Telnet et LiveBOX SAGEM

1. <u>Introduction</u>

Dans ce document, nous allons essayer de comprendre les différentes fonctions internes d'une liveBOX Sagem.

Ce document a juste la prétention de lister les différentes fonctions de la box ; il devra être complété :

- par des exemples paramétrés des fonctions pouvant être utile à la bonne configuration de la box,
- par des explications du fonctionnement de chaque fonction ou groupe de fonctions (les fonctions de **visiophonie** regroupées sous le répertoire **h323**),
- par une indication différenciant les fonctions actives et les fonctions de status,
- en indiquant les fonctions qui n'indiquent pas de warning avant de s'exécuter, telles les fonctions « **delete** » ou « **flush** »,
- par des warnings indiquant que telle ou telle fonction est dangereuse, sachant que l'on peut toujours faire un reset conf-usine complet de la box.

2. Connexion à la box en Telnet

Pour ce faire, nous allons nous rendre avec putty (un client Telnet/SSh disponble ici : http://www.chiark.greenend.org.uk/~sgtatham/putty/) à l'adresse de notre box, soit 192.168.1.1, en cochant le port 23 (telnet).

Une fois connecté, après avoir mis son loggin et mot de passe (root et 1234 par défaut), nous tapons « ls » et nous voyons défiler les commandes suivantes :

[root @ home]$ ls   (sur un firmware 3202-220108)

A <CMD> reboot
O <CMD> date
O <CMD> version
A <LIST> ipqos
O <CMD> list
O <CMD> stats
A <CMD> ifconfig
O <CMD> route
A <CMD> bitmap
O <LIST> sndcp
A <CMD> save
A <CMD> erase
O <LIST> bridge
O <LIST> bt
A <LIST> ethernet
A <LIST> rarpd
O <LIST> arp
A <LIST> auth
A <LIST> logger
A <LIST> snmp
A <LIST> atm
O <LIST> adsl
A <CMD> dhcp
O <LIST> sntp
O <LIST> dhcpserver
A <CMD> dhcpr
A <LIST> dns
A <LIST> igmp
O <LIST> wlan
O <LIST> relayvoice
O <LIST> pstnclass
O <LIST> http
O <LIST> rip
O <LIST> h323
O <LIST> vlan
O <LIST> acf
O <CMD> mread
O <CMD> mwrite
O <CMD> memshow
O <CMD> aread
O <CMD> awrite
O <CMD> apregdump
O <LIST> wpost
A <LIST> rtp

```
[root @ home]$
```

Nous voyons aisément que cette liste est composée de 18 commandes directes (en rouge) et disons de 26 répertoires (en noir) contenant des commandes, mais aussi des sous répertoires. Les commandes marquées **'A'** sont permises aux utilisateurs 'administrateur' seulement, celles marquées **'O'** sont permises aux utilisateurs 'ordinaires' et 'administrateurs'. (cf la commande 'listuser' dans le répertoire 'auth' pour voir les rôles des utilisateurs).
Pour se déplacer dans un répertoire, il faut juste taper le nom de celui-ci :

```
[root @ home]$ adsl              adsl va nous mettre dans le répertoire adsl
[root @ adsl]$ ls                on a bien root @adsl,  ls va nous lister le répertoire

O <CMD>  setmode                 chaque commande est alors exécutable
O <CMD>  cmvhex
O <CMD>  readcmv
O <CMD>  writecmv
O <CMD>  mon
O <CMD>  adslup
O <CMD>  adsldown
O <CMD>  addusercmv
O <CMD>  delusercmv
O <CMD>  listusercmv

[root @ adsl]$ ..                pour retourner au niveau inférieur
                                 /home, il faut faire « .. » ou
                                 « exit »
[root @ home]$                   Voilà on est bien dans le bon
                                 répertoire
```

Nous pouvons maintenant explorer les différentes fonctions.

Remarque : dans la suite, le terme 'interface réseau' correspond au nom logique des différentes connexions possibles, c'est à dire :
- ppp0   prise ligne adsl   adresse IP publique
- eth0   LiveBox elle même   192.168.1.1
- usb0   prise USB   192.168.2.x
- wlan0   réseau sans fil WiFi   192.168.3.x
- tth0   réseau sans fil Bluetooth   192.168.4.x
- vif0   prise ethernet rouge   192.168.5.x
- vif1   prise ethernet jaune   192.168.6.x

3. Commandes du noyau

1) help
Aide sur les commandes du noyau

help -o \<command\>

Displays help and usage text for the specified command. If nothing is specified, it displays help text for all general commands.

2) build
Donne la version du noyau
[root @ home]$ build
AD6489 Security Gateway Software: 200410281738

3) clear
Efface l'écran

4) exit
Reviens au répertoire de niveau immédiatement supérieur, ou met fin à la session telnet

5) home
Revient au répertoire 'home', c-à-d root@home pour le user root

6) ls
Liste le contenu du répertoire en cours

7) pwd
Liste du répertoire en cours

8) ..
Reviens au répertoire de niveau immédiatement supérieur (idem exit)

9) ping
Outil de test de liaison TCP/IP

Exemple :

```
[root @ home]$ ping www.wanadoo.fr


Pinging www.wanadoo.fr (193.252.122.103) with 56 bytes of data


64 bytes from 193.252.122.103: icmp_seq= 0 ttl=246 time= 70 ms

64 bytes from 193.252.122.103: icmp_seq= 1 ttl=246 time=102 ms

64 bytes from 193.252.122.103: icmp_seq= 2 ttl=246 time= 69 ms
```

```
64 bytes from 193.252.122.103: icmp_seq= 3 ttl=246 time= 71 ms


--- www.wanadoo.fr ping statistics ---

4 packets transmitted, 4 packets received, 0% packet loss

round-trip min/avg/max =  69/ 78/102 ms


[root @ home]$
```

10)   telnet
Démarre une session telnet client

[root @ home]$ telnet
     telnet address
[root @ home]$

[root @ home]$ telnet
Command not found.
[root @ home]$ telnet
     telnet address
[root @ home]$ telnet www.ammoniac.net
Trying 83.113.88.91
Connected to 83.113.88.91
Escape character is '^]'.
login: superadmin
Password:
[root@one31 root]#

11)   ftp
Démarre une session ftp client

12)   tftp
Démarre une session tftp client

13)   ps
Liste des processus en cours

14)   regs
Liste des registres du processus spécifié

4. <u>Listing des commandes 'ADMIN'</u>

Nota : en rouge-gras => les commandes,
en noir-gras => les répertoires.

