHCP server  : 255.255.255.255
              hostname     : NewLease
              req.leasetime= 10800 s
              trying to get a lease for 8 min, 32 sec
              transmission of DISCOVER in 57 sec
              retransmission timeout: 64
              nbr of retransmissions: 14
Number of leases: 1
Total size of table: 19, in use: 1, free:94 %
=>dhcp client ifdelete intf NewMer
=>dhcp client iflist
No dynamic interfaces defined.
=>
```

RELATED COMMANDS:

dhcp client ifadd	Create a DHCP lease for a specific interface.
dhcp client ifattach	Attach a DHCP lease to an interface.
dhcp client ifconfig	Configure a DHCP lease created for a specific interface.
dhcp client iflist	Show all dynamic interfaces.
dhcp client ifrelease	Release a lease attached to a dynamic interface.

dhcp client iflist

Show all dynamic interfaces.

SYNTAX:

```
dhcp client iflist
```

EXAMPLE:

```

=>dhcp client iflist
NewMer      : [INIT]
             flags= uc
             IP address   : 0.0.0.0
             HW address   : 0:90:d0:01:47:de
             DHCP server  : 255.255.255.255
Number of leases: 1
Total size of table: 19,  in use: 1, free:94 %
=>

```

EXAMPLE INPUT/OUTPUT IN A NETWORKED ENVIRONMENT:

The SpeedTouch™ is configured as DHCP client on its Ethernet interface eth0.

```

=>dhcp client iflist
eth0       : [BOUND]
           flags= uc
           IP address   : 10.0.0.3
           HW address   : 00:90:d0:01:47:f1
           DHCP server  : 10.10.1.1
           lease renewal in 5 days,1 h, 26 min, 45 sec
           lease rebinding in 8 days,20 h, 34 min, 15 sec
           lease expires in 10 days,2 h, 56 min, 45 sec
Number of leases: 1
Total size of table: 18,  in use: 1, free:94 %
=>dhcp client iflist
eth0       : [BOUND]
           flags= uc
           IP address   : 10.0.0.3
           HW address   : 00:90:d0:01:47:f1
           DHCP server  : 10.10.1.1
           lease renewal in 5 days,1 h, 25 min, 27 sec
           lease rebinding in 8 days,20 h, 32 min, 57 sec
           lease expires in 10 days,2 h, 55 min, 27 sec
Number of leases: 1
Total size of table: 18,  in use: 1, free:94 %
=>

```

RELATED COMMANDS:

dhcp client ifadd

Create a DHCP lease for a specific interface.

dhcp client ifdelete

Delete a dynamic interface.

dhcp client ifrelease

Release a lease attached to a dynamic interface.

SYNTAX:

dhcp client ifrelease	intf = <interface name>	
<i>intf</i>	The name of the dynamic interface.	REQUIRED

EXAMPLE:

```
=>dhcp client iflist
NewMer      : [SELECTING]
              flags= uc
              IP address   : 10.0.0.10
              HW address   : 0:90:d0:01:47:de
              DHCP server  : 255.255.255.255
              hostname     : NewLease
              req.lease-time= 10800 s
              trying to get a lease for 8 min, 32 sec
              transmission of DISCOVER in 57 sec
              retransmission timeout: 64
              nbr of retransmissions: 14
Number of leases: 1
Total size of table: 19,  in use: 1, free:94 %
=>dhcp client ifattach intf=NewMer
=>dhcp client iflist
NewMer      : [INIT]
              flags= uc
              IP address   : 0.0.0.0
              HW address   : 00:90:d0:01:47:de
              DHCP server  : 255.255.255.255
              hostname     : NewLease
              req.lease-time= 10800 s
Number of leases: 1
Total size of table: 19,  in use: 1, free:94 %
=>
```

EXAMPLE INPUT/OUTPUT IN A NETWORKED ENVIRONMENT:

The SpeedTouch™ is configured as DHCP client on its Ethernet interface eth0.

```

=>dhcp client iflist
eth0      : [BOUND]
           flags= uc
           IP address   : 10.0.0.3
           HW address   : 00:90:d0:01:47:f1
           DHCP server  : 10.10.1.1
           lease renewal in 5 days,58 min, 48 sec
           lease rebinding in 8 days,20 h, 6 min, 18 sec
           lease expires in 10 days,2 h, 28 min, 48 sec
Number of leases: 1
Total size of table: 18, in use: 1, free:94 %
=>dhcp client stats
DHCP client statistics:
Corrupted packet recv :          0
DECLINES sent         :          0
RELEASES sent         :          0
INFORMs sent          :          0
Number of dynamic interfaces: 1
Memory usage:
Table size of dyn leases: 19, in use: 1, free:94 %
=>dhcp client ifrelease intf=eth0
=>(CTRL + Q)
=>STATE ACTIVATE !
STATE IDLE !
STATE ACTIVATE !
dhcc: intf 1 releases 10.0.0.3 to server 10.10.1.1.
dhcc: 10.0.0.3 deleted: ok.
STATE IDLE !
STATE ACTIVATE !
.....
dhcc: intf 1 in init state.
n_send() broadcast triggered; To be verified
dhcc: broadcast discover on intf 1.
=>(CTRL + S)
=>dhcp client stats
DHCP client statistics:
Corrupted packet recv :          0
DECLINES sent         :          0
RELEASES sent         :          1
INFORMs sent          :          0
Number of dynamic interfaces: 1
Memory usage:
Table size of dyn leases: 18, in use: 1, free:94 %
=>

```

RELATED COMMANDS:

dhcp client ifattach

Attach a DHCP lease to an interface.

dhcp client ifconfig

Configure a DHCP lease created for a specific interface.

dhcp client ifdelete

Delete a dynamic interface.

dhcp client ifrenew

Renew the lease of a dynamic interface.

SYNTAX:

dhcp client ifrenew	intf = <interface name>	
<i>intf</i>	The name of the dynamic interface.	REQUIRED

EXAMPLE:

```

=>dhcp client iflist
NewMer      : [BOUND]
             flags = uc
             IP address   : 10.0.0.10
             HW address   : 00:90:d0:01:47:de
             DHCP server  : 255.255.255.255
             hostname     : NewLease
             req.leasetime= 10800s
             lease renewal in 5 days,58 min, 48 sec
             lease rebinding in 8 days,20 h, 6 min, 18 sec
             lease expires in 10 days,2 h, 28 min, 48 sec
Number of leases: 1
Total size of table: 19, in use: 1, free: 94 %
=>dhcp client ifrenew intf=NewMer
=>dhcp client iflist
NewMer      : [RENEWING]
             flags = uc
             IP address   : 10.0.0.10
             HW address   : 00:90:d0:01:47:de
             DHCP server  : 255.255.255.255
             hostname     : NewLease
             req.leasetime= 10800 s
             trying to get a lease for 12 sec
             transmission of DISCOVER in 24 sec
             retransmission timeout: 64
             nbr of retransmissions: 11
Number of leases: 1
Total size of table: 19, in use: 1, free: 94 %
=>

```


EXAMPLE INPUT/OUTPUT IN A NETWORKED ENVIRONMENT:

The SpeedTouch™ is configured as DHCP client on its Ethernet interface eth0.

```

=>dhcp client stats
DHCP client statistics:
Corrupted packet recv      :          0
OFFERs  recv              :          0
ACKs  recv                 :          0
NAKs  recv                 :          0
Pure BOOTP REPLIES       :          0
Other message types       :          0
DISCOVERs sent            :          0
REQUESTs sent             :          0
DECLINEs sent             :          0
RELEASEs sent             :          1
INFORMs sent              :          0
Number of dynamic interfaces: 1
Memory usage:
Table size of dyn leases: 18,  in use: 1, free: 94 %
=>dhcp client ifrenew intf=eth0
=>dhcp client stats
DHCP client statistics:
Corrupted packet recv      :          0
OFFERs  recv              :          1
ACKs  recv                 :          1
NAKs  recv                 :          0
Pure BOOTP REPLIES       :          0
Other message types       :          0
DISCOVERs sent            :          1
REQUESTs sent             :          1
DECLINEs sent             :          0
RELEASEs sent             :          1
INFORMs sent              :          0
Number of dynamic interfaces: 1
Memory usage:
Table size of dyn leases: 19,  in use: 1, free: 94 %
=>(CTRL + Q)
.....
STATE IDLE !
STATE ACTIVATE !
dhcc: intf 1 renews lease 10.0.0.3.
dhcc: intf 1 requests 10.0.0.3 from 10.10.1.1
dhcc: 10.10.1.1 acks 10.0.0.3 to intf 1.
dhcc: lease 10.0.0.3 bound to intf 1.
STATE IDLE !
STATE ACTIVATE !
.....
=>(CTRL + S)

```

RELATED COMMANDS:

dhcp client ifadd

Create a DHCP lease for a specific interface.

dhcp client ifattach

Attach a DHCP lease to an interface.

dhcp client stats

Show DHCP client statistics.

SYNTAX:

```
dhcp client stats
```

EXAMPLE:

```
=>dhcp client stats
DHCP client statistics:
Corrupted packet recv  :          0
OFFERs  recv           :          1
ACKs  recv              :          1
NAKs  recv              :          0
Pure BOOTP REPLIES    :          0
Other message types    :          0
DISCOVERs sent        :         244
REQUESTs sent         :          9
DECLINEs sent         :          0
RELEASEs sent         :          0
INFORMs  sent         :          0
Number of dynamic interfaces: 1
Memory usage:
Table size of dyn leases: 19,  in use: 1, free: 94 %
=>
```

RELATED COMMANDS:

dhcp client clear Clear DHCP client statistics.

dhcp server clear

Clear SpeedTouch™ DHCP server statistics.

SYNTAX:

```
dhcp server clear
```

EXAMPLE:

```
=>dhcp client stats
DHCP client statistics:
Corrupted packet recv      :          0
OFFERs  recv               :         9575
ACKs  recv                  :          121
NAKs  recv                  :           0
Pure BOOTP REPLIES        :           0
Other message types        :           0
DISCOVERs sent            :         9552
REQUESTs sent            :         142
DECLINEs sent              :           0
RELEASEs sent              :           0
INFORMs sent               :           0
Number of dynamic interfaces: 1
Memory usage:
Table size of dyn leases:  19,  in use: 1, free: 94 %
=>dhcp server clear
=>dhcp client stats
DHCP client statistics:
Corrupted packet recv      :          0
OFFERs  recv               :           0
ACKs  recv                  :           0
NAKs  recv                  :           0
Pure BOOTP REPLIES        :           0
Other message types        :           0
DISCOVERs sent            :           0
REQUESTs sent            :           0
DECLINEs sent              :           0
RELEASEs sent              :           0
INFORMs sent               :           0
Number of dynamic interfaces: 1
Memory usage:
Table size of dyn leases:  19,  in use: 1, free: 94 %
=>
```

RELATED COMMANDS:

dhcp server stats Show DHCP server statistics.

dhcp server config

Show/set SpeedTouch™ DHCP server configuration settings.

SYNTAX:

dhcp server config	[autodhcp = <{off on}>] [scantime = <number>] [spoofing = <{off on}>] [trace = <{off on}>]
---------------------------	---

[autodhcp]	Allow the SpeedTouch™ to present itself as DHCP client (AutoDHCP mode) at boot time and probe for another DHCP server on the network for some time before starting its own DHCP server (yes) or immediately start the DHCP server (no).	OPTIONAL
[scantime]	A number between 0 and 1814400 (seconds). Represents the time the SpeedTouch™ scans for another DHCP server to be active in the network. By default the scantime is 20 seconds.	OPTIONAL
[spoofing]	Allow a remote DHCP server to hand out IP addresses negotiated by PPP on WAN side (yes) or not (no). DHCP spoofing is used to relay local DHCP requests to an external PPP connection having a specific IP address negotiation mechanism. DHCP replies are in turn generated by the DHCP server based on the IP address information received by the PPP link.	OPTIONAL
[trace]	Disable verbose console logging and generation of debug traces (off) or enable verbose console logging and generation of debug traces (on). By default tracing is disabled.	OPTIONAL

EXAMPLE:

```
=>dhcp server config
autodhcp: on
scantime: 20s
spoofing: off
tracing: off
=>dhcp server config scantime=30 tracing=on
=>dhcp server config
autodhcp: on
scantime: 30s
spoofing: off
tracing: on
=>
```

RELATED COMMANDS:

dhcp server stats Show current DHCP server state and statistics.

dhcp server policy

Show/set SpeedTouch™ DHCP server policy.

SYNTAX:

dhcp server policy	[verifyfirst = <off on>] [trustclient = <off on>]
---------------------------	--

<i>[verifyfirst]</i>	Probe the network for conflicting IP addresses before giving a suggested IP address to the requesting DHCP client (on) or not (off).	OPTIONAL
<i>[trustclient]</i>	Take the IP address suggested by a DHCP client into account (on) or not (off).	OPTIONAL

EXAMPLE:

```
=>dhcp server policy
Verify first:  off
Trust client:  on
=>dhcp server policy verifyfirst=on trustclient=off
=>dhcp server policy
Verify first:  on
Trust client:  off
=>
```

RELATED COMMANDS:

dhcp server stats	Show current DHCP server state and statistics.
dhcp server config	Show/set current DHCP server configuration.

dhcp server spoof

Show/set DHCP spoofing parameters. Only applicable in case of a PPP-to-DHCP Spoofing connection. (See **dhcp server config** command).

SYNTAX:

dhcp server spoof	[failtime = <number>] [errorlt = <number>] [dodlt = <number>]
--------------------------	--

<i>[failtime]</i>	<p>A number between 0 and 1814400 (seconds). Represents the time to wait for a PPP link to successfully negotiate an IP address. This parameter determines how long the SpeedTouch™ should try to set up a PPP connection before returning to normal DHCP mode, i.e. in case the PPP connection cannot be established within the time lapse determined by failtime, the SpeedTouch™ DHCP server will allocate a local private IP address to the DHCP client. By default the failtime is 4 seconds.</p>	OPTIONAL
<i>[errorlt]</i>	<p>A number between 0 and 1814400 (seconds). Represents the leasetime of the private address issued when a PPP link fails. In case the PPP link fails after failtime has elapsed, this parameter determines how long the private DHCP lease must be maintained before retrying to set up the PPP link again. By default the error lease time is 60 seconds.</p>	OPTIONAL
<i>[dodlt]</i>	<p>A number between 0 and 1814400 (seconds). Represents the leasetime of the temporary private IP address in case of a dial-on-demand PPP link. In case of a dial-on-demand PPP link, this parameter determines the interval at which the the temporary DHCP lease must be maintained before checking whether a public IP address negotiated by a triggered PPP link is available. By default the dial-on-demand lease time is 10 seconds.</p>	OPTIONAL

EXAMPLE:

```
=>dhcp server spoof failtime=8 errorlt=120 dodlt=20
=>dhcp server spoof
Failure timeout (!DoD): 8 sec
Failure lease time (!DoD): 120 sec
Temp. lease time (DoD): 20 sec
=>
```

RELATED COMMANDS:

dhcp server policy	Set DHCP server policy.
dhcp server stats	Show current DHCP server state and statistics.

dhcp server start

Start SpeedTouch™ DHCP server.

SYNTAX:

```
dhcp server start
```

EXAMPLE:

```
=>dhcp server stats
DHCP Server State:   Stopped
DHCP server statistics:
Corrupted packet recv   :           0
.....
=>dhcp server start
=>dhcp server stats
DHCP server state:    Running
DHCP server statistics:
Corrupted packet recv   :           0
.....
=>
```

RELATED COMMANDS:

dhcp server stats

Show current DHCP server state and statistics.

dhcp server stop

Stop DHCP server.

dhcp server stats

Show SpeedTouch™ DHCP server statistics.

SYNTAX:

```
dhcp server stats
```

EXAMPLE OUTPUT:

```

=>dhcp server stats
DHCP Server State:   Stopped
DHCP server statistics:
Corrupted packet recv :      0
DISCOVER             :    2451
REQUEST              :      28
DECLINE              :      0
RELEASE              :     22
INFORM               :      1
Pure BOOTP REQUESTS :      2
Other message types  :      0
OFFERs sent          :    2451
ACKs sent             :     19
NAKs sent             :      0
Lease table got full : no
Ping table got full  : no
Second dhcp server seen : no
Total size of lease table: 32, in use: 16, free: 50 %
=>

```

DESCRIPTION:

<i>DHCP server state</i>	Indicates the state of the SpeedTouch™ DHCP server.
<i>Corrupted packet recv</i>	Indicates the number of corrupted packets (not compliant to RFC2131) were received from the LAN.
<i>DISCOVER</i>	Indicates the number of DHCP server discovery packets were received from the Local Area Network (LAN). These broadcasts are sent by potential DHCP clients to locate available DHCP servers.
<i>REQUEST</i>	Indicates the number of DHCP address lease requests were received from the LAN.
<i>DECLINE</i>	Indicates the number of DHCP address lease requests that were declined.
<i>RELEASE</i>	Indicates the number of DHCP address release requests that were received from DHCP clients.
<i>INFORM</i>	Indicates the number of information requests that were received from DHCP clients.
<i>Pure BOOTP requests</i>	Indicates the number of BOOTP requests that were received from the LAN.
<i>OFFERs sent</i>	Indicates the number of IP address offers were sent in reply to DHCP requests.

<i>ACKs sent</i>	Indicates the number of ACKnowledgement replies were sent to successfully configured DHCP clients.
<i>NAKs sent</i>	Indicates the number of Not-AcKnowledge replies were sent to wrongly configured DHCP clients.
<i>Lease table got full</i>	Indicates whether the maximum number of DHCP leases is reached or not.
<i>Ping table got full</i>	Indicates whether the history list of IP address pings got full or not. These pings are sent by the SpeedTouch™ DHCP server to verify whether the IP address is already in use on the LAN or not. (dhcp server policy verifyfirst=yes)
<i>Second DHCP server</i>	Indicates whether a concurrent DHCP server was found on the LAN or not.

RELATED COMMANDS:

dhcp server clear Clear DHCP server statistics.

dhcp server stop

Stop SpeedTouch™ DHCP server.

SYNTAX:

```
dhcp server stop
```

EXAMPLE:

```
=>dhcp server stats
DHCP Server State:   Running
DHCP server statistics:
Corrupted packet recv   :           0
.....
=>dhcp server start
=>dhcp server stats
DHCP server state:    Stopped
DHCP server statistics:
Corrupted packet recv   :           0
.....
=>
```

RELATED COMMANDS:

dhcp server start

Start DHCP server.

dhcp server stats

Show current DHCP server state and statistics.

dhcp server lease add

Assign a DHCP server lease to a DHCP host in the local network.

SYNTAX:

dhcp server lease add	clientid = <client-id> pool = <string> [addr = <ip-address>] [offset = <number>] [leasetime = <number>] [hostname = <{hostname ""}>]
------------------------------	---

<i>clientid</i>	The DHCP client identification string of the booting host.	REQUIRED
<i>pool</i>	The name of the DHCP server pool from which the DHCP lease should be taken from. Use <i>dhcp server pool list</i> for a list of available DHCP server pools.	REQUIRED
<i>[addr]</i>	The favoured IP address for this DHCP host. This IP address, if specified, must be in the range of the DHCP pool specified.	OPTIONAL
<i>[offset]</i>	A number between 0 and the integer number defined by the number of available IP addresses in the DHCP server pool. Represents the IP address offset in the DHCP server pool preserved for this host. Not specifying this parameter does not preserve an IP address for the host.	OPTIONAL
<i>[leasetime]</i>	A number between 0 and 1814400 (seconds). Represents the time the host is allowed to use this address, before renewing. Specifying -1 makes the lease permanent.	OPTIONAL
<i>[hostname]</i>	The hostname to add to the local Domain Name System (DNS) table for this host. Use "" in case no hostname should not be associated with this lease.	OPTIONAL

EXAMPLE:

```
=>dhcp server lease list
Lease      Pool          TTL           State         Clientid
0 0.0.0.0   dhcp_pool_1  00:26:40     FREE          00:90:D0:12:34:56
=>dhcp server lease add clientid=01:23:55:67:89:ab pool=Local_pool leasetime=3600
=>dhcp server lease list
Lease      Pool          TTL           State         Clientid
0 0.0.0.0   dhcp_pool_1  00:26:40     FREE          00:90:D0:12:34:56
1 10.0.0.1   local_pool   00:59:22     USED          01:23:45:67:89:AB
=>
```

RELATED COMMANDS:

dhcp server lease delete	Delete a DHCP lease.
dhcp server lease flush	Delete all DHCP leases.
dhcp server lease list	Show current DHCP leases.

dhcp server lease delete

Delete a DHCP lease.

SYNTAX:

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

<i>clientid</i>	The DHCP client identification string of the DHCP lease.	REQUIRED
[<i>index</i>]	The index number of the entry to be deleted. Use <code>:dhcp server lease list</code> to see a list of the index numbers of all current DHCP leases.	OPTIONAL

EXAMPLE:

```
=>dhcp server lease list
Lease      Pool      TTL      State      Clientid
0 0.0.0.0   dhcp_pool_1  Infinite  FREE      00:90:D0:12:34:56
1 10.0.0.1   local_pool  00:22:45  USED      01:23:45:67:89:AB
=>dhcp server lease delete index=0
=>dhcp server lease list
Lease      Pool      TTL      State      Clientid
1 10.0.0.1   local_pool  00:22:12  USED      01:23:45:67:89:AB
=>
```

RELATED COMMANDS:

dhcp server lease add	Add a DHCP lease manually.
dhcp server lease flush	Delete all DHCP leases.
dhcp server lease list	Show current DHCP leases.

dhcp server lease flush

Flush complete DHCP server configuration and dynamic leases.
The flush command does not impact previously saved configurations.

SYNTAX:

```
dhcp server lease flush
```

EXAMPLE:

```
=>dhcp server lease list
Lease      Pool      TTL      State      Clientid
0 0.0.0.0   dhcp_pool_1 Infinite  FREE      00:90:D0:12:34:56
1 10.0.0.1   local_pool 00:22:45  USED      01:23:45:67:89:AB
2 10.0.0.101 local_pool 00:21:01  USED      01:23:89:AB:80:CD
3 10.0.0.132 local_pool 00:45:37  USED      09:D0:25:CE:F1:31
5 10.0.0.5   local_pool 00:21:11  USED      AB:33:A1:7C:89:DD
4 10.0.0.6   local_pool 00:59:01  USED      E3:81:9F:11:11:11
8 10.0.0.8   local_pool 00:01:00  USED      08:80:09:90:AB:DC
9 10.0.0.15  local_pool 00:00:23  USED      08:93:DA:AE:01:AF
=>dhcp server lease flush
=>dhcp server lease list
=>
```

RELATED COMMANDS:

dhcp server lease add	Add a DHCP lease manually.
dhcp server lease delete	Delete a DHCP lease.
dhcp server lease list	Show current DHCP leases.

dhcp server lease list

List current DHCP leases, indicated by their index number.

SYNTAX:

```
dhcp server lease list
```

EXAMPLE OUTPUT:

```
=>dhcp server lease list
=>dhcp server lease list
Lease      Pool      TTL      State      Clientid
0 0.0.0.0   dhcp_pool_1 Infinite  FREE      00:90:D0:12:34:56
1 10.0.0.1   local_pool 00:22:45  USED      01:23:45:67:89:AB
2 10.0.0.101 local_pool 00:21:01  USED      01:23:89:AB:80:CD
3 10.0.0.132 local_pool 00:45:37  USED      09:D0:25:CE:F1:31
5 10.0.0.5   local_pool 00:21:11  USED      AB:33:A1:7C:89:DD
4 10.0.0.6   local_pool 00:59:01  USED      E3:81:9F:11:11:11
8 10.0.0.8   local_pool 00:01:00  USED      08:80:09:90:AB:DC
9 10.0.0.15  local_pool 00:00:23  USED      08:93:DA:AE:01:AF
=>
```

RELATED COMMANDS:

dhcp server lease add	Add a DHCP lease manually.
dhcp server lease delete	Delete a DHCP lease.
dhcp server lease flush	Delete complete DHCP server configuration and dynamic leases.

dhcp server pool add

Add a DHCP server pool.

SYNTAX:

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

<i>[name]</i>	A name for the DHCP server pool. If not specified the name is "dhcp_pool_x", where x is a subsequent number.	OPTIONAL
<i>[index]</i>	A number between 0 (highest priority) and the highest number (lowest priority) found in the list of existing DHCP server pools. Represents a (higher) priority for the DHCP server pool. If not specified, the DHCP pool is given the lowest subsequent priority.	OPTIONAL

EXAMPLE:

```
=>dhcp server pool list
Pool      Start      End      State      PPP
0 dhcp_pool_1  0.0.0.0  0.0.0.0  FREE
1 My_LAN_Pool 10.0.0.1  10.0.0.254 USED
2 dhcp_pool_2  0.0.0.0  0.0.0.0  FREE
=>dhcp server pool add
=>dhcp server pool list
Pool      Start      End      State      PPP
0 dhcp_pool_1  0.0.0.0  0.0.0.0  FREE
1 My_LAN_Pool 10.0.0.1  10.0.0.254 USED
2 dhcp_pool_2  0.0.0.0  0.0.0.0  FREE
3 dhcp_pool_3  0.0.0.0  0.0.0.0  FREE
3 dhcp pool 3  0.0.0.0  0.0.0.0  FREE
=>dhcp server pool add name=POOL_EXTRA1
=>dhcp server pool list
Pool      Start      End      State      PPP
0 dhcp_pool_1  0.0.0.0  0.0.0.0  FREE
1 My_LAN_Pool 10.0.0.1  10.0.0.254 USED
2 dhcp_pool_2  0.0.0.0  0.0.0.0  FREE
3 dhcp_pool_3  0.0.0.0  0.0.0.0  FREE
4 POOL_EXTRA1 0.0.0.0  0.0.0.0  FREE
=>ppp ifconfig name=PPP_Test pool=POOL_EXTRA1
=>dhcp server pool list
Pool      Start      End      State      PPP
0 dhcp_pool_1  0.0.0.0  0.0.0.0  FREE
1 My_LAN_Pool 10.0.0.1  10.0.0.254 USED
2 dhcp_pool_2  0.0.0.0  0.0.0.0  FREE
3 dhcp_pool_3  0.0.0.0  0.0.0.0  FREE
4 POOL_EXTRA1 0.0.0.0  0.0.0.0  FREE      PPP Test
=>
```

RELATED COMMANDS:

dhcp server pool delete	Delete a DHCP pool.
dhcp server pool flush	Delete all DHCP pools.
dhcp server pool list	Show current DHCP pools.

dhcp server pool config

Configure an existing DHCP pool. Before you are able to configure the DHCP pool, you must create it via `:dhcp server pool add`.

SYNTAX:

```
dhcp server pool config  name = <string>
                          [index = <number>]
                          [poolstart = <ip-address>]
                          [poolend = <ip-address>]
                          [netmask = <ip-mask{dotted or cidr}>]
                          [gateway = <ip-address|0>]
                          [primdns = <ip-address|0>]
                          [secdns = <ip-address|0>]
                          [leasetime = <number>]
```

<code>name</code>	The name of the DHCP server pool to configure.	REQUIRED
<code>[index]</code>	A number between 0 (highest priority) and the highest number (lowest priority) found in the list of existing DHCP server pools. Represents a (higher) priority for the DHCP server pool.	OPTIONAL
<code>[poolstart]</code>	The lowest IP address in the DHCP address range to use for leasing. Default value of this parameter is 0.0.0.0 (not specified), which means that the lowest IP address of the pool will be defined by the remote server via Internet Protocol Control Protocol (IPCP) as soon as the Point-to-Point Protocol (PPP) IPCP subnetmasking connection is established.	OPTIONAL
<code>[poolend]</code>	The highest IP address in the DHCP address range to use for leasing. Default value of this parameter is 0.0.0.0 (not specified), which means that the highest IP address of the pool will be defined by the remote server via IPCP as soon as the PPP IPCP subnetmasking connection is established.	OPTIONAL
<code>[netmask]</code>	The applicable netmask for the DHCP leases.	OPTIONAL
<code>[gateway]</code>	The IP address of the default gateway for the DHCP clients. Default value of this parameter is 0 (not specified), which means that the gateway IP address will be communicated by the remote server as soon as the PPP IPCP subnetmasking connection is established or that the SpeedTouch™ acts as the LAN default gateway.	OPTIONAL
<code>[primdns]</code>	The IP address of the primary DNS server for the DHCP clients. Default value of this parameter is 0 (not specified), which means that the IP address of the DNS server will be communicated by the remote server as soon as the PPP IPCP subnetmasking connection is established or that the SpeedTouch™ acts as the LAN DNS server.	OPTIONAL

<code>[secdns]</code>	<p>The IP address of the optional secondary DNS server for DHCP clients.</p> <p>Default value of this parameter is 0 (not specified), which means that the gateway IP address will be communicated by the remote server as soon as the PPP IPCP subnetmasking connection is established.</p>	OPTIONAL
<code>[leasetime]</code>	<p>A number between 0 and 1814400 (seconds).</p> <p>Represents the time for which a client can use its dynamically allocated IP address.</p> <p>By default the leasetime is 2 hours (7200 seconds).</p> <p>Specifying <code>-1</code> makes the lease permanent.</p>	OPTIONAL

EXAMPLE:

```

=>dhcp server pool list
Pool          Start          End          State      PPP
0 LAN_Private  10.0.0.1       10.255.255.254  USED
=>dhcp server pool config name=My_Pool poolstart=192.6.11.101 poolend=192.6.11.254
  netmask=255.255.255 gateway=192.6.11.100 leasetime=21600
=>dhcp server pool list
Pool          Start          End          State      PPP
0 LAN_Private  10.0.0.1       10.255.255.254  USED
1 My Pool     192.6.11.101   192.6.11.254   USED
=>

```

RELATED COMMANDS:

dhcp server pool list Show current DHCP pools.

dhcp server pool delete

Delete a DHCP pool.

SYNTAX:

```
dhcp server pool delete name = <string>
```

<i>name</i>	The name of the DHCP server pool to delete. Use <code>:dhcp server pool list</code> to see a list of all current DHCP leases.	REQUIRED
-------------	--	----------

EXAMPLE:

```
=>dhcp server pool list
Pool      Start          End            State      PPP
0 LAN_Private 10.0.0.1       10.255.255.254 USED
1 My_Pool   192.6.11.101  10.255.255.254 USED
=>dhcp server pool delete name=My_Pool
=>dhcp server pool list
Pool      Start          End            State      PPP
0 LAN_Private 10.0.0.1       10.255.255.254 USED
=>
```

RELATED COMMANDS:

dhcp server pool add	Add a DHCP pool.
dhcp server pool flush	Delete all DHCP pools.
dhcp server pool list	Show current DHCP pools.

dhcp server pool flush

Flush all DHCP pools

The flush command does not impact previously saved configurations.

SYNTAX:

```
dhcp server flush
```

EXAMPLE:

```
=>dhcp server pool list
Pool          Start          End            State          PPP
0 dhcp_pool_1  0.0.0.0       0.0.0.0       FREE
1 My_LAN_Pool 10.0.0.1      10.0.0.254    USED
2 POOL_EXTRA2 0.0.0.0       0.0.0.0       FREE
3 dhcp_pool_2  0.0.0.0       0.0.0.0       FREE
4 dhcp_pool_3  0.0.0.0       0.0.0.0       FREE
5 POOL_EXTRA1 0.0.0.0       0.0.0.0       FREE
=>dhcp server pool flush
=>dhcp server pool list
=>
```

RELATED COMMANDS:

dhcp server pool add	Add a DHCP pool.
dhcp server pool delete	Delete a DHCP pool.
dhcp server pool list	Show current DHCP pools.

dhcp server pool list

List current DHCP leases.

SYNTAX:

```
dhcp server pool list
```

EXAMPLE:

```
=>dhcp server pool list
Pool      Start          End            State          PPP
0 dhcp_pool_1  0.0.0.0       0.0.0.0       FREE
1 My_LAN_Pool 10.0.0.1      10.0.0.254    USED
2 POOL_EXTRA2 0.0.0.0       0.0.0.0       FREE
3 dhcp_pool_2  0.0.0.0       0.0.0.0       FREE
4 dhcp_pool_3  0.0.0.0       0.0.0.0       FREE
5 POOL_EXTRA1 0.0.0.0       0.0.0.0       FREE
=>
```

RELATED COMMANDS:

dhcp server pool add	Add a DHCP pool.
dhcp server pool delete	Delete a DHCP pool.
dhcp server pool flush	Delete all DHCP pools.

8 DNS Commands

dns (to access the DNS level)

dns add

dns clear

dns clrstats

dns delete

dns domain

dns flush

dns fwdadd

dns fwddelete

dns fwdlist

dns fwdtable

dns list

dns nslookup

dns start

dns stats

dns status

dns stop

dns toutfwd

dns troff

dns tron

dns add

Add a static DNS entry for IP hosts who do not reveal their hostname in the DHCP request, or even worse, not support DHCP.

SYNTAX:

dns add	hostname = <string> [addr = <ip-address>]
----------------	--

<i>hostname</i>	The name of the IP host (without the (sub)domain name).	REQUIRED
<i>[addr]</i>	The IP address of the host (without mask). In case this parameter is not specified the hostname applies to the SpeedTouch™ itself.	OPTIONAL

EXAMPLE:

```
=>dns list
Domain: business.lan
Nr.      Hostname      IP Address
0        SpeedTouch    *.*.*.*
1        TestHost      10.0.0.140
2        HTTP_Server   10.0.0.8
Total Table Size: 73 entries
Amount used: 3 (4%)
=>dns add hostname=FTP_Server addr=10.0.0.7
=>dns list
Domain: business.lan
Nr.      Hostname      IP Address
0        SpeedTouch    *.*.*.*
1        TestHost      10.0.0.140
2        HTTP_Server   10.0.0.8
3        FTP_Server    10.0.0.7
Total Table Size: 73 entries
Amount used: 4 (5%)
=>
```

RELATED COMMANDS:

dns list	List current DNS entries.
dns delete	Delete a DNS entry.

dns clear

Delete current DNS entries.

SYNTAX:

```
dns clear
```

EXAMPLE:

```
=>dns list
Domain: business.lan
Nr.      Hostname      IP Address
0        SpeedTouch   *.*.*.*
1        TestHost     10.0.0.140
2        HTTP_Server  10.0.0.8
3        FTP_Server   10.0.0.7
Total Table Size: 73 entries
Amount used: 4 (5%)
=>dns clear
=>dns list
Domain: business.lan
Nr.      Hostname      IP Address
Total Table Size: 73 entries
Amount used: 0 (0%)
=>
```

RELATED COMMANDS:

dns list List current DNS entries.

dns clrstats

Clear DNS statistics.

SYNTAX:

```
dns clrstats
```

EXAMPLE:

```

=>dns stats
DNS Statistics:
Corrupted packets recv           :           0
Local questions resolved         :           0
Local neg answers sent           :           4
Total DNS packets fwd            :           0
External answers recv           :           0
Fwd table full, discard         :           0
Spurious answers                 :           0
Unknown query types              :           0

Total number of packets received :           4

=>dns clrstats
DNS statistics cleared.
=>dns stats
DNS Statistics:
Corrupted packets recv           :           0
Local questions resolved         :           0
Local neg answers sent           :           0
Total DNS packets fwd            :           0
External answers recv           :           0
Fwd table full, discard         :           0
Spurious answers                 :           0
Unknown query types              :           0

Total number of packets received :           0

=>

```

RELATED COMMANDS:

dns stats

Show DNS server/forwarder statistics.

dns delete

Delete a DNS entry.

SYNTAX:

dns delete	index = <number>
-------------------	-------------------------------

<i>index</i>	The index number of the entry to be deleted. Use <i>:dns list</i> to see a list of the index numbers of all current DNS entries.	REQUIRED
--------------	---	----------

EXAMPLE:

```
=>dns list
Domain: business.lan
Nr.      Hostname      IP Address
0        SpeedTouch    *.*.*.*
1        TestHost      10.0.0.140
2        HTTP_Server   10.0.0.8
3        FTP_Server    10.0.0.7
Total Table Size: 73 entries
Amount used: 4 (5%)
=>dns delete index=2
=>dns list
Domain: business.lan
Nr.      Hostname      IP Address
0        SpeedTouch    *.*.*.*
1        TestHost      10.0.0.140
3        FTP_Server    10.0.0.7
Total Table Size: 73 entries
Amount used: 3 (4%)
=>
```

RELATED COMMANDS:

dns add	Add a static DNS entry.
dns list	List current DNS entries.

dns domain

Set local DNS (sub)domain name.

SYNTAX:

dns domain	domain = <string>
-------------------	--------------------------------

<i>domain</i>	The local DNS (sub)domain name.	REQUIRED
---------------	---------------------------------	----------

EXAMPLE:

```
=>dns list
Domain: business.lan
Nr.      Hostname      IP Address
0        SpeedTouch   *.*.*.*
1        TestHost     10.0.0.140
2        HTTP_Server  10.0.0.8
3        FTP_Server   10.0.0.7
Total Table Size: 73 entries
Amount used: 4 (5%)
=>dns domain domain=office.home.lan
=>dns list
Domain: office.home.lan
Nr.      Hostname      IP Address
0        SpeedTouch   *.*.*.*
1        TestHost     10.0.0.140
2        HTTP_Server  10.0.0.8
3        FTP_Server   10.0.0.7
Total Table Size: 73 entries
Amount used: 4 (5%)
```

RELATED COMMANDS:

dns list	List current DNS entries.
-----------------	---------------------------

dns flush

Flush complete **SpeedTouch™ 610** DNS server/forwarder configuration and static entries. The flush command does not impact previously saved configurations.

SYNTAX:

```
dns flush
```

EXAMPLE:

```
=>dns list
Domain: office.home.lan
Nr.      Hostname      IP Address
4*       Z7V1D8        10.0.0.29
0        SpeedTouch    *.*.*.*
1        TestHost      10.0.0.140
2        Default       10.0.0.8
3        ftpserver     172.16.0.1
Total Table Size: 73 entries
Amount used: 5 (6%)
=>dns flush
=>dns list
Domain: lan
Nr.      Hostname      IP Address
3*       Z7V1D8        10.0.0.29
Total Table Size: 73 entries
Amount used: 1 (1%)
=>
```

dns fwdadd

Add a DNS forwarding entry. The entries in the forwarding list determine which DNS server should be used for which PC. If an identification cannot be established within the local LAN, the request is forwarded to another DNS server, on another network (Internet/LAN to LAN connection). The connection is negotiated within a PPP link.

SYNTAX:

dns fwdadd	dns = <ip-address> src = <ip-address> mask = <ip-mask (dotted or cidr)> [direct = <number>]
-------------------	--

<i>dns</i>	The IP address of the (remote) DNS server.	REQUIRED
<i>src</i>	The source IP address (pool) of the host(s) using this DNS server.	REQUIRED
<i>mask</i>	The appropriate source IP (sub)netmask.	REQUIRED
<i>[direct]</i>	Determines whether DNS replies are sent directly back to the client (1) or relayed by the SpeedTouch™ 610 DHCP server's DNS forwarder (0) in case of PPP-to-DHCP spoofing connections.	OPTIONAL

EXAMPLE:

```
=>dns fwdlist
DNS forwarding servers:
DNS      SRC          MASK          Direct
10.0.0.138  10.0.0.2      255.255.255.0  yes
=>dns fwdadd dns=10.0.0.138 src=10.0.0.3 mask=24 direct=1
Dns forwarding server added.
=>dns fwdlist
DNS forwarding servers:
DNS      SRC          MASK          Direct
10.0.0.138  10.0.0.2      255.255.255.0  yes
10.0.0.138  10.0.0.3      255.255.255.0  yes
=>
```

RELATED COMMANDS:

dns fwdelete	Delete a DNS forwarding entry.
dns fwdlist	Show current DNS forwarding entries.

dns fwdddelete

Delete a DNS forwarding entry.

SYNTAX:

dns fwdddelete	src = <ip-address> mask = <ip-mask (dotted or cidr)> [dns = <ip-address>]
-----------------------	--

<i>src</i>	The source IP address (pool) of the hosts to remove the entry for.	REQUIRED
<i>mask</i>	The source IP (sub)netmask.	REQUIRED
<i>[dns]</i>	The IP address of the (remote) DNS server (in case of multiple DNS server entries).	OPTIONAL

EXAMPLE:

```
=>dns fwdlist
DNS forwarding servers:
DNS          SRC          MASK          Direct
10.0.0.138   10.0.0.0           255.255.255.0  yes
192.6.11.150 192.6.11.0         255.255.255.0  yes
=>dns fwdddelete src=192.6.11.0 mask=24 dns=192.6.11.150
Dns forwarding server deleted.
=>dns fwdlist
DNS forwarding servers:
DNS          SRC          MASK          Direct
10.0.0.138   10.0.0.0           255.255.255.0  yes
=>
```

RELATED COMMANDS:

dns fwdadd	Add a DNS forwarding entry.
dns fwdlist	Show current DNS forwarding entries.

dns fwdlist

Show current DNS forwarding entries.

SYNTAX:

```
dns fwdlist
```

EXAMPLE OUTPUT:

```
=>dns fwdlist
DNS forwarding servers:
DNS          SRC          MASK          Direct
10.0.0.138   10.0.0.0       255.255.255.0 yes
192.6.11.150 192.6.11.0     255.255.255.0 yes
=>
```

RELATED COMMANDS:

<i>dns fwdadd</i>	Add a DNS forwarding entry.
<i>dns fwddelete</i>	Delete a DNS forwarding entry.
<i>dns fwdtable</i>	Show DNS forwarding table.

dns fwdtable

Show DNS forwarding table, i.e. list all currently unresolved DNS requests.

SYNTAX:

```
dns fwdtable
```

EXAMPLE OUTPUT:

```
=>dns fwdtable
Forwarding table:
Nr.  Ip Address      (port#):id(hex) (expiry)      dns server      tries
0    10.10.10.12     (54751):8331   (13 sec)      10.10.10.112   1
Timeout: 15 seconds
Table size: 10
amount of table used: 1 (10%)
=>
```

RELATED COMMANDS:

dns fwdlist

Show current DNS forwarding entries.

dns list

Show current DNS entries.

SYNTAX:

```
dns list
```

EXAMPLE OUTPUT:

```
=>dns list
Domain: office.home.lan
Nr.      Hostname      IP Address
4*       Z7V1D8       10.0.0.29
0        SpeedTouch   *.*.*.*
1        TestHost     10.0.0.140
2        Default      10.0.0.8
3        ftpserver    172.16.0.1
Total Table Size: 73 entries
Amount used: 5 (6%)
=>
```

EXAMPLE INPUT/OUTPUT IN A NETWORKED ENVIRONMENT:

The **SpeedTouch™ 610** is configured as DNS server.