<u>Remarque</u> **:** La liste est dans l'ordre alphabétique.

1) A <CMD> bitmap
Syntaxe : bitmap
Description : Donne un état d'occupation des différents éléments de la mémoire (tables, subpools,…):

```
sabitmap          : Used = 14 Max = 256
radixMaskBitmap : Used = 3 Max = 10
radixHeadBitmap : Used = 2 Max = 10
rnkeyBitmap       : Used = 17 Max = 300
Route Entries    : Used = 17 Max = 300
UDP connections : Used = 14 Max = 128
rtInfoBitmap     : Used = 0 Max = 10
RAW connections : Used = 0 Max = 10
TCP Connections : Used = 6 Max = 128
Sockets          : Used = 14 Max = 128
Arp entries      : Used = 2 Max = 256
cluBit512        : Used = 0       Max = 15       Failed = 0
cluBit1024       : Used = 0       Max = 15       Failed = 0
cluBit1536       : Used = 0       Max = 40       Failed = 0
cluBit2048       : Used = 53      Max = 993      Failed = 0
mbufBit          : Used = 35      Max = 800      Failed = 0
```

2) A <CMD> dhcp
Syntaxe : dhcp start | stop | restart | status <interface>
Description : gère le serveur DHCP d'attribution d'adresses IP dynamiques

Configures an interface to fetch its IP address from a DHCP server. The **start** option enables the interface to get the IP address from the DHCP server. The **stop** option disables this feature.

The **restart** option will stop and then start again negotiation with the DHCP server for an IP address. Restart is useful to reacquire an IP address.

Exemple:

dhcp start eth0

3) A <CMD> dhcpr
Syntaxe : dhcpr [start/stop/status] -o [remote_server]
Description : gère le serveur DHCP Relay
l'option –o [remote_server] sert à spécifier l'adresse du serveur relais.

4) A <CMD> erase
Syntaxe : erase
Description : efface la configuration courante, et revient à la config. Usine.

5) A <CMD> ifconfig

Syntaxe :   ifconfig -o <interface-name> inet <address> [parameters]
              ifconfig -o –a
              ifconfig -o –l
              parameters - mtu <n 72-1500>, broadcast <address>, netmask <mask>, up, down

Description : gère les différentes interfaces réseaux de la LiveBox :
              ifconfig –o eth0 liste la config de l'interface eth0 (LiveBox)
              ifconfig –o –a liste la config de toutes les interfaces

The ifconfig command contains several forms to obtain information or configure an IP address for an interface. The first form configures the IP address and other parameters for the specified interface. The remaining forms display information about the interface(s).

ifconfig –o <interface_name> inet <address> [netmask <mask>] [broadcast <addr>]

[up|down] [mtu <n>]

ifconfig –o <interface_name>

ifconfig –o –a

ifconfig –o –l

<interface_name>   The name of the interface. Possible values are "eth0", "eth1", "mer0", "usb0", "lo0", "atm0", "atm1", "atm2", "atm3", "atm4", "atm5", "atm6", "atm7", "ppp0", "ppp1", "ppp2," "ppp3", "ppp4", "ppp5", "ppp6", "ppp7".

<address>

The IP address to be assigned to the interface. Dot-notation is used to enter the IP address (for example 192.168.2.1).

netmask <mask>

The netmask is used to extract the network part from the IP address. It also specifies how much of the address is to be reserved for subdividing the network into sub-networks that are taken from the host field of the address. Netmask is 'AND'ed with the interface IP address to get the network ID that is used in routing, indicating that this network is reachable through these interfaces. The mask can be specified as a single hexadecimal number with a leading 0x, for example 0xffffff00, or with a dot-notation Internet address of 255.255.255.00

broadcast <addr>

Broadcasting is used when it makes sense to send the same message to multiple recipients on the LAN. This option is used to specify the broadcast address to be used in the network. The default broadcast address is the address with a host part as all 1's in the IP address. For example, 192.168.2.255 is a broadcast address for network 192.168.2.0

down

Mark an interface "down''. When an interface is marked "down", the system will not attempt to transmit messages through that interface.

up

Mark an interface "up''. This may be used to enable an interface after an interface was marked as "down''. By enabling the interface, messages can be transmitted through that interface.

mtu <n>

Sets the maximum transmission unit of the interface to n, the default is interface specific. The MTU is used to limit the size of packets that are transmitted on an interface. Not all interfaces support setting the MTU, and some interfaces, like ethernet, have range restrictions (72 – 1500).

-a

Displays detailed information about all the interfaces.

-l

Lists the current interfaces.

Examples:

[root @ home] ifconfig –o -a

eth0: flags=ffff8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST>

mtu 1500 inet 192.168.2.185 netmask 0xffffff00 broadcast 192.168.2.255

ether 08:00:20:c0:c9:74

lo0: flags=ffff8049<UP,LOOPBACK,RUNNING,MULTICAST> mtu 16384

inet 127.0.0.1 netmask 0xff000000

The above command lists all the interfaces.

ifconfig –o –l

Displays a list of interfaces. It will result in a listing such as "eth0 atm0."

ifconfig –o eth0

eth0: flags=ffff8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST>

mtu 1500 inet 192.168.2.185 netmask 0xffffff00 broadcast 192.168.2.255

ether 08:00:20:c0:c9:74

The configuration of eth0 is listed.

ifconfig –o eth0 inet 192.168.2.242

Set the IP address on eth0 to 192.168.2.242

ifconfig –o eth0 inet 192.168.2.185 mtu 900

Changes the MTU for the eth0 interface.

ifconfig –o eth0 inet 192.168.2.185 broadcast 192.168.255.255

Changes the broadcast address

ifconfig –o eth0 inet 192.168.2.185 netmask 255.255.00.00

Changes the netmask.

ifconfig –o eth0 inet 192.168.2.185 down

Marks the interface as down.

ifconfig –o eth0 inet 192.168.2.185 up

Marks the interface as up.

ifconfig –o eth0 inet 192.168.2.185 alias 192.168.2.242

ifconfig -o eth0 inet 192.168.2.185 broadcast 192.168.255.255 netmask

255.255.00.00 mtu 900

Sets the broadcast address, netmask and mtu for the eth0 interface.

6) A <CMD> reboot
Syntaxe :   reboot
Description :   redémarre la LiveBOX, de façon moins violente qu'en éteignant/rallumant !

7) A <CMD> save
Syntaxe :   save
Description : enregistre la configuration en cours dans la mémoire flash.

8) A <LIST> atm

O <CMD> showatmconn
Syntaxe :
```
ATM INTERFACE CONFIGURATION INFORMATION

 VPI   VCI   ID   SERVICE   ENCAPS  PEAK       AVG/    BURST    CDVT
                                    (Cells/s)  MIN     (Cells)  (usec)
   8    35    0   UBR       AAL5    377        377      45      500000
   8    38    1   NRTVBR    AAL5    302        302      75      500000
   8    39    2   CBR       AAL5     75          0       0      500000
   8    40    3   RTVBR     AAL5      1          1      45      500000
   8    41    4   RTVBR     AAL5      1          1      45      500000

ACTIVE VCC CONNECTIONS AT THIS INTERFACE  : 5
```

O <CMD> vcadd

Syntaxe :
```
vcadd <vpi> <vci> <service> <encaps> -o [-peak <val>]
                                [-avg <val>] [-mbs <val>] [-cdvt <val>]
 vpi       - vpi number
 vci       - vci number
 service   - cbr / rtvbr / nrtvbr / ubr
 encaps    - aal2 / aal5
 -peak val - peak cell rate (in cells per sec)
 -avg  val - average/minimum (SCR) cell rate (in cells per sec)
 -mbs  val - burst size (in cells)
 -cdvt val - cell delay variation tolerance (in micro secs)
```

O <CMD> deletevc

Syntaxe :
```
deletevc <vpi> <vci>
 vpi - vpi value
 vci - vci value
```

O <CMD> atmstats

Syntaxe :
```
Transmitted Cells     : 0
Transmitted Frames : 0
Received Cells        : 0
Received Frames     : 0
CRC Errors              : 0
Over sized Frames    : 0
```

O <CMD> f5lb

Syntaxe :
```
f5lb <vpi> <vci> <flow type> -o <LLID>
         vpi - vpi value
         vci - vci value
   flow type - seg / ete
        LLID - loopback location ID (32 hex digits)
               (default (hex): FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF)
```

9) A <LIST> auth

A <CMD> listusers

```
1     admin                         HTTP FTP      - ADMIN
2     root                          CLI FTP       - ADMIN
```
Description :

A <CMD> adduser

Syntaxe :
```
adduser username -o -services [services] -permissions [permissions]
  services   : [cli/ftp/http]
  permissions : [admin/ordin]
```

Description :
Ajoute un nouvel utilisateur pour accéder au système. Cette commande nécessite qu'un mot de passe soit entré. Vous devez être loggé en tant qu'administrateur pour utiliser cette commande..

Exemple 1 :
[root @ auth]$ adduser toto -o -services cli
Enter password:

 User Name Succefully Added.
 [root @ auth]$ listusers
1   admin   HTTP FTP   - ADMIN
2   root   CLI FTP   - ADMIN
3   toto   CLI   - ORDIN
[root @ auth]$

Exemple2 :
[root @ auth]$ adduser toto -o -services http,cli -permissions admin
Enter password:

 User Name Succefully Added.
[root @ auth]$ listusers
1   admin   HTTP FTP   - ADMIN
2   root   CLI FTP   - ADMIN
3   toto   HTTP CLI   - ADMIN
[root @ auth]$

A <CMD> deluser

Syntaxe :
```
deluser username
```

Exemple :
[root @ auth]$ deluser toto
User successfully deleted
[root @ auth]$

A <CMD> changepasswd

Syntaxe :
```
changepasswd username
Enter old password:
Enter New password:
Confirm New password:
```

Description :
Change le mot de passé d'un utilisateur.

Exemple :
[root @ auth]$ changepasswd toto
Enter old password:
Enter New password:
Confirm New password:
Passwords Changed Successfully
[root @ auth]$

A <CMD> modifyuser

Syntaxe :
```
modifyuser username -o -services [services] -permissions [permissions]
    services    : [cli/ftp/http]
    permissions : [admin/ordin]
```

Description :
Modifie les paramètres d'un utilisateur. Cette commande nécessite qu'un mot de passe soit entré.
Vous devez être loggé en tant qu'administrateur pour utiliser cette commande..

Exemple :
```
[root @ auth]$ modifyuser toto -o -permissions ordin
Succefully modified
[root @ auth]$ listusers
1      admin              HTTP FTP     - ADMIN
2      root               CLI FTP      - ADMIN
3      toto               HTTP CLI     - ORDIN
[root @ auth]$
[root @ auth]$modifyuser toto -o -permissions admin
Succefully modified
[root @ auth]$ listusers
1      admin              HTTP FTP     - ADMIN
2      root               CLI FTP      - ADMIN
3      toto               HTTP CLI     - ADMIN
[root @ auth]$
```

A <CMD> resetuser

10)   A <LIST> dns

A <CMD> list

Syntaxe :
```
Name Server1:  80.10.246.130
Name Server2:  80.10.246.3
Domain Name:
```

A <CMD> help

Syntaxe :
```
Help for list and set commands
      list - It will display the current configuration
      set [-d] <default domain name> - will set the default domain name
      set [-n1 / -n2] < domain name server's ip address > - will set
the dns servers
```

A <CMD> set

A <CMD> delete

Syntaxe :
```
delete primary/secondary
where primary  -  Primary DNS Server.
```

```
secondary    -    Secondary DNS Server.
```

A <CMD> dnsr

Syntaxe : `dnsr [start/stop] -o [Server1] {Server2}`

11) A <LIST> ethernet

A <CMD> elink

Syntaxe :
```
elink <interface> -o [[auto] | [10 | 100 | auto_speed ] | [half | full |
auto_duplex]]
```

A <CMD> emac
Syntaxe :
```
emac <interface>  half/full/show
```

A <CMD> linkstats
Syntaxe :
```
rmon <interface>
```

A <CMD> setemac
Syntaxe :
```
setemac xx:xx:xx:xx:xx:xx
```

A <CMD> stat
Syntaxe :
```
stat <dev>
```

12) A <LIST> igmp

A <CMD> igmp
Syntaxe :
```
igmp -proxyif <interface> : To set proxy interface
igmp  -routerif <interface> : To set router interface
igmp  -deleteif <interface> : To delete either proxy or router interface
```

A <CMD> list
Syntaxe :
```
IGMP Proxy Status: Disable
Igmp proxy interface not configured
```