```
=>dns list
Domain: SpeedLAN.local
Nr.      Hostname      IP Address
0        SpeedTouch   *.*.*.*
1        Server       10.10.1.1
2        Client       10.0.0.3
Total Table Size: 73 entries
Amount used: 3 (4%)
=>
```

RELATED COMMANDS:

dns add

Add a static DNS entry.

dns delete

Delete a DNS entry (via its index number).

dns nslookup

Search the hostname (via a known IP address) or the IP address (via a known hostname) of a DNS host.

SYNTAX:

dns nslookup	lookup = <string>	
<i>lookup</i>	The DNS hostname or IP address to query.	REQUIRED

EXAMPLE:

```
=>dns list
Domain: office.home.lan
Nr.      Hostname      IP Address
4*       Z7V1D8       10.0.0.29
0        SpeedTouch   *.*.*.*
1        TestHost     10.0.0.140
2        Default     10.0.0.8
3        ftpserver    172.16.0.1
Total Table Size: 73 entries
Amount used: 5 (6%)
=>dns nslookup lookup=TestHost
Name:    TestHost
Address: 10.0.0.140
=>dns nslookup lookup=10.0.0.29
Name:    Z7V1D8
Address: 10.0.0.29
=>
```

RELATED COMMANDS:

dns list List current DNS entries.

dns start

Start **SpeedTouch™ 610** DNS server/forwarder.

SYNTAX:

```
dns start
```

EXAMPLE:

```
=>dns status
DNS server status: Stopped
DNS table size           : 73, in use: 4, free: 94 %
DNS forwarding table size : 10, in use: 0, free:100 %
DNS forwarding dns servers table size : 25, in use: 4, free: 84 %
No dns cache.
Tracing: off
=>dns start
DNS server started.
=>dns status
DNS server status: Started
DNS table size           : 73, in use: 4, free: 94 %
DNS forwarding table size : 10, in use: 0, free:100 %
DNS forwarding dns servers table size : 25, in use: 4, free: 84 %
No dns cache.
Tracing: off
=>
```

RELATED COMMANDS:

dns status	Show DNS server/forwarder configuration.
dns stop	Stop DNS server/forwarder.

dns stats

Show **SpeedTouch™ 610** DNS server/forwarder statistics.

SYNTAX:

```
dns stats
```

EXAMPLE INPUT/OUTPUT IN A NETWORKED ENVIRONMENT:

The **SpeedTouch™ 610** is configured as DNS server.

```

=>dns list
Domain: SpeedLAN.local
Nr.      Hostname      IP Address
0        SpeedTouch   *.*.*.*
1        Server       10.10.1.1
2        Client       10.0.0.3
-----
Total Table Size: 73 entries
Amount used: 3 (4%)
=>dns stats
DNS Statistics:
Corrupted packets recv      :          0
Local questions resolved    :          1
Local neg answers sent      :          0
Total DNS packets fwd       :          0
External answers recv       :          0
Fwd table full, discard    :          0
Spurious answers           :          0
Unknown query types        :          0
Total number of packets received :          1
-----
=>(Ping Client.SpeedLAN.local)
=>(CTRL + Q)
dnssd: Internet class type A request received from 10.10.1.1.
dnssd: Client.SpeedLAN.local found in local database.
dnssd: Client.SpeedLAN.local resolved into 10.0.0.3.
=>(Ping Server.SpeedLAN.local)
dnssd: Internet class type A request received from 10.10.1.1.
dnssd: Server.SpeedLAN.local found in local database.
dnssd: Server.SpeedLAN.local resolved into 10.0.0.3.
=>(CTRL + S)
=>dns stats
DNS Statistics:
Corrupted packets recv      :          0
Local questions resolved    :          3
Local neg answers sent      :          0
Total DNS packets fwd       :          0
External answers recv       :          0
Fwd table full, discard    :          0
Spurious answers           :          0
Unknown query types        :          0
Total number of packets received :          3
-----
=>

```

RELATED COMMANDS:

dns clrstats

Clear DNS server/forwarder statistics.

dns status

Show **SpeedTouch™ 610** DNS server/forwarder configuration.

SYNTAX:

```
dns status
```

EXAMPLE OUTPUT:

```
=>dns status
DNS server status: Stopped
DNS table size           : 73, in use: 4, free: 94 %
DNS forwarding table size : 10, in use: 0, free:100 %
DNS forwarding dns servers table size : 25, in use: 4, free: 84 %
No dns cache.
Tracing: off
=>
```

dns stop

Stop **SpeedTouch™ 610** DNS server/forwarder.

SYNTAX:

```
dns stop
```

EXAMPLE:

```
=>dns status
DNS server status: Started
DNS table size           :    73,   in use:    4, free: 94 %
DNS forwarding table size :    10,   in use:    0, free:100 %
DNS forwarding dns servers table size :    25,   in use:    4, free: 84 %
No dns cache.
Tracing: off
=>dns stop
DNS server stopped.
=>dns status
DNS server status: Stopped
DNS table size           :    73,   in use:    4, free: 94 %
DNS forwarding table size :    10,   in use:    0, free:100 %
DNS forwarding dns servers table size :    25,   in use:    4, free: 84 %
No dns cache.
Tracing: off
=>
```

RELATED COMMANDS:

dns status

Show DNS server/forwarder configuration.

dns start

Start DNS server/forwarder.

dns toutfwd

Set DNS forwarding timeout.

SYNTAX:

dns toutfwd	timeout = <number>
--------------------	---------------------------------

<i>timeout</i>	A number (seconds). Represents the query forwarding timeout. This parameter determines how long the SpeedTouch™ 610 DNS server should try to contact a (remote) DNS server before (temporarily) declaring the DNS requests unresolved. By default the timeout is 15 seconds.	REQUIRED
----------------	--	----------

EXAMPLE:

```
=>dns fwdtable
Forwarding table:
Nr.  Ip Address      (port#):id(hex) (expiry)      dns server      tries
0    10.10.10.12     (54751):8331   (13 sec)      10.10.10.112   1
Timeout: 15 seconds
Table size: 10
amount of table used: 1 (10%)
=>dns toutfwd timeout=20
Current timeout: 15 seconds
Timeout set to: 20 seconds
=>dns fwdtable
Forwarding table:
Nr.  Ip Address      (port#):id(hex) (expiry)      dns server      tries
0    10.10.10.12     (54751):8331   (13 sec)      10.10.10.112   1
Timeout: 20 seconds
Table size: 10
amount of table used: 1 (10%)
=>
```

RELATED COMMANDS:

dns fwdtable	Show DNS forwarding table.
dns fwdlist	Show current DNS forwarding entries..
dns fwdadd	Add a DNS forwarding entry.
dns fwddelete	Delete a DNS forwarding entry.

dns troff

Disable verbose console messaging. No debug traces are generated.

SYNTAX:

```
dns troff
```

EXAMPLE:

```

=>dns status
DNS server status: Started
DNS table size           :    73,   in use:    4, free: 94 %
DNS forwarding table size :    10,   in use:    0, free:100 %
DNS forwarding dns servers table size :    25,   in use:    4, free: 84 %
No dns cache.
Tracing: on
=>dns troff
=>dns status
DNS server status: Started
DNS table size           :    73,   in use:    4, free: 94 %
DNS forwarding table size :    10,   in use:    0, free:100 %
DNS forwarding dns servers table size :    25,   in use:    4, free: 84 %
No dns cache.
Tracing: off
=>

```

RELATED COMMANDS:

dns fwdtable

Show DNS forwarding table.

dns fwdlist

Show current DNS forwarding entries..

dns status

Show DNS server/forwarder configuration.

dns tron

Enable verbose console messaging.

dns tron

Enable verbose console messaging. Debug traces are generated.

SYNTAX:

```
dns tron
```

EXAMPLE:

```

=>dns status
DNS server status: Started
DNS table size           :    73,  in use:    4,  free: 94 %
DNS forwarding table size :    10,  in use:    0,  free:100 %
DNS forwarding dns servers table size :    25,  in use:    4,  free: 84 %
No dns cache.
Tracing: off
=>dns tron
Tracing on.
=>dns status
DNS server status: Started
DNS table size           :    73,  in use:    4,  free: 94 %
DNS forwarding table size :    10,  in use:    0,  free:100 %
DNS forwarding dns servers table size :    25,  in use:    4,  free: 84 %
No dns cache.
Tracing: on
=>(CTRL + Q)
dnscd: Internet class type A request received from 10.0.0.10.
dnscd: aa.aa.be is outside our domain: forward.
dnscd: forwarding request from 10.0.0.10 (1318,0x0001) to 138.203.68.61
      (try=1): 'reply to ant' mode.
dnscd: Internet class type A request received from 10.0.0.10.
dnscd: aa.aa.be is outside our domain: forward.
dnscd: forwarding request from 10.0.0.10 (1318,0x0001) to 138.203.68.11
      (try=2): 'reply to ant' mode.
dnscd: forward answer from 138.203.68.11 to 10.0.0.10 (1318,0001).
dnscd: Internet class type A request received from 10.0.0.10.
dnscd: aa.aa.be.lan unknown: return error.
.....
=>(CTRL + S)

```

RELATED COMMANDS:

dns fwdtable	Show DNS forwarding table.
dns fwdlist	Show current DNS forwarding entries..
dns status	Show DNS server/forwarder configuration.
dns troff	Disable verbose console messaging.

9 Env Commands

env (to access the Env level)

env def

env flush

env get

env list

env set

env unset

env def

Define an environment variable.

This command is for internal use by the Setup wizard application only. Do not use it.

SYNTAX:

<i>env def</i>

env flush

Flush all non-system environment variables.

SYNTAX:

```
env flush
```

EXAMPLE:

```
=>env list
_COMPANY_NAME=THOMSON multimedia
_COMPANY_URL=http://www.speedtouch.com
_PROD_NAME=SpeedTouch
_PROD_FRIENDLY_NAME=SpeedTouch 610 Business DSL Router
_PROD_NUMBER=610
_BOARD_SERIAL_NBR=012345678
_BUILD=R4.1.0.9
_BUILDNAME=Sascha4.109
_PRL=3EC99999XXXX
_BOARD_NAME=ADNT-R
_COMPANY_ID=NWBGL
_COPYRIGHT=Copyright(c) 2002 THOMSON multimedia
_MACADDR=00-90-D0-01-02-03
_UDN=uuid:UPnP-SpeedTouch520-1_00-90-D0-01-02-03
CONF_REGION=Belgium
CONF_PROVIDER=peckelbs
CONF_DESCRIPTION=Default Bridging configuration
CONF_SERVICE=Bridging on 0/35 and 8/35
CONF_DATE=May 2002
COLUMNS=80
ROWS=24
SESSIONTIMEOUT=120
=>env flush
=>env list
_COMPANY_NAME=THOMSON multimedia
_COMPANY_URL=http://www.speedtouch.com
_PROD_NAME=SpeedTouch
_PROD_FRIENDLY_NAME=SpeedTouch 610 Business DSL Router
_PROD_NUMBER=610
_BOARD_SERIAL_NBR=012345678
_BUILD=R4.1.0.9
_BUILDNAME=Sascha4.109
_PRL=3EC99999XXXX
_BOARD_NAME=ADNT-R
_FIA=NE
_COMPANY_ID=NWBGL
_COPYRIGHT=Copyright(c) 2002 THOMSON multimedia
_MACADDR=00-90-D0-01-02-03
_UDN=uuid:UPnP-SpeedTouch610-1_00-90-D0-01-02-03
COLUMNS=80
ROWS=24
SESSIONTIMEOUT=120
=>
```

RELATED COMMANDS:

env list

List all environment variables.

env get

Get the current value of a environment variable.

SYNTAX:

env get	var = <string>
----------------	-----------------------------

var	The name of the environment variable. Execute env list to see a list of all environment variables.	REQUIRED
------------	--	-----------------

EXAMPLE:

```
=>env list
_COMPANY_NAME=THOMSON multimedia
_COMPANY_URL=http://www.speedtouch.com
_PROD_NAME=SpeedTouch
_PROD_FRIENDLY_NAME=SpeedTouch 610 Business DSL Router
_PROD_NUMBER=610
_BOARD_SERIAL_NBR=012345678
_BUILD=R4.1.0.9
_BUILDNAME=Sascha4.109
_PRL=3EC99999XXXX
_BOARD_NAME=ADNT-R
_COMPANY_ID=NWBGL
_COPYRIGHT=Copyright(c) 2002 THOMSON multimedia
_MACADDR=00-90-D0-01-02-03
_UDN=uuid:UPnP-SpeedTouch520-1_00-90-D0-01-02-03
CONF_REGION=Belgium
CONF_PROVIDER=peckelbs
CONF_DESCRIPTION=Default Bridging configuration
CONF_SERVICE=Bridging on 0/35 and 8/35
CONF_DATE=May 2002
COLUMNS=80
ROWS=24
SESSIONTIMEOUT=120
HOST_SETUP=user
VPI_VCI=8*35
=>env get var=VPI_VCI
8*35
=>
```

RELATED COMMANDS:

env set	Create and set a non-system environment variable.
env list	List all current environment variables.

env list

Show all currently available environment variables.

SYNTAX:

```
env list
```

EXAMPLE:

```
=>env list
_COMPANY_NAME=THOMSON multimedia
_COMPANY_URL=http://www.speedtouch.com
_PROD_NAME=SpeedTouch
_PROD_FRIENDLY_NAME=SpeedTouch 610 Business DSL Router
_PROD_NUMBER=610
_BOARD_SERIAL_NBR=012345678
_BUILD=R4.1.0.9
_BUILDNAME=Sascha4.109
_PRL=3EC99999XXXX
_BOARD_NAME=ADNT-R
_COMPANY_ID=NWBGL
_COPYRIGHT=Copyright(c) 2002 THOMSON multimedia
_MACADDR=00-90-D0-01-02-03
_UDN=uuid:UPnP-SpeedTouch520-1_00-90-D0-01-02-03
CONF_REGION=Belgium
CONF_PROVIDER=peckelbs
CONF_DESCRIPTION=Default Bridging configuration
CONF_SERVICE=Bridging on 0/35 and 8/35
CONF_DATE=May 2002
COLUMNS=80
ROWS=24
SESSIONTIMEOUT=120
HOST_SETUP=user
VPI_VCI=8*35
=>
```

env set

Create and set a non-system environment variable or change the value of a non-system environment variable.

SYNTAX:

env set	var = <string> value = <string>
----------------	--

<i>var</i>	The name of the environment variable. When creating an environment variable, any name is allowed, however spaces are not allowed and the name may not start with "CONF", "HOST", an underscore "_" or the dollar sign "\$".	REQUIRED
<i>value</i>	A quoted string which defines the value of the environment variable. The value of system variables (built-in variables with names starting with an underscore "_", "CONF" or "HOST") can not be changed.	REQUIRED

EXAMPLE:

```
=>env list
_COMPANY_NAME=THOMSON multimedia
_COMPANY_URL=http://www.speedtouch.com
_PROD_NAME=SpeedTouch
_PROD_FRIENDLY_NAME=SpeedTouch 610 Business DSL Router
.....
CONF_DESCRIPTION=Default Bridging configuration
CONF_SERVICE=Bridging on 0/35 and 8/35
CONF_DATE=May 2002
HOST_SETUP=user
=>env set var=VPI_VCI value="8*35"
=>env get var=VPI_VCI
8*35
=>env set var=VPI_VCI value="11*35"
=>env get var=VPI_VCI
11*35
=>
```

RELATED COMMANDS:

env get	Show the value of an environment variable.
env list	List all current environment variables.
env unset	Delete a non-system environment variable.

env unset

Delete a non-system environment variable.

SYNTAX:

env unset	var = <string>
------------------	-----------------------------

var	The name of the environment variable to delete. System variables (built-in variables with names starting with an underscore "_", "CONF" or "HOST") can not be unset, nor changed or deleted.	REQUIRED
------------	---	-----------------

EXAMPLE:

```
=>env list
_COMPANY_NAME=THOMSON multimedia
_COMPANY_URL=http://www.speedtouch.com
_PROD_NAME=SpeedTouch
.....
CONF_DATE=May 2002
HOST_SETUP=user
VPI_VCI=8*35
=>env unset var=VPI_VCI
=>env list
_COMPANY_NAME=THOMSON multimedia
_COMPANY_URL=http://www.speedtouch.com
_PROD_NAME=SpeedTouch
.....
CONF_DATE=May 2002
HOST_SETUP=user
=>
```

RELATED COMMANDS:

env set	Create and set a non-system environment variable.
env list	List all current environment variables.

10 Eth Commands

The eth command group is only applicable to SpeedTouch variants equipped with a single Ethernet port (no switch variants).

eth (to access the Eth level)

eth ifconfig

eth iflist

eth ifconfig

Configure the Ethernet port.

SYNTAX:

eth ifconfig	intf = <number {0-0}> type = <{auto 10BaseTHD 10BaseTFD 100BaseTHD 100BaseTFD}>
---------------------	--

<i>intf</i>	The Ethernet interface to configure. Currently only one (the single Ethernet port) is available: intf=0.	REQUIRED
<i>type</i>	The Ethernet interface's Ethernet type. Select either: <ul style="list-style-type: none"> ▪ auto Auto negotiation of Ethernet communication speed (10Mb/s or 100Mb/s) and Duplex mode (half duplex or full duplex). ▪ 10BaseTHD 10Mb/s communication speed in half duplex mode. ▪ 10BaseTFD 10Mb/s communication speed in full duplex mode. ▪ 100BaseTHD 100Mb/s communication speed in half duplex mode. ▪ 100BaseTFD 100Mb/s communication speed in full duplex mode. By default the Ethernet type is set to <i>auto</i> and should never be changed, except in case of communication problems.	REQUIRED

RELATED COMMANDS:

eth iflist Show Ethernet port configuration and current operating mode.

eth iflist

Show the Ethernet port configuration and current operating status.

SYNTAX:

```
eth iflist
```

EXAMPLE:

```
=>eth iflist
Intf   Type           Result Type
0      auto           100BaseTFD
=>
```

DESCRIPTION:

Type indicates the configured Ethernet communication speed and duplex mode.

Result type indicates the effective operating status in case *Type=auto*. In other cases, when the Ethernet types do NOT match, *Result type=unknown* and no Ethernet connectivity will exist.

RELATED COMMANDS:

eth ifconfig Configure the Ethernet port.

11 Firewall Commands

firewall (to access the Firewall level)
firewall assign
firewall flush
firewall list
firewall troff
firewall tron
firewall unassign
firewall chain (to access the Firewall Chain level)
firewall chain create
firewall chain delete
firewall chain flush
firewall chain list
firewall rule (to access the Firewall Rule level)
firewall rule clear
firewall rule create
firewall rule delete
firewall rule flush
firewall rule list
firewall rule stats

firewall assign

Assign a chain to an entry point. An entry point, also referred to as hook or a Packet Interception Point (PIP) is the location where packets are intercepted to be compared against a chain of rules

SYNTAX:

firewall assign	hook = <{input sink forward source output}> chain = <string>	
<i>hook</i>	<p>The entry point's name to assign a chain to. Choose between:</p> <ul style="list-style-type: none"> ▪ input : The point off all incoming traffic. At this point it can be determined whether the packet is allowed to reach the SpeedTouch™ IP router or local host. ▪ sink : The point off all traffic destined to the SpeedTouch™ IP router itself. At this point it can be determined whether the packet is allowed to address the local host. ▪ forward : The point off all traffic to be forwarded by the SpeedTouch™ IP router. At this point it can be determined whether the packet is allowed to be handled, i.e. routed. ▪ source : The point off all traffic sourced by the SpeedTouch™ IP router. At this point it can be determined whether the packet is allowed to leave the local host. ▪ output : The point off all outgoing traffic. At this point it can be determined whether the packet is allowed to leave the SpeedTouch™ IP router or local host. 	REQUIRED
<i>chain</i>	The name of the chain to use.	REQUIRED

EXAMPLE:

```
=>firewall list
assign hook=sink chain=sink
assign hook=forward chain=forward
assign hook=source chain=source
=>firewall chain create chain Telnet
=>firewall assign hook=sink chain=Telnet
=>firewall list
assign hook=sink chain=Telnet
assign hook=forward chain=forward
assign hook=source chain=source
=>
```

RELATED COMMANDS:

- firewall chain create** Create a chain.
firewall chain list Show a list of all current chains.

firewall flush

Flush all associations between a hook and its chain(s). The chain itself is not removed. The flush command does not impact previously saved configurations.

SYNTAX:

firewall flush	[hook = <{input sink forward source output}>]
-----------------------	--

<i>[hook]</i>	<p>the name of the hook to clear.</p> <p>Choose between:</p> <ul style="list-style-type: none"> ▪ input ▪ sink ▪ forward ▪ source ▪ output. <p>In case this parameter is not specified all hooks are cleared.</p>	OPTIONAL
---------------	--	----------

EXAMPLE:

```
=>firewall load
=>firewall list
assign hook=sink chain=sink
assign hook=forward chain=forward
assign hook=source chain=source
=>firewall flush hook=sink
=>firewall list
assign hook=forward chain=forward
assign hook=source chain=source
=>firewall flush
=>firewall list
=>
```

RELATED COMMANDS:

firewall assign Assign a chain to an entry point.

firewall list

Show association(s) between all hooks and their chain(s) or of one specified hook

SYNTAX:

```
firewall list [hook = <{input|sink|forward|source|output}>]
```

<code>[hook]</code>	<p>the name of the hook to show the associations for. OPTIONAL</p> <p>Choose between:</p> <ul style="list-style-type: none"> ▪ input ▪ sink ▪ forward ▪ source ▪ output. <p>In case this parameter is not specified the associations for all hooks are shown.</p>
---------------------	---

EXAMPLE:

```
=>firewall list
assign hook=sink chain=sink
assign hook=forward chain=forward
assign hook=source chain=source
=>firewall list hook=input
=>firewall list hook=forward
assign hook=forward chain=forward
=>
```

RELATED COMMANDS:

firewall assign

Assign a chain to an entry point.

firewall flush

Clear associations for all or a selected entry point(s).

firewall troff

Disable verbose console messaging.

SYNTAX:

```
firewall troff
```

EXAMPLE:

```
=>firewall troff
```

RELATED COMMANDS:

firewall tron

Enable verbose console messaging.

firewall tron

Enable verbose console messaging.

SYNTAX:

```
firewall tron
```

EXAMPLE:

```
=>firewall tron
```

RELATED COMMANDS:

firewall troff

Disable verbose console messaging.

firewall unassign

Unassign all chains from a hook.

SYNTAX:

firewall unassign	hook = <{input sink forward source output}>
--------------------------	--

<i>hook</i>	The hook's name to unassign all chain from. Choose between: <ul style="list-style-type: none"> ▪ input ▪ sink ▪ forward ▪ source ▪ output. 	REQUIRED
-------------	--	----------

RELATED COMMANDS:

ipsec policy assign	Assign a chain to a hook.
ipsec policy flush	Clear all hooks.
ipsec policy list	Show a list of all chain assignments.

firewall chain create

Create a new chain.

SYNTAX:

```
firewall chain create    chain = <string>
```

chain

The name of the chain to create.

REQUIRED

EXAMPLE:

```
=>firewall chain list
Tempo, source, forward, sink
=>firewall chain create chain=Telnet
=>firewall chain list
Telnet, Tempo, source, forward, sink
=>
```

RELATED COMMANDS:

firewall assign

Assign a chain to an entry point.

firewall chain delete

Delete a chain.

firewall chain list

Show a list of all current chains.

firewall chain delete

Delete a chain.

SYNTAX:

firewall chain delete	chain = <string>
------------------------------	-------------------------------

<i>chain</i>	The name of the chain to be deleted.	REQUIRED
--------------	--------------------------------------	----------

EXAMPLE:

```
=>firewall chain list
Telnet, Tempo, source, forward, sink
=>firewall chain list
Telnet, Tempo, source, forward, sink
=>firewall chain delete chain=Tempo
=>firewall chain list
Telnet, source, forward, sink
=>
```

RELATED COMMANDS:

firewall assign	Assign a chain to an entry point.
firewall chain create	Create a chain.
firewall chain list	Show a list of all chains.

firewall chain list

Show a list of all current chains.

SYNTAX:

```
firewall chain list
```

EXAMPLE INPUT/OUTPUT:

```
=>firewall chain list  
source, forward, sink  
=>firewall chain create chain Telnet  
=>firewall chain list  
Telnet, source, forward, sink  
=>firewall chain list  
Telnet, source, forward, sink  
=>
```

RELATED COMMANDS:

firewall assign	Assign a chain to an entry point.
firewall chain create	Create a chain.
firewall chain delete	Delete a chain.

firewall rule clear

Clear statistics for a given rule.

SYNTAX:

firewall rule clear	[chain = <string>] [index = <number>]
----------------------------	--

<i>[chain]</i>	The name of the chain in which the rule is to be found.	OPTIONAL
<i>[index]</i>	The index number (determined by the position) of the rule in the chain	OPTIONAL

EXAMPLE:

```
=>firewall rule stats
ChainTelnet, index0, packets 0, bytes 0
ChainTelnet, index1, packets 0, bytes 0
ChainTelnet, index2, packets 0, bytes 0
Chainsource, index0, packets 203, bytes 15229
Chainsource, index1, packets 0, bytes 0
Chainsource, index2, packets 0, bytes 0
Chainforward,index0, packets 0, bytes 0
Chainsink, index0, packets 202, bytes 10159
Chainsink, index1, packets 0, bytes 0
Chainsink, index2, packets 0, bytes 0
=>firewall rule clear chain=source index=0
=>firewall rule stats
ChainTelnet, index0, packets 0, bytes 0
ChainTelnet, index1, packets 0, bytes 0
ChainTelnet, index2, packets 0, bytes 0
Chainsource, index0, packets 11, bytes 559
Chainsource, index1, packets 0, bytes 0
Chainsource, index2, packets 0, bytes 0
Chainforward,index0, packets 0, bytes 0
Chainsink, index0, packets 409, bytes 21535
Chainsink, index1, packets 0, bytes 0
Chainsink, index2, packets 0, bytes 0
=>
```

RELATED COMMANDS:

firewall rule create	Create a rule.
firewall rule delete	Delete a specified rule in a chain.
firewall rule flush	Delete all rules in a chain.
firewall rule list	Show a list of all (or a specified) chains' rules.
firewall rule stats	Show statistics for all (or a specified) chains' rules.

firewall rule create

Create a rule.

SYNTAX:

```

firewall rule create      chain = <string>
                           [index = <number>]
                           [srcintf [!]= <string>]
                           [srcintfgrp [!]= <{wan|local|lan}>]
                           [srcbridgeport [!]= <number>]
                           [src [!]= <ip-address>]
                           [srcmsk = <ip-mask(dotted or cidr)>]
                           [dstintf [!]= <string>]
                           [dstintfgrp [!]= <{wan|local|lan}>]
                           [dst [!]= <ip-address>]
                           [dstmsk = <ip-mask(dotted or cidr)>]
                           [tos [!]= <number{1-255}>]
                           [prot [!]= <{<supported IP protocol name> | <number>}>]
                           [syn = <yes|no>]
                           [urg = <yes|no>]
                           [ack = <yes|no>]
                           [srcport [!]= <{<supported TCP/UDP port name> | <number>}>]
                           [srcportend = <{<supported TCP/UDP port name> | <number>}>]
                           [dstport [!]= <{<supported TCP/UDP port name> | <number>}>]
                           [dstportend = <{<supported TCP/UDP port name> | <number>}>]
                           [icmptype [!]= <{<supported ICMP type name> | <number>}>]
                           [icmpcode [!]= <number{0-15}>]
                           [icmpcodeend = <number{0-15}>]
                           [clink = <string>]
                           action = <{accept|deny|drop|count}>

```

<i>chain</i>	The name of the chain to insert the rule in.	REQUIRED
<i>[index]</i>	The number of the rule before which the new rule must be added.	OPTIONAL
<i>[srcintf]</i>	The name of the interface the packet should [or should NOT] arrive on to make this rule apply. (NOT applicable if used in a chain assigned to the output hook)	OPTIONAL
<i>[srcintfgrp]</i>	The interface group the packet should [or should NOT] arrive on. Choose between: <ul style="list-style-type: none"> ▪ wan ▪ local ▪ lan (NOT applicable if used in a chain assigned to the output hook)	OPTIONAL

<code>[srcbridgeport]</code>	A number between 0 and 6. Represents the bridge port the virtual packet should [or should NOT] arrive on. Use <code>:bridge iflist</code> for a list of available bridge ports.	OPTIONAL
<code>[src]</code>	The source IP address (range) the packet should [or should NOT] come from. (Supports cidr notation).	OPTIONAL
<code>[srcmsk]</code>	The source IP address mask defining the range (see <code>src</code>).	OPTIONAL
<code>[dstintf]</code>	The name of the interface the packet should [or should NOT] be going to. (NOT applicable if used in a chain assigned to the input hook)	OPTIONAL
<code>[dstintfgrp]</code>	The interface group the packet should [or should NOT] be going to. Choose between: <ul style="list-style-type: none"> ▪ <code>wan</code> ▪ <code>local</code> ▪ <code>lan</code> (NOT applicable if used in a chain assigned to the input hook)	OPTIONAL
<code>[dst]</code>	The destination IP address (range) the packet should [or should NOT] be going to. (supports cidr notation).	OPTIONAL
<code>[dstmsk]</code>	The destination IP address mask defining the range (see <code>dst</code>).	OPTIONAL
<code>[tos]</code>	A number between 0 and 255. Represents the Type Of Service specification which should be expected [or NOT expected] in the IP packet. The Type of Service numbering specification is in accordance to the latest version of RFC1700: Assigned numbers.	OPTIONAL
<code>[prot]</code>	The protocol (name or number) expected [or NOT expected] in the IP packet. Select one of the supported protocol names (See B.1 for a listing of protocol names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL
<code>[syn]</code>	Expect TCP SYN flag set (yes) or not (no). In combination with TCP ACK this allows selection of incoming versus outgoing TCP connections.	OPTIONAL
<code>[urg]</code>	Expect TCP URG flag set (yes) or not (no).	OPTIONAL
<code>[ack]</code>	Expect TCP ACK flag set (yes) or not (no).	OPTIONAL
<code>[srcport]</code>	The TCP/UDP port (or beginning of range) the packet should [or should NOT] be from. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL

<i>[srcportend]</i>	The source TCP/UDP port range end (inclusive). (Only applicable for ranges) Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL
<i>[dstport]</i>	The TCP/UDP port (or beginning of range) the packet should [or should NOT] be going to. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL
<i>[dstportend]</i>	The destination TCP/UDP port range end (inclusive). (Only applicable for ranges) Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL
<i>[icmptype]</i>	The expected [or NOT expected] ICMP type (name or number) of the packet. Select one of the supported ICMP type names (See NO TAG for a listing of ICMP type names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL
<i>[icmpcode]</i>	A number between 0 and 15. Represents the expected [or NOT expected] ICMP code (or beginning of range) of the packet as specified in the latest version of RFC1700: Assigned number.	OPTIONAL
<i>[icmpcodeend]</i>	A number between 0 and 15. Represents the ICMP code range end. Only applicable for ranges.	OPTIONAL
<i>[clink]</i>	The name of the chain to be parsed when this rule applies. (action is ignored).	OPTIONAL
<i>action</i>	Action to be taken when this rule applies. Choose between: <ul style="list-style-type: none"> ▪ accept : the packet may pass. ▪ deny : ICMP error destination unreachable. An error message is sent back to the sender. ▪ drop : packet disappears. It is silently dropped, that is, without sending an error message to the sender. ▪ count : update of statistics. Has no influence on the packet. 	REQUIRED

RELATED COMMANDS:

firewall rule clear	Clear statistics of a given rule.
firewall rule delete	Delete a specified rule in a chain.
firewall rule flush	Delete all rules in a chain.
firewall rule list	Show a list of all (or a specified) chains' rules.
firewall rule stats	Show statistics for all (or a specified) chains' rules.

firewall rule delete

Delete a rule.

SYNTAX:

firewall rule delete	chain = <string> index = <number>
-----------------------------	--

<i>chain</i>	The name of the chain in which to delete the rule.	REQUIRED
<i>index</i>	The index number of the rule in the chain. Use <i>:firewall rule list</i> first to determine the index number of the applicable rule.	REQUIRED

EXAMPLE:

```
=>firewall rule list chain=Telnet
:firewall rule create chain=Telnet index=0 srcintfgrp=lan src=10.0.0.0/8
  dst=200.200.200.1/32 prot=tcp srcport=1024 srcportend=65535dstport=telnet
  action=accept
:firewall rule create chain=Telnet index=1 srcintfgrp=wan src=200.200.200.1/32
  dst=10.0.0.0/8 prot=tcp srcport=telnet dstport=1024 dstportend=65535
  action=accept
:firewall rule create chain=Telnet index=2 action=drop
=>firewall rule delete chain=Telnet index=1
=>firewall rule list chain=Telnet
:firewall rule create chain=Telnet index=0 srcintfgrp=lan src=10.0.0.0/8
  dst=200.200.200.1/32 prot=tcp srcport=1024 srcportend=65535dstport=telnet
  action=accept
:firewall rule create chain=Telnet index=1 action=drop
=>
```

RELATED COMMANDS:

firewall rule clear	Clear statistics of a given rule.
firewall rule create	Create a rule.
firewall rule flush	Delete all rules in a chain.
firewall rule list	Show a list of all (or a specified) chains' rules.
firewall rule stats	Show statistics for all (or a specified) chains' rules.

firewall rule flush

Flush all rules created for a chain(s). The chain itself is not removed. The flush command does not impact previously saved configurations.

SYNTAX:

firewall rule flush	[chain = <string>]
----------------------------	---------------------------------

<i>[chain]</i>	The name of the chain to empty. In case this parameter is not specified all rules for all chains are deleted.	OPTIONAL
----------------	--	----------

EXAMPLE:

```
=>firewall rule list chain=Telnet
:firewall rule create chain=Telnet index=0 srcintfgrp=lan src=10.0.0.0/8
  dst=200.200.200.1/32 prot=tcp srcport=1024 srcportend=65535dstport=telnet
  action=accept
:firewall rule create chain=Telnet index=1 srcintfgrp=wan src=200.200.200.1/32
  dst=10.0.0.0/8 prot=tcp srcport=telnet dstport=1024 dstportend=65535
  action=accept
:firewall rule create chain=Telnet index=2 action=drop
=>firewall rule flush chain=Telnet
=>firewall rule list chain=Telnet
=>
```

RELATED COMMANDS:

firewall rule clear	Clear statistics of a given rule.
firewall rule create	Create a rule.
firewall rule delete	Delete a specified rule.
firewall rule list	Show a list of all (or a specified) chains' rules.
firewall rule stats	Show statistics for all (or a specified) chains' rules.

firewall rule list

Show a list of rules.

SYNTAX:

firewall rule list	[chain = <string>]
---------------------------	---------------------------------

<i>[chain]</i>	The name of the chain to list the rules of. In case this parameter is not specified all rules for all chains are shown.	OPTIONAL
----------------	--	----------

EXAMPLE INPUT AND OUTPUT:

```
=>firewall rule list chain=Telnet
:firewall rule create chain=Telnet index=0 srcintfgrp=lan src=10.0.0.0/8
  dst=200.200.200.1/32 prot=tcp srcport=1024 srcportend=65535dstport=telnet
  action=accept
:firewall rule create chain=Telnet index=1 srcintfgrp=wan src=200.200.200.1/32
  dst=10.0.0.0/8 prot=tcp srcport=telnet dstport=1024 dstportend=65535
  action=accept
:firewall rule create chain=Telnet index=2 action=drop
=>firewall rule list
:firewall rule create chain=source index=0 dstintfgrp=!wan action=accept
:firewall rule create chain=source index=1 prot=udp dstport=dns action=accept
:firewall rule create chain=source index=2 prot=udp dstport=67 action=accept
:firewall rule create chain=source index=3 action=drop
:firewall rule create chain=forwardindex=0 srcintfgrp=wan dstintfgrp=wan action=drop
:firewall rule create chain=sink index=0 srcintf=eth0 srcbridgeport=1 action=accept
:firewall rule create chain=sink index=1 srcintfgrp=!wan action=accept
:firewall rule create chain=sink index=2 prot=udp dstport=dns action=accept
:firewall rule create chain=sink index=3 prot=udp dstport=68 action=accept
:firewall rule create chain=sink index=4 action=drop
:firewall rule create chain=Telnet index=0 srcintfgrp=lan src=10.0.0.0/8
  dst=200.200.200.1/32 prot=tcp srcport=1024 srcportend=65535dstport=telnet
  action=accept
:firewall rule create chain=Telnet index=1 srcintfgrp=wan src=200.200.200.1/32
  dst=10.0.0.0/8 prot=tcp srcport=telnet dstport=1024 dstportend=65535
  action=accept
:firewall rule create chain=Telnet index=2 action=drop
=>
```

RELATED COMMANDS:

firewall rule clear	Clear statistics of a given rule.
firewall rule create	Create a rule.
firewall rule delete	Delete a specified rule.
firewall rule flush	Delete all rules in a chain.
firewall rule stats	Show statistics for all (or a specified) chains' rules.

firewall rule stats

Show statistics, i. e. the number of packets and bytes which have passed the hooks.

SYNTAX:

firewall rule stats	[chain = <string>] [index = <number>]
----------------------------	--

[chain] The name of the chain of which the statistics must be listed. OPTIONAL
In case this parameter is not specified the statistics for the rules applicable to all chains are shown.

[index] The index number of the chain's rule of which the statistics must be listed. Execute **firewall rule list** first to determine the index number of the applicable rule. OPTIONAL
In case this parameter is not specified the statistics for all rules applicable to the specified chain are shown.

EXAMPLE OUTPUT:

```
=>firewall rule list chain=Test
:firewall rule create chain=Test index=0 srcintfgrp=lan src=200.200.0.1/32
  dst=200.200.0.2/32 prot=udp srcport=0 srcportend=65535dstport=telnet
  action=deny
=>firewall rule clear
=>firewall rule stats
Chainsink,    index0, packets  43, bytes 1743
Chainsink,    index1, packets  0, bytes  0
Chainsink,    index2, packets  0, bytes  0
Chainsink,    index3, packets  0, bytes  0
Chainforward,index0, packets  0, bytes  0
Chainsource, index0, packets 43, bytes 1977
Chainsource, index1, packets  0, bytes  0
Chainsource, index2, packets  0, bytes  0
ChainTest,   index0, packets  0, bytes  0
=>firewall rule stats
Chainsink,    index0, packets 104, bytes 6143
Chainsink,    index1, packets  0, bytes  0
Chainsink,    index2, packets  0, bytes  0
Chainsink,    index3, packets  0, bytes  0
Chainforward,index0, packets  0, bytes  0
Chainsource, index0, packets 43, bytes 1977
Chainsource, index1, packets  0, bytes  0
Chainsource, index2, packets  0, bytes  0
ChainTest,   index0, packets 44, bytes 21032
=>
```

DESCRIPTION:

The statistics for the 'Test' chain are the result of sending udp packets to the **SpeedTouch™ 610**. The chain 'Test' is assigned to the hook 'input' and prohibits the sending of udp packets from one host to another.

EXAMPLE INPUT/OUTPUT IN A NETWORKED ENVIRONMENT:

The **SpeedTouch™ 610** is configured as DHCP client on its Ethernet interface eth0.

```
=>firewall rule list chain=Sending
:firewall rule create chain=Sendingindex=0 srcintfgrp=lan src=10.0.0.3/32
  dst=10.10.1.1/32prot=icmp action=count
:firewall rule create chain=Sendingindex=1 srcintfgrp=lan src=10.10.1.1/32
  dst=10.0.0.3/32 prot=icmp action=count
=>firewall rule stats
Chainsource, index0, packets 0, bytes 0
Chainsource, index1, packets 0, bytes 0
Chainsource, index2, packets 0, bytes 0
Chainsource, index3, packets 0, bytes 0
Chainforward,index0, packets 0, bytes 0
Chainsink, index0, packets 0, bytes 0
Chainsink, index1, packets 144, bytes 5844
Chainsink, index2, packets 0, bytes 0
Chainsink, index3, packets 0, bytes 0
Chainsink, index4, packets 0, bytes 0
Chainsink, index5, packets 0, bytes 0
Chainsending,index0, packets 0, bytes 0
Chainsending,index1, packets 0, bytes 0
=>firewall rule clear
=>(Ping from server 10.10.1.1 to client 10.0.0.3)
=>firewall rule stats
Chainsource, index0, packets 0, bytes 0
Chainsource, index1, packets 0, bytes 0
Chainsource, index2, packets 0, bytes 0
Chainsource, index3, packets 0, bytes 0
Chainforward,index0, packets 0, bytes 0
Chainsink, index0, packets 0, bytes 0
Chainsink, index1, packets 42, bytes 1782
Chainsink, index2, packets 0, bytes 0
Chainsink, index3, packets 0, bytes 0
Chainsink, index4, packets 0, bytes 0
Chainsink, index5, packets 0, bytes 0
Chainsending,index0, packets 4, bytes 240
Chainsending,index1, packets 4, bytes 240
=>
```

RELATED COMMANDS:

firewall rule clear	Clear statistics of a given rule.
firewall rule create	Create a rule.
firewall rule delete	Delete a specified rule.
firewall rule flush	Delete all rules in a chain.
firewall rule list	Show a list of all (or a specified) chains' rules.

12 GRP Commands

grp (to access the GRP level)
grp config
grp flush
grp ifconfig
grp iflist
grp rtlist
grp rip (to access the GRP RIP level)
grp rip bnadd
grp rip bndelete
grp rip bnlist
grp rip config
grp rip flush
grp rip ifconfig
grp rip nbadd
grp rip nbdelete
grp rip nblist
grp rip status

grp config

Set group configuration settings.

SYNTAX:

grp config	trace = <{off on}>
-------------------	---------------------------------

<i>trace</i>	Enable (on) or disable (off) verbose console messaging. By default no traces are logged.	REQUIRED
--------------	---	----------

grp flush

Flush group interface settings and parameters.

SYNTAX:

<i>grp flush</i>

RELATED COMMANDS:

grp ifconfig

Configure an interface's routing parameters.

grp iflist

Show current interfaces.

grp rtlist

Show current routes in the group interfaces routing table.

grp ifconfig

Configure the interface's routing parameters.

SYNTAX:

grp ifconfig	intf = <available interface names> metric = <number{1-16}>
---------------------	---

<i>intf</i>	The name of the interface. Use : <i>grp iflist</i> for a list of available interfaces or browse available interface with the the ARROW UP and ARROW DOWN keys.	REQUIRED
<i>metric</i>	A number between 1 and 16 (hops). Represents the metric of the interface.	REQUIRED

EXAMPLE:

```
=>grp iflist
Interface : DIALUP_PPP2
  index   : 3
  metric  : 1
  mtu     : 9180
  flags   : <UP,POINTTOPOINT>
  address : 129.16.1.1/24

Interface : eth0
  index   : 1
  metric  : 1
  mtu     : 1500
  flags   : <ARP,BROADCAST,UP,ARPTABLE,MULTICAST>
  address : 10.0.0.147/8
           broadcast : 10.255.255.255
  address : 138.203.7.147/22
           broadcast : 138.203.7.255

.....

=>grp ifconfig intf=DIALUP_PPP2 metric=3
=>grp iflist intf=DIALUP_PPP2
Interface : DIALUP_PPP2
  index   : 3
  metric : 3
  mtu     : 9180
  flags   : <UP,POINTTOPOINT>
  address : 129.16.1.1/24

=>
```

RELATED COMMANDS:

grp iflist Show current interfaces.

grp iflist

Show current interfaces.

SYNTAX:

grp iflist	[intf = <available interface names>]
-------------------	---

<i>[intf]</i>	The name of the interface to show.	OPTIONAL
---------------	------------------------------------	----------

EXAMPLE:

```

=>grp iflist
Interface : DIALUP_PPP2
    index   : 3
    metric  : 1
    mtu     : 9180
    flags   : <UP,POINTTOPOINT>
    address : 129.16.1.1/24

Interface : eth0
    index   : 1
    metric  : 1
    mtu     : 1500
    flags   : <ARP,BROADCAST,UP,ARPTABLE,MULTICAST>
    address : 10.0.0.147/8
             broadcast : 10.255.255.255
    address : 138.203.7.147/22
             broadcast : 138.203.7.255

Interface : loop
    index   : 0
    metric  : 1
    mtu     : 1500
    flags   : <BROADCAST,UP,LOOPBACK>
    address : 127.0.0.1/8
             broadcast : 127.255.255.255

=>grp iflist intf=DIALUP_PPP2
Interface : DIALUP_PPP2
    index   : 3
    metric  : 1
    mtu     : 9180
    flags   : <UP,POINTTOPOINT>
    address : 129.16.1.1/24

=>

```

RELATED COMMANDS:

grp ifconfig	Configure an interface's routing parameters.
---------------------	--

grp rtlist

Show the current routes in the group interfaces routing table.

SYNTAX:

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

[dst]	The destination IP address of the route. Supports ip/mask notation.	OPTIONAL
[dstmask]	The destination IP address mask, either in dotted or in numerical cidr notation.	OPTIONAL

EXAMPLE:

```
=>grp rtlist
Codes : K - Kernel, C - connected, S - Static, R - RIP, * - FIB route
destination : 10.0.0.0/8 *
Route type : "C"
distance : 0
Nexthop : eth

destination : 10.0.0.0/8
Route type : "K"
distance : 1
Nexthop : 10.0.0.147

destination : 127.0.0.0/8 *
Route type : "C"
distance : 0
Nexthop : loop

destination : 129.132.2.21/32 *
Route type : "K"
distance : 2
Nexthop : 138.203.7.146

destination : 172.16.1.0/24 *
Route type : "C"
distance : 0
Nexthop : cip0

destination : 172.16.1.0/24
Route type : "K"
distance : 2
Nexthop : 172.16.1.1

=>
```

RELATED COMMANDS:

grp ifconfig

Configure an interface's routing parameters.

grp rip bnadd

Add an IP address to the Routing Information Protocol (RIP) black network list.

SYNTAX:

grp rip bnadd	addr = <ip-address> [netmask = <ip-mask(dotted or cidr)>]
----------------------	--

<i>addr</i>	The IP network address. Supports ip/mask notation.	REQUIRED
<i>[netmask]</i>	The subnetmask associated with this IP address, either in dotted or in numerical cidr notation.	OPTIONAL

EXAMPLE:

```
=>grp rip bnlist
  RIP black network address list
=====
=>grp bnadd addr=192.6.11.150 netmask=255.255.255.0
:grp bnadd addr=192.6.11.150/24
=>grp rip bnlist
  RIP black network address list
=====
  192.6.11.150/24
=>
```

RELATED COMMANDS:

grp rip bndelete	Delete an IP address from the RIP black network list.
grp rip bnlist	Show the RIP black network list.

grp rip bndelete

Delete an IP address from the RIP black network list.

SYNTAX:

```
grp rip bndelete      addr = <ip-address>
                    [netmask = <ip-mask(dotted or cidr)>]
```

<i>addr</i>	The IP network address to delete. Supports ip/mask notation.	REQUIRED
<i>[netmask]</i>	The subnetmask associated with this IP address, either in dotted or in numerical cidr notation.	OPTIONAL

EXAMPLE:

```
=>grp rip bnlist
  RIP black network address list
=====
  192.6.11.150/24
=>grp rip bndelete addr=192.6.11.150
:grp rip bndelete addr=192.6.11.150
=>grp rip bnlist
  RIP black network address list
=====
=>
```

RELATED COMMANDS:

- grp rip bnadd** Add an IP address to the RIP black network list.
- grp rip bnlist** Show the RIP black network list.

grp rip bnlst

Show the RIP black network list.

SYNTAX:

```
grp rip bnlst
```

EXAMPLE:

```
=>grp rip bnlst
  RIP black network address list
=====
  192.6.11.150/24
=>
```

RELATED COMMANDS:

grp rip bnadd
grp rip bndelete

Add an IP address to the RIP black network list.
Delete an IP address from the RIP black network list.

grp rip config

Configure the RIP settings.

SYNTAX:

grp rip config	<pre> rip = <{off on}> [version = <{rip_unspec rip_v1 rip_v2}>] [defmetric = <number{1-16}>] [updatetime = <number{1-3600}>] [timeouttime = <number{1-3600}>] [garbagecollectiontime = <number{1-3600}>] [impcrt = <{off on}>] [impkrt = <{off on}>] [impsrt = <{off on}>] [impdefkrt = <{off on}>] [impdefsrts = <{off on}>] [exprt = <{off on}>] [expdefrtr = <{off on}>] [txdefrt = <{off on}>] [trace = <{off on}>] </pre>	
-----------------------	--	--

<i>rip</i>	Enable (on) or disable (off) RIP. By default RIP is disabled.	REQUIRED
<i>[version]</i>	Configure the RIP version to be applied. Select either: <ul style="list-style-type: none"> ▪ rip_unspec No RIP version is a priori specified. The actual RIP version to be used is negotiated with the remote side. ▪ rip_v1 RIP version 1 is used. ▪ rip_v2 RIP version 2 is used. 	OPTIONAL
<i>[defmetric]</i>	A number between 1 and 16 (hops). Represents the default RIP metric for imported routes. By default the default RIP metric for an imported route is 1 hop.	OPTIONAL
<i>[updatetime]</i>	A number between 1 and 3600 (seconds). Represents the update timer value of the RIP routing table. By default the update timer value is 30 seconds.	OPTIONAL
<i>[timeouttime]</i>	A number between 1 and 3600 (seconds). Represents the timeout timer value of the RIP routing info. By default the timeout timer value is 180 seconds.	OPTIONAL
<i>[garbagecollectiontime]</i>	A number between 1 and 3600 (seconds). Represents the garbage collection timer value. By default the garbage collection timer value is 120 seconds.	OPTIONAL
<i>[impcrt]</i>	Enable (on) or disable (off) the import of connected routes. By default the import of connected routes is enabled.	OPTIONAL

<code>[impkrt]</code>	Enable (on) or disable (off) the import of kernel routes. By default the import of kernel routes is enabled.	OPTIONAL
<code>[impsrt]</code>	Enable (on) or disable (off) the import of static routes. By default the import of static routes is enabled.	OPTIONAL
<code>[impdefkrt]</code>	Enable (on) or disable (off) the import of the default kernel route. By default the import of the default kernel route is enabled.	OPTIONAL
<code>[impdefsrt]</code>	Enable (on) or disable (off) the import of the default static route. By default the import of the default static route is enabled.	OPTIONAL
<code>[exprrt]</code>	Enable (on) or disable (off) the export of received RIP routes. By default the export of received RIP routes is enabled.	OPTIONAL
<code>[expdefrrt]</code>	Enable (on) or disable (off) the export of the received RIP default route. By default the export of the received RIP default route is enabled.	OPTIONAL
<code>[txrrt]</code>	Enable (on) or disable (off) the transmission of the RIP default route. By default the transmission of the RIP default route is enabled.	OPTIONAL
<code>[trace]</code>	Enable (on) or disable (off) verbose console messaging. By default no traces are logged.	OPTIONAL

EXAMPLE:

```

=>grp rip status
  RIP routing protocol config dump
-----
  RIP daemon is inactive
  Global RIP queries received : 0
  Global RIP route changes : 0
  Default version : send rip_v2, receive rip_v2
  Default redistribution metric is 1
  Sending routing table updates every 30 seconds with +/-5%
  Route timeout after 180 seconds
.....
=>grp rip config rip=on
=>grp rip status
  RIP daemon is active
  Global RIP queries received : 0
  Global RIP route changes : 0
  Default version : send rip_v2, receive rip_v2
  Default redistribution metric is 1
  Sending routing table updates every 30 seconds with +/-5%
  Route timeout after 180 seconds
.....
=>

```

RELATED COMMANDS:

grp rip status
grp rip flush

Show RIP configuration and current RIP Routing table.
Flush RIP interface settings and global parameters.

grp rip flush

Flush RIP interface settings and global parameters.

SYNTAX:

```
grp rip flush
```

EXAMPLE:

```
=>grp rip flush  
=>
```

RELATED COMMANDS:

grp rip ifconfig
grp rip status

Configure a RIP interface.
Show RIP configuration and current RIP Routing table.

grp rip ifconfig

Configure a RIP interface.

SYNTAX:

grp rip ifconfig	intf = <interface name> [rip = <{off on}>] [txversion = <{rip_unspec rip_v1 rip_v2 rip_v1-2}>] [rxversion = <{rip_unspec rip_v1 rip_v2 rip_v1-2}>] [authmode = <{none cleartext}>] [authstring = <quoted string>] [passive = <{off on}>] [splithorizon = <{off on}>]
-------------------------	---

<i>intf</i>	The name of the RIP interface to configure. Execute grp iflist for a list of available interfaces.	REQUIRED
<i>[rip]</i>	Enable (on) or disable (off) RIP on this interface. By default RIP is disabled.	OPTIONAL
<i>[txversion]</i>	Configure the RIP transmit version to be applied. Select either: <ul style="list-style-type: none"> ▪ rip_unspec No RIP version is a priori specified. The actual RIP version to be used is negotiated with the remote side. ▪ rip_v1 RIP version 1 is used. ▪ rip_v2 RIP version 2 is used. ▪ rip_v2-2 RIP version 1 and RIP version 2 are used. 	OPTIONAL
<i>[rxversion]</i>	Configure the RIP receive version to be applied. Select either: <ul style="list-style-type: none"> ▪ rip_unspec No RIP version is a priori specified. The actual RIP version to be used is negotiated with the remote side. ▪ rip_v1 RIP version 1 is used. ▪ rip_v2 RIP version 2 is used. ▪ rip_v2-2 RIP version 1 and RIP version 2 are used. 	OPTIONAL
<i>[authmode]</i>	Configure the RIP authentication mode. Enter the mode in cleartext, or specify none in case no authentication mode is required.	OPTIONAL
<i>[authstring]</i>	Configure the authentication string for the RIP authentication password. Leave authstring unspecified in case the authentication mode is none.	OPTIONAL

<i>[passive]</i>	Enable (on) or disable (off) the passive interface status for this interface. By default the passive status is enabled.	OPTIONAL
<i>[splithorizon]</i>	Enable (on) or disable (off) the split horizon status for this interface. By default the split horizon status is enabled.	OPTIONAL

EXAMPLE:

```
=>grp rip ifconfig
.....
=>
```

RELATED COMMANDS:

grp rip status
grp rip flush

Show RIP configuration and current RIP Routing table.
Flush RIP interface settings and global parameters.

grp rip nbadd

Add a RIP neighbor to the neighbor list.

SYNTAX:

grp rip nbadd	addr = <ip-address>
----------------------	----------------------------------

<i>addr</i>	The neighbor's IP address.	REQUIRED
-------------	----------------------------	----------

EXAMPLE:

```

=>grp rip bnlist
  RIP neighbor list
=====
=>grp rip nbadd addr=192.6.11.150
:grp bnadd addr=192.6.11.150
=>grp rip nblist
  RIP neighbor list
=====
  192.6.11.150
=>

```

RELATED COMMANDS:

grp rip nbdelete
grp rip nblist

Delete a RIP neighbor from the RIP neighbor list.
 Show the RIP neighbor list.

grp rip nbdelete

Delete a RIP neighbor from the RIP neighbor list.

SYNTAX:

grp rip nbdelete	addr = <ip-address>
-------------------------	----------------------------------

<i>[addr]</i>	The IP address of the RIP neighbor to delete.	REQUIRED
---------------	---	----------

EXAMPLE:

```
=>grp nblast
  RIP neighbor list
=====
  192.6.11.150
=>grp rip nbdelete addr=192.6.11.150
:grp rip nbdelete addr=192.6.11.150
=>grp rip nblast
  RIP neighbor list
=====
=>
```

RELATED COMMANDS:

grp rip nbadd
grp rip nblast

Add a RIP neighbor to the RIP neighbor list.
Show the RIP neighbor list.

grp rip nblast

Show the RIP neighbor list.

SYNTAX:

```
grp rip nblast
```

EXAMPLE:

```
=>grp rip nblast
  RIP neighbor list
=====
  192.6.11.150
=>
```

RELATED COMMANDS:

grp rip nbadd
grp rip nbdelete

Add a RIP neighbor to the RIP neighbor list.
Delete a RIP neighbor from the RIP neighbor list.

grp rip status

Show RIP configuration, RIP interfaces and current RIP Routing table.

SYNTAX:

```
grp rip status
```

EXAMPLE:

```
=>grp rip status
RIP routing protocol config dump
-----
RIP daemon is active
Global RIP queries received : 0
Global RIP route changes : 3
Default version : send rip_v2, receive rip_v2
Default redistribution metric is 1
Sending routing table updates every 30 seconds with +/-5%
Route timeout after 180 seconds
Route garbage collect after 120 seconds
Import of connected routes is enabled
Import of kernel routes is enabled
Import of static routes is enabled
Import of default kernel route is enabled
Import of default static route is enabled
Export of RIP routes is enabled
Export of default RIP route is enabled
Transmission of default RIP route is enabled

  Intf      Send      Recv      AuthModePassive SplitHorizon  BadPackets BadRoutes
SentUpdates
-----
  eth0     rip_unspec rip_unspec none      off      on          0          58
62

RIP route table dump
-----
Codes : K - Kernel, C - connected, S - Static, R - RIP, * - FIB route
Network      Next Hop      Metric From      Flags
-----
R 0.0.0.0/0    192.6.11.150  3      192.6.11.150 <>  *
C 10.0.0.0/8   1             1             <>  *
K 129.132.2.21/32 138.203.7.146 1             <>  *
C 138.203.4.0/22 1             1             <>  *
C 172.16.1.0/24 1             1             <>  *
=>
```

RELATED COMMANDS:

grp rip nbadd
grp rip nbdelete

Add a RIP neighbor to the RIP neighbor list.
Delete a RIP neighbor from the RIP neighbor list.

13 IP Commands

ip (to access the IP level)
ip apadd
ip apdelete
ip aplist
ip arpadd
ip arpdelete
ip arplist
ip config
ip flush
ip ifconfig
ip iflist
ip ping
ip rtadd
ip rtdelete
ip rtlist
ip sendto

ip apadd

Assign an Internet Protocol (IP) address to an interface.

SYNTAX:

ip apadd	addr = <ip-address> [netmask = <ip-mask (dotted or cidr)>] intf = <interface name> [pointopoint = <ip-address>] [addrtrans = <{none pat}>] [addroute = <{no yes}>] [type = <number>]
-----------------	---

<i>addr</i>	The new IP address to add.	REQUIRED
<i>[netmask]</i>	The subnetmask associated with this address.	OPTIONAL
<i>intf</i>	The interface name.	REQUIRED
<i>[pointopoint]]</i>	The remote IP address in case of a dedicated point-to-point link.	OPTIONAL
<i>[addrtrans]</i>	Indicates whether network address translation mode is allowed (pat) for this IP address or not (none).	OPTIONAL
<i>[addroute]</i>	Add typical net/subnet routes automatically according to the default (or specified) subnet mask (yes) or not (no).	OPTIONAL
<i>[type]</i>	The type of address classification. For internal use only.	OPTIONAL

EXAMPLE:

```

=>ip aplist
1 eth0 Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr ff:ff:ff:ff:ff:ff
inet addr:10.10.10.147 Bcast: 10.10.10.255 Mask:255.0.0.0
UP RUNNING pat MTU:1500 ReasmMAX:65535 Group:2
IPRX bytes:19791886 unicastpkts:11341 bcastpkts:290555
IPTX bytes:839550 unicastpkts:11477 bcastpkts:0 dropkts:0
HWRX bytes:0 unicastpkts:0 bcastpkts:0
HWTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
0 loop Type:0
inet addr:127.0.0.1 Bcast:127.255.255.255 Mask:255.0.0.0
UP RUNNING MTU:1500 ReasmMAX:65535 Group:1
IPRX bytes:116 unicastpkts:0 bcastpkts:2
IPTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
HWRX bytes:0 unicastpkts:0 bcastpkts:0
HWTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
=>ip apadd addr=10.0.0.2 netmask=255.255.255.0 intf=eth0 addrtrans=pat addroute=yes
=>ip aplist
2 eth0 Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr ff:ff:ff:ff:ff:ff
inet addr:10.0.0.2 Bcast: 10.0.0.255 Mask:255.255.255.0
UP RUNNING pat MTU:1500 ReasmMAX:65535 Group:2
IPRX bytes:0 unicastpkts:0 bcastpkts:0
IPTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
HWRX bytes:0 unicastpkts:0 bcastpkts:0
HWTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
1 eth0 Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr ff:ff:ff:ff:ff:ff
inet addr:10.10.10.147 Bcast: 10.10.10.255 Mask:255.0.0.0
UP RUNNING pat MTU:1500 ReasmMAX:65535 Group:2
IPRX bytes:19810763 unicastpkts:11515 bcastpkts:290669
IPTX bytes:853114 unicastpkts:11662 bcastpkts:0 dropkts:0
HWRX bytes:0 unicastpkts:0 bcastpkts:0
HWTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
0 loop Type:0
inet addr:127.0.0.1 Bcast:127.255.255.255 Mask:255.0.0.0
UP RUNNING MTU:1500 ReasmMAX:65535 Group:1
IPRX bytes:116 unicastpkts:0 bcastpkts:2
IPTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
HWRX bytes:0 unicastpkts:0 bcastpkts:0
HWTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
=>

```

RELATED COMMANDS:

ip apdelete
ip aplist

Remove an IP address from an interface.
Show current IP addresses.

ip apdelete

Remove an IP address from an interface.

SYNTAX:

ip apdelete	addr = <ip-address>	
<i>addr</i>	The IP address to delete.	REQUIRED

EXAMPLE:

```

=>ip aplist
2   eth0      Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr ff:ff:ff:ff:ff:ff
    inet addr:10.0.0.2      Bcast: 10.0.0.255      Mask: 255.255.255.0
    UP RUNNING   pat  MTU:1500 ReasmMAX:65535 Group:2
    IPRX bytes:0          unicastpkts:0      brcastpkts:0
    IPTX bytes:0          unicastpkts:0      brcastpkts:0      droppkts:0
    HWRX bytes:0          unicastpkts:0      brcastpkts:0
    HWTX bytes:0          unicastpkts:0      brcastpkts:0      droppkts:0
1   eth0      Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr ff:ff:ff:ff:ff:ff
    inet addr:10.10.10.147  Bcast: 10.10.10.255  Mask: 255.0.0.0
    UP RUNNING   pat  MTU:1500 ReasmMAX:65535 Group:2
    IPRX bytes:19791886   unicastpkts:11341  brcastpkts:290555
    IPTX bytes:839550     unicastpkts:11477  brcastpkts:0      droppkts:0
    HWRX bytes:0          unicastpkts:0      brcastpkts:0
    HWTX bytes:0          unicastpkts:0      brcastpkts:0      droppkts:0
0   loop      Type:0
    inet addr:127.0.0.1    Bcast:127.255.255.255 Mask:255.0.0.0
    UP RUNNING   MTU:1500 ReasmMAX:65535 Group:1
    IPRX bytes:116        unicastpkts:0      brcastpkts:2
    IPTX bytes:0          unicastpkts:0      brcastpkts:0      droppkts:0
    HWRX bytes:0          unicastpkts:0      brcastpkts:0
    HWTX bytes:0          unicastpkts:0      brcastpkts:0      droppkts:0
=>ip apdelete addr=10.0.0.2
=>ip aplist
1   eth0      Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr ff:ff:ff:ff:ff:ff
    inet addr:10.10.10.147  Bcast: 10.10.10.255  Mask: 255.0.0.0
    UP RUNNING   pat  MTU:1500 ReasmMAX:65535 Group:2
    IPRX bytes:19791886   unicastpkts:11341  brcastpkts:290555
    IPTX bytes:839550     unicastpkts:11477  brcastpkts:0      droppkts:0
    HWRX bytes:0          unicastpkts:0      brcastpkts:0
    HWTX bytes:0          unicastpkts:0      brcastpkts:0      droppkts:0
0   loop      Type:0
    inet addr:127.0.0.1    Bcast:127.255.255.255 Mask:255.0.0.0
    UP RUNNING   MTU:1500 ReasmMAX:65535 Group:1
    IPRX bytes:116        unicastpkts:0      brcastpkts:2
    IPTX bytes:0          unicastpkts:0      brcastpkts:0      droppkts:0
    HWRX bytes:0          unicastpkts:0      brcastpkts:0
    HWTX bytes:0          unicastpkts:0      brcastpkts:0      droppkts:0
=>

```

RELATED COMMANDS:

ip apadd

Add an IP address to an interface.

ip aplist

Show current IP addresses.

ip aplist

Show a list of all configured IP addresses.

SYNTAX:

```
ip aplist
```

EXAMPLE:

```

=>ip aplist
2 eth0      Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr  ff:ff:ff:ff:ff:ff
  inet addr:10.0.0.2      Bcast: 10.0.0.255      Mask:255.255.255.0
  UP RUNNING pat MTU:1500 ReasmMAX:65535 Group:2
  IPRX bytes:0          unicastpkts:0      bcastpkts:0
  IPTX bytes:0          unicastpkts:0      bcastpkts:0      dropkts:0
  HWRX bytes:0          unicastpkts:0      bcastpkts:0
  HWTX bytes:0          unicastpkts:0      bcastpkts:0      dropkts:0
1 eth0      Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr  ff:ff:ff:ff:ff:ff
  inet addr:10.10.10.147 Bcast: 10.10.10.255      Mask:255.0.0.0
  UP RUNNING pat MTU:1500 ReasmMAX:65535 Group:2
  IPRX bytes:19791886  unicastpkts:11341 bcastpkts:290555
  IPTX bytes:839550    unicastpkts:11477 bcastpkts:0      dropkts:0
  HWRX bytes:0         unicastpkts:0      bcastpkts:0
  HWTX bytes:0         unicastpkts:0      bcastpkts:0      dropkts:0
0 loop      Type:0
  inet addr:127.0.0.1    Bcast:127.255.255.255 Mask:255.0.0.0
  UP RUNNING MTU:1500 ReasmMAX:65535 Group:1
  IPRX bytes:116       unicastpkts:0      bcastpkts:2
  IPTX bytes:0         unicastpkts:0      bcastpkts:0      dropkts:0
  HWRX bytes:0         unicastpkts:0      bcastpkts:0
  HWTX bytes:0         unicastpkts:0      bcastpkts:0      dropkts:0
=>

```

RELATED COMMANDS:

ip aplist

Add an IP address to an interface.

ip adelete

Remove an IP address from an interface.

ip arpadd

Add a static entry to the SpeedTouch™ ARP cache.

SYNTAX:

ip arpadd	intf = <interface name> ip = <ip-address> [hwaddr = <hardware-address>]
------------------	--

<i>intf</i>	The interface name.	REQUIRED
<i>ip</i>	The IP address.	REQUIRED
<i>[hwaddr]</i>	The hardware address (e.g. the Ethernet MAC address).	OPTIONAL

EXAMPLE:

```
=>ip arplist
Intf      IP-address      HW-address      Type
eth0      10.0.0.1        00:01:42:5f:7d:81  DYNAMIC
eth0      10.0.0.8        00:a0:24:ae:66:e1  DYNAMIC
eth0      10.0.1.99       52:41:53:20:20:4d  STATIC
eth0      10.0.1.100     52:41:53:20:f0:90  STATIC
=>ip arpadd intf=eth0 ip=10.0.0.2 hwaddr=00:10:a4:d0:9a:db
=>ip arplist
Intf      IP-address      HW-address      Type
eth0      10.0.0.1        00:01:42:5f:7d:81  DYNAMIC
eth0      10.0.0.8        00:a0:24:ae:66:e1  DYNAMIC
eth0      10.0.1.99       52:41:53:20:20:4d  STATIC
eth0      10.0.1.100     52:41:53:20:f0:90  STATIC
eth0      10.0.0.2        00:10:a4:d0:9a:db  STATIC
=>
```

RELATED COMMANDS:

ip arpdelete	Delete an ARP entry.
ip arplist	Show current ARP cache.

ip arpdelete

Remove an entry from the SpeedTouch™ ARP cache.

SYNTAX:

ip arpdelete	intf = <interface name> ip = <ip-address> [hwaddr = <hardware-address>]
---------------------	--

<i>intf</i>	The interface name.	REQUIRED
<i>ip</i>	The IP address.	REQUIRED
<i>[hwaddr]</i>	The hardware address.	OPTIONAL

EXAMPLE:

```
=>ip arplist
Intf      IP-address      HW-address      Type
eth0      10.0.0.1        00:01:42:5f:7d:81  DYNAMIC
eth0      10.0.0.8        00:a0:24:ae:66:e1  DYNAMIC
eth0      10.0.1.99       52:41:53:20:20:4d  STATIC
eth0      10.0.1.100     52:41:53:20:f0:90  STATIC
eth0      10.0.0.2        00:10:a4:d0:9a:db  STATIC
=>ip arpdelete intf=eth0 ip=10.0.0.2 hwaddr=00:10:a4:d0:9a:db
=>ip arplist
Intf      IP-address      HW-address      Type
eth0      10.0.0.1        00:01:42:5f:7d:81  DYNAMIC
eth0      10.0.0.8        00:a0:24:ae:66:e1  DYNAMIC
eth0      10.0.1.99       52:41:53:20:20:4d  STATIC
eth0      10.0.1.100     52:41:53:20:f0:90  STATIC
eth0      10.0.0.2        00:10:a4:d0:9a:db  STATIC
=>
```

RELATED COMMANDS:

ip arpadd	Add a static ARP entry.
ip arplist	Show current ARP cache.

ip arplist

Show the SpeedTouch™ ARP cache.

SYNTAX:

```
ip arplist
```

EXAMPLE OUTPUT:

```
=>ip arplist
Intf      IP-address      HW-address      Type
eth0      10.0.0.1        00:01:42:5f:7d:81  DYNAMIC
eth0      10.0.0.8        00:a0:24:ae:66:e1  DYNAMIC
eth0      10.0.1.99       52:41:53:20:20:4d  STATIC
eth0      10.0.1.100      52:41:53:20:f0:90  STATIC
eth0      10.0.0.2        00:10:a4:d0:9a:db  STATIC
=>
```

RELATED COMMANDS:

ip arpadd

Add a static entry to the ARP cache.

ip arpdelete

Delete an entry from the ARP cache.

ip config

Show/set global IP stack configuration options.

SYNTAX:

ip config	<pre>[forwarding = <{off on}>] [firewalling = <{off on}>] [redirects = <{off on}>] [sourcerouting = <{off on}>] [netbroadcasts = <{off on}>] [ttl = <number{0-255}>] [fraglimit = <number{1-1024}>] [defragmode = <{normal always nat}>] [addrcheck = <{off own static dynamic}>] [mssclamping = <{off on}>]</pre>
------------------	--

[forwarding]	Disable (off) or enable (on) the IP routing functionality.	OPTIONAL
[firewalling]	Enable (on) or disable (off) IP firewalling (master switch). If applicable the CLI firewall level allows configuration of the SpeedTouch™ firewall. For security reasons this parameter is enabled per default. It is strongly recommended never to disable the SpeedTouch™ firewall.	OPTIONAL
[redirects]	Disable (off) or enable (on) the sending of ICMP redirect messages. A router can send a redirect message in case a shorter path than the path followed is discovered. For security reasons this parameter is disabled per default.	OPTIONAL
[sourcerouting]	Disallow (off) or allow (on) IP source routed packets. IP source routed packets are packets with the route to follow specified in the header. For security reasons this parameter is disabled per default.	OPTIONAL
[netbroadcasts]	Disallow (off) or allow (on) net directed broadcasts. This parameter is per default disabled. In case netbroadcasts are allowed no traces of netbroadcasts are generated.	OPTIONAL
[ttl]	A number between 0 and 255. Represents the default time-to-live (ttl) for locally generated IP packets. This parameter determines the number of hop-counts the IP packet may pass before it is dropped. Generally the time-to-live is 64 hop-counts. By limiting the time-to-live continuous circulation of IP packets on the network without ever reaching a destination is avoided.	OPTIONAL

<i>[fraglimit]</i>	<p>A number between 1 and 1024. Represents the maximum number of IP packet fragments waiting for completion. Generally the fragmentation limit is 64. By limiting the fragmentation limit the depletion of the buffer is avoided.</p>	OPTIONAL
<i>[defragmode]</i>	<p>Define which packets are reassembled under which circumstances. Choose between:</p> <ul style="list-style-type: none"> ▪ normal Packets to be forwarded will not be reassembled. Packets with local destination, i.e. destined for the SpeedTouch™, are reassembled. ▪ always Packets are always reassembled. ▪ nat Same behaviour as normal except for packets to be forwarded through the Network Address Translation (NAT) engine. Packets on which address translation is performed are reassembled as the NAT engine requires the entire packet. 	OPTIONAL
<i>[addrcheck]</i>	<p>Set the level of IP address checks. Choose between:</p> <ul style="list-style-type: none"> ▪ off No address checking is performed. For advanced users only; in normal circumstances there should always be some kind of address checking. ▪ own Minimum level of checking. Only the address configuration on the SpeedTouch™ is checked. ▪ static Checking of the address configuration of the SpeedTouch™ and also of traffic: addresses of incoming packets; this checking is related to constants (e. g. an address may not be entirely composed of one's or zero's). ▪ dynamic Besides the address configuration of the SpeedTouch™ itself, and besides the checking of traffic on a constants level, additional checking is performed on the IP addresses that are determined by the configuration, more specifically by the network. 	OPTIONAL
<i>[mssclamping]</i>	<p>Disable (off) or enable (on) mss clamping for low mtu interfaces. Mss clamping assures that the size of a TCP packet never exceeds the available mtu of the outgoing interface. It is recommended not to disable this parameter.</p>	OPTIONAL

EXAMPLE:

```
=>ip config
Forwarding on
Firewalling off
Sendredirects off
Srcrouterouting on
NetBroadcasts off
Default TTL 128
Fraglimit 32 fragments
Fragcount currently 0 fragments
Defragment mode : always
Address checks : static
Mss clamping : on
=>ip config firewalling=on ttl=64 fraglimit=64 defragmode=nat
=>ip config
Forwarding on
Firewalling on
Sendredirects off
Srcrouterouting on
NetBroadcasts off
Default TTL 64
Fraglimit 64 fragments
Fragcount currently 0 fragments
Defragment mode : nat
Address checks : static
Mss clamping : on
=>
```

RELATED COMMANDS:

ip ifconfig

Configure interface parameters.

ip flush

Flush complete IP configuration. Dynamic configurations (e.g. from PPP or CIP links) remain. The flush command does not impact previously saved configurations.

As an **ip flush** causes all local IP connectivity to be deleted, do not execute this command during an IP based local connection, e.g. a Telnet CLI session, or web based CLI access.

SYNTAX:

```
ip flush
```

EXAMPLE:

```
=>ip aplist
3   cip1      Type:ATM
    inet addr:172.16.0.5      Bcast:172.16.0.255      Mask:255.255.255.0
    UP RUNNING   pat  MTU:9180  ReasmMAX:65535  Group:0
    IPRX bytes:0      unicastpkts:0      broadcastpkts:0
    IPTX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
    HWRX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
    HWTX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
2   eth0      Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr ff:ff:ff:ff:ff:ff
    inet addr:10.0.0.2      Bcast: 10.0.0.255      Mask:255.255.255.0
    UP RUNNING   pat  MTU:1500  ReasmMAX:65535  Group:2
    IPRX bytes:0      unicastpkts:0      broadcastpkts:0
    IPTX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
    HWRX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
    HWTX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
0   loop      Type:0
    inet addr:127.0.0.1      Bcast:127.255.255.255  Mask:255.0.0.0
    UP RUNNING   MTU:1500  ReasmMAX:65535  Group:1
    IPRX bytes:116     unicastpkts:0      broadcastpkts:2
    IPTX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
    HWRX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
    HWTX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
=>ip flush
=>ip aplist
3   cip1      Type:ATM
    inet addr:172.16.0.5      Bcast:172.16.0.255      Mask:255.255.255.0
    UP RUNNING   pat  MTU:9180  ReasmMAX:65535  Group:0
    IPRX bytes:0      unicastpkts:0      broadcastpkts:0
    IPTX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
    HWRX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
    HWTX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
0   loop      Type:0
    inet addr:127.0.0.1      Bcast:127.255.255.255  Mask:255.0.0.0
    UP RUNNING   MTU:1500  ReasmMAX:65535  Group:1
    IPRX bytes:116     unicastpkts:0      broadcastpkts:2
    IPTX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
    HWRX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
    HWTX bytes:0      unicastpkts:0      broadcastpkts:0      dropkts:0
=>
```

ip ifconfig

Configure interface parameters.

SYNTAX:

ip ifconfig	intf = <interface name> [mtu = <number{293-20000}>] [status = <{down up}>] [hwaddr = <hardware-address>] [group = <{wan local lan}>]
--------------------	---

<i>intf</i>	The IP interface name.	REQUIRED
<i>[mtu]</i>	A number between 293 and 20000. Represents the maximum transmission unit, i.e. the maximum packet size (including IP header) to use on this interface. The default value depends on the connection and packet service for which the interface was created.	OPTIONAL
<i>[status]</i>	The administrative status of the interface. Choose between: <ul style="list-style-type: none"> ▪ down ▪ up 	OPTIONAL
<i>[hwaddr]</i>	The hardware address (e.g. the Ethernet MAC address) of this interface.	OPTIONAL
<i>[group]</i>	The group this interface belongs to (e.g. for oriented firewalling).	OPTIONAL

EXAMPLE:

```

=>ip iflist
Interface   GRP  MTU   RX      TX      TX-DROP  STATUS  HWADDR
0 loop      1    1500  116     0        0        UP
1 eth0      2    3000  21045795 1019664  0        UP      00:80:9f:24:ab:cf
2 NewMer    0    1500  0        0        0        UP      00:80:9f:24:ab:cf
5 cip0      0    9180  0        0        0        UP
=>ip ifconfig intf=eth0 mtu=1500
=>ip iflist
Interface   GRP  MTU   RX      TX      TX-DROP  STATUS  HWADDR
0 loop      1    1500  116     0        0        UP
1 eth0      2    1500  21054963 1025417  0        UP      00:80:9f:24:ab:cf
2 NewMer    0    1500  0        0        0        UP      00:80:9f:24:ab:cf
5 cip0      0    9180  0        0        0        UP
=>

```

RELATED COMMANDS:

ip config

Show/set global IP stack configuration options.

ip iflist

Show all current interfaces.

SYNTAX:

```
ip iflist
```

EXAMPLE OUTPUT:

```
=>ip iflist
Interface   GRP  MTU   RX      TX      TX-DROP  STATUS  HWADDR
0 loop      1    1500  116     0        0        UP        
1 eth0     2    3000  21045795 1019664  0        UP      00:80:9f:24:ab:cf
2 NewMer   0    1500  0        0        0        UP      00:80:9f:24:ab:cf
5 cip0     0    9180  0        0        0        UP        
=>
```

RELATED COMMANDS:

ip ifconfig

Configure interface parameters.

ip ping

Send ICMP ECHO_REQUEST packets.

SYNTAX:

ip ping	addr = <ip-address> [count = <number{1-1000000}>] [size = <number{1-20000}>] [interval = <number{100-1000000}>] [listen = <{off on}>]
----------------	--

<i>addr</i>	The destination IP address.	REQUIRED
<i>[count]</i>	A number between 1 and 1000000. Represents the number of pings to send.	OPTIONAL
<i>[size]</i>	A number between 1 and 20000 (bytes). Represents the size of the ping packet(s).	OPTIONAL
<i>[interval]</i>	A number between 100 and 10000000 (milliseconds). Represents the intermediate interval between two sent ICMP packets.	OPTIONAL
<i>[listen]</i>	Listen for incoming ICMP packets (on) or only send ICMP packets (off).	OPTIONAL

EXAMPLE:

```
=>ip ping addr=10.0.0.148 listen=off
=>ip ping addr=10.0.0.148 listen=on
9 bytes from 10.0.0.148: Echo Request
=>ip ping addr=10.0.0.148 count=15 listen=on
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
9 bytes from 10.0.0.148: Echo Request
=>
```

RELATED COMMANDS:

ip sendto Send UDP packets.

ip rtadd

Add a route to the SpeedTouch™ routing table.

SYNTAX:

ip rtadd	dst = <ip-address> [dstmsk = <ip-mask(dotted or cidr)>] [src = <ip-address>] [srcmsk = <ip-mask(dotted or cidr)>] [gateway = <ip-address>] [intf = <interface name>] [metric = <number{0-100}>] [type = <number>]
-----------------	--

<i>dst</i>	The destination IP address(es) for this route. Supports cidr notation.	REQUIRED
<i>[dstmsk]</i>	The destination IP address mask.	OPTIONAL
<i>[src]</i>	The source IP address(es) allowed to use this route. Supports cidr notation.	OPTIONAL
<i>[srcmsk]</i>	The source IP address mask.	OPTIONAL
<i>[gateway]</i>	The IP address of the next hop. Must be directly connected. The parameters 'gateway' and 'intf' are mutually exclusive.	OPTIONAL
<i>[intf]</i>	Only for special interface routes : the outgoing IP interface name. The parameters 'gateway' and 'intf' are mutually exclusive.	OPTIONAL
<i>[metric]</i>	The metric for this route (currently not used).	OPTIONAL
<i>[type]</i>	Route classification. For internal use only.	OPTIONAL

EXAMPLE:

```

=>ip rtlist
  Destination      Source           Gateway          Intf    Mtrc
  10.0.0.0/24      10.0.0.0/24     10.0.0.140      eth0    0
  10.0.0.140/32   0.0.0.0/0       10.0.0.140      eth0    0
  127.0.0.1/32    0.0.0.0/0       127.0.0.1       loop    0
=>ip rtadd dst=10.10.0.0/24 src=10.0.0.0/24 gateway=10.0.0.140
=>ip rtlist
  Destination      Source           Gateway          Intf    Mtrc
  10.0.0.0/24      10.0.0.0/24     10.0.0.140      eth0    0
  10.10.0.0/24     10.0.0.0/24     10.0.0.140      eth0    0
  10.0.0.140/32   0.0.0.0/0       10.0.0.140      eth0    0
  127.0.0.1/32    0.0.0.0/0       127.0.0.1       loop    0
=>
    
```

RELATED COMMANDS:

- ip rtdelete** Remove a route from the routing table.
- ip rtlist** Show current routing table.

ip rtdelete

Delete a route from the SpeedTouch™ routing table.

SYNTAX:

ip rtdelete	dst = <ip-address> [dstmsk = <ip-mask(dotted or cidr)>] [src = <ip-address>] [srcmsk = <ip-mask(dotted or cidr)>] [gateway = <ip-address>] [intf = <interface name>]
--------------------	---

<i>dst</i>	The destination IP address(es) of the route. Supports cidr notation.	REQUIRED
<i>[dstmsk]</i>	The destination IP address mask.	OPTIONAL
<i>[src]</i>	The source IP address(es) of the route. Supports cidr notation.	OPTIONAL
<i>[srcmsk]</i>	The source IP address mask.	OPTIONAL
<i>[gateway]</i>	The IP address of the next hop. Must be directly connected. The parameters 'gateway' and 'intf' are mutually exclusive.	OPTIONAL
<i>[intf]</i>	Only for special interface routes : the outgoing IP interface name. The parameters 'gateway' and 'intf' are mutually exclusive.	OPTIONAL

EXAMPLE:

```
=>ip rtlist
  Destination      Source           Gateway          Intf           Mtrc
  10.0.0.0/24      10.0.0.0/24     10.0.0.140      eth0           0
  10.10.0.0/24     10.0.0.0/24     10.0.0.140      eth0           0
  10.0.0.140/32    0.0.0.0/0       10.0.0.140      eth0           0
  127.0.0.1/32    0.0.0.0/0       127.0.0.1       loop           0
=>ip rtdelete dst=10.10.0.0/24 src=10.0.0.0/24 gateway=10.0.0.140
=>ip rtlist
  Destination      Source           Gateway          Intf           Mtrc
  10.0.0.0/24      10.0.0.0/24     10.0.0.140      eth0           0
  10.0.0.140/32    0.0.0.0/0       10.0.0.140      eth0           0
  127.0.0.1/32    0.0.0.0/0       127.0.0.1       loop           0
=>
```

RELATED COMMANDS:

ip rtadd	Add a route to the routing table.
ip rtlist	Show current routing table.

ip rtlist

Show current SpeedTouch™ routing table.

SYNTAX:

```
ip rtlist
```

EXAMPLE OUTPUT:

```
=>ip rtlist
  Destination      Source           Gateway          Intf    Mtrc
  10.0.0.0/24      10.0.0.0/24     10.0.0.140      eth0    0
  172.16.0.5/32   0.0.0.0/0       172.16.0.5      cip1    0
  0.0.0.140/32    0.0.0.0/0       10.0.0.140      eth0    0
  127.0.0.1/32    0.0.0.0/0       127.0.0.1       loop    0
  10.0.0.0/24      0.0.0.0/0       10.0.0.140      eth0    0
  172.16.0.0/24   0.0.0.0/0       172.16.0.5      cip1    1
=>
```

RELATED COMMANDS:

ip rtadd

Add a route to the routing table.

ip rdelete

Remove a route from the routing table.

ip sendto

Send UDP packets.

SYNTAX:

ip sendto	addr = <ip-address> [count = <number{1-1000000}>] [size = <number{1-20000}>] [interval = <number{100-1000000}>] [listen = <{off on}>] [srcport = <number{1-65535}>] dstport = <number{1-65535}>
------------------	--

<i>addr</i>	The destination IP address.	REQUIRED
<i>[count]</i>	A number between 1 and 1000000. Represents the number of UDP packets to send.	OPTIONAL
<i>[size]</i>	A number between 1 and 20000 (bytes). Represents the size of the ping packet(s).	OPTIONAL
<i>[interval]</i>	A number between 100 and 10000000 (milliseconds). Represents the intermediate interval between two sent UDP packets.	OPTIONAL
<i>[listen]</i>	Listen for incoming UDP packets (on) or only send UDP packets (off).	OPTIONAL
<i>[srcport]</i>	The UDP source port number to use.	OPTIONAL
<i>dstport</i>	The UDP destination port number to send to.	REQUIRED

EXAMPLE:

```
=>ip sendto addr=10.0.0.148 listen=on srcport=19 dstport=1025
=>ip sendto addr=10.0.0.148 listen=on srcport=19 dstport=1025
1 bytes from 10.0.0.148:1025
41                                     A
=>ip sendto addr=10.0.0.148 count=3 listen=on srcport=19 dstport=1025
1 bytes from 10.0.0.148:1025
41                                     A
1 bytes from 10.0.0.148:1025
41                                     A
1 bytes from 10.0.0.148:1025
41                                     A
=>
```

RELATED COMMANDS:

ip ping

Send ICMP ECHO_REQUEST packets.

14 IPoA Commands

ipoa (to access the IPoA level)

ipoa flush

ipoa ifadd

ipoa ifattach

ipoa ifconfig

ipoa ifdelete

ipoa ifdetach

ipoa iflist

ipoa flush

Flush complete Routed IPoA configuration.

The flush command does not impact previously saved configurations.

SYNTAX:

<i>ipoa flush</i>

RELATED COMMANDS:

<i>ipoa ifadd</i>	Create a new Routed IPoA interface.
<i>ipoa ifconfig</i>	Configure a Routed IPoA interface.
<i>ipoa ifdelete</i>	Delete a Routed IPoA interface.
<i>ipoa ifdetach</i>	Detach a Routed IPoA interface.
<i>ipoa iflist</i>	Show current Routed IPoA interfaces.

ipoa ifadd

Create a new Routed IPoA interface.

SYNTAX:

ipoa ifadd	[intf = <string>] [dest = <phonebook entry>]
-------------------	---

[intf]	The name for the new Routed IPoA interface. If not specified, the destination parameter must be specified. In this case the name of the destination will double as interface name.	OPTIONAL
[dest]	The destination for the new Routed IPoA interface. Typically, a phonebook entry.	OPTIONAL

EXAMPLE:

```
=>ipoa iflist
IPoA_1      : dest : IPoA_1
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected

=>phonebook list
Name        Type    Use  Address
IPoA_1      ipoa    1    8.35
IPoA_2      ipoa    0    8.36
=>ipoa ifadd dest=IPoA_2
=>ipoa iflist
IPoA_1      : dest : IPoA_1
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected

IPoA_2      : dest : IPoA_2
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : not-connected

=>
```

RELATED COMMANDS:

ipoa ifattach	Attach an Routed IPoA interface.
ipoa ifconfig	Configure a Routed IPoA interface.
ipoa ifdelete	Delete a Routed IPoA interface.
ipoa ifdetach	Detach a Routed IPoA interface.
ipoa iflist	Show current Routed IPoA interfaces.

ipoa ifattach

Attach (i.e. connect) an Routed IPoA interface.

SYNTAX:

```
ipoa ifattach      intf = <ifname>
```

intf The name of the Routed IPoA interface to attach. REQUIRED

EXAMPLE:

```

=>ipoa iflist
IPoA_PVC1  : dest : Br4
             Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
             Connection State : connected

Br3        : dest : Br3
             Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
             Connection State : not-connected

=>ipoa ifattach intf=Br3
IPoA_PVC1  : dest : Br4
             Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
             Connection State : connected

Br3        : dest : Br3
             Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
             Connection State : connected

=>

```

RELATED COMMANDS:

ipoa ifadd	Create a new Routed IPoA interface.
ipoa ifconfig	Configure a Routed IPoA interface.
ipoa ifdelete	Delete a Routed IPoA interface.
ipoa ifdetach	Detach a Routed IPoA interface.
ipoa iflist	Show current Routed IPoA interfaces.

ipoa ifconfig

Configure an IPoA interface.

SYNTAX:

ipoa ifconfig	intf = <IPoA_PVC> [dest = <ifname>] [qos = <string>] [encaps = <{llc/snap vcmux}>] [retry = <number {0-65535}>]
----------------------	--

<i>intf</i>	The name of the Routed IPoA interface to configure.	REQUIRED
<i>[dest]</i>	The destination for this interface. Typically a phonebook entry. This parameter needs only to be specified in case of an interface created without specified destination.	OPTIONAL
<i>[qos]</i>	The name of a configured Quality Of Service book entry. If not specified, the default Quality Of Service book entry will be used.	OPTIONAL
<i>[encaps]</i>	The type of encapsulation to be used for this bridge interface. Choose between: <ul style="list-style-type: none"> ▪ llc/snap ▪ vcmux 	OPTIONAL
<i>[retry]</i>	A number between 0 and 65535. Represents the number of Wide Area Network (WAN) connection setup retries before giving up. By default the retry value is 10.	OPTIONAL

EXAMPLE:

```
=>ipoa iflist
IPoA_PVC1 : dest : Br4
           Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : connected

=>ipoa ifconfig intf=IPoA_PVC1 encaps=llc/snap retry=15
=>ipoa iflist
Moreipoa  : dest : Br4
           Retry : 15   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : connected
           RX bytes: 0           frames: 0
           TX bytes: 0           frames: 0           dropframes: 0

=>
```

RELATED COMMANDS:

ipoa ifadd	Create a new Routed IPoA interface.
ipoa ifattach	Attach a Routed IPoA interface.
ipoa ifdelete	Delete a Routed IPoA interface.
ipoa ifdetach	Detach a Routed IPoA interface.
ipoa iflist	Show current Routed IPoA interfaces.

ipoa ifdelete

Delete a Routed IPoA interface.

SYNTAX:

ipoa ifdelete	intf = <ifname>
----------------------	------------------------------

<i>intf</i>	The name of the Routed IPoA interface.	REQUIRED
-------------	--	----------

EXAMPLE:

```
=>ipoa iflist
Newipoa   : dest : Br3
           Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : connected
           RX bytes: 0       frames: 0
           TX bytes: 0       frames: 0       dropframes: 0
Moreipoa__ : dest : Br4
           Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : not-connected
=>ipoa ifdelete intf=Moreipoa
=>ipoa iflist
Newipoa   : dest : Br3
           Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : connected
           RX bytes: 0       frames: 0
           TX bytes: 0       frames: 0       dropframes: 0
=>
```

RELATED COMMANDS:

ipoa ifadd	Create a new Routed IPoA interface.
ipoa ifattach	Attach a Routed IPoA interface.
ipoa ifconfig	Configure a Routed IPoA interface.
ipoa ifdetach	Detach a Routed IPoA interface.
ipoa iflist	Show current Routed IPoA interfaces.

ipoa ifdetach

Detach a Routed IPoA interface.

SYNTAX:

ipoa ifdetach	intf = <ifname>	
<i>intf</i>	The name of the Routed IPoA interface.	REQUIRED

EXAMPLE:

```
=>ipoa iflist
Newipoa   : dest : Br3
           Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : connected
           RX bytes: 0      frames: 0
           TX bytes: 0      frames: 0      dropframes: 0
Moreipoa__ : dest : Br4
           Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : connected
           RX bytes: 0      frames: 0
           TX bytes: 0      frames: 0      dropframes: 0
=>ipoa ifdetach intf=Moreipoa
=>ipoa iflist
Newipoa   : dest : Br3
           Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : connected
           RX bytes: 0      frames: 0
           TX bytes: 0      frames: 0      dropframes: 0
Moreipoa__ : dest : Br4
           Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : not-connected
=>
```

RELATED COMMANDS:

ipoa ifadd	Create a new Routed IPoA interface.
ipoa ifattach	Attach a Routed IPoA interface.
ipoa ifconfig	Configure a Routed IPoA interface.
ipoa ifdelete	Delete a Routed IPoA interface.
ipoa iflist	Show current Routed IPoA interfaces.

ipoa iflist

Show all or a specified Routed IPoA interface(s).

SYNTAX:

ipoa iflist	[intf = <ifname>]
--------------------	--------------------------------

<i>[intf]</i>	The name of the Routed IPoA interface. If not specified all Routed IPoA interfaces are listed.	OPTIONAL
---------------	---	----------

EXAMPLE OUTPUT:

```

=>ipoa iflist
Newipoa   : dest : Br3
           Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : connected
           RX bytes: 0       frames: 0
           TX bytes: 0       frames: 0       dropframes: 0
Moreipoa  : dest : Br4
           Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : connected
           RX bytes: 0       frames: 0
           TX bytes: 0       frames: 0       dropframes: 0
=>

```

RELATED COMMANDS:

ipoa ifadd	Create a new Routed IPoA interface.
ipoa ifattach	Attach a Routed IPoA interface.
ipoa ifconfig	Configure a Routed IPoA interface.
ipoa ifdelete	Delete a Routed IPoA interface.
ipoa detach	Detach a Routed IPoA interface.

15 IPsec Commands

- ipsec config**
- ipsec flush**
- ipsec salear**
- ipsec salist**
- ipsec show**
- ipsec cert (to access the IPsec Cert level)**
- ipsec cert clearall**
- ipsec cert crlconfig**
- ipsec cert export**
- ipsec cert import**
- ipsec cert list**
- ipsec cert refresh**
- ipsec cert remove**
- ipsec cert request**
- ipsec cert cep (to access the IPsec Cert CEP level)**
- ipsec cert cep cancel**
- ipsec cert cep config**
- ipsec cert cep list**
- ipsec cert cep request**
- ipsec cert cep resubmit**
- ipsec connection (to access the IPsec Connection level)**
- ipsec connection add**
- ipsec connection config**
- ipsec connection delete**
- ipsec connection list**
- ipsec connection start**
- ipsec connection stop**

ipsec descriptor (to access the IPsec Descriptor level)
ipsec descriptor add
ipsec descriptor delete
ipsec descriptor list
ipsec peer (to access the IPsec Peer level)
ipsec peer add
ipsec peer config
ipsec peer delete
ipsec peer list
ipsec policy (to access the IPsec Policy level)
ipsec policy assign
ipsec policy flush
ipsec policy list
ipsec policy troff
ipsec policy tron
ipsec policy unassign
ipsec policy chain (to access the Policy Chain level)
ipsec policy chain create
ipsec policy chain delete
ipsec policy chain flush
ipsec policy chain list
ipsec policy rule (to access the Policy Rule level)
ipsec policy rule clear
ipsec policy rule create
ipsec policy rule delete
ipsec policy rule flush
ipsec policy rule list
ipsec policy rule stats

ipsec config

Show/set global IP Security (IPSec)/Virtual Private Networking (VPN) configuration.

SYNTAX:

ipsec config	[state = <{disabled enabled}>] [trace = <{disabled enabled}>]
---------------------	--

<i>[state]</i>	Enable or disable IPSec/VPN operation and processing. By default the IPSec/VPN processing is disabled.	OPTIONAL
<i>[trace]</i>	Enable or disable tracing. By default traces are disabled.	OPTIONAL

ipsec flush

Flush complete IPsec/VPN configuration (inclusive IPsec policy settings).

SYNTAX:

<i>ipsec flush</i>

ipsec salear

Flush all Internet Key Exchange (IKE) and Authentication Header (AH)/Encapsulating Security Payload (ESP) Security Associations (SAs).

SYNTAX:

<i>ipsec salear</i>

RELATED COMMANDS:

ipsec salist Show a list of the current SAs.

ipsec salist

Show all currently active IKE (Phase 1) and AH/ESP (Phase 2) SAs.

SYNTAX:

```
ipsec salist
```

RELATED COMMANDS:

ipsec sadclear

Flush all current SAs.

ipsec show

Show IKE and certificate(s) configuration.

SYNTAX:

<code>ipsec show</code>	<code>[format = <{pretty cli}>]</code>	
<code>[format]</code>	Show intuitive output (pretty) or reflect configuration via CLI commands configuration (cli). By default the "pretty" output is shown.	OPTIONAL

EXAMPLE:

```
=>ipsec show
VPN Status : running
              traces disabled

Descriptors
=====
def_ike      (IKE)   : "identity 3des sha1 minutes 60 dhgroup 1"
def_auth    (IPSEC) : "esp null hmac md5 minutes 1440"
def_encrypt (IPSEC) : "esp aes hmac md5 minutes 60 or esp 3des hmac md5 minutes 60"

Peers
=====

Connections
=====

Policy rules
=====
:ipsec policy assign hook=input chain="_auto_in"
:ipsec policy assign hook=output chain="_auto_out"

Secure storage
=====
Certificate services have not been logged into.

CRL configuration
=====
CRL Checking      : disabled
Use expired       : disabled
URL               :
FetchDynamic      : disabled
Use cert ext      : disabled
Timechecks        : enabled
Net timeout       : 10 seconds
CRL HTTP proxy    : disabled
=>ipsec show format=cli
:ipsec
config state=enabled
descriptor add name="def_ike" phase=IKE value="identity 3des sha1 minutes 60 dhgroup 1"
descriptor add name="def_auth" phase=IPSEC value="esp null hmac md5 minutes 1440"
descriptor add name="def_encrypt" phase=IPSEC value="esp aes hmac md5 minutes 60 or esp
              3des hmac md5 minutes 60"
cert crlconfig time_checking=enabled net_timeout=10
cert cep config chknonce=yes chktid=yes
:ipsec policy assign hook=input chain="_auto_in"
:ipsec policy assign hook=output chain="_auto_out"
=>
```

ipsec cert clearall

Physically delete the secure storage of certificates currently installed on the SpeedTouch™. Use this command with extreme caution: recovery of deleted certificates is not possible!

SYNTAX:

ipsec cert clearall	[force = <{yes no}>]	
[force]	If you are really sure to clear the secure storage, specify yes. If not specified the secure storage is not deleted. A warning message appears instead.	OPTIONAL

EXAMPLE:

```
=>ipsec cert clearall

Removing the secure storage will effectively delete
all certificates currently installed on this gate. There is
_no_ way to recover these certificates afterwards. If you are
really sure you want to do this, use the force option

=>
=>ipsec cert clearall force=yes
Secure storage security is guaranteed when executing following commands:
    Delete the passive software (software deletepassive)
    Duplicate the active software as the passive software (software duplicate)
    Switch over active and passive software (software switch)

=>
```

IMPORTANT NOTE:

To be absolutely sure that the secure storage is completely deleted from the SpeedTouch™'s file system, perform the following actions:

- 1 Delete the passive SpeedTouch™ software via the following CLI command:


```
:software deletepassive
```
- 2 Duplicate the current running active software as passive software version:


```
:software duplicate
```
- 3 Switch over active and passive software version:


```
:software switch
```
- 4 The SpeedTouch™ will restart. All certificates previously stored in the /active and /dl SpeedTouch™ file system subdirectories are deleted. The secure storage is cleared.

RELATED COMMANDS:

ipsec cert remove Remove one item from the secure storage.

ipsec cert crlconfig

Show/set Public Key Infrastructure (PKI) Certificate Revocation List (CRL) configuration.

SYNTAX:

ipsec cert crlconfig	<pre>[checking_enabled = <{disabled enabled}>] [use_expired_crls = <disabled enabled>] [dist_point1 = <quoted string>] [fetch_dynamically = <disabled enabled>] [check_cert_extension = <disabled enabled>] [time_checking = <disabled enabled>] [net_timeout = <number>] [http_proxy_address = <ip-address>] [http_proxy_port = <number>]</pre>
-----------------------------	--

<i>[checking_enabled]</i>	Enable or disable CRL checking. By default checking is disabled.	OPTIONAL
<i>[use_expired_crls]</i>	Allow (enabled) or do not allow (disabled) the use of certificates with expired CRLs. By default the use of expired lists is not allowed.	OPTIONAL
<i>[dist_point1]</i>	The Uniform Resource Identifier (URI) to fetch CRLs from. The URI must contain the IP address of the Light-weight Directory Access Protocol (LDAP) or the HyperText Transfer Protocol (HTTP) server.	OPTIONAL
<i>[fetch_dynamically]</i>	Enable or disable dynamic retrieval of CRLs. By default the dynamic retrieval is disabled.	OPTIONAL
<i>[check_cert_extension]</i>	Check (enabled) or do not check (disabled) the presence of CRL Distribution Point extension. By default no check is done on presence of the extension.	OPTIONAL
<i>[time_checking]</i>	Take (enabled) or do not take (disabled) time restrictions into account. By default time restrictions are checked.	OPTIONAL
<i>[net_timeout]</i>	A number between 0 and 999999999 (seconds). Represents the maximum time to (re)try to connect to external servers. By default the retry period is 10 seconds. Specify 0 for an infinite retry period.	OPTIONAL
<i>[http_proxy_address]</i>	Indicates the IP address of the HTTP proxy to use for CRL retrieval. Specifying 0.0.0.0 means that no proxy is to be used.	OPTIONAL
<i>[http_proxy_port]</i>	Indicates the HTTP proxy port to use for CRL retrieval. By default HTTP proxy port 1080 is assumed. Specify 0 in case no proxy port is to be used.	OPTIONAL

ipsec cert export

Export an individual certificate from the secure storage to a file on the SpeedTouch™ file system (/dl subdirectory).

Typically this command is used to save offline certificates to the SpeedTouch™ file system for later use.

certification files on the Speedtouch™ files system are stored with extension **.cert**.

SYNTAX:

ipsec cert export	item = <number>] filename = <string>
--------------------------	---

<i>item</i>	Secure storage item number. To retrieve the item number, execute <i>:ipsec cert list</i> .	REQUIRED
<i>filename</i>	Name of the file (without extension .cert) to save the secure storage item in.	REQUIRED

EXAMPLE:

```
=>ipsec cert export
R
=>
```

RELATED COMMANDS:

ipsec cert import	Import certificate/CRL from file or pasted text (PKCS#7).
ipsec cert list	List secure storage contents.
ipsec cert refresh	Reload Certificates management subsystem.
ipsec cert remove	Remove one item from the secure storage.

ipsec cert import

Import an individual certificate from a certificate file, stored on the SpeedTouch™ file system (/dl subdirectory).

This command can also be used for importation of offline certificates. In this case, before importing the file, first put the signed certificate – in Public Key Cryptography Standard (PKCS)#7 text format – on the SpeedTouch™ filesystem (/dl subdirectory).

SYNTAX:

ipsec cert import	filename = <string>
--------------------------	----------------------------------

<i>filename</i>	Full name of the file to load the certificate from. In case the file was previously saved by the SpeedTouch™ itself (via <i>:ipsec cert export</i>), the file always has extension .cert .	REQUIRED
-----------------	---	----------

EXAMPLE:

```
=>ipsec cert import
R
=>
```

RELATED COMMANDS:

ipsec cert export	Export an item from the secure storage to file.
ipsec cert list	List secure storage contents.
ipsec cert refresh	Reload Certificates management subsystem.
ipsec cert remove	Remove one item from the secure storage.

ipsec cert list

Show a listing of the secure storage content. The secure storage contains the certificate information and is a PKCS#12 password protected file.

SYNTAX:

```
ipsec cert list [item = <number>]
```

[item] Secure storage item number. OPTIONAL
 Not specifying will generate listing of all content.

EXAMPLE:

```
=>ipsec cert list
Item Distinguished Name           Type      Issuer      serial number
-----
1   cn=cert_sec, o=company         CERT      Cert #4     179
2   cn=rabbit, o=company           CERT      Cert #4     180
3   cn=blackred, o=company2, c=be  CERT      Self-signed  1
=>
```

RELATED COMMANDS:

- ipsec cert clearall** Delete secure storage.
- ipsec cert export** Export an item from the secure storage to file.
- ipsec cert import** Import certificate/CRL from file or pasted text (PKCS#7).
- ipsec cert refresh** Reload Certificates management subsystem.
- ipsec cert remove** Remove one item from the secure storage.

ipsec cert refresh

Reload the Certificate management subsystem into SpeedTouch™ memory.

SYNTAX:

<i>ipsec cert refresh</i>

RELATED COMMANDS:

ipsec cert clearall

Delete secure storage.

ipsec cert export

Export an item from the secure storage to file.

ipsec cert import

Import certificate/CRL from file or pasted text (PKCS#7).

ipsec cert remove

Remove one item from the secure storage.

ipsec cert remove

Delete an item from the secure storage's certification list.

remark that if a CA certification is removed, all certifications in the secure storage being signed by this CA will become invalid!

SYNTAX:

ipsec cert remove	item = <number>
--------------------------	------------------------------

<i>item</i>	Secure storage item number. To retrieve the item number, execute <i>:ipsec cert list</i> .	REQUIRED
-------------	---	----------

EXAMPLE:

<pre>=>ipsec cert list R =></pre>

RELATED COMMANDS:

ipsec cert clearall	Delete secure storage.
ipsec cert export	Export an item from the secure storage to file.
ipsec cert import	Import certificate/CRL from file or pasted text (PKCS#7).
ipsec cert refresh	Reload Certificate management subsystem.

ipsec cert request

Generate an offline certificate request to generate the public and private key pair (if successful).

SYNTAX:

ipsec cert request	subjectdn = <distinguished name> [force = <{yes no}>]
---------------------------	--

<i>subjectdn</i>	<p>The Distinguished Name (DN) for the certificate. The Subject DN reflects the subject name for the requested certificate. To be valid, the value of the <i>subjectdn</i> parameter must be a valid DN in string representation as specified in RFC1779. If used, the subject DN should at least always contain the common name item (cn=) and one or more of the following other items:</p> <ul style="list-style-type: none"> ▪ common name (cn=) ▪ organization unit (ou=) ▪ organization (o=) ▪ locality (l=) ▪ province or state (st=) ▪ country (c=) <p>Use commas to separate the items and enclose all items in quotation marks.</p>	REQUIRED
<i>[force]</i>	<p>Overwrite (yes) any pending offline certificate request or not (no). By default, pending offline certificate requests are overwritten.</p>	OPTIONAL

ipsec cert cep cancel

Cancel the current Certificate Enrollment Protocol (CEP) request.

SYNTAX:

```
ipsec cert cep cancel
```

ipsec cert cep config

Generate an offline certificate request according PKCS#10.

SYNTAX:

ipsec cert cep config	<pre> [url = <quoted string>] [ca_id = <quoted string>] [md5 = <quoted string>] [proxy_url = <quoted string>] [subjectdn = <distinguished name (RFC1779)>] [keylen = <number>] [password = <password>] [email = <quoted string>] [dnsname = <quoted string>] [ipaddress = <ip-address>] [altsubjectdn = <distinguished name (RFC1779)>] [chknonce = <{yes no}>] [chktid = <{yes no}>] [keyusage = <quoted string>] </pre>
------------------------------	---

[url]	<p>The Uniform Resource Locator (URL) of the CEP enrollment script on the CA server.</p> <p>Usually the URL is of the form: <i>http://<host ip-address>[:<port>]/cgi-bin/pkiclient.exe</i>.</p> <p>Make sure the server is identified by its IP address and not a DNS name.</p>	OPTIONAL
[ca_id]	<p>The Certificate Authority (CA) Identity string. Some PKIs rely on the identity string of the CA server to identify the CA.</p>	OPTIONAL
[md5]	<p>A hexadecimal value of 16 bytes, each byte separated by ":".</p> <p>Example: 12:A4:B9:0F:58:92:EC:0F:87:DB:03:4F:8A:8B:7D:91</p> <p>Represents the Message Digest 5 (MD5) fingerprint. The CAMD5FingerPrint is the finger print (MD5 hash) of the root Ca's certificate.</p> <p>Remark that the root CA will NOT be authenticated in case this entry is not specified.</p>	OPTIONAL
[proxy_url]	<p>The http-proxy server URL in cases where the CA is located behind a firewall.</p> <p>Usually the URL is of the form: <i><host ip-address>[:<port>]</i></p> <p>If the port is not specified, the standard HTTP port number (8080) is assumed.</p> <p>Make sure the server is identified by its IP address and not a DNS name.</p>	OPTIONAL

<i>[subjectdn]</i>	<p>The DN for the certificate. The Subject DN reflects the subject name for the requested certificate. To be valid, the value of the <i>subjectdn</i> parameter must be a valid DN in string representation as specified in RFC1779. If used, the subject DN should at least always contain the common name item (cn=) and one or more of the following other items:</p> <ul style="list-style-type: none"> ▪ common name (cn=) ▪ organization unit (ou=) ▪ organization (o=) ▪ locality (l=) ▪ province or state (st=) ▪ country (c=) <p>Use commas to separate the items and enclose all items in quotation marks.</p>	OPTIONAL
<i>[keylen]</i>	<p>Specifies the keylength (in bits) of the being certified key (i.e. your certificate). As only RSA compliant keys are supported, only following lengths are supported: 512,1024 and 2048 (bits). If not specified, the default keylength of 1024 bits is assumed.</p>	OPTIONAL
<i>[password]</i>	<p>The challenge password. Specify this challenge password (only) if the CA requires a password for revocation or automatic enrollment.</p>	OPTIONAL
<i>[email]</i>	<p>The e-Mail address for X509v3 extension. This value might optionally be used for creating the certificate if present. Remark that the e-Mail address is never used by the signed CEP request This parameter should only be used in combination with the <i>dnsname</i>, <i>ipaddress</i> and <i>altsubjectdn</i> parameters to form a SubjectAltName X509v3 extension in the requested certificate.</p>	OPTIONAL
<i>[dnsname]</i>	<p>The domain name for X509v3 extension. This value can optionally be used to provide a real DNS name to the particular VPN gate of the SpeedTouch™. This parameter should only be used in combination with the <i>email</i>, <i>ipaddress</i> and <i>altsubjectdn</i> parameters to form a SubjectAltName X509v3 extension in the requested certificate.</p>	OPTIONAL
<i>[ipaddress]</i>	<p>The IP address name for X509v3 extension. Optionally this parameter can be used to associate an IP address to the real DNS name provided to the SpeedTouch™'s VPN gate. This parameter should only be used in combination with the <i>dnsname</i>, <i>email</i> and <i>altsubjectdn</i> parameters to form a SubjectAltName X509v3 extension in the requested certificate.</p>	OPTIONAL

<code>[altsubjectdn]</code>	<p>The distinguished name for X509v3 extension. The Subject DN reflects the subject name for the requested certificate. To be valid, the value of the <code>subjectdn</code> parameter must be a valid DN in string representation as specified in RFC1779. If used, the subject DN should at least always contain the common name item (<code>cn=</code>) and one or more of the following other items:</p> <ul style="list-style-type: none"> ▪ common name (<code>cn=</code>) ▪ organization unit (<code>ou=</code>) ▪ organization (<code>o=</code>) ▪ locality (<code>l=</code>) ▪ province or state (<code>st=</code>) ▪ country (<code>c=</code>) <p>Use commas to separate the items and enclose all items in quotation marks. This parameter should only be used in combination with the <code>dnsname</code>, <code>ipaddress</code> and <code>email</code> parameters to form a SubjectAltName X509v3 extension in the requested certificate.</p>	OPTIONAL
<code>[chknonce]</code>	<p>Enable (yes) or disable (no) nonce checking. By default nonce checking is enabled. Make sure to use <code>chknonce=no</code> for Entrust VPN connector.</p>	OPTIONAL
<code>[chktid]</code>	<p>Enable (yes) or disable (no) transaction ID checking. By default transaction ID checking is enabled. Make sure to use <code>chktid=no</code> in case of a Baltimore CA.</p>	OPTIONAL
<code>[keyusage]</code>	<p>The required key usage extensions for the CA. The quoted string should comply to following syntax: [yes/no], [digitalSignature, nonRepudiation, keyEncipherment, dataEncipherment, keyAgreement, keyCertSign, cRLSign, encipherOnly, decipherOnly], [] ... (see RFC2459). This parameter is rarely used as most CAs do not require it.</p>	OPTIONAL

EXAMPLE:

```

=>ipsec cert cep config url=192.6.11.105/cgi-bin/pkiclient.exe ca_id=sec_cepserver
      md5=12:A4:B9:0F:58:92:EC:0F:87:DB:03:4F:8A:8B:7D:91
      proxy_url=80.80.20.1 subjectdn="cn=test","ou=custdoc","o=tmm","c=be"
      password=sec_doej
=>ipsec cert cep config
Enrollment URL      : 192.6.11.105/cgi-bin/pkiclient.exe
CA Identity string  : sec_cep_server
CA MD5 Fingerprint  : 12:A4:B9:0F:58:92:EC:0F:87:DB:03:4F:8A:8B:7D:91
HTTP proxy         : 80.80.20.1:8080
Subject DN         : cn=test, ou=custdoc, o=tmm, c=be
Key length         : 16
Challenge Password : *****
X509v3 extension
  Email Address    :
  DnsName          :
  Ip Address       :
  Alt Subject DN   :
CheckNonce         : yes
CheckTransactionID : yes
KeyUsage extension :
=>

```

ipsec cert cep list

Show a listing of currently outstanding CEP requests.

SYNTAX:

```
ipsec cert cep list
```

ipsec cert cep request

Generate the public and private key and launch the CEP request.

SYNTAX:

<i>ipsec cert cep request</i>	<i>[force = <{yes no}>]</i>
--------------------------------------	--

[force]

Ignore current certificates (yes) or not (no).
By default current certificates are ignored.

OPTIONAL

ipsec cert cep resubmit

Resubmit the current CEP request and/or check whether the launched CEP request is signed already by the CA. If so, the signed certificate will be imported into the secure storage.

SYNTAX:

<i>ipsec cert cep resubmit</i>

ipsec connection add

Create a VPN connection profile.

SYNTAX:

<i>ipsec connection add</i>	<i>name = <string></i>
------------------------------------	-------------------------------------

name

A name for the VPN connection profile.

REQUIRED

RELATED COMMANDS:

ipsec connection config

Configure a VPN connection profile.

ipsec connection delete

Delete a VPN connection profile.

ipsec connection list

Show a listing of VPN connection profiles.

ipsec connection config

Configure an existing VPN connection profile. Before being able to configure a profile, it must be added via `:ipsec connection add`.

SYNTAX:

ipsec connection config	conn = <> [peer = <>] [localrange = <ip-range>] [remoterange = <ip-range>] [xauthuser = <quoted string>] [xauthpass = <password>] [descriptor = <{def_auth def_encrypt}>]
--------------------------------	--

<code>conn</code>	The name of the VPN connection profile to configure.	REQUIRED
<code>[peer]</code>	The name of the peer gateway profile the VPN connection must use. Use <code>:ipsec peer list</code> for available peer gateway profiles.	OPTIONAL
<code>[localrange]</code>	<p>The range of IP addresses at the local side of the VPN tunnel that are able to trigger IPsec functionality on this VPN connection profile.</p> <p>This range represents the red IP address range at this side of the VPN tunnel.</p> <p>The syntax of <code>localrange</code> can be as depicted in the following examples:</p> <ul style="list-style-type: none"> ▪ IP address/subnetmask: e.g. 192.6.0.0/255.255.0.0 ▪ Limited IP address range: e.g. 192.6.[1–20].[200–230] ▪ IP subnet range: e.g. 192.6.[0–255].[0–255] or 192.6.*.* ▪ Single address range: e.g. 192.6.11.30 ▪ Short single address: e.g. 60.138 (<=> 60.0.0.138) 	OPTIONAL
<code>[remoterange]</code>	<p>The range of IP addresses at the far end side of the VPN tunnel that are able to trigger IPsec functionality on this VPN connection profile.</p> <p>This range represents the red IP address range at the far end of the VPN tunnel.</p> <p>The syntax of <code>localrange</code> can be as depicted in the following examples:</p> <ul style="list-style-type: none"> ▪ IP address/subnetmask: e.g. 192.6.0.0/255.255.0.0 ▪ Limited IP address range: e.g. 192.6.[1–20].[200–230] ▪ IP subnet range: e.g. 192.6.[0–255].[0–255] or 192.6.*.* ▪ Single address range: e.g. 192.6.11.30 ▪ Short single address: e.g. 60.138 (<=> 60.0.0.138) 	OPTIONAL
<code>[xauthuser]</code>	<p>When using X-AUTH, the X-AUTH user name.</p> <p>Typically, in the X-AUTH scenario, the remote IPsec peer will contact a Radius server to check the X-AUTH credentials (<code>xauthuser</code> and <code>xauthpass</code>).</p>	OPTIONAL

<i>[xauthpass]</i>	When using X-AUTH, the X-AUTH password. Typically, in the X-AUTH scenario, the remote IPsec peer will contact a Radius server to check the X-AUTH credentials (<i>xauthuser</i> and <i>xauthpass</i>).	OPTIONAL
<i>[descriptor]</i>	The AH/ESP (Phase 2) SA's IP Security descriptor. Choose between: <ul style="list-style-type: none"> ▪ <code>def_auth</code> ▪ <code>def_encrypt</code> 	OPTIONAL

RELATED COMMANDS:

ipsec connection add

Configure a VPN connection profile.

ipsec connection delete

Delete a VPN connection profile.

ipsec connection list

Show a listing of VPN connection profiles.

ipsec connection start

Manually start the negotiation of a VPN connection.

ipsec connection stop

Manually stop the a VPN connection.

ipsec connection list

Show a listing of available VPN connection profiles and their current configuration.

SYNTAX:

<i>ipsec connection list</i>

ipsec connection start

Manually start the negotiation of a VPN connection.

Before being able to start a connection the VPN connection profile has to be added (*ipsec connection add*) and configured (*ipsec connection config*) before.

SYNTAX:

ipsec connection start	conn = <string>
-------------------------------	------------------------------

<i>conn</i>	The name of the VPN connection profile to start negotiation for. Execute <i>ipsec connection list</i> for a list of available VPN connection profiles.	REQUIRED
-------------	---	----------

RELATED COMMANDS:

ipsec connection config	Configure a VPN connection profile.
ipsec connection list	Show a listing of available VPN connection profiles.
ipsec connection stop	Stop a VPN connection.

ipsec connection stop

Manually stop a VPN connection.

You can only stop VPN connection for which a negotiation has been (automatically or manually) started before.

SYNTAX:

ipsec connection stop conn = <string>

<i>conn</i>	The name of the VPN connection to stop. Execute <i>:ipsec connection list</i> for a list of available VPN connections.	REQUIRED
-------------	---	----------

RELATED COMMANDS:

ipsec connection list	Show a listing of available VPN connection profiles.
ipsec connection start	Start the negotiation of a VPN connection profile.

ipsec descriptor add

Add an IKE (Phase 1) and AH/ESP (Phase 2) security descriptor.

Adding a security descriptor allows to group the different mathematical operations which need to be applied on packets intended to pass a secure tunnel.

SYNTAX:

ipsec descriptor add	name = <string> phase = <{IKE IPSEC 1 2 I II}> value = <quoted string>
-----------------------------	---

<i>name</i>	A name for the new security descriptor.	REQUIRED
<i>phase</i>	Specifies whether the security descriptor applies to IKE (Phase 1) or AH/ESP (Phase 2) SAs. Specify: <ul style="list-style-type: none"> ▪ IKE or 1 or I For specifying an IKE (Phase 1) security descriptor. ▪ IPSEC or 2 of II For specifying an AH/ESP (Phase 2) security descriptor. 	REQUIRED
<i>value</i>	A quoted string which describes the actual security descriptor. Phase 1 ISAKMP value syntax (from left to right, optionally of multiple multiple descriptions seperated by AND and/or OR statements): value= [<{IDENTITY AGGRESSIVE}>] <{DES 3DES RC5 AES NULL}> [KEYLENGTH <number>] [HMAC <{MD5 SHA1}>] [DHGROUP <number>] [<{KB MINUTES SECONDS}> <{<number> FOREVER}>] [<{AND/OR}> <additional/optional descriptor description>] Phase 2 IPsec value syntax (from left to right, optionally with multiple descriptions seperated by AND and/or OR statements): value= [PFS DHGROUP <number>] [<ESP {DES 3DES RC5 AES NULL}>] [KEYLENGTH <number>] [AH HMAC <{MD5 SHA1}>] [IPCOMP] [LZS] [<{KB MINUTES SECONDS}> <{<number> FOREVER}>] [<{AND/OR}> <additional/optional descriptor description>] For a description of the available parameters and allowed combinations, please see below. The ordering of keywords is significant to the parser, for example if specifying a descriptor with support for AES-MAC, then "MD5 HMAC AES" will not be parsed the same as "AES HMAC MD5".	REQUIRED

Following parameters are available:

- Supported Phase 1 Modes:
 - IDENTITY
 - AGGRESSIVE

The parameter is global: if specified, you can not have OR'ed proposals with a different Phase 1 Mode parameter.
- DHGROUP: Supported OAKLEY group numbers for Diffie-Helman calculations
 - 1 (768 bits)
 - 2 (1024 bits)
 - 5 (2048 bits).

Note that elliptic group curves are not supported.
- Supported Phase 2 encapsulation protocols:
 - IPCOMP
 - AH
 - ESP.

A Phase 2 descriptor must contain either AH, ESP, or both. In case of ESP, an encryption algorithm must be specified; in case of AH, the integrity algorithm (HMAC) and a hashing algorithm must be specified.
- Supported encryption algorithms:
 - DES: The weakest of the algorithms and relatively slow, but industry standard. Key size=56 bits.
 - 3DES: Stronger version of DES, but slowest of the algorithms. Key size=168 bits.
 - RC5: An RSA algorithm, both fast and strong. Supported valid key sizes=40-256 bits (default=128).
 - AES: Strong and fast new algorithm, favoured by cryptologists. Supported valid key sizes=128, 192, and 256 bits (default=128).
 - NULL: No encryption is used.

The encryption parameter is mandatory in a Phase 1 descriptor.
- Supported Phase 2 SA compression: LZS
- Supported integrity algorithm: HMAC.
The HMAC keyword is mandatory in a Phase 2 descriptor whenever a hash algorithm (MD5 or SHA1) is specified.
- Supported hashing algorithms:
 - MD5
 - SHA1: Stronger than MD5, but slower.
- Supported Lifetime:
 - MINUTES, SECONDS: real-time life time (allowed values between 5 and 525600 seconds).
 - KB: Maximum amount of KiloBytes (allowed values between 10 and 1073741824 KBytes)

Or, to specify an unlimited life time:

 - MINUTES FOREVER or SECONDS FOREVER or KB FOREVER
- Additional/Optional statement parameters:
 - OR (Alternative descriptor proposals)
 - AND (SA bundle concept)

AND has priority over OR: the AND binding is stronger than the OR binding.

EXAMPLES:

Example of a Phase 1 ISAKMP security descriptor:

```
=>ipsec descriptor add
name=DESC_Test
phase=IKE
value=IDENTITY AES MD5 DHGROUP 2 MINUTES 300 or 3DES SHA1 DHGROUP 2 MINUTES 300
=>
```

Example of a Phase 2 IPsec security descriptor:

```
=>ipsec descriptor add
name=DESC_Test1
phase=IPSEC
value=ESP AES HMAC MD5 MINUTES 300
=>
```

Example of a Phase 2 IPsec security descriptor with several OR statements:

```
=>ipsec descriptor add
name=DESC_Test2
phase=IPSEC
value=ESP DES HMAC MD5 MINUTES 3600
      or ESP DES HMAC SHA1 MINUTES 3600
      or ESP AES HMAC MD5 MINUTES 3600
=>
```

Example of a Phase 2 IPsec security descriptor with mixed AND and OR statements:

```
=>ipsec descriptor add
name=DESC_Test3
phase=IPSEC
value=ESP DES
      and AH HMAC SHA1
      or ESP DES
      and AH HMAC SHA1
      and IPCOMP LZS
=>
```

The example above show the priority of AND above OR: the descriptor specifies the use of ESP DES and AH HMAC SHA1, either with or without LZS, but preferably without.

Example showing the default Phase 1 and Phase 2 security descriptors:

```
=>ipsec descriptor list
def_ike      (IKE) : "identity 3des sha1 minutes 60 dhgroup 1"
def_auth     (IPSEC) : "esp null hmac md5 minutes 1440"
def_encrypt (IPSEC) : "esp aes hmac md5 minutes 60 or esp 3des hmac md5 minutes 60"
=>
```

RELATED COMMANDS:

ipsec descriptor delete	Delete a security descriptor.
ipsec descriptor list	Show a list of available security descriptors.

ipsec descriptor delete

Delete an IKE (Phase 1) and AH/ESP (Phase 2) security descriptor.

SYNTAX:

ipsec descriptor delete	name = <string> phase = <{IKE IPSEC 1 2 I II}>
--------------------------------	---

<i>name</i>	The name of the security descriptor to delete. Use <i>:ipsec descriptor list</i> for a listing of available security descriptors.	REQUIRED
<i>phase</i>	Specifies whether an IKE (Phase 1) or AH/ESP (Phase 2) security descriptor is deleted. Specify: <ul style="list-style-type: none"> ▪ IKE or 1 or I For specifying an IKE (Phase 1) security descriptor. ▪ IPSEC or 2 or II For specifying an AH/ESP (Phase 2) security descriptor. 	REQUIRED

RELATED COMMANDS:

ipsec descriptor add
ipsec descriptor list

Add a security descriptor.
Show a list of available security descriptors.

ipsec descriptor list

Show a listing of available IKE (Phase 1) and AH/ESP (Phase 2) security descriptors.

SYNTAX:

```
ipsec descriptor list
```

EXAMPLE:

```
=>ipsec descriptor list
def_ike      (IKE) : "identity 3des sha1 minutes 60 dhgroup 1"
def_auth     (IPSEC) : "esp null hmac md5 minutes 1440"
def_encrypt(IPSEC) : "esp aes hmac md5 minutes 60 or esp 3des hmac md5 minutes 60"
=>
```

The example shows the default security descriptors.

RELATED COMMANDS:

ipsec descriptor add Add a security descriptor.
ipsec descriptor delete Delete a security descriptor.

ipsec peer add

Add a peer gateway profile.

SYNTAX:

<i>ipsec peer add</i>	<i>name = <string></i>
------------------------------	-------------------------------------

<i>name</i>	A name for the peer gateway profile.	REQUIRED
-------------	--------------------------------------	----------

RELATED COMMANDS:

ipsec peer config

Configure a peer gateway profile.

ipsec peer delete

Delete a peer gateway profile.

ipsec peer list

Show a listing of available peer gateway profiles.

ipsec peer config

Configure an existing peer IPSec gateway profile. Before being able to configure a profile, it must be added via `:ipsec peer add`.

SYNTAX:

ipsec peer config	peer = <> [addr = <ip-address>] [localid = <Identity : address, range or id string>] [remoteid = <Identity : address, range or id string>] [auth = <{preshared cert cert_or_shared}>] [secret = <password>] [descriptor = <{def_ike}>]	
<i>peer</i>	The name of the peer IPSec gateway profile to configure.	REQUIRED
<i>[addr]</i>	The IP address of the remote IPSec peer, often referred to as the black IP address of the peer IPSec gateway. Use 0 to match any address.	OPTIONAL
<i>[localid]</i>	The ID by which the peer gate identifies this gate. For convenience, use the local gate's red IP address, IP address range or DN (in case of certificates). Do not specify <i>localid</i> to allow any address.	OPTIONAL
<i>[remoteid]</i>	The ID of the peer gate. For convenience, use the remote gate's red IP address, IP address range or DN (in case of certificates). Do not specify <i>remoteid</i> to allow any address.	OPTIONAL
<i>[auth]</i>	The authentication method. Select between: <ul style="list-style-type: none"> ▪ <i>preshared</i> In case a shared secret, i.e. a fixed password, is used. Specify the shared secret via the <i>secret</i> parameter. ▪ <i>cert</i> In case of certificates ▪ <i>cert_or_preshared</i> In case both authentication methods (certificates and a shared secret) are allowed. Authentication via certificates is favoured in case both are offered. 	OPTIONAL
<i>[descriptor]</i>	The Phase 1 ISAKMP security descriptor to be used. For a list of available descriptors, use <i>ipsec descriptor list</i> . If not specified, the default available Phase 1 descriptor <i>def_ike</i> is used.	OPTIONAL

ipsec peer delete

Delete a peer gateway profile.

SYNTAX:

<i>ipsec peer delete</i>	<i>peer = <string></i>
---------------------------------	-------------------------------------

<i>peer</i>	The name of the peer gateway profile to delete. Use <i>:ipsec peer list</i> to show available peer gateway profiles.	REQUIRED
-------------	--	----------

RELATED COMMANDS:

ipsec peer add

Add a peer gateway profile.

ipsec peer config

Configure a peer gateway profile.

ipsec peer list

Show a listing of available peer gateway profiles.

ipsec peer list

Show a listing of available peer gateway profiles.

SYNTAX:

<i>ipsec peer list</i>

RELATED COMMANDS:

ipsec peer add

Add a peer gateway profile.

ipsec peer config

Configure a peer gateway profile.

ipsec peer delete

Delete a peer gateway profile.

ipsec policy assign

Assign a chain to a hook. A hook (also called *Packet Interception Point (PIP)* or *entry point*) is the location where packets are intercepted to be compared against a chain of rules.

SYNTAX:

ipsec policy assign	hook = <{input output}> chain = <string>
----------------------------	---

<i>hook</i>	The hook's name to assign a chain to. Choose between: <ul style="list-style-type: none"> ▪ <i>input</i>: The point off incoming traffic. At this point it can be determined whether the packet is allowed to reach the SpeedTouch™ IP router or local host. ▪ <i>output</i>: The point off outgoing traffic. At this point it can be determined whether the packet is allowed to leave the SpeedTouch™ IP router or local host. 	REQUIRED
<i>chain</i>	The name of the chain to use.	REQUIRED

RELATED COMMANDS:

ipsec policy list	Show a list of all hooks.
ipsec policy unassign	Unassign all chains from a hook.

ipsec policy flush

Flush all assignments of chains to the hooks. The chain itself is not removed.
The flush command does not impact previously saved configurations.

SYNTAX:

<i>ipsec policy flush</i>

RELATED COMMANDS:

ipsec policy assign

Assign a chain to a hook.

ipsec policy list

Show a list of all chain assignments.

ipsec policy unassign

Unassign all chains from a hook.

ipsec policy list

Show a list of the chain assignments per hook.

SYNTAX:

ipsec policy list	[hook = <{input output}>]
--------------------------	--

<i>[hook]</i>	The name of the hook to show the associations for. Choose between: <ul style="list-style-type: none"> ▪ input ▪ output. In case this parameter is not specified the associations for all hooks are shown.	OPTIONAL
---------------	--	----------

EXAMPLE (default configuration):

```
=>ipsec policy list
:ipsec policy assign hook=input chain="_auto_in"
:ipsec policy assign hook=output chain="_auto_out"
=>
```

RELATED COMMANDS:

ipsec policy assign	Assign a chain to a hook.
ipsec policy flush	Clear all hooks.
ipsec policy unassign	Unassign all chains from a hook.

ipsec policy troff

Disable verbose console messaging.

SYNTAX:

<i>ipsec policy troff</i>

RELATED COMMANDS:

ipsec policy tron

Enable verbose console messaging.

ipsec policy tron

Enable verbose console messaging.

SYNTAX:

<i>policy tron</i>

RELATED COMMANDS:

ipsec policy troff

Disable verbose console messaging.

ipsec policy unassign

Unassign all chains from a hook.

SYNTAX:

<i>ipsec policy unassign</i>	<i>hook = <{input output}></i>
-------------------------------------	---

hook

The hook's name to unassign all chain from.

REQUIRED

Choose between:

- **input** : The point off incoming traffic.
At this point it can be determined whether the packet is allowed to reach the SpeedTouch™ IP router or local host.
- **output** : The point all outgoing traffic.
At this point it can be determined whether the packet is allowed to leave the SpeedTouch™ IP router or local host.

RELATED COMMANDS:

ipsec policy assign

Assign a chain to a hook.

ipsec policy flush

Clear all hooks.

ipsec policy list

Show a list of all chain assignments.

ipsec policy chain create

Create a new chain.

SYNTAX:

<i>policy chain create</i>	<i>chain = <string></i>
-----------------------------------	--------------------------------------

chain

The name of the chain to create.

REQUIRED

RELATED COMMANDS:

ipsec policy chain delete

Delete a chain.

ipsec policy chain list

Show a list of all current chains.

ipsec policy assign

Assign a chain to a hook.

ipsec policy rule create

Create a rule and assign it to a chain.

ipsec policy chain delete

Delete a chain.

SYNTAX:

<i>policy chain delete</i>	<i>chain = <chain name></i>
-----------------------------------	--

chain The name of the chain to delete. Use *:ipsec policy chain list* for a list of existing chains. REQUIRED

RELATED COMMANDS:

<i>ipsec policy chain add</i>	Create a new chain.
<i>ipsec policy chain list</i>	Show a list of all current chains.
<i>ipsec policy rule delete</i>	Delete a rule.
<i>ipsec policy rule flush</i>	Delete all rules in a chain.
<i>ipsec policy unassign</i>	Unassign a chain from a hook.

ipsec policy chain flush

Flush all chains.

SYNTAX:

<i>ipsec policy chain flush</i>
--

RELATED COMMANDS:

ipsec policy chain delete	Delete a chain.
ipsec policy chain list	Show a list of all current chains.
ipsec policy rule delete	Delete a rule.
ipsec policy rule flush	Delete all rules in a chain.
ipsec policy flush	Clear all hooks, i.e. unassign all chains from all hooks.
ipsec policy unassign	Unassign all chains from a hook.

ipsec policy chain list

Show a list of all current chains.

SYNTAX:

```
ipsec policy chain list
```

EXAMPLE (default configuration):

```
=>ipsec policy chain list  
:ipsec policy chain create chain="_auto_out"  
:ipsec policy chain create chain="_auto_in"  
=>
```

RELATED COMMANDS:

ipsec policy chain list	Show a list of all current chains.
ipsec policy list	Show a list of all hooks.
ipsec policy rule list	Show a list of all rules (assigned to a chain).

ipsec policy rule clear

Clear statistics of one/all rule(s) assigned to one/all chain(s).

SYNTAX:

ipsec policy rule clear	[chain = <chain name>] [index = <number>]
--------------------------------	--

<i>[chain]</i>	The name of the chain in which the rule is to be found. Use <i>:ipsec policy chain list</i> for a list of existing chains. If not specified, the statistics for all chains are cleared.	OPTIONAL
----------------	---	----------

<i>[index]</i>	The index number (determined by the position) of the rule in the chain. Use <i>:ipsec policy rule list</i> for a list of rules in a chain. If not specified, the statistics of all rules in the chain are cleared.	OPTIONAL
----------------	--	----------

RELATED COMMANDS:

ipsec policy chain list	Show a list of all current chains.
ipsec policy list	Show a list of all hooks.
ipsec policy rule list	Show a list of all rules (assigned to a chain).
ipsec policy rule stats	Show statistics for all (or a specified) chains' rules.

ipsec policy rule create

Create a rule.

SYNTAX:

policy rule create	<pre> chain = <chain name> [index = <number>] [srcintf [!]= <string>] [src [!]= <ip-range>] [dst [!]= <ip-range>] [tos [!]= <number{1-255}>] [prot [!]= <{<supported IP protocol name> <number>}>] [srcport [!]= <{<supported TCP/UDP port name> <number>}>] [srcportend = <{<supported TCP/UDP port name> <number>}>] [dstport [!]= <{<supported TCP/UDP port name> <number>}>] [dstportend = <{<supported TCP/UDP port name> <number>}>] [clink = <chain name>] [log = <{no yes}>] policy = <Connection Profile Name> </pre>
---------------------------	--

<i>chain</i>	The name of the chain to insert the rule in.	REQUIRED
<i>[index]</i>	The number of the rule before which the new rule must be added.	OPTIONAL
<i>[srcintf]</i>	The name of the interface the packet should [or should NOT] arrive on to make this rule apply. (NOT applicable if used in a chain assigned to the output hook)	OPTIONAL
<i>[src]</i>	The source IP address (range) the packet should [or should NOT] come from. (Supports cidr notation).	OPTIONAL
<i>[srcmsk]</i>	The source IP address mask defining the range (see src).	OPTIONAL
<i>[dstintf]</i>	The name of the interface the packet should [or should NOT] be going to. (NOT applicable if used in a chain assigned to the input hook)	OPTIONAL
<i>[dst]</i>	The destination IP address (range) the packet should [or should NOT] be going to. (supports cidr notation).	OPTIONAL
<i>[dstmsk]</i>	The destination IP address mask defining the range (see dst).	OPTIONAL
<i>[tos]</i>	A number between 0 and 255. Represents the Type Of Service (TOS) specification expected [or NOT expected] in the IP packet.	OPTIONAL
<i>[prot]</i>	The protocol (name or number) expected [or NOT expected] in the IP packet. Select one of the supported protocol names (See B.1 for a listing of protocol names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL

<i>[srcport]</i>	The TCP/UDP port (or beginning of range) the packet should [or should NOT] be from. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL
<i>[srcportend]</i>	The source TCP/UDP port range end (inclusive). (Only applicable for ranges) Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL
<i>[dstport]</i>	The TCP/UDP port (or beginning of range) the packet should [or should NOT] be going to. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL
<i>[dstportend]</i>	The destination TCP/UDP port range end (inclusive). (Only applicable for ranges) Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number.	OPTIONAL
<i>[clink]</i>	The name of the (sub)chain to be parsed when this rule applies. (action should be link).	OPTIONAL
<i>[log]</i>	Generate syslog message for each packet dropped, denied, or accepted by applying it to this rule.	OPTIONAL
<i>policy</i>	The connection profile name. Represents the name of the policy to which this rules applies. Specify 'none' to indicate traffic to be sent to the clear or link.	REQUIRED

RELATED COMMANDS:

ipsec policy chain list	Show a list of all current chains.
ipsec policy list	Show a list of all hooks.
ipsec policy rule clear	Clear statistics of a given rule.
ipsec policy rule delete	Delete a specified rule in a chain.
ipsec policy rule flush	Delete all rules in a chain.
ipsec policy rule list	Show a list of all (or a specified) chains' rules.
ipsec policy rule stats	Show statistics for all (or a specified) chains' rules.

ipsec policy rule delete

Delete a rule.

SYNTAX:

<i>ipsec policy rule delete</i>	<i>chain = <string></i> <i>index = <number></i>
--	--

<i>chain</i>	The name of the chain in which to delete the rule.	REQUIRED
<i>index</i>	The index number of the rule in the chain. Use <i>:ipsec rule list</i> to determine the index number of the applicable rule.	REQUIRED

RELATED COMMANDS:

<i>ipsec policy chain list</i>	Show a list of all current chains.
<i>ipsec policy list</i>	Show a list of all hooks.
<i>ipsec policy rule add</i>	Create a new rule.
<i>ipsec policy rule flush</i>	Delete all rules in a chain.
<i>ipsec policy rule list</i>	Show a list of all (or a specified) chains' rules.

ipsec policy rule flush

Flush all rules created for one or all chains. The chain itself is not removed.

SYNTAX:

<i>ipsec policy rule flush</i> <i>[chain = <chain name>]</i>
--

<i>[chain]</i>	The name of the chain to empty. If not specified, all rules for all chains are deleted.	OPTIONAL
----------------	--	----------

RELATED COMMANDS:

<i>ipsec policy chain list</i>	Show a list of all current chains.
<i>ipsec policy list</i>	Show a list of all hooks.
<i>ipsec policy rule delete</i>	Delete a specified rule in a chain.
<i>ipsec policy rule list</i>	Show a list of all (or a specified) chains' rules.

ipsec policy rule list

Show a list of rules for one or all chains.

SYNTAX:

<i>ipsec policy rule list</i>	<i>[chain = <chain name>]</i>
--------------------------------------	--

[chain]

The name of the chain to list the rules of.
If not specified, all rules for all chains are shown.

OPTIONAL

RELATED COMMANDS:

ipsec policy chain list

Show a list of all current chains.

ipsec policy list

Show a list of all hooks.

ipsec policy rule add

Create a new rule.

ipsec policy rule clear

Clear statistics of a given rule.

ipsec policy rule delete

Delete a specified rule in a chain.

ipsec policy rule flush

Delete all rules in a chain.

ipsec policy rule stats

Show statistics for all (or a specified) chains' rules.

ipsec policy rule stats

Show statistics for one or all rules of one or all chains.

SYNTAX:

ipsec policy rule stats	[chain = <chain name>] [index = <number>]
--------------------------------	--

<i>[chain]</i>	The name of the chain of which the statistics must be listed. If not specified, the statistics for the rules applicable to all chains are shown.	OPTIONAL
----------------	---	----------

<i>[index]</i>	The index number of the chain's rule of which the statistics must be listed. Use <i>:ipsec policy rule list</i> to determine the index number of the applicable rule. In case this parameter is not specified the statistics for all rules applicable to the specified chain or all chains are shown.	OPTIONAL
----------------	--	----------

RELATED COMMANDS:

ipsec policy chain list	Show a list of all current chains.
ipsec policy list	Show a list of all hooks.
ipsec policy rule add	Create a new rule.
ipsec policy rule clear	Clear statistics of a given rule.
ipsec policy rule delete	Delete a specified rule in a chain.
ipsec policy rule flush	Delete all rules in a chain.
ipsec policy rule stats	Show statistics for all (or a specified) chains' rules.

16 MER Commands

mer (to access the MER level)

mer flush

mer ifadd

mer ifattach

mer ifconfig

mer ifdelete

mer ifdetach

mer iflist

mer flush

Flush complete Routed Ethernet, often referred to as MAC Encapsulated Routing (MER), configuration.

The flush command does not impact previously saved configurations.

SYNTAX:

```
mer flush
```

EXAMPLE:

```
=>mer iflist
NewMer      : dest : Br3
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0      frames: 0
              TX bytes: 0      frames: 0      dropframes: 0

=>mer flush
=>mer iflist
=>
```

mer ifadd

Create a new Routed Ethernet interface.

SYNTAX:

mer ifadd	[<i>intf</i> = <string>] [<i>dest</i> = <phonebook entry>]
------------------	---

[<i>intf</i>]	The name for the new Routed Ethernet interface. If not specified, the destination parameter must be specified. In this case the name of the destination will double as interface name.	OPTIONAL
[<i>dest</i>]	The destination for the new Routed Ethernet interface. Typically, an phonebook entry.	OPTIONAL

EXAMPLE:

```
=>mer iflist
NewMer      : dest : Br3
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0           frames: 0
              TX bytes: 0           frames: 0           dropframes: 0
=>phonebook list
Name        Type    Use  Address
Br1         bridge  1    8.35
Br2         bridge  1    8.36
CIPPVC3    cip     1    8.82
CIPPVC4    cip     1    8.83
=>mer ifadd intf=MoreMer dest=Br4
=>mer iflist
NewMer      : dest : Br3
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0           frames: 0
              TX bytes: 0           frames: 0           dropframes: 0
MoreMer     : dest : Br4
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : not-connected
=>
```

RELATED COMMANDS:

mer ifattach	Attach a Routed Ethernet interface.
mer ifconfig	Configure a Routed Ethernet interface.
mer ifdelete	Delete a Routed Ethernet interface.
mer ifdetach	Detach a Routed Ethernet interface.
mer iflist	Show current Routed Ethernet interfaces.

mer ifattach

Attach (i.e. connect) a Routed Ethernet interface.

SYNTAX:

mer ifattach	intf = <ifname>
---------------------	------------------------------

<i>intf</i>	The name of the Routed Ethernet interface to attach.	REQUIRED
-------------	--	----------

EXAMPLE:

```

=>mer iflist
NewMer      : dest : Br3
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0      frames: 0
              TX bytes: 0      frames: 0      dropframes: 0
MoreMer_____ : dest : Br4
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : not-connected
=>mer ifattach intf=MoreMer
=>mer iflist
NewMer      : dest : Br3
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0      frames: 0
              TX bytes: 0      frames: 0      dropframes: 0
MoreMer_____ : dest : Br4
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0      frames: 0
              TX bytes: 0      frames: 0      dropframes: 0
=>

```

RELATED COMMANDS:

mer ifadd	Create a new Routed Ethernet interface.
mer ifconfig	Configure a Routed Ethernet interface.
mer ifdelete	Delete a Routed Ethernet interface.
mer ifdetach	Detach a Routed Ethernet interface.
mer iflist	Show current Routed Ethernet interfaces.

mer ifconfig

Configure a Routed Ethernet interface.

SYNTAX:

mer ifconfig	intf = <ifname> [dest = <ifname>] [qos = <string>] [encaps = <{llc/snap vcmux}>] [retry = <number {0-65535}>]
---------------------	--

<i>intf</i>	The name of the Routed Ethernet interface to configure.	REQUIRED
<i>[dest]</i>	The destination for this interface. Typically a phonebook entry. This parameter needs only to be specified in case of an interface created without specified destination.	OPTIONAL
<i>[qos]</i>	The name of a configured Quality Of Service book entry. This parameter never needs to be specified.	OPTIONAL
<i>[encaps]</i>	The type of encapsulation to be used for this bridge interface. Choose between: <ul style="list-style-type: none"> ▪ llc/snap ▪ vcmux 	OPTIONAL
<i>[retry]</i>	A number between 0 and 65535. Represents the number of WAN connection setup retries before giving up. By default the retry value is 10.	OPTIONAL

EXAMPLE:

```
=>mer iflist
MoreMer   : dest : Br4
           Retry : 10   QoS : default   Encaps : vcmux   Fcs : off
           Connection State : connected
           RX bytes: 0           frames: 0
           TX bytes: 0           frames: 0           dropframes: 0
=>mer ifconfig intf=MoreMer encaps=llc/snap retry=15
=>mer iflist
MoreMer   : dest : Br4
           Retry : 15   QoS : default   Encaps : llc/snap   Fcs : off
           Connection State : connected
           RX bytes: 0           frames: 0
           TX bytes: 0           frames: 0           dropframes: 0
=>
```

RELATED COMMANDS:

mer ifadd	Create a new Routed Ethernet interface.
mer ifattach	Attach a Routed Ethernet interface.
mer ifdelete	Delete a Routed Ethernet interface.
mer ifdetach	Detach a Routed Ethernet interface.
mer iflist	Show current Routed Ethernet interfaces.

mer ifdelete

Delete a Routed Ethernet interface.

SYNTAX:

mer ifdelete	intf = <ifname>
---------------------	------------------------------

<i>intf</i>	The name of the Routed Ethernet interface.	REQUIRED
-------------	--	----------

EXAMPLE:

```
=>mer iflist
NewMer      : dest : Br3
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0      frames: 0
              TX bytes: 0      frames: 0      dropframes: 0
MoreMer_____ : dest : Br4
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : not-connected
=>mer ifdelete intf=MoreMer
=>mer iflist
NewMer      : dest : Br3
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0      frames: 0
              TX bytes: 0      frames: 0      dropframes: 0
=>
```

RELATED COMMANDS:

mer ifadd	Create a new Routed Ethernet interface.
mer ifattach	Attach a Routed Ethernet interface.
mer ifconfig	Configure a Routed Ethernet interface.
mer ifdetach	Detach a Routed Ethernet interface.
mer iflist	Show current Routed Ethernet interfaces.

mer ifdetach

Detach a Routed Ethernet interface.

SYNTAX:

mer ifdetach	intf = <ifname>	
<i>intf</i>	The name of the Routed Ethernet interface.	REQUIRED

EXAMPLE:

```
=>mer iflist
NewMer      : dest : Br3
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0      frames: 0
              TX bytes: 0      frames: 0      dropframes: 0
MoreMer_____ : dest : Br4
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0      frames: 0
              TX bytes: 0      frames: 0      dropframes: 0
=>mer ifdetach intf=MoreMer
=>mer iflist
NewMer      : dest : Br3
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0      frames: 0
              TX bytes: 0      frames: 0      dropframes: 0
MoreMer_____ : dest : Br4
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : not-connected
=>
```

RELATED COMMANDS:

mer ifadd	Create a new Routed Ethernet interface.
mer ifattach	Attach a Routed Ethernet interface.
mer ifconfig	Configure a Routed Ethernet interface.
mer ifdelete	Delete a Routed Ethernet interface.
mer iflist	Show current Routed Ethernet interfaces.

mer iflist

Show all or a specified Routed Ethernet interface(s).

SYNTAX:

mer iflist	[intf = <ifname>]
-------------------	--------------------------------

<i>[intf]</i>	The name of the Routed Ethernet interface. If not specified all Routed Ethernet interfaces are listed.	OPTIONAL
---------------	---	----------

EXAMPLE OUTPUT:

```
=>mer iflist
NewMer      : dest : Br3
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0       frames: 0
              TX bytes: 0       frames: 0       dropframes: 0
MoreMer     : dest : Br4
              Retry : 10   QoS : default   Encaps : llc/snap   Fcs : off
              Connection State : connected
              RX bytes: 0       frames: 0
              TX bytes: 0       frames: 0       dropframes: 0
=>
```

RELATED COMMANDS:

mer ifadd	Create a new Routed Ethernet interface.
mer ifattach	Attach a Routed Ethernet interface.
mer ifconfig	Configure a Routed Ethernet interface.
mer ifdelete	Delete a Routed Ethernet interface.
mer detach	Detach a Routed Ethernet interface.

17 NAT Commands

nat (to access the NAT level)
nat applist
nat bind
nat bindlist
nat create
nat defserver
nat delete
nat disable
nat enable
nat flush
nat list
nat unbind

nat applist

List available Network Address and Port Translation (NAPT) protocol helpers.

Certain protocols are 'sensitive' to NAPT in that they do not function properly when dealing with it. This list shows which 'NAPT-sensitive' applications are supported on the SpeedTouch™, i.e. the inherent knowledge of the SpeedTouch™ on this matter.

SYNTAX:

```
nat applist
```

EXAMPLE OUTPUT:

```
=>nat applist
Application  Proto  DefaultPort
GRE          gre    1          INCOMING
PPTP        tcp    1723      OUTGOING INCOMING
SIP         udp    5060      OUTGOING INCOMING
ILS         tcp    0          OUTGOING
H245        tcp    0          OUTGOING INCOMING
H323        tcp    1720      OUTGOING INCOMING
RAUDIO(PNA) tcp    7070      OUTGOING
RTSP        tcp    554       OUTGOING
IRC         tcp    6667      OUTGOING
FTP         tcp    21        OUTGOING
=>
```

RELATED COMMANDS:

nat bind

Create a new helper/port binding.

nat bindlist

List current NAPT helper/port bindings.

nat unbind

Delete an existing helper/port binding.

nat bind

Create a new helper/port binding.

SYNTAX:

nat bind	application = <string> port = <{<supported TCP/UDP port name> <number>}>
-----------------	---

<i>application</i>	The name of a NAPT application helper. The name must be spelled exactly as listed in the application list (:nat applist).	REQUIRED
<i>port</i>	The TCP/UDP port this application handler should work on. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number.	REQUIRED

EXAMPLE:

```
=>nat applist
Application  Proto  DefaultPort
GRE          gre    1           INCOMING
PPTP        tcp    1723       OUTGOING INCOMING
SIP         udp    5060       OUTGOING INCOMING
ILS         tcp    0           OUTGOING
H245        tcp    0           OUTGOING INCOMING
H323        tcp    1720       OUTGOING INCOMING
RAUDIO(PNA) tcp    7070       OUTGOING
RTSP        tcp    554        OUTGOING
IRC         tcp    6667       OUTGOING
FTP         tcp    21         OUTGOING
=>nat bind application=RAUDIO(PNA) port=7071
=>nat bindlist
Application  Proto  Port
RAUDIO(PNA) tcp    7071
SIP          udp    5060
GRE          gre    1
PPTP        tcp    1723
ILS         tcp    1002
ILS         tcp    389
H323        tcp    1720
FTP         tcp    21
RTSP        tcp    554
IRC         tcp    6667
RAUDIO(PNA) tcp    7070
H323        tcp    1720
FTP         tcp    21
RTSP        tcp    554
IRC         tcp    6667
RAUDIO(PNA) tcp    7070
=>
```

RELATED COMMANDS:

nat applist	List available NAPT protocol helpers.
nat bindlist	List current NAPT helper/port bindings.
nat unbind	Delete an existing helper/port binding.

nat bindlist

List current NAPT helper/port bindings.

SYNTAX:

```
nat bindlist
```

EXAMPLE OUTPUT:

```
=>nat bindlist
Application  Proto  Port
SIP          udp    5060
GRE          gre     1
PPTP        tcp    1723
ILS          tcp    1002
ILS          tcp    389
H323        tcp    1720
FTP          tcp     21
RTSP        tcp    554
IRC          tcp    6667
RAUDIO(PNA) tcp    7070
=>
```

RELATED COMMANDS:

nat applist

List available NAPT protocol helpers.

nat bind

Create a new NAPT helper/port binding.

nat unbind

Delete an existing helper/port binding.

nat create

Create a static NAT entry. Typically used to install specific servers behind the SpeedTouch™'s NAT device.

SYNTAX:

nat create	protocol = <{<supported IP protocol name> <number>}> inside_addr = <ip-address> [inside_port = <{<supported TCP/UDP port name> <number>}>] outside_addr = <ip-address> [outside_port = <{<supported TCP/UDP port name> <number>}>] [foreign_addr = <ip-address>] [foreign_port = <{<supported TCP/UDP port name> <number>}>]
-------------------	---

<i>protocol</i>	The IP protocol name (or number) of the incoming stream. Select one of the supported protocol names (See B.1 for a listing of protocol names supported by the SpeedTouch™). Alternatively, specify the protocol number.	REQUIRED
<i>inside_addr</i>	The IP address of the local host (intended to receive the incoming traffic) behind the SpeedTouch™'s NAT device. Typically, a private IP address.	REQUIRED
<i>[inside_port]</i>	The port of the application on the local host. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number. Applicable for TCP and UDP protocols only. Other protocols do not need a port to be specified.	OPTIONAL
<i>outside_addr</i>	The apparent host IP address this application is running on, i.e. the NAT enabled WAN IP address of the SpeedTouch™. Use '0' to create a template. Such template will then be valid for any of SpeedTouch™'s NAT enabled IP addresses, e.g. also dynamically assigned/negotiated IP addresses.	REQUIRED
<i>[outside_port]</i>	The apparent port number this application is running on. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number. Applicable for TCP and UDP protocols only. Other protocols do not need a port to be specified.	OPTIONAL
<i>[foreign_addr]</i>	The IP address of the in-front-of-NAPT routable address. Use '0' to match all foreign addresses.	REQUIRED
<i>[foreign_port]</i>	The port of the routable host. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number. Do not use '0' in case a foreign IP address is specified. Applicable for TCP and UDP protocols only. Other protocols do not need a port to be specified.	OPTIONAL

nat defserver

Define the default server behind the SpeedTouch™ NAPT device that receives all (unknown) incoming packets.

In typical LAN configurations one local 'default' server will be responsible for all WAN-LAN mail, http, ftp, ... connectivity. This command allows to specify this server. For specific services, use *:nat create*.

SYNTAX:

nat defserver	[addr = <ip-address>]
----------------------	------------------------------------

<i>[addr]</i>	The IP address of the server (on the 'inside') that will receive all (unknown) incoming packets. If not specified the current default server is shown.	OPTIONAL
---------------	---	----------

EXAMPLE INPUT/OUTPUT:

<pre>=>nat defserver Default server is undefined =>nat defserver addr=10.0.0.1 =>nat defserver Default server is 10.0.0.1 =></pre>
--

nat delete

Delete a static NAT entry.

SYNTAX:

nat delete	protocol = <{<supported IP protocol name> <number>}> inside_addr = <ip-address> [inside_port = <{<supported TCP/UDP port name> <number>}>] outside_addr = <ip-address> [outside_port = <{<supported TCP/UDP port name> <number>}>] [foreign_addr = <ip-address>] [foreign_port = <{<supported TCP/UDP port name> <number>}>]
-------------------	---

<i>protocol</i>	The IP protocol name (or number) of the incoming stream. Select one of the supported protocol names (See B.1 for a listing of protocol names supported by the SpeedTouch™). Alternatively, specify the protocol number.	REQUIRED
<i>inside_addr</i>	The IP address of the local host (intended to receive the incoming traffic) behind the SpeedTouch™'s NAT device. Typically, a private IP address.	REQUIRED
<i>[inside_port]</i>	The port of the application on the local host. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number. Applicable for TCP and UDP protocols only. Other protocols do not need a port to be specified.	OPTIONAL
<i>outside_addr</i>	The apparent host IP address this application is running on, i.e. the NAT enabled WAN IP address of the SpeedTouch™. Use '0' to delete an entry valid for any of SpeedTouch™'s NAT enabled IP addresses, e.g. also dynamically assigned/negotiated IP addresses.	REQUIRED
<i>[outside_port]</i>	The apparent port number this application is running on. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number. Applicable for TCP and UDP protocols only. Other protocols do not need a port to be specified.	OPTIONAL
<i>[foreign_addr]</i>	The IP address of the in-front-of-NAPT routable address.	REQUIRED
<i>[foreign_port]</i>	The port of the routable host. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number. Applicable for TCP and UDP protocols only. Other protocols do not need a port to be specified.	OPTIONAL

nat disable

Disable NAPT on a SpeedTouch™ IP address.

SYNTAX:

nat disable	addr = <ip-address>
--------------------	----------------------------------

addr One of SpeedTouch™ 's IP addresses one which NAPT is enabled. **REQUIRED**

EXAMPLE:

```
=>nat list
Indx Prot Inside-addr:Port Outside-addr:Port Foreign-addr:Port Flgs Expir State Control
1 6 10.0.0.138:80 172.16.0.5:1080 0.0.0.0:0 19 8 9
2 17 10.0.0.138:138 10.0.0.140:138 10.0.0.20:138 11 20 10
3 17 10.0.0.138:137 10.0.0.140:137 10.0.0.254:137 11 20 10
4 17 10.0.0.138:7938 10.0.0.140:7938 10.0.0.96:4756 11 20 10
5 17 10.0.0.138:513 10.0.0.140:513 10.0.0.109:513 11 20 10
6 17 10.0.0.138:111 10.0.0.140:111 10.0.0.96:4756 11 20 10
=>nat disable addr 172.16.0.5
=>nat list
Indx Prot Inside-addr:Port Outside-addr:Port Foreign-addr:Port Flgs Expir State Control
1 17 10.0.0.138:138 10.0.0.140:138 10.0.0.20:138 11 20 10
2 17 10.0.0.138:137 10.0.0.140:137 10.0.0.254:137 11 20 10
3 17 10.0.0.138:7938 10.0.0.140:7938 10.0.0.96:4756 11 20 10
4 17 10.0.0.138:513 10.0.0.140:513 10.0.0.109:513 11 20 10
5 17 10.0.0.138:111 10.0.0.140:111 10.0.0.96:4756 11 20 10
=>
```

RELATED COMMANDS:

nat create	Create a static NAPT entry.
nat delete	Delete a static NAPT entry.
nat enable	Enable NAPT on one of the SpeedTouch™ IP addresses.
nat list	List NAPT connection database.

nat enable

Enable NAT on a SpeedTouch™ IP address.

SYNTAX:

nat enable	addr = <ip-address> [type = <{none pat}>]
-------------------	--

<i>addr</i>	The SpeedTouch™ IP address on which NAT must be applied.	REQUIRED
<i>[type]</i>	Enable port translation (pat) or not (none).	OPTIONAL

EXAMPLE:

```
=>ip aplist
1 eth0 Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr ff:ff:ff:ff:ff:ff
  inet addr:10.10.10.147 Bcast: 10.10.10.255 Mask:255.0.0.0
  UP RUNNING MTU:1500 ReasmMAX:65535 Group:2
  IPRX bytes:19791886 unicastpkts:11341 bcastpkts:290555
  IPTX bytes:839550 unicastpkts:11477 bcastpkts:0 dropkts:0
  HWRX bytes:0 unicastpkts:0 bcastpkts:0
  HWTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
0 loop Type:0
  inet addr:127.0.0.1 Bcast:127.255.255.255 Mask:255.0.0.0
  UP RUNNING MTU:1500 ReasmMAX:65535 Group:1
  IPRX bytes:116 unicastpkts:0 bcastpkts:2
  IPTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
  HWRX bytes:0 unicastpkts:0 bcastpkts:0
  HWTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
=>nat enable addr=10.10.10.147 type=pat
=>ip aplist
1 eth0 Type:EthernetHWaddr 00:80:9f:24:ab:cf BRHWaddr ff:ff:ff:ff:ff:ff
  inet addr:10.10.10.147 Bcast: 10.10.10.255 Mask:255.0.0.0
  UP RUNNING pat MTU:1500 ReasmMAX:65535 Group:2
  IPRX bytes:19791886 unicastpkts:11341 bcastpkts:290555
  IPTX bytes:839550 unicastpkts:11477 bcastpkts:0 dropkts:0
  HWRX bytes:0 unicastpkts:0 bcastpkts:0
  HWTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
0 loop Type:0
  inet addr:127.0.0.1 Bcast:127.255.255.255 Mask:255.0.0.0
  UP RUNNING MTU:1500 ReasmMAX:65535 Group:1
  IPRX bytes:116 unicastpkts:0 bcastpkts:2
  IPTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
  HWRX bytes:0 unicastpkts:0 bcastpkts:0
  HWTX bytes:0 unicastpkts:0 bcastpkts:0 dropkts:0
=>
```

RELATED COMMANDS:

nat create	Create a static NAT entry.
nat delete	Delete a static NAT entry.
nat disable	Disable NAT on one of the SpeedTouch™ IP addresses.
nat list	List NAT connection database.

nat flush

Flush complete NAPT configuration.

The flush command does not impact previously saved configurations.

SYNTAX:

<i>nat flush</i>

RELATED COMMANDS:

nat create

Create a static NAPT entry.

nat delete

Delete a static NAPT entry.

nat disable

Disable NAPT on one of the SpeedTouch™ IP addresses.

nat enable

Enable NAPT on one of the SpeedTouch™ IP addresses.

nat list

Show NAPT connection database.

SYNTAX:

nat list	[addr = <ip-address>]
-----------------	------------------------------------

<i>[addr]</i>	The SpeedTouch™ IP address for which the NAPT connection database must be shown. In case the parameter is not specified the NAPT connection database for all IP addresses is shown.	OPTIONAL
---------------	--	----------

EXAMPLE INPUT/OUTPUT:

```
=>nat list
Indx Prot  Inside-addr:PortOutside-addr:Port  Foreign-addr:Port  Flgs  Expir  State  Control
1     6    10.0.0.138:80   172.16.0.5:1080   0.0.0.0:0         19    8      9
2     17    10.0.0.138:135 10.0.0.140:135   10.0.0.155:1034   11    20    10
3     17    10.0.0.138:138 10.0.0.140:138   10.0.0.20:138     11    20    10
4     17    10.0.0.138:137 10.0.0.140:137   10.0.0.254:137    11    20    10
5     17    10.0.0.138:7938 10.0.0.140:7938  10.0.0.96:4756    11    20    10
6     17    10.0.0.138:513 10.0.0.140:513   10.0.0.109:513    11    20    10
7     17    10.0.0.138:111 10.0.0.140:111   10.0.0.96:4756    11    20    10
=>
```

RELATED COMMANDS:

nat create	Create a static NAPT entry.
nat delete	Delete a static NAPT entry.
nat disable	Disable NAPT on one of the SpeedTouch™ IP addresses.
nat enable	Enable NAPT on one of the SpeedTouch™ IP addresses.

nat unbind

Delete an existing helper/port binding.

SYNTAX:

nat unbind	application = <string> port = <{<supported TCP/UDP port name> <number>}>
-------------------	---

<i>application</i>	The name of a NAPT application helper. The name must be spelled exactly as listed in the application list (: <i>nat applist</i>).	REQUIRED
<i>port</i>	The TCP/UDP port this application handler is working on. Select one of the supported TCP/UDP port names (See B.2 for a listing of TCP/UDP port names supported by the SpeedTouch™). Alternatively, specify the protocol number.	REQUIRED

EXAMPLE:

```
=>nat applist
Application Proto DefaultPort
ils tcp 0 OUTGOING
H254 tcp 0 OUTGOING INCOMING
H323 tcp 1720 OUTGOING INCOMING
RAUDIO(PNA) tcp 7070 OUTGOING
RTSP tcp 554 OUTGOING
IRC tcp 6667 OUTGOING
FTP tcp 21 OUTGOING INCOMING
=>nat bindlist
Application Proto Port
RAUDIO(PNA) tcp 7071
H323 tcp 1720
FTP tcp 21
RTSP tcp 554
IRC tcp 6667
RAUDIO(PNA) tcp 7070
=>
=>nat unbind application=RAUDIO(PNA) port=7071
=>nat bindlist
Application Proto Port
H323 tcp 1720
FTP tcp 21
RTSP tcp 554
IRC tcp 6667
RAUDIO(PNA) tcp 7070
=>
```

RELATED COMMANDS:

nat applist	List available NAPT protocol helpers.
nat bindlist	List current NAPT helper/port bindings.
nat bind	Create a new helper/port binding.

18 Phonebook Commands

phonebook (to access the Phonebook level)

phonebook add

phonebook autolist

phonebook delete

phonebook flush

phonebook list

phonebook add

Add a phonebook entry.

SYNTAX:

```
phonebook add name = <string>
addr = <[port.]vpi.vci>
type = <{any|ethoa|pppoa|ipoa}>
```

<i>name</i>	A free to choose phonebook name for the destination. Two limitations apply: <ul style="list-style-type: none"> ▪ The name of a phonebook entry intended for the Relayed PPPoA (PPPoA-to-PPTP Relaying) packet service may not start with capital P or capital T ▪ The name of a phonebook entry intended for the PPP-to-DHCP spoofing packet service must start with DHCP, e.g. 'DHCP_Spoof01'. 	REQUIRED
<i>addr</i>	The ATM address for this destination. It is composed of a Virtual Path Identifier (VPI) and a Virtual Channel Identifier (VCI) identifying ATM virtual channels. In most cases the values are provided by the Service Provider. Accepted VPI: a number between 0 and 15 Accepted VCI: a number between 0 and 511.	REQUIRED
<i>type</i>	The Connection Service supported by the destination. Choose between: <ul style="list-style-type: none"> ▪ any (All Packet Services) ▪ ethoa (Bridged Ethernet, Routed Ethernet, Bridged PPPoE, Routed PPPoE) ▪ pppoa (Routed PPPoA and Relayed PPPoA) ▪ ipoa (Classical IPoA and Routed IPoA). 	REQUIRED

EXAMPLE:

```
=>phonebook list
Name      Type      Use      Address
PVC1      any       1        8.35
PVC2      ethoa     0        8.36
Br4       ethoa     0        8.38
CIPPVC3   ipoa      1        8.82
=>phonebook add name=PVC_Test addr=8.68 type=pppoa
=>phonebook list
Name      Type      Use      Address
PVC1      any       1        8.35
PVC2      ethoa     0        8.36
Br4       ethoa     0        8.38
CIPPVC3   ipoa      1        8.82
PVC_Test  pppoa     0        8.68
=>
```

RELATED COMMANDS:

- phonebook delete** Remove a phonebook entry.
- phonebook list** Show current phonebook.

phonebook autolist

Show auto PVCs, if supported by the Central Office DSLAM.

SYNTAX:

```
phonebook autolist
```

EXAMPLE INPUT/OUTPUT:

```
=>phonebook autolist  
8.35  
=>
```

RELATED COMMANDS:

phonebook list

Show current phonebook.

phonebook delete

Remove an unused phonebook entry.

SYNTAX:

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

<i>name</i>	the name of the phonebook entry to delete. Only applicable for phonebook entries that are not used, i.e. not configured for any packet service. Execute phonebook list to check whether the entry is used (Use=1) or not (Use=0).	REQUIRED
-------------	--	----------

EXAMPLE:

```
=>phonebook list
Name      Type      Use      Address
PVC1      any       1        8.35
PVC2      ethoa    0        8.36
Br4       ethoa    0        8.38
CIPPVC3   ipoa     1        8.82
PVC Test  pppoa    0        8.68
=>phonebook delete name=PVC_Test
=>phonebook list
Name      Type      Use      Address
PVC1      any       1        8.35
PVC2      ethoa    0        8.36
Br4       ethoa    0        8.38
CIPPVC3   ipoa     1        8.82
=>
```

RELATED COMMANDS:

phonebook add	Add a phonebook entry.
phonebook list	Show current phonebook.

phonebook flush

Flush complete phonebook.

The flush command does not impact previously saved configurations.

SYNTAX:

```
phonebook flush
```

EXAMPLE:

```
=>phonebook list
Name      Type    Use  Address
PVC1      any     1    8.35
PVC2      ethoa   0    8.36
Br4        ethoa   0    8.38
CIPPVC3   ipoa    1    8.82
PVC_Test  pppoa   0    8.68
=>phonebook flush
=>phonebook list
Name      Type    Use  Address
=>
```

phonebook list

Show current phonebook.

SYNTAX:

```
phonebook list [opt = <{long}>]
```

[opt] Select output format. For internal use only.

OPTIONAL

EXAMPLE INPUT/OUTPUT:

```
=>phonebook list
Name      Type    Use  Address
PVC1      any     1    8.35
PVC2      ethoa   0    8.36
Br4       ethoa   0    8.38
CIPPVC3   ipoa    1    8.82
PVC_Test  pppoa   0    8.68
=>
```

RELATED COMMANDS:

phonebook add	Add a phonebook entry.
phonebook autolist	Show auto PVCs.
phonebook delete	Remove a phonebook entry.

19 PPP Commands

ppp (to access the PPP level)
ppp flush
ppp ifadd
ppp ifattach
ppp ifconfig
ppp ifdelete
ppp ifdetach
ppp iflist
ppp rtadd
ppp rtdelete

ppp flush

Flush complete Routed PPP over ATM (PPPoA) and Routed PPP over Ethernet (PPPoE) configuration. The flush command does not impact previously saved configurations.

SYNTAX:

```
ppp flush
```

EXAMPLE:

```
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10  QoS default encaps VC-MUX
      mode = IP Routing
      flags= echo magicaccomp mru  addr routesavepwd PPPOA
      transaddr = pat  mru = 1500
      route=      0.0.0.0/0 -      0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= down  oper state= down  link state= not-connected
      LCP : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =
=>ppp flush
=>ppp iflist
=>
```


ppp ifadd

Create a new Routed PPP(oA/oE) interface.

SYNTAX:

ppp ifadd	[<i>intf</i> = <string>] [<i>dest</i> = <phonebook entry>] [<i>encaps</i> = <{vcmux llc}>] [<i>speed</i> = <number{4800–1000000}>]
------------------	---

<i>[intf]</i>	The name for the new Routed PPP(oA/oE) interface. If not specified, the destination parameter must be specified. In this case the name of the destination will double as interface name.	OPTIONAL
<i>[dest]</i>	The destination for the new Routed PPP(oA/oE) interface. Typically, an phonebook entry.	OPTIONAL
<i>[encaps]</i>	The type of encapsulation to be used for this Routed PPP(oA/oE) interface. Choose between: <ul style="list-style-type: none"> ▪ vcmux – Virtual Channel MultipleXing (VCMUX) ▪ llc/snap – Logical Link Control (LLC)/Sub Network Access Protocol (SNAP) 	OPTIONAL
<i>[speed]</i>	A number between 4800 and 10000000 (bits per second). Represents the speed of the peer-to-peer connection. Use for backward compatibility. Use Quality Of Service instead.	OPTIONAL

EXAMPLE:

```

=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10   QoS default encaps VC-MUX
      mode = IP Routing
      flags= echo magicaccomp mru  addr routesavepwd PPPOA
      transaddr = pat    mru = 1500
      route= 0.0.0.0/0 - 0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= down  oper state= down  link state= not-connected
      LCP : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =
=>ppp ifadd intf=PPP2 dest=PVC2
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10   QoS default encaps VC-MUX
      mode = IP Routing
      flags= echo magicaccomp mru  addr routesavepwd PPPOA
      transaddr = pat    mru = 1500
      route= 0.0.0.0/0 - 0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= down  oper state= down  link state= not-connected
      LCP : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =

PPP2:  dest : PVC2
      Retry: 10   QoS default encaps VC-MUX
      mode = IP Routing
      flags= echo magicaccomp restart mru  addr savepwd PPPOA
      mru = 1500
      user name = password=
      adminstate= down  oper state= down  link state= not-connected
      LCP : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =
=>

```

RELATED COMMANDS:

ppp ifattach	Attach a Routed PPP(oA/oE) interface.
ppp ifconfig	Configure a Routed PPP(oA/oE) interface.
ppp ifdelete	Delete a Routed PPP(oA/oE) interface.
ppp ifdetach	Detach a Routed PPP(oA/oE) interface.
ppp iflist	Show current Routed PPP(oA/oE) configuration.

ppp ifattach

Attach (i.e. connect) a Routed PPP(oA/oE) interface.

SYNTAX:

ppp ifattach	intf = <ifname>	
<i>intf</i>	The name of the Routed PPP(oA/oE) interface to attach.	REQUIRED

EXAMPLE:

```
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10  QoS default encaps LLC
      mode = IP Routing
      flags= echo magicaccomp restart mru  addr routesavepwd PPPOE
      transaddr = pat  mru = 1492
      route=      0.0.0.0/0 -      0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= down  oper state= down  link state= not-connected
      LCP  : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =
=>ppp ifattach =intf=PPP1
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10  QoS default encaps LLC
      mode = IP Routing
      flags= echo magicaccomp restart mru  addr routesavepwd PPPOA
      transaddr = pat  mru = 1492
      route=      0.0.0.0/0 -      0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= up    oper state= down  link state= connected
      LCP  : state= reqsent retransm= 10 term.reason =
      IPCP : state= initial retransm= 10 term.reason =
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10  QoS default encaps LLC
      mode = IP Routing
      flags= echo magicaccomp restart mru  addr routesavepwd PPPOA
      transaddr = pat  mru = 1492
      route=      0.0.0.0/0 -      0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= up    oper state= up    link state= connected
      LCP  : state= opened retransm= 0 term.reason =
      IPCP : state= opened retransm= 10 term.reason =
      acname : , service = .
=>
```

RELATED COMMANDS:

ppp ifadd	Create a Routed PPP(oA/oE) interface.
ppp ifconfig	Configure a Routed PPP(oA/oE) interface.
ppp ifdelete	Delete a Routed PPP(oA/oE) interface.
ppp ifdetach	Detach a Routed PPP(oA/oE) interface.
ppp iflist	Show current Routed PPP(oA/oE) configuration.

ppp ifconfig

Configure a Routed PPP(oA/oE) interface. As the interface to be configured may not be connected at the time of configuration, execute **ppp ifdetach** prior to executing the **ppp ifconfig** command.

SYNTAX:

ppp ifconfig	<pre> intf = <ifname> [dest = <phonebook entry>] [user = <string>] [password = <string>] [qos = <string>] [proto = <{pppoe pppoe}>] [acname = <string>] [servicename = <string>] [encaps = <{vcmux llc}>] [pcomp = <{off on}>] [accomp = <{on off negotiate}>] [trace = <{off on}>] [pap = <{off on}>] [restart = <{off on}>] [retryinterval = <number{0-65535}>] [passive = <{off on}>] [silent = <{off on}>] [echo = <{off on}>] [mru = <number{293-8192}>] [laddr = <ip-address>] [raddr = <ip-address>] [netmask = <ip-mask(dotted or cidr)>] [format = <{dotted cidr}>] [pool = <{poolname none}>] [savepwd = <{off on}>] [demanddial = <{off on}>] [primdns = <ip-address>] [secdns = <ip-address>] [idle = <number{0-1000000}>] [addrtrans = <{none pat}>] [unnumbered = <{off on}>] [poolstart = <ip-address>] [poolend = <ip-address>] [status = <{down up}>] </pre>
---------------------	---

<i>intf</i>	The name of the Routed PPP(oA/oE) interface to configure.	REQUIRED
<i>[dest]</i>	The destination for this Routed PPP(oA/oE) interface. Typically, a phonebook entry. Use: <ul style="list-style-type: none"> ▪ PPPoA (ppp) phonebook entries For the Routed PPPoA packet service. ▪ ETHoA (bridge) phonebook entries For the Routed PPPoE packet service. 	OPTIONAL
<i>[user]</i>	The user name for remote PAP/CHAP authentication.	OPTIONAL
<i>[password]</i>	The password for remote PAP/CHAP authentication.	OPTIONAL

<i>[qos]</i>	The name of a configured Quality Of Service book entry. This parameter never needs to be specified.	OPTIONAL
<i>[proto]</i>	The encapsulation method for the PPP frames, i.e. the applicable packet service for the connection. Select: <ul style="list-style-type: none"> ▪ pppoa For a Routed PPPoA connection. ▪ pppoe For a Routed PPPoE connection. Per default the PPPoA protocol applies.	OPTIONAL
<i>[acname]</i>	The Access Concentrator name for a Routed PPPoE connection. This parameter is applicable only for Routed PPPoE PPP interfaces (proto=pppoe). Execute the ppp ifscan command to see the names of available access concentrators, if any.	OPTIONAL
<i>[servicename]</i>	The Service Name for a Routed PPPoE connection. This parameter is applicable only for Routed PPPoE PPP interfaces (proto=pppoe). Execute the ppp ifscan command to see the available service names, if any.	OPTIONAL
<i>[encaps]</i>	The type of encapsulation to be used for this Routed PPP(oA/oE) interface. Choose between: <ul style="list-style-type: none"> ▪ vcmux (default) Standard encapsulation method for PPPoA (ppp) frames. ▪ llc Standard encapsulation method for ETHoA (bridge) frames. 	OPTIONAL
<i>[pcomp]</i>	Try (on) or do not try (off) to negotiate PPP protocol compression (LCP PCOMP). Per default the negotiation is disabled (off).	OPTIONAL
<i>[accomp]</i>	Try (on), do never try (off) or negotiate (negotiate) to negotiate PPP address & control field compression (LCP ACCOMP). In the very most cases LCP ACCOMP should not be disabled nor negotiated, i.e. the address field FF-03 should not be sent over ATM. Therefore by default this parameter is enabled (on). In case the accomp parameter is set 'negotiate' the local side of the PPP connection demands to do ACCOMP and adapts itself to the result of this negotiation.	OPTIONAL
<i>[trace]</i>	Enable (on) or disable (off) verbose console logging. By default tracing is disabled (off).	OPTIONAL
<i>[pap]</i>	Force Password Authentication Protocol (PAP) based authentication (on) or use Challenge Handshake Authentication Protocol (CHAP) based authentication, if available (off). For security reasons PAP negotiation is disabled (off) per default.	OPTIONAL

<i>[restart]</i>	Automatically restart the connection when Link Control Protocol (LCP) link goes down (on) or do not restart automatically (off). By default restart is disabled (off).	OPTIONAL
<i>[retryinterval]</i>	A number between 0 and 65535 (seconds). Represents the intermediate interval between two retries to establish the connection on ATM level.. Only applicable in an SVC environment.	OPTIONAL
<i>[passive]</i>	Put the link in listening state in case LCP times out (on) or not (off). This parameter allows to determine whether the link should be left open to wait for incoming messages from the remote side after 10 unsuccessful tries to establish the connection or not. Per default the listening state is disabled.	OPTIONAL
<i>[silent]</i>	Do not send anything at startup and just listen for incoming LCP messages (on) or retry up to 10 times to establish the connection (off). Per default the silent state is disabled.	OPTIONAL
<i>[echo]</i>	Send LCP echo requests at regular intervals (on) or not (off). Per default the sending of LCP echo requests is enabled.	OPTIONAL
<i>[mru]</i>	A number between 293 and 8192. Represents the maximum packet size the SpeedTouch™ should negotiate to be able to receive.	OPTIONAL
<i>[laddr]</i>	The local IP address of the peer-to-peer connection. Specifying a local IP address forces the remote side of the PPP link (if it allows to) to accept this IP address as the SpeedTouch™ 610 PPP session IP address. If not specified, the SpeedTouch™ 610 will accept any IP address. Typically the local IP address parameter is not specified.	OPTIONAL
<i>[raddr]</i>	The remote IP address of the peer-to-peer connection. Specifying a remote IP address forces the remote side of the PPP link (if it allows to) to accept this IP address as its PPP session IP address. If not specified, the SpeedTouch™ 610 will accept any IP address. Typically the remote IP address parameter is not specified.	OPTIONAL
<i>[netmask]</i>	The subnetmask associated with this address. Specifying a subnetmask forces the remote side (if it allows to) to accept this subnetmask as the PPP session subnetmask. If not specified, the SpeedTouch™ 610 will accept any subnetmask. The SpeedTouch™ 610 will only request/accept a subnetmask if a DHCP server pool is associated, i.e. if the <i>[pool]</i> parameter is specified.	OPTIONAL
<i>[format]</i>	The negotiated subnetmask specified in the netmask parameter is specified in the dotted format (dotted) or in Classes Inter Domain Routing (CIDR) format (cidr). Per default the format is CIDR.	OPTIONAL
<i>[pool]</i>	The name of the free DHCP server pool to which the acquired IP subnet must be assigned to.	OPTIONAL

<i>[savepwd]</i>	Save password (on), if supplied, or do not save the password (off). Per default the saving of the password is disabled.	OPTIONAL
<i>[demanddial]</i>	Enable (on) or disable (off) the dial-on-demand feature.	OPTIONAL
<i>[primdns]</i>	The IP address of the primary DNS server. In case a primary DNS server is specified the SpeedTouch™ 610 will negotiate this IP address with the remote side. If not specified, the SpeedTouch™ 610 will accept any IP address.	OPTIONAL
<i>[secdns]</i>	The IP address of the (optional) secondary DNS server. In case a secondary DNS server is specified the SpeedTouch™ 610 will negotiate this IP address with the remote side. If not specified, the SpeedTouch™ 610 will accept any IP address.	OPTIONAL
<i>[idle]</i>	A number between 1 and 1000000 (seconds). Represents after how many seconds an idle link goes down.	OPTIONAL
<i>[addrtrans]</i>	Automatically enable address translation for the IP address of this link (pat) or do not use address translation (none).	OPTIONAL
<i>[unnumbered]</i>	Takes the local IP address from 'laddr' field and remote IP address from the IP address pool assigned to the incoming PPP link. In case the unnumbered parameter is disabled the same IP address is used for each connection on the server side, thus reducing the number of used IP addresses.	OPTIONAL
<i>[poolstart]</i>	The lower bound of the IP address pool assigned to the incoming PPP link.	OPTIONAL
<i>[poolend]</i>	The upper bound of the IP address pool assigned to the incoming PPP link.	OPTIONAL
<i>[status]</i>	Force automatically to attach the PPP interface (up) or use the regular ppp ifattach command (down). Per default the startup status is down (recommended).	OPTIONAL

EXAMPLE:

```

=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10   QoS default encaps LLC
      mode = IP Routing
      flags= echo magicaccomp restart mru  addr routesavepwd PPPOE
      transaddr = pat      mru = 1492
      route=      0.0.0.0/0 -      0.0.0.0/0 (metric 0)
      user name = My_Connection@MY_ISP  password= *****
      adminstate= down   oper state= down   link state= not-connected
      LCP : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =
=>ppp ifconfig intf=PPP1 prot=pppoe encaps=vcmux
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10   QoS default encaps VC-MUX
      mode = IP Routing
      flags= echo magicaccomp restart mru  addr routesavepwd PPPOA
      transaddr = pat      mru = 1492
      route=      0.0.0.0/0 -      0.0.0.0/0 (metric 0)
      user name = My_Connection@MY_ISP  password= *****
      adminstate= down   oper state= down   link state= not-connected
      LCP : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =
=>

```

RELATED COMMANDS:

ppp ifadd	Create a Routed PPP(oA/oE) interface.
ppp ifattach	Attach a Routed PPP(oA/oE) interface.
ppp ifdelete	Delete a Routed PPP(oA/oE) interface.
ppp ifdetach	Detach a Routed PPP(oA/oE) interface.
ppp iflist	Show current Routed PPP(oA/oE) configuration.

ppp ifdelete

Delete a Routed PPP(oA/oE) interface.

SYNTAX:

```
ppp ifdelete      intf = <ifname>
```

intf The name of the Routed PPP(oA/oE) interface to delete.

EXAMPLE:

```
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10   QoS default encaps VC-MUX
      mode = IP Routing
      flags= echo magicaccomp mru  addr routesavepwd PPPOA
      transaddr = pat      mru = 1500
      route=      0.0.0.0/0 -      0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= down   oper state= down   link state= not-connected
      LCP  : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =

PPP2:  dest : PVC2
      Retry: 10   QoS default encaps VC-MUX
      mode = IP Routing
      flags= echo magicaccomp restart mru  addr savepwd PPPOA
      mru = 1500
      user name = password=
      adminstate= down   oper state= down   link state= not-connected
      LCP  : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =

=>ppp ifdelete intf=PPP2
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10   QoS default encaps VC-MUX
      mode = IP Routing
      flags= echo magicaccomp mru  addr routesavepwd PPPOA
      transaddr = pat      mru = 1500
      route=      0.0.0.0/0 -      0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= down   oper state= down   link state= not-connected
      LCP  : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =

=>
```

RELATED COMMANDS:

ppp ifadd	Create a Routed PPP(oA/oE) interface.
ppp ifattach	Attach a Routed PPP(oA/oE) interface.
ppp ifconfig	Configure a Routed PPP(oA/oE) interface.
ppp ifdetach	Detach a Routed PPP(oA/oE) interface.
ppp iflist	Show current Routed PPP(oA/oE) configuration.

ppp ifdetach

Detach a Routed PPP(oA/oE) interface.

SYNTAX:

ppp ifdetach	intf = <ifname>
---------------------	------------------------------

<i>intf</i>	The name of the Routed PPP(oA/oE) interface.	REQUIRED
-------------	--	----------

EXAMPLE:

```
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10   QoS default encaps LLC
      mode = IP Routing
      flags= echo magicaccomp restart mru  addr routesavepwd PPPOA
      transaddr = pat      mru  = 1492
      route=    0.0.0.0/0 -    0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= up      oper state= up      link state= connected
      LCP : state= opened retransm= 0 term.reason =
      IPCP : state= opened retransm= 10 term.reason =
      acname : , service = .
=>ppp ifdetach =intf=PPP1
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10   QoS default encaps LLC
      mode = IP Routing
      flags= echo magicaccomp restart mru  addr routesavepwd PPPOE
      transaddr = pat      mru  = 1492
      route=    0.0.0.0/0 -    0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= down    oper state= down    link state= not-connected
      LCP : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =
=>
```

RELATED COMMANDS:

ppp ifadd	Create a Routed PPP(oA/oE) interface.
ppp ifattach	Attach a Routed PPP(oA/oE) interface.
ppp ifconfig	Configure a Routed PPP(oA/oE) interface.
ppp ifdelete	Delete a Routed PPP(oA/oE) interface.
ppp iflist	Show current Routed PPP(oA/oE) configuration.

ppp iflist

Show current configuration of all or a specified Routed PPP(oA/oE) interface(s).

SYNTAX:

ppp iflist	[<i>intf</i> = <<i>ifname</i>>]
-------------------	--

<i>intf</i>	the name of the Routed PPP(oA/oE) interface. In case this parameter is not specified all Routed PPP(oA/oE) interfaces are shown.	OPTIONAL
-------------	---	----------

EXAMPLE INPUT/OUTPUT :

```
=>ppp iflist
PPP1:  dest : PPP1
      Retry: 10   QoS default encaps VC-MUX
      mode = IP Routing
      flags= echo magicaccomp mru  addr routesavepwd PPPOA
      transaddr = pat      mru = 1500
      route=      0.0.0.0/0 -      0.0.0.0/0 (metric 0)
      user name = guest  password= *****
      adminstate= down   oper state= down   link state= not-connected
      LCP  : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =

PPP2:  dest : PVC2
      Retry: 10   QoS default encaps VC-MUX
      mode = IP Routing
      flags= echo magicaccomp restart mru  addr savepwd PPPOA
      mru = 1500
      user name = password=
      adminstate= down   oper state= down   link state= not-connected
      LCP  : state= initial retransm= 10 term.reason =
      IPCP : state= initial retransm= 0 term.reason =

=>
```

RELATED COMMANDS:

ppp ifadd	Create a Routed PPP(oA/oE) interface.
ppp ifattach	Attach a Routed PPP(oA/oE) interface.
ppp ifconfig	Configure a Routed PPP(oA/oE) interface.
ppp ifdelete	Delete a Routed PPP(oA/oE) interface.
ppp ifdetach	Detach a Routed PPP(oA/oE) interface.

ppp ifscan

Scan a Routed PPPoE interface (proto=pppoe) for available Access Concentrator names and Service Names.

Execute the **ppp ifdetach** command for this interface prior to perform a scan on it.

SYNTAX:

ppp ifscan	intf = <ifname> [time = <number{0-36000}>] [kit = <number{0-8}>]
-------------------	---

<i>intf</i>	The name of the RoutedPPPoE interface to scan.	REQUIRED
<i>[time]</i>	A number between 0 and 36000 (seconds). Represents the time to scan for services.	OPTIONAL
<i>[kit]</i>	A number between 0 and 8. Represents the way the scan progress is visually indicated. Per default no progress indicator is applied (kit=0). kit=1 up to kit=8 are diverse progress indicators. Try it !	OPTIONAL

EXAMPLE:

```
=>ppp iflist
PPP1:  dest : PPP1
  Retry: 10  QoS default encaps LLC
  mode = IP Routing
  flags= echo magicaccomp restart mru  addr routesavepwd PPPOE
  transaddr = pat      mru  = 1492
  route=      0.0.0.0/0 -      0.0.0.0/0 (metric 0)
  user name = guest  password= *****
  adminstate= down  oper state= down  link state= not-connected
  LCP : state= initial retransm= 10 term.reason =
  IPCP : state= initial retransm= 0 term.reason =
=>ppp ifscan intf=PPP1 time=45
      Service Name                Access Concentrator

Done !
=>
```

RELATED COMMANDS:

ppp ifconfig Configure a Routed PPP(oA/oE) interface.

ppp rtadd

Automatically add a route configuration to the routing table in case the specified Routed PPP(oA/oE) interface link comes up.

This route configuration will determine which local hosts are allowed to use this link and/or which remote destinations should be or should not be reachable.

Execute the **ppp ifdetach** command for this interface prior to configuring routes.

SYNTAX:

ppp rtadd	intf = <ifname> dst = <ip-address> [dstmsk = <ip-mask(dotted or cidr)>] [src = <ip-address>] [srcmsk = <ip-mask(dotted or cidr)>] [metric = <number{0-100}>]	
<i>intf</i>	The name of the Routed PPP(oA/oE) interface.	REQUIRED
<i>dst</i>	The destination IP address for the route to be added when the link comes up.	REQUIRED
<i>[dstmsk]</i>	The destination IP mask. Depending on the destination netmask: <ul style="list-style-type: none"> ▪ Any remote destination is reachable, i.e. the Routed PPP(oA/oE) connection acts as default route (dstmsk=0) ▪ Only the remote (sub)net is reachable (dstmsk=1) The actual destination mask will be the default netmask applicable for destination IP address ▪ Only the single remote host is reachable (dstmsk=32) ▪ Any valid (contiguous) netmask in case of Variable Length Subnet Masking (VLSM). 	OPTIONAL
<i>[src]</i>	The source IP address specification for the route to be added when the link comes up.	OPTIONAL
<i>[srcmsk]</i>	The source IP mask. Depending on the source netmask: <ul style="list-style-type: none"> ▪ Everybody is allowed to use this Routed PPP(oA/oE) connection (dstmsk=0) ▪ Only members of the same subnet as the host which opened the Routed PPP(oA/oE) connection are allowed to use the Routed PPP(oA/oE) connection (dstmsk=1) The actual destination mask will be the netmask applicable for the IP address of the host which opened the Routed PPP(oA/oE) connection. ▪ Only the host which opened the Routed PPP(oA/oE) connection is allowed to use the Routed PPP(oA/oE) connection. (dstmsk=32) ▪ Any valid (contiguous) netmask in case of VLSM. 	OPTIONAL
<i>[metric]</i>	The route metric, i. e. the cost factor of the route. Practically, the cost is determined by the hop count. It is recommended not to use this parameter.	OPTIONAL

EXAMPLE:

```

=>ppp iflist
PPP1:  dest : PVC3
  Retry: 10   QoS default encaps LLC
  mode = IP Routing
  flags= echo magicaccomp restart mru  addr routesavepwd PPPOE
  transaddr = pat      mru = 1492
  user name = guest   password= *****
  adminstate= down   oper state= down   link state= not-connected
  LCP  : state= initial retransm= 10 term.reason =
  IPCP : state= initial retransm=  0 term.reason =
=>ppp rtadd intf=PPP1 dst=172.16.0.5 dstmsk=24 src=10.0.0.2 srcmask=24
=>ppp iflist
PPP1:  dest : PVC3
  Retry: 10   QoS default encaps LLC
  mode = IP Routing
  flags= echo magicaccomp restart mru  addr routesavepwd PPPOE
  transaddr = pat      mru = 1492
  route=      10.0.0.2/24 -      172.16.0.5/24 (metric 1)
  user name = guest   password= *****
  adminstate= down   oper state= down   link state= not-connected
  LCP  : state= initial retransm= 10 term.reason =
  IPCP : state= initial retransm=  0 term.reason =
=>

```

RELATED COMMANDS:

ppp rtdelete

Delete the route specification for an upcoming Routed PPP(oA/oE) link.

ppp rtdelete

Delete the route specification for a Routed PPP(oA/oE) link.

Execute the **ppp ifdetach** command for this interface prior to deleting route configurations.

SYNTAX:

ppp rtdelete	intf = <ifname>	
<i>intf</i>	The Routed PPP(oA/oE) interface name for which to delete the route settings.	REQUIRED

EXAMPLE:

```
=>ppp iflist
PPP1:  dest : PVC3
  Retry: 10  QoS  default encaps LLC
  mode = IP Routing
  flags= echo magicaccomp restart mru  addr routesavepwd PPPOE
  transaddr = pat      mru = 1492
  route= _____ 10.0.0.2/24 - _____ 172.16.0.5/24 (metric 1)
  user name = guest  password= *****
  adminstate= down  oper state= down  link state= not-connected
  LCP : state= initial retransm= 10 term.reason =
  IPCP : state= initial retransm= 0 term.reason =
=>ppp rtdelete intf=PPP1
=>ppp iflist
PPP1:  dest : PVC3
  Retry: 10  QoS  default encaps LLC
  mode = IP Routing
  flags= echo magicaccomp restart mru  addr routesavepwd PPPOE
  transaddr = pat      mru = 1492
  user name = guest  password= *****
  adminstate= down  oper state= down  link state= not-connected
  LCP : state= initial retransm= 10 term.reason =
  IPCP : state= initial retransm= 0 term.reason =
=>
```

RELATED COMMANDS:

ppp rtadd

Configure a route specification for an upcoming Routed PPP(oA/oE) link.

20 PPTP Commands

pptp (to access the PPTP level)

pptp flush

pptp list

pptp profadd

pptp profdelete

pptp proflist

pptp flush

Flush complete Relayed PPPoA, often referred to as PPPoA/Point-to-Point Tunneling Protocol (PPTP) configuration.

The flush command does not impact previously saved configurations.

SYNTAX:

```
pptp flush
```

EXAMPLE:

```
=>pptp profadd name=Relay PPP1 encaps=nlpid ac=always
=>pptp proflist
Profile           QoS           Encaps          AC
Relay PPP1       default      nlpid           always
=>pptp flush
=>pptp proflist
=>
```

pptp list

Show current Relayed PPPoA configuration.

SYNTAX:

```
pptp list
```

EXAMPLE INPUT/OUTPUT:

```
=>pptp list
Dialstr   Destination   QoS   Encaps   AC   State   User
          DIALUP_PPP3  default vcmux   never CONNECTED (10.0.0.2)
=>
```

pptp profadd

Define a new Relayed PPPoA profile.

SYNTAX:

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

<i>name</i>	The name for the Relayed PPPoA profile.	REQUIRED
<i>[qos]</i>	The name of the Quality Of Service book entry. This parameter never needs to be specified.	OPTIONAL
<i>[encaps]</i>	The type of encapsulation applicable to Relayed PPPoA interfaces using this Relayed PPPoA profile. Choose between: <ul style="list-style-type: none"> ▪ vcmux ▪ nlpid – Network Layer Protocol IDentifiers (NLPID) 	OPTIONAL
<i>[ac]</i>	The High–level Data Link Control (HDLC) framing option applicable to Relayed PPPoA interfaces using this Relayed PPPoA profile. Before relaying the encapsulated PPP frames over the PPPoA link, make sure that the address and control field (0xFF03) is always in front of the frames (always), make sure the address and control field will never be found in front of the frames (never) or do not change the frames arriving via the PPTP tunnel (keep). By default the address and control field is never sent (compliant to RFC2364). It is recommended to keep this setting.	OPTIONAL

EXAMPLE:

```
=>pptp proflist
Profile      QoS      Encaps      AC
Relay_PPP1   default  nlpid       always
=>pptp profadd name=PPTPLink encaps=vcmux ac=never
=>pptp proflist
Profile      QoS      Encaps      AC
Relay_PPP1   default  nlpid       always
PPTPLink     default  vcmux       never
=>
```

RELATED COMMANDS:

pptp profdelete	Delete a Relayed PPPoA profile.
pptp proflist	Show current Relayed PPPoA profiles.

pptp profdelete

Delete a Relayed PPPoA profile.

SYNTAX:

```
pptp profdelete name <string>
```

<i>name</i>	The name for the Relayed PPPoA profile.	REQUIRED
-------------	---	----------

EXAMPLE:

```
=>pptp proflist
Profile      QoS      Encaps      AC
Relay_PPP1   default  nlpid       always
PPTPLink     default  vcmux       never
=>pptp profdelete name=PPTPLink
=>pptp proflist
Profile      QoS      Encaps      AC
Relay_PPP1   default  nlpid       always
=>
```

RELATED COMMANDS:

pptp profadd	Define a new Relayed PPPoA profile.
pptp proflist	Show current Relayed PPPoA profiles.

pptp proflist

Show all current Relayed PPPoA profiles.

```
pptp proflist
```

EXAMPLE:

```
=>pptp proflist
Profile           QoS           Encaps         AC
Relay_PPP1       default      nlpid         always
PPTPLink         default      vcmux         never
=>
```

RELATED COMMANDS:

pptp profadd Define a new Relayed PPPoA profile.
pptp profdelete Delete a Relayed PPPoA profile.

21 QoSBook Commands

qosbook (to access the QoSbook level)

qosbook add

qosbook delete

qosbook flush

qosbook list

qosbook add

Add a Quality of Service book entry.

SYNTAX:

```
qosbook add      name = <string>
                  class = <{ubr|cbr|vbr-nrt}>
                  [tx_peakrate = <number{0-2147483}>]
                  [tx_sustrate = <number{0-2147483}>]
                  [tx_maxburst = <number{0-2147483600}>]
                  [rx_peakrate = <number{0-2147483}>]
                  [rx_sustrate = <number{0-2147483}>]
                  [rx_maxburst = <number{0-2147483600}>]
```

<i>name</i>	The name for the new QoS entry.	REQUIRED
<i>class</i>	The ATM service category. Choose between: <ul style="list-style-type: none"> ▪ ubr: unspecified bit rate ▪ cbr: constant bit rate ▪ vbr-nrt: variable bit rate - non real time 	REQUIRED
<i>[tx_peakrate]</i>	A number between 0 and 2147483 (Kilobits per second). Indicates the peak rate in the transmit (upstream) direction. Use tx_peakrate=0 to indicate Linerate.	OPTIONAL
<i>[tx_sustrate]</i>	A number between 0 and 2147483 (Kilobits per second). Indicates the sustainable rate in the transmit (upstream) direction. Only applicable in case class=vbr-nrt.	OPTIONAL
<i>[tx_maxburst]</i>	A number between 0 and 2147483600 (Kilobits per second). Indicates the maximum burst size in the transmit (upstream) direction. Only applicable in case class=vbr-nrt.	OPTIONAL
<i>[rx_peakrate]</i>	A number between 0 and 2147483 (Kilobits per second). Indicates the peak rate in the receive (downstream) direction. Use rx_peakrate=0 to indicate Linerate. Only applicable in an SVC environment.	OPTIONAL
<i>[rx_sustrate]</i>	A number between 0 and 2147483 (Kilobits per second). Indicates the sustainable rate in the receive (downstream) direction. Only applicable in an SVC environment with class=vbr-nrt.	OPTIONAL
<i>[rx_maxburst]</i>	A number between 0 and 2147483600 (Kilobits per second). Indicates the maximum burst size in the receive (downstream) direction. Only applicable in an SVC environment with class=vbr-nrt.	OPTIONAL

EXAMPLE:

```

=>qosbook list
Name      Ref Type      TX peak  sust      burst      RX peak  sust      burst
          (Kbits) (Kbits) (bytes) (Kbits) (Kbits) (bytes)
default 4   ubr         linerate 0         0         linerate 0         0
=>qosbook add
name=TestVBR
class=vbr-nrt
[tx_peakrate]=
[tx_sustrate]=1000
[tx_maxburst]=100
[rx_peakrate]=
[rx_sustrate]=1000
[rx_maxburst]=100

=>qosbook list
Name      Ref Type      TX peak  sust      burst      RX peak  sust      burst
          (Kbits) (Kbits) (bytes) (Kbits) (Kbits) (bytes)
default 4   ubr         linerate 0         0         linerate 0         0
TestVBR 0   vbr-nrt    linerate 1000    144      linerate 1000    144
=>

```

IMPORTANT NOTE:

Please note that the SpeedTouch™ always makes sure that specified burst sizes are round up to a multiple of 48 bytes, i.e. a multiple of ATM cells. For example, when specifying a burst size of 100 bytes as depicted in the example above (*tx_maxburst=100*) the SpeedTouch™ will round up the burst size to the closest matching multiple of 48 bytes, as can be seen when displaying the profile via `:qosbook list (burst=144)`.

RELATED COMMANDS:

qosbook delete Remove a QoS book entry.
qosbook list Show current QoS book.

qosbook delete

Remove a Quality of Service book entry.

SYNTAX:

qosbook delete	name = <string> [force = <{no yes}>]
-----------------------	---

<i>name</i>	The name of the QoS book entry to delete.	REQUIRED
<i>[force]</i>	Force deletion of the entry even if it is still in use (yes) or do not force the deletion (no). By default forced deletion is disabled.	OPTIONAL

EXAMPLE:

```
=>qosbook list
Name      Ref Type   TX peek  sust    burst   RX peek  sust    burst
          (Kbits) (Kbits) (bytes) (Kbits) (Kbits) (bytes)
default  24  ubr    Linerate 0      0      Linerate 0      0
voice    0   cbr     64      0      0      64      0      0
-----
PPP3     1   ubr   6144    0      0      Linerate 0      0
=>qosbook delete name voice
=>qosbook list
Name      Ref Type   TX peek  sust    burst   RX peek  sust    burst
          (Kbits) (Kbits) (bytes) (Kbits) (Kbits) (bytes)
default  24  ubr    Linerate 0      0      Linerate 0      0
PPP3     1   ubr   6144    0      0      Linerate 0      0
=>
```

RELATED COMMANDS:

qosbook add	Add a QoS book entry.
qosbook list	Show current QoS book.

qosbook flush

Flush complete Quality of Service book. The flush command does not impact previously saved configurations.

SYNTAX:

qosbook flush

RELATED COMMANDS:

qosbook load

Load saved or default QoS book.

qosbook save

Save current QoS book.

qosbook list

Show current Quality of Service book.

SYNTAX:

```
qosbook list
```

EXAMPLE OUTPUT:

```

=>qosbook list
Name      Ref Type   TX peek  sust    burst   RX peek  sust    burst
          (Kbits) (Kbits) (bytes) (Kbits) (Kbits) (bytes)
default  24  ubr     Linerate 0      0      Linerate 0      0
PPP3     1  ubr     6144    0      0      Linerate 0      0
=>qosbook add name voice class cbr tx_peekrate 64 rx_peekrate 64
=>qosbook list
Name      Ref Type   TX peek  sust    burst   RX peek  sust    burst
          (Kbits) (Kbits) (bytes) (Kbits) (Kbits) (bytes)
default  24  ubr     Linerate 0      0      Linerate 0      0
voice    0  cbr     64      0      0      64      0      0
PPP3     1  ubr     6144    0      0      Linerate 0      0
=>

```

RELATED COMMANDS:

qosbook add
qosbook delete

Add a QoS book entry.
Remove a QoS book entry.

22 SHDSL Commands

The shdsl command group is only applicable to the **SpeedTouch™ 610s** SHDSL variant, NOT to the **SpeedTouch™ 610** and **SpeedTouch™ 610i** ADSL variants, or the **SpeedTouch™ 610v** Very high speed Digital Subscriber Line (VDSL) variant.

shdsl (to access the SHDSL level)

shdsl line

shdsl psd

shdsl status

shdsl version

shdsl line

Show Single-pair High speed Digital Subscriber Line (SHDSL) line information and basic statistics.

SYNTAX:

```
shdsl line
```

EXAMPLE:

```
=>shdsl line  
  
SHDSL Line in 4 Wires Mode  
Line UP at 4096 kbit/s since 00:13:48  
Total bytes since power on :  
Downstream : 101071 bytes Upstream : 96884 bytes  
  
Actual PSD : Symmetric PSD mask for Europe  
=>
```

shdsl psd

Configure the Power Spectral Density (PSD) mask to be used, then restart the SHDSL line.

SYNTAX:

shdsl psd	mask = <{sym_NA sym_EU asym_NA_768 asym_NA_1536 asym_EU_2048 asym_EU_2304 auto}>
------------------	---

<i>mask</i>	<p>The selected PSD mask must comply to the regional demands and required payload rate.</p> <p>Select either:</p> <ul style="list-style-type: none"> ▪ <i>sym_NA</i> Symmetric PSD mask for North America ▪ <i>sym_EU</i> Symmetric PSD mask for Europe ▪ <i>asym_NA_768</i> Asymmetric PSD mask for 768kb/s (North American) ▪ <i>asym_NA_1536</i> Asymmetric PSD mask for 1536kb/s (North American) ▪ <i>asym_EU_2048</i> Asymmetric PSD mask for 2048kb/s (European) ▪ <i>asym_EU_2304</i> Asymmetric PSD mask for 2304kb/s (European) ▪ <i>auto</i> The PSD mask is selected automatically by the SpeedTouch™ at SHDSL line synchronization. <p>By default the PSD mask will be automatically detected by the SpeedTouch™ (:<i>shdsl psd mask=auto</i>).</p>	REQUIRED
-------------	---	----------

shdsl status

Show detailed SHDSL statistics and status information.

SYNTAX:

```
shdsl info
```

EXAMPLE:

```
=>shdsl status  
  
Performance Infos (Loop 1/Loop 2)  
ES      = 1/1          SES = 0/0          UAS = 0/0  
LOSWS = 0/0          CRC = 5/3          HEC = 0/0  
PBO Current      State : Selected  
PBO Programmed State : Selected  
Line Conditions (Loop 1/Loop 2) :  
PBO Value (0/0) dB  
SNR Margin  (10/10) dB  
Attenuation (0/0) dB  
Transmit Power (15/15) dBm  
=>
```


shdsl version

Show SHDSL version information.

SYNTAX:

```
shdsl version
```

EXAMPLE:

```
=>shdsl version
GSI firmware SHDSL : release R2.0
Vendor & Version Infos
CountryCode      : 0f
EOC Version      : 01
SHDSL Version    : 01
Code             : (ALCB): 41 4c 43 42
Specific Code    : (): 00 00
List            : ( ): 20 20 20
Issue           : ( ): 20 20
SW Version       : (AA4106): 41 41 34 31 30 36
Clei Code        : ( ): 20 20 20 20 20 20 20 20 20 20
Model           : (SHNT-B ): 53 48 4e 54 2d 42 20 20 20 20 20 20
Serial Number    : (022090062 ): 30 32 32 30 39 30 30 36 32 20 20 00
Other Info       : (3EC18873HDAA): 33 45 43 31 38 38 37 33 48 44 41 41
=>
```


23 SNMP Commands

snmp (to access the SNMP level)

snmp config

snmp flush

snmp get

snmp list

snmp trapadd

snmp trapdelete

snmp config

Show/set global Simple Network Management Protocol (SNMP) parameters.

SYNTAX:

snmp config	<pre>[RWCommunity = <string>] [ROCommunity = <string>] [sysContact = <quoted string>] [sysName = <quoted string>] [sysLocation = <quoted string>] [traps <{no yes}>] [firstTrapDelay <number{1-300}>]</pre>
--------------------	---

[RWCommunity]	The read-write community name. By default the read-write community name is <i>private</i> .	OPTIONAL
[ROCommunity]	The read-only community name. By default the read-only community name is <i>public</i> .	OPTIONAL
[sysContact]	The SNMP system contact. By default the system contact is <i>Service Provider</i> .	OPTIONAL
[sysName]	The SNMP system name. By default the system name is <i>SpeedTouch 610</i> .	OPTIONAL
[sysLocation]	The SNMP system location. By default the system location is <i>Customer Premises</i> .	OPTIONAL
[traps]	Allow (yes) or do not allow (no) SNMP traps to be sent. By default sending of SNMP traps is disabled.	OPTIONAL
[firstTrapDelay]	A number between 1 and 300 (seconds). Represents the delay before sending the first of the SNMP traps. By setting the delay, loss of traps due to pending but not yet fully accomplished end-to-end connectivity (e.g. in case of Routed PPP interfaces) can be avoided. By default <i>firstTrapDelay</i> is set to 90 seconds.	OPTIONAL

EXAMPLE (default configuration):

```
=>snmp config
Read-write SNMP community name : private
Read-only SNMP community name : public
SNMP System Contact      : Service Provider
SNMP System Name        : SpeedTouch 610
SNMP System Location    : Customer Premises
All SNMP traps          : DISABLED
Delay, in secs before first trap is sent      : 90
=>
```

snmp flush

Flush the SNMP trap list. I.e. delete all configured SNMP trap destination IP addresses.

SYNTAX:

<i>snmp flush</i>

RELATED COMMANDS:

snmp trapadd

Add a new trap destination to the SNMP trap list.

snmp trapdelete

Delete a trap destination from the SNMP trap list.

snmp list

Show all SNMP parameters and the SNMP trap list.

snmp get

Get, GetNext or Walk from the supplied SNMP Object Identifier (OID).

SYNTAX:

snmp get	[Option = <{get getnext walk}>] [ObjectID = <string>]
-----------------	--

<i>[Option]</i>	The operation to be done, starting from the OID, specified in <i>ObjectID</i> . Specify: <ul style="list-style-type: none"> ▪ get For getting the value of the specified OID. ▪ getnext For getting the next OID. ▪ walk For walking through the values of all OIDs, starting from the specified OID. If not specified, <i>Option</i> is <i>get</i> .	OPTIONAL
<i>[ObjectID]</i>	The Object Identifier. If not specified, the sysdescription OID .1.3.6.1.2.1.1.1.0 is assumed. Its value is <i>SpeedTouch 610</i> . Use <i>walk</i> for retrieving available OIDs.	OPTIONAL

EXAMPLE:

```
=>snmp get
VB_octetStr .1.3.6.1.2.1.1.1.0 SpeedTouch 610
=>snmp get Option=getnext ObjectID=.1.3.6.1.2.1.1.4.0
VB_octetStr .1.3.6.1.2.1.1.5.0 Sascha
=>snmp get Option=walk ObjectID=.1.3.6.1.2.1.1
VB_octetStr .1.3.6.1.2.1.1.1.0 SpeedTouch 610
VB_objId .1.3.6.1.2.1.1.2.0 .1.3.6.1.4.1.637.61.2
VB_timeTicks .1.3.6.1.2.1.1.3.0 2927636
VB_octetStr .1.3.6.1.2.1.1.4.0 Service Provider
VB_octetStr .1.3.6.1.2.1.1.5.0 Sascha
VB_octetStr .1.3.6.1.2.1.1.6.0 Customer Premises
VB_integer .1.3.6.1.2.1.1.7.0 72
=>
```

snmp list

List all SNMP global parameters and the SNMP trap list.

SYNTAX:

```
snmp list
```

EXAMPLE:

```
=>snmp list
Read-write SNMP community name : private
Read-only SNMP community name : public
SNMP System Contact : Service Provider
SNMP System Name : Sascha
SNMP System Location : Customer Premises
All SNMP traps : DISABLED
Delay, in secs before first trap is sent : 90

Trap 0 ipaddr 10.0.0.1 port 162 min interval 0 s
Trap 1 ipaddr 192.6.11.50 port 162 min interval 20 s
Trap 2 ipaddr 186.138.141.1 port 20286 min interval 60 s
=>
```

snmp trapadd

Add a new SNMP trap destination to the SNMP trap list.

SYNTAX:

snmp trapadd	addr = <ip-address> [port = <number{1-65535}>] [interval = <number{0-60}>]
---------------------	---

<i>addr</i>	The SNMP trap destination IP address.	REQUIRED
<i>[port]</i>	A port number between 1 and 65535. Represents the SNMP trap destination port number. By default the default SNMP-trap port number 162 is assumed.	OPTIONAL
<i>[interval]</i>	A number between 0 and 60 (seconds). Represents the minimum interval between sending subsequent SNMP traps to the destination. By default sending of subsequent traps to the destination is not delayed (<i>interval</i> = 0).	OPTIONAL

EXAMPLE:

```
=>snmp trapadd addr=10.0.0.1 port=10162 interval=20
=>snmp trapadd addr=10.0.0.250
=>snmp list
Read-write SNMP community name : private
Read-only SNMP community name : public
SNMP System Contact : Service Provider
SNMP System Name : Sascha
SNMP System Location : Customer Premises
All SNMP traps : DISABLED
Delay, in secs before first trap is sent : 90

Trap 0 ipaddr 10.0.0.1 port 10162 min interval 20 s
Trap 1 ipaddr 10.0.0.250 port 162 min interval 0 s
=>
```

RELATED COMMANDS:

snmp trapdelete	Delete a trap destination from the SNMP trap list.
snmp list	Show all SNMP parameters and the SNMP trap list.

snmp trapdelete

Delete an SNMP trap destination from the SNMP trap list.

SYNTAX:

<i>snmp trapdelete</i>	<i>addr = <ip-address></i> <i>[port = <number{1-65535}>]</i>
-------------------------------	---

<i>addr</i>	The SNMP trap destination IP address.	REQUIRED
<i>[port]</i>	A port number between 1 and 65535. Represents the SNMP trap destination port number. If not specified the entry with this destination with the lowest trap number in the trap list is deleted. Use <i>:snmp list</i> for a list of trap destinations.	OPTIONAL

RELATED COMMANDS:

<i>snmp trapadd</i>	Add a new trap destination to the SNMP trap list.
<i>snmp list</i>	Show all SNMP parameters and the SNMP trap list.

24 SNTP Commands

sntp (to access the SNTP level)

sntp add

sntp config

sntp del

sntp flush

sntp list

sntp add

Add a Network Time Protocol (NTP) server to the NTP server list to synchronize the internal SpeedTouch™ real time clock (SNTP client) with.

SYNTAX:

sntp add	addr = <ip-address> [version = <number{1-4}>]
-----------------	--

<i>addr</i>	The IP address of the NTP server to add to the list.	REQUIRED
<i>[version]</i>	The SNTP version of the NTP server. Select either 1, 2, 3, or 4 following NTP server supported versions.	OPTIONAL

RELATED COMMANDS:

sntp config	Show /set SpeedTouch™ SNTP client configuration.
sntp del	Remove an NTP server from the NTP server list.
sntp flush	Flush the NTP server list and clear SNTP client configuration.
sntp list	List currently configured NTP servers.

sntp config

Show/set SpeedTouch™ SNTP client configuration.

SYNTAX:

sntp config	[enable = <{yes no}>] [poll = <number{1-60}>]
--------------------	--

<i>[enable]</i>	Enable (yes) or disable the SpeedTouch™ SNTP client. By default the NTP server list is empty, and hence the SpeedTouch™ SNTP client disabled.	OPTIONAL
-----------------	--	----------

<i>[poll]</i>	A number between 1 and 60 minutes. Represents the time interval for the SpeedTouch™ SNTP client to poll the configured NTP server and, if needed, (re-)synchronize its internal clock. By default the polling interval is 15 minutes.	OPTIONAL
---------------	---	----------

RELATED COMMANDS:

sntp add	Add a new NTP server to the NTP server list.
sntp del	Remove an NTP server from the NTP server list.
sntp flush	Flush the NTP server list and clear SNTP client configuration.
sntp list	List currently configured NTP servers.

sntp del

Delete NTP server from NTP server list.

SYNTAX:

sntp del	addr = <ip-address>
-----------------	----------------------------------

<i>addr</i>	The IP address of the NTP server to remove from the list.	REQUIRED
-------------	---	----------

RELATED COMMANDS:

sntp add	Add a new NTP server to the NTP server list.
sntp config	Show /set SpeedTouch™ SNTP client configuration.
sntp flush	Flush the NTP server list and clear SNTP client configuration.
sntp list	List currently configured NTP servers.

sntp flush

Delete all NTP servers from NTP server list and clear the SpeedTouch™ SNTP client configuration.

SYNTAX:

<i>sntp flush</i>

RELATED COMMANDS:

sntp add

Add a new NTP server to the NTP server list.

sntp config

Show /set SpeedTouch™ SNTP client configuration.

sntp del

Remove an NTP server from the NTP server list.

sntp list

List currently configured NTP servers.

sntp list

Show a listing of added NTP servers and their current status.

SYNTAX:

```
sntp list
```

EXAMPLE:

```

=>sntp list
IP Address      Version  Status
100.101.110.111 4        contacting ...
100.101.110.112 4        Unable to contact
100.101.110.113 4        Synchronized
=>

```

DESCRIPTION:

Following NTP server states are possible:

- Not used
The SpeedTouch™ SNTP client is disabled. As a consequence, none of the NTP servers are used.
- Contacting ...
The SpeedTouch™ SNTP client is trying to contact this NTP server.
- Unable to contact
The SpeedTouch™ SNTP client is unable to contact this NTP server; it may be down, or no end-to-end connectivity exists (no connection, no DSL, ...)
- Synchronized
The SpeedTouch™ SNTP client was able to contact this NTP server. If required the internal clock has been synchronized with this NTP server.

RELATED COMMANDS:

sntp add	Add a new NTP server to the NTP server list.
sntp config	Show /set SpeedTouch™ SNTP client configuration.
sntp del	Remove an NTP server from the NTP server list.
sntp flush	Flush the NTP server list and clear SNTP client configuration.

25 Software Commands

software (to access the Software level)
software cleanup
software deletepassive
software duplicate
software setpassive
software switch
software version
software addon (to access the Software Add-on level)
software addon list

software cleanup

Remove all unused files from the passive software subdirectory.

This command frees the passive software subdirectory from corrupted software files and configuration files. Software marked as passive software is not deleted.

SYNTAX:

<i>software cleanup</i>

RELATED COMMANDS:

software deletepassive

Delete the passive software.

software setpassive

Mark an uploaded file as passive software version.

software deletepassive

Delete passive software.

SYNTAX:

```
software deletepassive
```

EXAMPLE:

```
=>Software version
Active : Sascha4.115           Passive : Bene4.114
=>software deletepassive
=>Software version
Active : Sascha4.115           Passive : _____
=>
```

RELATED COMMANDS:

software cleanup

Remove all unused files from the passive software subdirectory.

software duplicate

Duplicate the active software as passive software.

software setpassive

Mark a file as passive software version.

software duplicate

Duplicate the active software as passive software.

SYNTAX:

```
software duplicate
```

EXAMPLE:

```
=>Software version
Active : Sascha4.115           Passive :
=>Software duplicate
=>Software version
Active : Sascha4.115           Passive : Sascha4.115
=>
```

RELATED COMMANDS:

software cleanup

Remove all unused files from the passive software subdirectory.

software deletepassive

Delete passive software.

software setpassive

Mark a file as passive software version.

software setpassive

Mark a file as passive software version. Only correctly uploaded software, valid for the SpeedTouch™ can be marked as passive software.

SYNTAX:

software setpassive	file = <string>
----------------------------	------------------------------

file the filename (without directory path) of the software package. REQUIRED

EXAMPLE:

```
=>Software version
Active : Sascha4.115                    Passive : Bene4.114
=>Software deletepassive
=>Software version
Active : Sascha4.115                    Passive :
.....
(FTP file transfer or upload via the SpeedTouch™ pages of new software Sascha4.120)
.....
=>software setpassive file=Sascha4.120
=>Software version
Active : Sascha4.115                    Passive : Sascha4.120
=>
```

RELATED COMMANDS:

software cleanup Remove all unused files from the passive software subdirectory.
software deletepassive Delete passive software.

software switch

Switch active and passive versions and reboot the SpeedTouch™.

Because rebooting implies a flush of all non-saved configurations it is highly recommended to save the current configuration if needed, e.g. via *saveall* or *:config save* before executing a software switch.

SYNTAX:

```
software switch
```

EXAMPLE:

```
=>Software version
Active : Sascha4.115           Passive : Sascha4.120
=>software switch
.....
(after reboot and re-opening the Telnet session)
.....
=>Software version
Active : Sascha4.120           Passive : Sascha4.115
=>
```

RELATED COMMANDS:

software version
system reboot

Show active and passive software versions.
Reboot the SpeedTouch™.

software version

Show active and passive software versions.

SYNTAX:

```
software version
```

EXAMPLE:

```
=>Software version  
Active   : Sascha4.120           Passive  : Sascha4.115  
=>
```

RELATED COMMANDS:

software switch

Switch active and passive software versions and reboot the SpeedTouch™.

software addon list

Via Software key activation information.

SYNTAX:

```
software addon list
```

EXAMPLE:

```
=>software addon list

IPSEC_VPN module info :
    Software key status : Key Enabled
    Filename : IPSEC_VPN.swk
    Link : http://www.speedtouch.com/homeprod/addon/html
    Teaser : IPSEC based VPN capability

=>
```

NOTE: In case a software key has not been enabled *Software key status : No key.*

26 Syslog Commands

syslog (to access the Syslog level)

syslog config

syslog flush

syslog list

syslog ruleadd

syslog ruledetele

syslog msgbuf show

syslog msgbuf send

syslog config

Show/set SpeedTouch™ Syslog configuration.

SYNTAX:

syslog config	[activate = <{no yes}>] [timeout = <number{0-60}>]
----------------------	---

<i>[activate]</i>	Allow the SpeedTouch™ Syslog daemon to send messages to collectors, present in the collector rule list (yes), or not (no). By default no rules are configured, and hence sending of syslog messages disabled.	OPTIONAL
-------------------	--	----------

<i>[timeout]</i>	A number between 0 and 60 (seconds). Represents the interval between sending subsequent syslog messages to collectors as soon as there are available. This may avoid congestions, hence loss of messages. By default no time-out is configured (0 seconds).	OPTIONAL
------------------	---	----------

EXAMPLE (starting from default configuration):

```
=>syslog config
Activated : no
Timeout   : 0 sec(s)
=>syslog config activate=yes timeout=10
=>syslog config
Activated : yes
Timeout   : 30 sec(s)
=>
```

syslog flush

Delete all rules from the SpeedTouch™ Syslog collector rule list.

SYNTAX:

<i>syslog flush</i>

RELATED COMMANDS:

syslog ruleadd

Add a new rule to the SpeedTouch™ Syslog collector rule list.

syslog ruledelete

Remove a rule from the SpeedTouch™ Syslog collector rule list.

syslog list

Show a list of all collectors and their applicable rules.

SYNTAX:

```
syslog list
```

EXAMPLE:

```
=>syslog list  
1: all.debug 10.0.0.1  
2: kern,auth,security,ftp.warning 10.10.10.101  
=>
```

IMPORTANT NOTE:

The SpeedTouch™ syslog collector list can hold up to 16 rules.

RELATED COMMANDS:

syslog flush

Delete all rules in the SpeedTouch™ Syslog collector rule list.

syslog ruleadd

Add a new rule to the SpeedTouch™ Syslog collector rule list.

syslog ruledelete

Remove a rule from the SpeedTouch™ Syslog collector rule list.

syslog ruleadd

Add a rule, i.e. a new collector and applicable rules to send SpeedTouch™ syslog messages, to the SpeedTouch™ Syslog collector list.

The SpeedTouch™ syslog collector list can hold up to 16 rules.

SYNTAX:

syslog ruleadd	fac = <{<supported facility names (comma seperated)> all}> sev = <supported severity name> dest = <ip-address>
-----------------------	--

fac	Specify the facility name(s) of the syslog messages to send to the collector specified in this rule. REQUIRED In case multiple facilities apply, list them comma-seperated (e.g. <i>fac=kern,auth,security</i>). Use <i>fac=all</i> to send syslog messages of any facility to the collector. Use one or more of the supported facility names (See B.4 for a listing of syslog facility names supported by the SpeedTouch™).
sev	Specify the lowest priority severity of the syslog messages to send to the collector specified in this rule. REQUIRED Specifying a severity actually means specifying to send syslog messages with a severity as specified, and all messages with a higher severity. For example use <i>sev=debug</i> (lowest priority) to allow the SpeedTouch™ to send syslog messages of any severity to the collector; use <i>sev=alert</i> to only send alert messages (one but highest proirity severity) and emergency messages (highest priority severity) to the collector. Use one of the supported severity names (See B.5 for a listing of syslog facility names supported by the SpeedTouch™).
dest	The IP address of the local (or remote) host, i.e. the collector's IP address to send the syslog messages to. REQUIRED

EXAMPLE:

```
=>syslog list
1: all.debug 10.0.0.1
=>syslog ruleadd fac=kern,auth,security,ftp sev=warning dest= 10.10.10.101
=>syslog list
1: all.debug 10.0.0.1
2: kern,auth,security,ftp.warning 10.10.10.101
=>
```

RELATED COMMANDS:

syslog flush	Delete all rules in the SpeedTouch™ Syslog collector rule list.
syslog list	Show the SpeedTouch™ Syslog collector rule list.
syslog ruledelete	Remove a rule from the SpeedTouch™ Syslog collector rule list.

syslog ruledelelete

Delete a rule from the SpeedTouch™ syslog collector list.

SYNTAX:

syslog ruledelelete	index_rule = <number{1-16}>
----------------------------	--

<i>index_rule</i>	Specify the index of the rule to delete. Use <i>:syslog list</i> to identify the index number of the rule to delete.	REQUIRED
-------------------	--	----------

EXAMPLE:

```
=>syslog list
1: all.debug                10.0.0.1
2: kern,auth,security,ftp.warning 10.10.10.101
=>syslog ruledelelete rule_index=2
=>syslog list
1: all.debug                10.0.0.1
=>
```

RELATED COMMANDS:

syslog flush	Delete all rules in the SpeedTouch™ Syslog collector rule list.
syslog list	Show the SpeedTouch™ Syslog collector rule list.
syslog ruleadd	Add a new rule to the SpeedTouch™ Syslog collector rule list.

syslog msgbuf show

Show syslog messages in the internal Speedtouch™ syslog message buffer.

SYNTAX:

syslog msgbuf show	[fac = <supported facility name>] [sev = <supported severity name>] [hist = <{no yes}>]	
[fac]	Optionally, Specify the facility name of the syslog messages to show. Use one of the supported facility names (See B.4 for a listing of syslog facility names supported by the SpeedTouch™). Do not specify to show messages of any facility.	OPTIONAL
[sev]	Specify the lowest priority severity of the syslog messages to show. Specifying a severity actually means specifying to show the syslog messages with a severity as specified, and all messages with a higher severity. Use one of the supported severity names (See B.5 for a listing of syslog facility names supported by the SpeedTouch™). Do not specify to show messages of any facility.	OPTIONAL
[hist]	The show messages over several SpeedTouch™ reboots (yes) or show only messages since latest startup (no). Do not specify to only show the recent messages.	OPTIONAL

EXAMPLE:

```
=>syslog msgbuf show fac=kern sev=emerg hist=yes
<0> SysUpTime: 14:45:43 KERNEL Controlled restart (after internal error or explicit
system reboot)
<0> SysUpTime: 02:58:18 KERNEL Controlled restart (after internal error or explicit
system reboot)
<0> SysUpTime: 04 days 04:52:37 KERNEL Controlled restart (after internal error or
explicit system reboot)
<0> SysUpTime: 00:00:41 KERNEL Controlled restart (after internal error or explicit
system reboot)
=>syslog msgbuf show fac=kern sev=warning hist=yes
<4> SysUpTime: 00:00:00 KERNEL Cold restart
<0> SysUpTime: 14:45:43 KERNEL Controlled restart (after internal error or explicit
system reboot)
<4> SysUpTime: 00:00:00 KERNEL Warm restart
<0> SysUpTime: 02:58:18 KERNEL Controlled restart (after internal error or explicit
system reboot)
<4> SysUpTime: 00:00:00 KERNEL Warm restart
<0> SysUpTime: 04 days 04:52:37 KERNEL Controlled restart (after internal error or
explicit system reboot)
<4> SysUpTime: 00:00:00 KERNEL Warm restart
<0> SysUpTime: 00:00:41 KERNEL Controlled restart (after internal error or explicit
system reboot)
=>
```

syslog msgbuf send

Send syslog messages from the internal Speedtouch™ syslog message buffer to a specified local or remote syslog server host.

SYNTAX:

syslog msgbuf send	[fac = <supported facility name>] [sev = <supported severity name>] [hist = <{no yes}>] dest = <ip-address>
---------------------------	--

<i>[fac]</i>	Optionally, Specify the facility name of the syslog messages to show. Use one of the supported facility names (See B.4 for a listing of syslog facility names supported by the SpeedTouch™). Do not specify to show messages of any facility.	OPTIONAL
<i>[sev]</i>	Specify the lowest priority severity of the syslog messages to show. Specifying a severity actually means specifying to show the syslog messages with a severity as specified, and all messages with a higher severity. Use one of the supported severity names (See B.5 for a listing of syslog facility names supported by the SpeedTouch™).	OPTIONAL
<i>[hist]</i>	The show messages over several SpeedTouch™ reboots (yes) or show only messages since latest startup (no).	OPTIONAL
<i>dest</i>	The IP address of the remote host on the local or remote network, i.e. the collector's IP address, to send the syslog messages to.	REQUIRED

IMPORTANT NOTE:

There will be no notification on whether the host has received the messages or not.

27 System Commands

system (to access the System level)

system clearpassword

system config

system flush

system reboot

system reset

system setpassword

system settime

system clearpassword

Clear current SpeedTouch™ system password.

To avoid unrestricted and unauthorized access to the SpeedTouch™ it is highly recommended always to make sure that it is protected by a SpeedTouch™ system password (via `:system setpassword`) and to change the password on a regular basis.

SYNTAX:

```
system clearpassword
```

EXAMPLE:

```
=>system clearpassword  
Security notification: Password changed, use 'saveall' to make it permanent.  
=>
```

RELATED COMMANDS:

system setpassword Set/change current system password.

system config

Show/set SpeedTouch™ system configuration parameters.

For a good operation of Universal Plug and Play (UPnP) and the discovery mechanism, it is highly recommended not to change the System config settings.

SYNTAX:

system config	[upnp = <{disabled enabled}>] [mdap = <{disabled enabled}>] [dcache = <{disabled enabled}>]
----------------------	--

[upnp]	Enable (enabled) or disable (disabled) Universal Plug and Play (UPnP) discovery. By default UPnP discovery is enabled.	OPTIONAL
[mdap]	Enable (enabled) or disable (disabled) proprietary discovery protocol. By default MDAP discovery is enabled.	OPTIONAL
[dcache]	Enable (enabled) or disable (disabled) data cache. By default data cache is enabled. For internal use only. Do not alter in any way.	OPTIONAL

EXAMPLE:

```
=>system config
upnp discovery: on
mdap discovery: on
dcache:         on
=>
```

Please do not change the System config settings. In case of Setup Wizard discovery problems, check whether the System config settings are listed as in the example above. If needed, execute the System config command as listed in the example below:

system flush

Flush current SpeedTouch™ system configuration, i.e. the System password and the system config settings (dcache excluded).

The flush command does not impact previously saved configurations.

To avoid unrestricted and unauthorized access to the SpeedTouch™ it is highly recommended always to make sure that it is protected by a SpeedTouch™ system password (via `:system setpassword`) and to change the password on a regular basis.

SYNTAX:

```
system flush
```

EXAMPLE:

```
=>system flush  
Security notification: Password changed, use 'saveall' to make it permanent.  
=>
```

system reboot

Reboot the SpeedTouch™. Non-saved configuration settings are lost after reboot.

SYNTAX:

```
system reboot
```

EXAMPLE:

```
=>system reboot  
.....  
(lost session connectivity due to reboot)  
.....
```

system reset

Reset the SpeedTouch™ to its factory default settings and reboot the device. All user and Service Provider specific settings and all saved configuration changes are lost after reboot.

SYNTAX:

system reset	no/yes = <{no yes}>
---------------------	----------------------------------

<i>no/yes</i>	Proceed with resetting the SpeedTouch™ device to its factory default settings (yes) or not (no). By default the system reboot command is discarded in case of no explicit positive confirmation.	REQUIRED
---------------	---	----------

EXAMPLE:

```
=>system reset
-----
!! WARNING !!
-----
The SpeedTouch(TM)610 DSL Router will be reset to factory defaults clearing all user and
ISP specific settings.
Connectivity with the ISP network might be lost.
Do you want to proceed ?
no/yes = no
=>
=>system reset
-----
!! WARNING !!
-----
The SpeedTouch(TM)610 DSL Router will be reset to factory defaults clearing all user and
ISP specific settings.
Connectivity with the ISP network might be lost.
Do you want to proceed ?
no/yes = yes

.....
(lost session connectivity due to reboot)
.....
```

system setpassword

Set/change the current SpeedTouch™ system password.

To avoid unrestricted and unauthorized access to the SpeedTouch™ it is highly recommended always to make sure that it is protected by a SpeedTouch™ system password and to change it regularly.

SYNTAX:

system setpassword	password = {<string> \$_BOARD_SERIAL_NBR}
---------------------------	--

<i>password</i>	the system password can be set to either:	REQUIRED
	<ul style="list-style-type: none"> ▪ <string> A free to choose password <string> ▪ \$_BOARD_SERIAL_NBR Equal to the SpeedTouch™ device serial number's nine numerical digits. 	

IMPORTANT NOTE:

The code serial number is printed on the marking label found on the bottom of the SpeedTouch™. It consists of the concatenation of the string 'CP' followed by nine digits.

These nine digits incorporate the serial number.

In case the System password is set to the serial number, for authentication the serial number must be given without the preceding string 'CP'.

DO NOT REMOVE OR COVER THIS MARKING LABEL !!!

EXAMPLE 1:

```
=>system setpassword password=Sascha
Security notification: Password changed, use 'saveall' to make it permanent.
=>
```


system settime

Show/set the SpeedTouch™ internal system clock.

In cases where synchronization with an external NTP server via SpeedTouch™'s SNTP client fails, this command allows to manually configure its internal clock.

Of course, in cases without regular synchronization, accurate real-time clock settings can not be guaranteed.

SYNTAX:

system settime	[date = <dd/mm/yyyy>] [time = <hh:mm:ss>] [timezone = <(+ or -)hh:mm>] [daylightsaving = <{no yes}>]	
[date]	The system date formatted as dd/mm/yyyy. If not specified, the current date is preserved.	OPTIONAL
[time]	The system time formatted as hh:mm:ss. If not specified, the current time is preserved.	OPTIONAL
[time]	The system time formatted as hh:mm:ss. If not specified, the current time is preserved.	OPTIONAL
[timezone]	The system timezone formatted as (+ or -)hh:mm. Valid timezones are possible from -12:00 to +14:00 with a resolution of 15 minutes. If not specified, the current timezone is preserved.	OPTIONAL
[daylightsaving]	Enable (yes) or disable (no) daylight saving. By default daylight saving is disabled. If not specified, the current daylight saving setting is preserved.	OPTIONAL

EXAMPLE:

```
=>system settime
date = 31/01/2005
time = 18:05:16
timezone = +00:00
daylightsaving = off
=>
```

RELATED COMMANDS:

sntp config

Show/set SpeedTouch™ SNTP client configuration.

28 TD Commands

td (to access this level)
td call

td call

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

SYNTAX:

<i>td call</i>	<i>cmd = <string></i> <i>[pwd = <string>]</i>
-----------------------	--

<i>cmd</i>	The quoted trace & debug command string.	REQUIRED
<i>pwd</i>	The 'Trace & Debug' prompt password, if required.	OPTIONAL

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Appendices

Abbreviations

AAL5	ATM Adaption Layer 5
ADSL	Asymmetric Digital Subscriber Line
AH	Authentication Header
ARP	Address Resolution Protocol
ATM	Asynchronous Transfer Mode
ATMF	ATM Forum
BGP	Border Gateway Protocol
CA	Certificate Authority
CC	Continuity Check
CEP	Certificate Enrollment Protocol
CHAP	Challenge Handshake Authentication Protocol
CIDR	Classless Inter Domain Routing
CLI	Command Line Interface
CRL	Certificate Revocation List
DHCP	Dynamic Host Configuration Protocol
DN	Distinguished Name
DNS	Domain Name System
EGP	Exterior Gateway Protocol
ESP	Encapsulating Security Payload
GRE	General Routing Encapsulation
HDLC	High-level Data Link Control
HTTP	HyperText Transfer Protocol
ICMP	Internet Control Message Protocol
IGMP	Internet Group Management Protocol
IKE	Internet Key Exchange
IMAP	Interim Mail Access Protocol
IMAP	Interactive Mail Access Protocol
IP	Internet Protocol
IPCP	Internet Protocol Control Protocol
IPCP	IP Payload Compression Protocol
IPoA	IP over ATM

IPSec	IP Security
IRC	Internet Relay Chat
ISDN	Integrated Services Digital Network
LAN	Local Area Network
LCP	Link Control Protocol
LDAP	Light-weight Directory Access Protocol
LIS	Logical IP Subnet
LLC	Logical Link Control
MAC	Medium Access Control
MD5	Message Digest 5
MER	MAC Encapsulated Routing
NAPT	Network Address and Port Translation
NAT	Network Address Translation
NBP	Name Binding Protocol
NLPID	Network Layer Protocol IDentifiers
NNTP	Network News Transfer Protocol
NTP	Network Time Protocol
OAM	Operation and Maintenance
OID	Object IDentifier
PAP	Password Authentication Protocol
PKCS	Public Key Cryptography Standard
PKI	Public Key Infrastructure
POP	Post Office Protocol
POTS	Plain Old Telephone Service
PPP	Point-to-Point Protocol
PPPoA	PPP over ATM
PPPoE	PPP over Ethernet
PPTP	Point-to-Point Tunneling Protocol
PSD	Power Spectral Density
PVC	Permanent Virtual Channel
RIP	Routing Information Protocol
RTMP	RouTing Maintenance Protocol
RTSP	Real Time Stream Control Protocol

SAs	Security Associations
SHDSL	Single-pair High speed Digital Subscriber Line
SMTP	Simple Mail Transfer Protocol
SNAP	Sub Network Access Protocol
SNMP	Simple Network Management Protocol
SNPP	Simple Network Paging Protocol
SNTP	Simple Network Time Protocol
SVC	Switched Virtual Channel
TCP	Transmission Control Protocol
TFTP	Trivial File Transfer Protocol
UDP	User Datagram Protocol
UPnP	Universal Plug and Play
URI	Uniform Resource Identifier
URL	Uniform Resource Locator
VC	Virtual Channel
VCMUX	Virtual Channel MULTipleXing
VDSL	Very high speed Digital Subscriber Line
VLSM	Variable Length Subnet Masking
VP	Virtual Path
VPN	Virtual Private Networking
WAN	Wide Area Network
WWW	World Wide Web
ZIS	Zone Information System

Appendix A Syslog Messages

PPP Module

Facility	Severity	Contents
LOCAL0	WARNING	PPP Link up (<intf name>)
LOCAL0	WARNING	PPP Link down (<intf name>)
AUTH	ERROR	PPP PAP authentication failed (<intf name>) [protocol reject]
AUTH	INFO	PPP PAP on intf <intf_id> no response to authenticate-request
AUTH	NOTICE	PPP PAP remote user <remote_user_name> succesfull
AUTH	ERROR	PPP PAP authentication for remote user <remote_user> failed
AUTH	DEBUG	PPP PAP Authenticate Ack received
AUTH	DEBUG	PPP PAP authentication failed (<int_id>), authentication Nack received
AUTH	DEBUG	PPP PAP Authenticate Request sent
AUTH	ERROR	PPP CHAP authentication failed (<intf name>)
AUTH	ERROR	PPP CHAP authentication failed [protocol reject(server)]
AUTH	ERROR	PPP CHAP authentication failed [protocol reject(client)]
AUTH	DEBUG	PPP CHAP Receive challenge (rhost = <hostname>)
AUTH	INFO	PPP CHAP Chap receive success : authentication ok
AUTH	DEBUG	PPP CHAP Challenge Send (Id = <challenge_id>)
AUTH	DEBUG	PPP CHAP Send status respons: {ack nack}

PPTP Module

Facility	Severity	Contents
LOCAL0	WARNING	PPTP tunnel (<Pbname>) up:(<ip addr>)
LOCAL0	WARNING	PPTP tunnel (<Pbname>) down:(<ip addr>)

DHCP Module

Facility	Severity	Contents
LOCAL2	WARNING	DHCP Auto DHCP: no server detected on LAN, SpeedTouch server started
LOCAL2	WARNING	DHCP Auto DHCP: server detected on LAN, own dhcp server disabled
LOCAL2	WARNING	DHCP Auto DHCP: search for DHCP server stopped
LOCAL2	WARNING	DHCP Server up
LOCAL2	WARNING	DHCP Server went down
LOCAL2	WARNING	DHCP lease ip-address <ip-address> bound to intf <intf_id>
LOCAL2	WARNING	DHCP intf <intf_id> renews lease ip-address <ip-address>
LOCAL2	WARNING	DHCP intf <intf_id> rebinds lease ip-address <ip-address> from server (<ip-address>)
LOCAL2	WARNING	DHCP offer received from <ip-address> (can be relay agent) for intf <intf_id>
LOCAL2	WARNING	DHCP server (<ip-address>) offers <ip-address> to intf <intf_id>
LOCAL2	WARNING	DHCP unable to configure ip address: <ip-address> (bootp-reply)

DHCP Module (continued)

Facility	Severity	Contents
LOCAL2	WARNING	DHCP bootp lease ip-address <ip-address> bound to intf <intf_id> from server (<ip-address>)
LOCAL2	WARNING	DHCP <ip-address> already configured on intf: failure
LOCAL2	WARNING	DHCP <ip-address> (<ip-address>) set on intf <intf_id>: {failure ok}
LOCAL2	WARNING	DHCP <ip-address> deleted: {failure ok}

SNTP Module

Facility	Severity	Contents
NTP	WARNING	SNTP Unable to contact server: <SNTP server ip>
NTP	WARNING	SNTP Server not synchronized: <SNTP server ip>
NTP	WARNING	SNTP Invalid response from server: <SNTP server ip>
NTP	WARNING	SNTP Synchronized to server: <SNTP server ip>
NTP	ERROR	SNTP No server(s) configured, check configuration
NTP	WARNING	SNTP Roundtrip exceeds limits

RIP Module

Facility	Severity	Contents
LOCAL1	INFO	RIP Response does not come from default RIP port
LOCAL1	INFO	RIP Datagram doesn't come from a valid neighbor: <ip-address>
LOCAL1	INFO	RIP Unsupported family from <ip-address>
LOCAL1	INFO	RIP Network is net 127 or it is not unicast network
LOCAL1	INFO	RIP Route metric is not in the 1-16 range
LOCAL1	INFO	RIP RIPv1 packet with nexthop value error <ip-address>
LOCAL1	INFO	RIP Nexthop address is not directly reachable <ip-address>
LOCAL1	INFO	RIP RIPv2 address <ip-address> is not correct mask /<mask> applied
LOCAL1	INFO	RIP Neighbor <ip-address> is not connected to direct network
LOCAL1	INFO	RIP Packet received from unknown interface
LOCAL1	INFO	RIP Packet size is smaller than minimum size
LOCAL1	INFO	RIP Packet size is greater than maximum size
LOCAL1	INFO	RIP Wrong RIP packet alignment
LOCAL1	INFO	RIP RIP version 0 with command <command-name> received
LOCAL1	INFO	RIP RIP is not enabled on interface <ip-address>
LOCAL1	INFO	RIP Packet's v<version_nr> does not match to RIP v<version_nr>
LOCAL1	INFO	RIP Packet's v<version_nr> does not match to itf RIP v<version_nr>
LOCAL1	INFO	RIP Packet v<version_nr> is dropped because authentication is disabled on itf <intf-name>
LOCAL1	INFO	RIP Packet v<version_nr> dropped because authentication is enabled on itf <intf-name>
LOCAL1	INFO	RIP Simple password authentication failed on itf <intf-name>
LOCAL1	INFO	RIP MD5 authentication not supported in current release

RIP Module (continued)

Facility	Severity	Contents
LOCAL1	INFO	RIP Unknown authentication type in packet
LOCAL1	INFO	RIP No authentication in RIP packet
LOCAL1	INFO	RIP Obsolete command <command-name> received
LOCAL1	INFO	RIP Unknown RIP command received
LOCAL1	INFO	RIP IP Address <ip-address> not found in RIP table

Login Module

Facility	Severity	Contents
AUTH	NOTICE	LOGIN User <username> logged <in out> on telnet (<ip address>)
AUTH	NOTICE	LOGIN User <username> logged in on http (<ip-address>)

NAPT Module

Facility	Severity	Contents
LOCAL4	INFO	NAPT Protocol: <TCP UDP ICMP> Open port: <port> Helper: <app_name> => <""failed"" ""ok"">

Firewall Module

Facility	Severity	Contents
AUTH	WARNING	FIREWALL Hook: <hookname> Protocol: ICMP Src_ip: <ip_address> Dst_ip: <ip_address> ICMP message type: <message_type_name message_type_id > Action: <action>
AUTH	WARNING	FIREWALL Hook: <hookname> Protocol: TCP Src_ip_port: <ip-address:ip_port> Dst_ip_port: <ip-address:ip_port> Action: <action>
AUTH	WARNING	FIREWALL Hook: <hookname> Protocol: UDP Src_ip_port: <ip-address:ip_port> Dst_ip_port: <ip-address:ip_port> Action: <action>

Kernel Module

Facility	Severity	Contents
KERN	WARNING	KERNEL cold reset
KERN	WARNING	KERNEL warm reset
KERN	EMERG	KERNEL Controlled restart (after internal error or explicit system reboot)

IPSec Module

Facility	Severity	Contents
USER	INFO	AddSa: SPIs:<spi/otherspi> Loc:<myid> Rem:<hisid> (<ip-address>) Prot:<prot> - <alg> <keysize> Exp:<expiry>
USER	INFO	AddSuite: SPIs:<spi/otherspi> Loc:<myid> Rem:<hisid> (<ip-address>) Prot:<prot> - <alg> <keysize> Exp:<expiry>
USER	INFO	Cert/map id mismatch: <hisid> using <dn>
USER	INFO	Cert: <hisid> using <dn> to establish to <myid>
USER	INFO	"Cert status unknown; no ISAKMP <to/from> <ip-address>"
USER	NOTICE	"Cert not usable; no ISAKMP <to/from> <ip-address>"
USER	INFO	DelSa: SPIs:<spi/otherspi>
USER	INFO	DelSuite: SPIs:<spi/otherspi>
USER	INFO	DelPhase1: Rem:<ip-address> ID: <hisid> Cookies: <cookies> <cause>
USER	INFO	Establish Request: <ip-address> to <ip-address>
USER	INFO	Secure map contains target <ip-address> for this gate but no red security policy entry for these nodes
USER	INFO	AddPhase1: Rem:<ip-address>, ID: <hisid>, Cookies: <cookies> Prot:<alg[keysize]>, Exp:<expiry>
USER	INFO	No local policy matches <myid>
USER	INFO	Notify from <ip-address>: <notify-string>
USER	INFO	Notify to <ip-address>: <notify-string>
USER	INFO	Rekey Phase 2: Loc:<myid>, Rem:<hisid> (<ip-address>)
USER	INFO	Got policy for peer:<ip-address>, I am <initiator/responder>, authentication: certificate
USER	INFO	Got policy for peer:<ip-address>, I am <initiator/responder>, authentication: certificate or shared
USER	INFO	Got policy for peer:<ip-address>, I am <initiator/responder>, authentication: shared
USER	NOTICE	Shared secret lookup failed for <id> <to/from> <ip-address>

Appendix B Supported Key Names

Following section list all key names, supported by the SpeedTouch™, that can be used for completing CLI command parameters.

B.1 Supported Internet Protocol (IP) Protocol Names

For more information on the listed IP protocols, see RFC1340 or www.iana.org.

Protocol name	Number	Description
icmp	1	Internet Control Message Protocol (ICMP)
igmp	2	Internet Group Management Protocol (IGMP)
ipinip	4	IP in IP (encapsulation)
tcp	6	Transmission Control Protocol (TCP)
egp	8	Exterior Gateway Protocol (EGP)
udp	17	User Datagram Protocol (UDP)
rsvp	46	Reservation Protocol
gre	47	General Routing Encapsulation (GRE)
ah	51	Authentication Header (AH)
esp	50	Encapsulating Security Payload (ESP)
vines	83	Vines
ipcomp	108	IP Payload Compression Protocol (IPCP)

B.2 Supported TCP/UDP Port Names

For more information on the listed TCP/UDP port assignments, see RFC1340 or www.iana.org.

Port name	Number	TCP	UDP	Description
echo	7	✓	✓	Echo
discard	9	✓	✓	Discard
sysstat	11	✓	✓	Active Users
daytime	13	✓	✓	Daytime
qotd	17	✓	✓	Quote of the Day
chargen	19	✓	✓	Character Generator
ftp-data	20	✓	✓	File Transfer (Default data)
ftp	21	✓	✓	File Transfer (Control)
telnet	23	✓	✓	Telnet
smtp	25	✓	✓	Simple Mail Transfer Protocol (SMTP)
time	37	✓	✓	Time
nicname	43	✓	✓	Who Is
dns	53	✓	✓	Domain Name System (DNS)
domain	53	✓	✓	Domain Name System (DNS)
sql*net	66	✓	✓	Oracle SQL*NET
bootps	67	✓	✓	Bootstrap Protocol Server
bootpc	68	✓	✓	Bootstrap Protocol Client
tftp	69	✓	✓	Trivial File Transfer Protocol (TFTP)
gopher	70	✓	✓	Gopher

Port name	Number	TCP	UDP	Description
finger	79	✓	✓	Finger
www-http	80	✓	✓	World Wide Web (WWW) HTTP
kerberos	88	✓	✓	Kerberos
rtelnet	107	✓	✓	Remote Telnet Service
pop2	109	✓	✓	Post Office Protocol (POP) – Version 2
pop3	110	✓	✓	Post Office Protocol (POP) – Version 3
sunrpc	111	✓	✓	SUN Remote Procedure Call
auth	113	✓	✓	Authentication Service
sqlserver	118	✓	✓	SQL Services
nntp	119	✓	✓	Network News Transfer Protocol (NNTP)
sntp	123	✓	✓	Simple Network Time Protocol (SNTP)
ntp	123	✓	✓	Network Time Protocol (NTP)
ingres-net	134	✓	✓	INGRES-NET Service
netbios-ns	137	✓	✓	NETBIOS Naming System
netbios-dgm	138	✓	✓	NETBIOS Datagram Service
netbios-ssn	139	✓	✓	NETBIOS Session Service
imap2	143	✓	✓	Interim Mail Access Protocol (IMAP) v2
sql-net	150	✓	✓	SQL-NET
pcmail-srv	158	✓	✓	PCMail Server
snmp	161	✓	✓	Simple Network Management Protocol (SNMP)
snmptrap	162	✓	✓	SNMP Trap
bgp	179	✓	✓	Border Gateway Protocol (BGP)
irc-o	194	✓	✓	Internet Relay Chat (IRC) – o
at-rtmp	201	✓	✓	AppleTalk Routing Maintenance Protocol (RTMP)
at-nbp	202	✓	✓	AppleTalk Name Binding Protocol (NBP)
at-echo	204	✓	✓	AppleTalk Echo
at-zis	206	✓	✓	AppleTalk Zone Information System (ZIS)
ipx	213	✓	✓	
imap3	220	✓	✓	Interactive Mail Access Protocol (IMAP) v3
clearcase	371	✓	✓	ClearCase
ulistserv	372	✓	✓	UNIX Listserv
ldap	389	✓	✓	Light-weight Directory Access Protocol (LDAP)
netware-ip	396	✓	✓	Novell Netware over IP
snpp	444	✓	✓	Simple Network Paging Protocol (SNPP)
ike	500	✓	✓	ISAKMP
exec	512	✓	–	Remote process execution
biff	512	–	✓	Used by mail system to notify users of new mail received
login	513	✓	–	Remote login a la telnet
who	513	–	✓	Maintains data bases showing who's logged in to machines on a local net and the load average of the machine
syslog	514	–	✓	Syslog
printer	515	✓	✓	Spooler
talk	517	✓	✓	Like Tenex link, but across machine
ntalk	518	✓	✓	NTalk
utime	519	✓	✓	UNIX Time
rip	520	–	✓	Local routing process (on site); uses variant of Xerox NS Routing Information Protocol (RIP)
timed	525	✓	✓	Timeserver

Port name	Number	TCP	UDP	Description
netwall	533	✓	✓	For emergency broadcasts
uucp	540	✓	✓	uucpd
uucp-rlogin	540	✓	✓	uucpd remote login
new-rwho	540	✓	✓	uucpd remote who is
rtsp	554	✓	✓	Real Time Stream Control Protocol (RTSP)

B.3 Supported ICMP Type Names

For more information on the listed ICMP type names, see RFC1340 or www.iana.org.

ICMP Type name	Number	Description
echo-reply	0	Echo Reply
destination-unreachable	3	Destination Unreachable
source-quench	4	Source Quench
redirect	5	Redirect
echo-request	8	Echo
router-advertisement	9	Router Advertisement
router-solicitation	10	Router Solicitation
time-exceeded	11	Time Exceeded
parameter-problems	12	Parameter problems
timestamp-request	13	Timestamp
timestamp-reply	14	Timestamp Reply
information-request	15	Information Request
information-reply	16	Information Reply
address-mask-request	17	Address Mask Request
address-mask-reply	18	Address Mask Reply

B.4 Supported Syslog Facilities

For more information on the listed Syslog facilities, , see RFC3164.

Facility Name	Hierarchy Code	Syslog facility (listed according descending importance)
kern	0	Kernel messages
user	8	User-level messages
mail	16	Mail system
daemon	24	System daemons
auth	32	Authorization messages
syslog	40	Syslog daemon messages
lpr	48	Line printer subsystem
news	56	Network news subsystem
uucp	64	UUCP subsystem
cron	72	Clock daemon
security	80	Security messages
ftp	88	FTP daemon

Facility Name	Hierarchy Code	Syslog facility (listed according descending importance)
ntp	96	NTP subsystem
audit	104	Log audit
logalert	112	Log alert
clock	120	Clock daemon
local0	128	Local use messages
local1	136	
local2	144	
local3	152	
local4	160	
local5	168	
local6	176	
local7	184	
all	–	All facilities (SpeedTouch™ specific facility parameter value.

B.5 Supported Syslog Severities

For more information on the listed Syslog severities, see RFC3164.

Severity Name	Hierarchy Code	Syslog severity (listed according descending importance)
emerg	0	Emergency conditions, system unusable
alert	1	Alert conditions, immediate action is required
crit	2	Critical conditions
err	3	Error conditions
warning	4	Warning conditions
notice	5	Normal but significant conditions
info	6	Informational messages
debug	7	Debug-level messages

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