A <CMD> proxy
Syntaxe :

```
proxy [enable/disable]
```

13) A <LIST> ipqos

A <CMD> attach
Syntaxe :
```
attach <interface_name> -o linkspeed <kbps> admission <yes/no> borrow
<yes/no> ackpriority <enable/diable>
   Default Link Speed : Baud rate of the interface
   Default admission: no
   Default Borrow: yes
   Default AckPriority : Disable
```

A <CMD> firewall
Syntaxe :
```
More or less arguements
```

A <CMD> links
Syntaxe :
```
LOCAL-ADDR/PORT |  ALIAS-ADDR/PORT |  REMOT-ADDR/PORT |  LINK/EX.TIME |  IN/OUT-PKTS
-------------------------------------------------------------------------------
80.13.11.201      80.13.11.201      0.0.0.0             TCP             0
1720              1720              0                   55              1

80.13.11.201      80.13.11.201      193.252.20.5        UDP             652
3719              3719              1719                55              659

192.168.3.11      0.0.0.0           192.168.1.1         TCP             273
3500              0                 23                  172800          478
```

A <CMD> listwfq
Syntaxe :
```
1.
 Interface Information:
 ----------------------
    Name  Link Speed  Admission  Borrow  Ack Priority
    ppp0  152         no         yes     disable

 Weights:
 -------
    Default  Low  Medium  High  critical  real-time  premium  urgent
    20       0    0       0     0         80         0        0
```

A <CMD> listwt
Syntaxe :
```
WFQ Weights
====================
 Traffic Name      Weight (%)
--------------------------------
 Default           20
 Low               0
```

```
Medium             0
High               0
Critical           0
Real Time          80
Premium            0
Urgent             0
```

A <CMD> nat

Syntaxe :
```
nat <interface> [-alias_address <addr>]
                [-unregistered_only yes|no]
                [-same_ports yes|no]
                [-status]
                [-disable]
                [-enable]
Options:
  -alias_address a.b.c.d  Address to use for aliasing
  -unregistered_only [yes|no]    Alias only unregistered addresses
  -same_ports        [yes|no]    Try to keep original port numbers for
                                 connections
  -status                  Display currently configured NAT options
  -disable                 Disable NAT
  -enable                  Enable NAT
```

A <CMD> nataction

Syntaxe :
```
nataction add static/rdaddr/rdport <addr1 [addr2]> [-tp port1 [port2]]
nataction delete/list/enable/disable <action-id>
```

A <CMD> policy

Syntaxe :
```
policy set      <RxIfName> <TxIfName> <Sequence> {Allow|Deny}
                    [srcip <a.b.c.d> [<e.f.g.h>]]
                    [dstip <a.b.c.d> [<e.f.g.h>]]
                    [sport <p1> [<p2>]]
                    [dport <p1> [<p2>]]
                    [proto <Protocol>]
                    [tc    <TC-Action-ID>]
                    [nat   <NAT-Action-ID>]


policy delete   <QoS-Policy-ID>


policy modify   <Policy-ID> <RxIfName> <TxIfName> <Sequence>{Allow|Deny}
                    [srcip <a.b.c.d> [<e.f.g.h>]]
                    [dstip <a.b.c.d> [<e.f.g.h>]]
                    [sport <p1> [<p2>]]
                    [dport <p1> [<p2>]]
                    [proto <Protocol>]
                    [tc    <TC-Action-ID>]
                    [nat   <NAT-Action-ID>]
```

```
policy enable  <QoS-Policy-ID>

policy disable <QoS-Policy-ID>

policy list    [default] [<IfName1>] [<IfName2>]
```

A <CMD> publicip
Syntaxe :
```
publicip add/delete <public address>
publicip list
```

A <CMD> qstat
Syntaxe :
```
qstat $interface_name
```

A <CMD> remove
Syntaxe :
```
remove $interface_name
```

A <CMD> rft

Quitte Telnet !

A <CMD> setwt
Syntaxe :
```
setwt  <default_wt> <low_wt> <high_wt> <medium_wt>
        <critical_wt> <real-time_wt> <premium_wt> <urgent_wt>
        Weight Zero queues traffic will use default queue bandwidth
```

A <CMD> spoof
Syntaxe :
```
spoof [ list | enable | disable | <If name> [ trusted | untrusted ] ]

spoof list : list the all the trusted and untrusted interfaces along
with status
spoof enable : Enable spoof protection
spoof disable : Disable spoof protection
spoof eth1 trusted : Set eth1 as trusted interface
spoof eth1 untrusted : Set eth1 as untrusted interface
```

O <CMD> attack
Syntaxe :
```
attack set/enable/disable <attack_type> [<threshold> <timeout>]
attack enable/disable <attack_type>
attack listInsufficient number of arguments
```

O <CMD> createtc

Syntaxe :
```
createtc <dfmark/dfnomark> <priority_class> -o assuredbw <value> maxbw <value>
```

O <CMD> debug

(répète l'action précédente)

O <CMD> deletetc

Syntaxe :
```
deletetc <action_id/all( which are not attached to any policy)
```

O <CMD> listtc

Syntaxe :
```
listtc <action_id/all>
```

O <CMD> tcstat

```
listtc <action_id>
```

14)   A <LIST> logger

A <CMD> logger

Syntaxe :
```
logger list
logger add <facility-name> <severity-name> <destination-id>
logger delete <facility-name> <severity-name>

facility-name  ->
kernel/user/mail/deamon/auth/syslog/lpr/new/uucp/clock/secauth
ftpdeamon/ntp/logaduit/logalert/cron/local0/local1/local2/local3
local4/local5/local6/local7/ip/tcp/udp/sockets/rawip/icmp/arp
igmp/app/cdcli/if/telnet/dns/snmp/http/ping/ftp/ftpd/tftp/bootp
dhcpc/dhcps/qosbw/ipsec/ike/nat/firewall/diffserv/logger/queuing
ipoa/pppoa/ethoa/httpproxy/ftpproxy/misc/cbq/mgcp/rtp/dhcpr

severity-name  ->
emergency/alert/critical/error/warning/notice/info/debug
trace/accounting
```

A <CMD> loggerdest

Syntaxe :
```
loggerdest add syslog <syslog-server-addr> [syslog-server-port]
loggerdest add local
loggerdest add user <user-name>
loggerdest add adminalert <sender-mail-id> <admin-mail-id> <smtp-server-addr>
loggerdest list [<destination-id>]
loggerdest delete <destination-id>
```

A <CMD> logmsg

Syntaxe :
```
logmsg list
logmsg delete
```

15)   A <LIST> rarpd

A <CMD> list

Syntaxe :
```
    H/W ADDR          IP ADDRESS
```

A <CMD> add

Syntaxe :
```
add {0xH/Waddress} {IPAddress)
```

A <CMD> delete

Syntaxe :
```
delete {0xH/Waddress}
```

A <CMD> rarpd

Syntaxe :
```
rarpd {-a | interface}
```

16)   A <LIST> snmp

A <CMD> list

Syntaxe :
```
SNMP Agent
=========================================================
    STATUS                    : Running
    TRANSPORT                 : 192.168.1.1/161
    System Version Description : F@st3202
    System Contact            : SAGEM SA Phone: 33 1 40 70 63 63
    System Location           : Le Ponant de Paris,27, rue Leblanc 75512 PARIS
CEDEX 15
     System ID                : 4242
=========================================================

Trap Server Configurations
==========================
---------------------------------------------------------
Index   Version   IP-Address      Community       Status
---------------------------------------------------------
1      SNMP-V1   0.0.0.0         public          disable
2      SNMP-V2   0.0.0.0         public          disable
----------------------------------------------------

Communities
==============
---------------------------------------------------------
Index   IP-Address        Community         Access
```

A <CMD> agconfig

Syntaxe :
```
agconfig $interface -o   $port
    $interface - interface on which agent will run
    $port: Port Number ( DEFAULT Port No : 161
```

A <CMD> comconf

Syntaxe :
```
comconf $ipaddress $community_name -o $access
    $ipaddress: IP Address of accessing station
    $community_name: community string to access MIB
    $access: 1 - ReadOnly[default]/ 2 - ReadWrite
```
comconf @ip-de-ta-machine nom-de-ta-communauté -o readonly (c'est suffisant pour récupérer des graphes type MRTG ou PRTG)

et ensuite start
[root @ snmp]$ start
SNMP Agent Is Already Running[root @ snmp]$

A <CMD> delcomm

Syntaxe :
```
delcomm $index
    index: Community index in list
```

A <CMD> shutdown

Syntaxe :
```
        (Arrête le serveur snmp)
        Si le serveur est arêté, => SNMP Agent Is Already Stopped
```

A <CMD> start

Syntaxe :
```
        (Démarre le serveur snmp)
        Si le serveur est démarré, => SNMP Agent Is Already Running
```

A <CMD> sysconf

Syntaxe :
```
sysconf [-d] [-c] [-l] [-i] value
    -d      : System Version Description
    -c      : System Contact
    -l      : System Location
    -i      : Assigned Enterprise Number
```

A <CMD> trap

```
trap [1][2] enable/disable
1 - SNMP Version-1,
```

```
2 - SNMP Version-2
```

A <CMD> trapconf

Syntaxe :
```
trapconf [1][2] $IPADDRESS $community
    1 - SNMP Version-1, 2 - SNMP Version-2
    IPADDRESS - IP Address of Trap Server
    community: community string to authenticate at manager side
```

5. Listing des commandes 'ORDIN'

1) O <CMD> apregdump
Syntaxe :
```
*apregdump <ap_id>
ap_id - 1 - ETH1, 2 - ETH2, 3 - ETH3(ATM), 4 - SEC, 5 – BM
```

2) O <CMD> aread

Syntaxe :
```
aread <ap_id> <offset> <size> <type>
ap_id - 1 - ETH1, 2 - ETH2, 3 - ETH3, 4 - SEC, 5 - BM, 6 - ATM
offset = 0x0 - 0x7ff
size = 1 – 256 (decimal)
type = b - byte, w - word, l – long
```

3) O <CMD> awrite
Syntaxe :
```
awrite <ap_id> <offset> <value> <type>
ap_id - 1 - ETH1, 2 - ETH2, 3 - ETH3, 4 - SEC, 5 - BM, 6 - ATM
offset = 0x0 - 0x7ff
value = 0 - ff for byte, 0 - ffff for word, 0 - ffffffff for long
type = b - byte, w - word, l – long
```

4) O <CMD> date
Syntaxe :
DATE (MM:DD:YYYY) 10:28:2004 TIME (H:M:S) 20:50:55

5) O <CMD> list
Syntaxe :
list <udp/tcp/routes>

6) O <CMD> memshow
Syntaxe :
        (pas de message ? ? ?)

7) O <CMD> mread
Syntaxe :
mread <offset> <size>
offset = 0xa0000000 - 0xbfffffff
size = 1 - 100 (decimal)

8) O <CMD> mwrite
Syntaxe :
```
mwrite <offset> <value>
offset = 0xa0000000 – 0xbfffffff
value = 0 - ffffffff (hexadecimal)
```

9) O <CMD> route
Syntaxe :
```
route add –o –dest {dest ip addr} –gateway {gateway ip addr}   [{-option  value}*]
```

```
route add -o -dest {dest ip addr} -interface {interface name}   [{-option value }*]
route delete -o -dest {dest ip addr}
route change -o -dest {dest ip addr} -gateway {new ip addr}
route flush
options : mtu & hopcount &netmask
```

10)   O <CMD> stats
Syntaxe :
```
statistic parameter
parameters - IP|TCP|UDP|ICMP.
```

11)   O <CMD> version
Syntaxe :
```
AD6843 Security Router Software3202_220108
```

12)   O <LIST> acf

O <CMD> intf
Syntaxe :
```
      intf is ppp0
```

O <CMD> loadint
Syntaxe :
```
      loadint = 240 hours 0 minuts
```

O <CMD> media
Syntaxe :
```
      Invalid number of arguments
```

O <CMD> server
Syntaxe :
```
      Invalid number of arguments
```

O <CMD> setmacs
Syntaxe :
      (pas de message)

O <CMD> trace
Syntaxe :
```
      ACF TRACE LEVEL is 0
```

13)   O <LIST> adsl

O <CMD> adslup
Syntaxe :
      (rien ne s'affiche)

O <CMD> adsldown
Syntaxe :
     (rien ne s'affiche)

O <CMD> setmode
Syntaxe :
mode = ansi/gdmt/glite/multi

O <CMD> mon
Syntaxe :
```
ADSL Monitoring is Successful.
The values are:

  adslLineStatus : OPERATIONNEL
  adslMode  : G992_1_A
  Upstream = 160 Kb ( Intlv[LP0] )
  Downstream = 2432 Kb ( Intlv[LP0] )
===================================================
  DIAG Info           :
===================================================
  Attenuation ( dB )  :      15.5        11.0 (FE)
  SNR margin  ( dB )  :       33         31 (FE)
  HEC counter         :       0
  CRC counter         :       1

  RTFirmwareVer  : 0x170f060f
```


O <CMD> cmvhex
Syntaxe :
```
cmvhex <command id> <hex1> .. <hex16>
```


O <CMD> readcmv
Syntaxe :
```
readcmv <cmv name> <address> <index>
cmv index = CNTL/ STAT/ INFO/ TEST /OPTN /RATE /PLAM /CNFG/
address = 0 – 65535 (decimal)
index = 0 – 65535 (decimal)
```


O <CMD> writecmv
Syntaxe :
```
writecmv <cmv name> <address> <index> <value>
cmv index = CNTL/ STAT/ INFO/ TEST /OPTN /RATE /PLAM /CNFG/
address = 0 – 65535 (decimal)
index = 0 – 65535 (decimal)
value = value is expected in hexadecimal format
```

O <CMD> addusercmv

Syntaxe :
```
addusercmv <cmv name> <address> <index> <value>
cmv index = CNTL/ STAT/ INFO/ TEST /OPTN /RATE /PLAM /CNFG/
address = 0 - 65535 (decimal)
index = 0 - 65535 (decimal)
value = value is expected in hexadecimal format
```

O <CMD> delusercmv

Syntaxe :
```
delusercmv <cmv index>
cmv index = Index of CMV as displayed in the "list".
```

O <CMD> listusercmv

Syntaxe :
```
USER CMVs:
=============================================
 Index    CMV Name    Address    Index     Value
=============================================
```

14) O <LIST> arp

O <CMD> list

Syntaxe :
```
IP Address            MAC Address
192.168.1.1            0:60:4c:55:aa:ba
192.168.3.10           0:60:b3:a8:72:a1
192.168.5.10           0:50:ba:21:be:8b
```

O <CMD> delete

Syntaxe :
delete <ipaddr>

O <CMD> flush

Syntaxe :
Après un flush, voici le list précédent obtenu :
```
IP Address            MAC Address
192.168.3.10           0:60:b3:a8:72:a1
192.168.3.10           0: 0: 0: 0: 0: 0
192.168.3.10           0: 0: 0: 0: 0: 0
192.168.3.10           0: 0: 0: 0: 0: 0
192.168.3.10           0: 0: 0: 0: 0: 0
192.168.3.10           0: 0: 0: 0: 0: 0
192.168.3.10           0: 0: 0: 0: 0: 0
192.168.3.10           0: 0: 0: 0: 0: 0
192.168.3.10           0: 0: 0: 0: 0: 0
192.168.3.10           0: 0: 0: 0: 0: 0
192.168.3.10           0: 0: 0: 0: 0: 0
192.168.5.10           0:50:ba:21:be:8b
```

(reboot pour revenir à l'état initial)

15) O <LIST> bridge

O <CMD> bridge
Syntaxe :
```
bridge action
where action - enable\disable\Delete
```

O <CMD> cachetimer
Syntaxe :
```
cachetimer timeout
where timeout - Host cache timeout in (1-1200) seconds.
```

O <CMD> group
Syntaxe :
```
group if if -o  [-if]
where if  - Interface name e.g. eth0\eth1\(atm0..atm7)\wlan0
```

O <CMD> igmpsnoop
Syntaxe :
```
igmpsnoop enable/disable/flush
```

O <CMD> list
Syntaxe :

Name	State	MacAddr	Priority	LinkCost	Vci/Vpi/Encap	VpnOUI	VpnId
eth0	Transitaire	00:60:4c:55:aa:ba	128	100	0/0/LLC (VPN)	0	0
atm1	Transitaire	00:00:00:00:00:00	128	250	8/38/LLC (VPN)	0	0
atm2	Transitaire	00:00:00:00:00:00	128	250	8/39/LLC (VPN)	0	0
atm3	Transitaire	00:00:00:00:00:00	128	250	8/40/LLC (VPN)	0	0
atm4	Transitaire	00:00:00:00:00:00	128	250	8/41/LLC (VPN)	0	0

```
Station Cache Timeout : 300
```

O <CMD> listAll
Syntaxe :
```
Bridge status = Active
Spanning Tree status = InActive
VLAN status = Active
Maximum bridge filters allowed = 1024
Maximum layer2 filters allowed per port = 100
Maximum classify rules allowed per port = 100
Maximum VLANs allowed = 8
Maximum VLANs allowed per port = 8
No of ports in bridge group = 5
bridge timeout (secs) = 600
bridge management Ip Address = 192.168.1.1
igmpsnoop status (V1/V2) = disable
```

O <CMD> listmcast

Syntaxe :
No Entries present in the filter list

O <CMD> pvc

Syntaxe :
```
pvc add/delete port vpi vci encapsulation -o <-vpn OUI vpnId>
where port          - (atm0-atm7)
      vpi           - (0-255)
      vci           - (0-65535)
      encapsulation - llc\vc
      -vpn OUI vpnId - Enable VPN Encapsulation on this interface.
                        OUI  : Organizationally Unique Identifier.
                       vpnId : VPN Index
```


O <CMD> setmultiport

Syntaxe :
```
setmultiport <enable/disable>
setmultiport enable allows flooding between ATM pvcs.
```


O <CMD> stats

Syntaxe :
```
Statistics Summary
-----------------
RxTotal: 9128    TxTotal: 15     FloodTotal: 3423    DropTotal: 0   FwdTotal: 3423

Name        Rxcount           Txcount        RxFail          TxFail         SenttoIP

eth0           9128              3              0               0             3420
atm1              0              3              0               0                0
atm2              0              3              0               0                0
atm3              0              3              0               0                0
atm4              0              3              0               0                0
```


O <CMD> tableflush

Syntaxe :

O <CMD> tablelist

Syntaxe :
```
Name        PortNo/Vid  MacAddr              Age Action
_           0:-1        0:60:4c:55:aa:ba S    Fwd

eth0        1:2         0:50:ba:21:be:8b D    Fwd

_           0:-1        ff:ff:ff:ff:ff:ff S   Fwd

Maximum Filter Entries : 1024
Total Filter Entries   : 3
Total Static Entries   : 2
Total Dynamic Entries  : 1
```

O <LIST> l2filter

O <CMD> list
Syntaxe :
```
list <filter_id/all>
where filter_id   - filter id to be listed
or  all          - keyword all to list all l2 filters
```

O <CMD> add
Syntaxe :
```
add <port_name> <drop/allow> <priority> -o [ -smac <mac_value> | -dmac <mac_value> | -
bilateralmac <mac_value> | -ethertype <type_value> | -ethertype <type_name> | -vlan
<vlan_name>]
 where port_name                    - name of a particular port (32 characters)
       -smac <mac_value>            - if souce mac needs to be dropped or allowed
       <drop/allow>                 - drop - to drop and allow - to allow
       <priority>                   - priority of the filter rule. It can have values in
the range 0-7.
   or  -dmac <mac_value>            - if souce mac needs to be dropped or allowed
   or  -bilateralbmac <mac_value>  - if souce mac needs to be dropped or allowed
   or  -ether_type <protocol_value> - if ether type is needs to be dropped or allowed
   or  -ether_type <protocole_name> - if ether type is needs to be dropped or allowed.
                                     For valid names, please use ethertypes command
       --vlan <vlan_name>           - vlan name from the existing vlans if VLAN is
enabled

 The mac addresses should be of the format xx:xx:xx:xx:xx:xx.
 The list of valid protocol names can be found using the 'ethertypes' command.
 The protocol value should be of the format 0xAAAA or 0XAAAA.
 This command will return a unique Filter Id which can be used in delete and list
commands.
```

O <CMD> delete
Syntaxe :
```
delete <filer_id>
where filter_id   - filter id returned while adding
```

O <CMD> deleteall
Syntaxe :
```
deleteall <port_name>
where port_name   - name of a particular port (32 characters)
```

O <CMD> ethertypes
Syntaxe :
```
Protocol Names  Protocol vlaue  Explaination

arp             0x806   Address Resolution Protocol
rarp            0x8035  Reverse Address Resolution Protocol
ip              0x800   Internet Protocol
btn             0x1000  Berkeley Trailer Negotiation
lan_test        0x708   LAN test
x25             0x805   X.25 level 3
banyan          0xbad   BANYAN
cdp             0x2000  CDP
xns             0x6000  Dec XNS
mop_dl          0x6001  Dec MOP Dump/Load
mop             0x6002  Dec MOP
lat             0x6004  Dec LAT
ethertalk       0x809b  Ethertalk
aarp            0x80f3  appletalk arp
```

```
ipx_o          0x8137  Novell IPX (old)
ipx_n          0x8138  Novell IPX (new)
eapol_o        0x8180  EAPOL (old)
eapol_n        0x888e  EAPOL (new)
txp            0x8729  Telxon TXP
ddp            0x872d  Aironet DDP
ect            0x9000  Enet Config Test
netbui         0xf0f0  NETBUI
pppoe_disc     0x8863  PPPOE discovery stage
pppoe_sess     0x8864  PPPOE session stage
```

O <LIST> stp

O <CMD> list

Syntaxe :
```
Stp       : DISABLED        ActivePorts:5
BridgeId  : 00:00:00:00:00:00    RootId :00:00:00:00:00:00
HelloTime : 2          RootPathCost :0
Max Age   : 20         RootPort     :0
FwdDelay  : 15         HoldTime     :1

Port State PortId LinkCost TxCBpdu RxCBpdu TxTBpdu RxTBpdu Timers
eth0  F    32769  100       0       0       0       0      _._ _ MeFwHo
atm1  F    32770  250       0       0       0       0      _ _ _ MeFwHo
atm2  F    32771  250       0       0       0       0      _ _ _ MeFwHo
atm3  F    32772  250       0       0       0       0      _ _ _ MeFwHo
atm4  F    32773  250       0       0       0       0      _ _ _ MeFwHo
```

O <CMD> config

Syntaxe :
>   Aucun effet apparent

O <CMD> port

Syntaxe :
```
port portname -o [-priority] [-linkcost]
where portname  - eth0\eth1\(atm0-atm7)
      priority  - (0-255)
      linkcost  - (0-65535)
```

O <CMD> span
```
span enable\disable
        Enable stops all network connections for about ~30sec
        to rebuild the new bridge table based on spanning Tree
```

16) O <LIST> bt

O <CMD> version

Syntaxe :

O <CMD> mac

Syntaxe :
```
00:03:C9:4E:43:75
```

O <CMD> rdevclass
Syntaxe :
     (rien)

O <CMD> rname
Syntaxe :
     (rien)

O <CMD> rsetvoice
Syntaxe :
     (rien)

O <CMD> testmode
Syntaxe :
     (rien)

O <CMD> total_debug
Syntaxe :
    (m'a bloqué Telnet => reboot de la box pour reprendre la main)

O <CMD> vendor
Syntaxe :
     (rien)

O <CMD> wname
Syntaxe :
     (rien)

O <CMD> wsetvoice
     (rien)

17)   <u>O <LIST> dhcpserver</u>

O <CMD> host
Syntaxe :
```
 host add -o -macaddr <mac-address> -ipaddr <ipaddr>
                 -leasetime <lease time>  -broadcast <broadcast-address>
                 -dns <name-server> -gateway <gateway> -server <server-name>
                 -file <filename>
        host delete -o -macaddr <mac-address>
        host list
```

O <CMD> lease

Syntaxe :
lease list

O <CMD> start

Syntaxe :
DHCP Server started !!! si démarré => DHCP Server already running.

O <CMD> stop

Syntaxe :
DHCP Server stopped !!! si stoppé => Command not found.

O <CMD> subnet

Syntaxe :
```
subnet <if> add -o -subnet <subnet> -netmask <mask> -startip <startip>
                        -endip <endip> -leasetime <lease time in days>
                        -broadcast <broadcast-address> -dns <name-server>
                        -secondarydns <name-server> -gateway <gateway>
                        -server <serverip> -file <filename>

     subnet <if> delete

     subnet <if> list
```

18)   O <LIST> h323

A <CMD> announce

Syntaxe :
```
announce <on/off> -o <wrongnum|nwfail|busy>
```


A <CMD> clearstat

Syntaxe :
(pas d'affichage)

A <CMD> configdest

Syntaxe :
```
configdest <destip> <destE164alias>
   destip        - Destination IP address.
   destalias     - Destination E.164 alias address.
                   This address is used in case of direct call.
```


A <CMD> configdtmf

Syntaxe :
```
configdtmf <phone_portno> <inband/outband/2833>
  phone_portno  - RJ11 port number. 1 to maximum no of RJ11 ports on RG.
```

A <CMD> configep

Syntaxe :
```
configep <phone_portno> <e164_addr> -o -id <h323id> -c <codecs>:<pack_period>..
MAX_NUM_SUPPORTED codecs
  phone_portno - RJ11 port number. 1 to maximum no of RJ11 ports on RG.
  e164_addr    - Phone number that has to be registered with GK/known to peer end.
  h323id       - h323ID that has to be registered with GK.
  codecs       - Specifies the codec type to be used in negotiation with peer.
 Codecs can be PCMU/PCMA/G723/G729A/G729AB. G729A is with AneexA and  G729AB is G729
with Aneex A&B.
   pack_periof  - Specifies the packetization period.
```

A <CMD> configprefix

Syntaxe :
```
configprefix <in/out> <add/delete> <prefix> -o <length>
  in     - Indicates prefix for inbound calls.
  out    - Indicates prefix for outbound calls.
  add    - Indicates prefix to be added.
  delete - Indicates prefix to be deleted.
  prefix - String to be used as prefix for inbound/outbound calls.
            Incase of delete configuration 'any' only is allowed.In this
            case user has to configure the length of prefix to be
            deleted as optional parameter
  length -  Length of prefix to be deleted.
```

A <CMD> configretry

Syntaxe :
        (pas de message)

A <CMD> configrg

Syntaxe :
```
configrg <ifname>
  ifname         - interface name
```

A <CMD> configtimer

Syntaxe :
        (pas de message)

A <CMD> configttl

Syntaxe :
```
configttl <ttlValue>
```

A <CMD> configVDN

Syntaxe :
```
configVDN <portno> <yes/no> -o <number>
 portno       - RJ11 port on RG.
 yes/no       -  yes - enable no- disable. Optional parameter is
mandatory to enable VDN.
```

```
 number        - VirtualDialNumber(VDN) used for this port.
```

A <CMD> debugport

Syntaxe :
```
debugport <port>
  port           - RG Port (1--2)
```

A <CMD> deletedest

Syntaxe :

Do you want to delete all the entries? (Y/N)
(et la suite)

A <CMD> dellock

Syntaxe :

dellock {area|phone}.

Example :

Pour supprimer un verrou, il suffit d'utiliser la commande dellock suivit du numéro.
[root @ h323]$ dellock 0620

A <CMD> displayci

Syntaxe :
```
displayci  <yes/no> -o <portno>
  yes          - Displayss calling party number if presentation is allowed
  no           - Doesn't display the calling party number even if presentation
is allowed
  portno       - RJ11 port on which gateway receives
```

A <CMD> dsptimer

Syntaxe :
```
dsptimer <interdigtimervalue(in secs)
```

A <CMD> faststart

Syntaxe :
```
faststart <on/off>   faststart    - Enable fast connect procedures.
                 OFF/off indicates disable faststart.
                 ON/on indicates enable faststart.
```

A <CMD> fasttunnel

Syntaxe :
```
fasttunnel <on/off>    fasttunnel - Enables h.245 tunneling in parallel with
fast connect..
                 off disables h.245 tunneling in parallel with fast connect.
                 on  enables h.245 tunneling in parallel with fast connect.
```

A <CMD> faxpassthru

Syntaxe :
```
faxpassthru <port> <enable/disable>
```

```
port    - FXS Number (1 or 2).
enable  - Enables fax passthrough on given port.

disable - Disables fax passthrough on given port.
```

A <CMD> framenego

Syntaxe :
```
framenego <auto/manual>
 auto          - Number of frames will be auto negotiated.
 manual        -  Number of frames will be set according to
                  configured value of number frames with codec.
```

A <CMD> useport

Syntaxe :
```
useport <port> <yes/no>
  portno       - Activates/deactivates port to register to gatekeeper.
                  (1 to maximum number of ports).
  yes          - Activates port number.This port (alias address) will be .
                 registered to gatekeer if the user executes 'usegk' command
                 with appropriate parameters
  no           - Deactivates port number.This port(alias address) will not be
                 registered to gatekeeper
```

O <CMD> listepinfo

Syntaxe :

************* RG Endpoint Information ***********

+-----------------------------+

```
 PortNo      : 1
 PhoneNo     : 20000133871229449
 H323Id      :
 VDN         : None
 CallerID    : Enabled
  Prefix     : 831
Codecs       : G729:4 G729A:4 PCMU:2
 DTMF Sinaling: out-of-band
 Pass Through : Disabled
```

+----------------------------+

```
 PortNo      : 2
 PhoneNo     :
 H323Id      :
 VDN         : None
 CallerID    : Disabled
  Prefix     :
Codecs       :
 DTMF Sinaling: in-band
```

Pass Through : Disabled

<<< PRESS q TO QUIT >>>


```
+----------------------------+

 PortNo      : 3
 PhoneNo     :
 H323Id      :
 VDN         : None
 CallerID    : Disabled
  Prefix     :
Codecs       :
 DTMF Sinaling: in-band
 Pass Through : Disabled
```

O <CMD> listdest

Syntaxe :

```
Destination Configurations:
==========================
-----------------------------------------
SlNo | DestIP          | DestE164Alias
-----------------------------------------
      No Entry Found
```


O <CMD> listlock

Syntaxe :

```
Restricted  calls:
==========================
----------------------------------------
number          | TypeOfNumber
----------------------------------------
      No Entry Found
```

Example :

Pour visualiser les restrictions d'appel mises en place, il faut utiliser la commande listlock

```
[root @ h323]$ listlock
Restricted calls:
========================
----------------------------------------
number | TypeOfNumber
----------------------------------------
06 | area
0620 | area
0492156436 | phone
```

O <CMD> listrginfo

Syntaxe :

```
                RG Configuration
        ***********************************
        Interface          :  ppp0
        FastStart          :  disabled
```

```
            Tunnel           :  disabled
            FastTunnel       :  disabled
            VDN              :

            ********* Announcement Status **********

            WrongNo          :  disabled
            NetWorkFail      :  disabled
            LineBusy         :  disabled

            ************* Outbound Prefix ***********

            Add  Prefix      :  disabled
            Delete  Prefix   :  disabled
            Length           :  0
            ************* Inbound Prefix ***********

            Add  Prefix      :  disabled
            Delete  Prefix   :  disabled
            Length           :  0

            <<< PRESS q TO QUIT >>>
```

A <CMD> lock

Syntaxe :
```
lock {area|phone} < areacode|phoneno>
area|phone - whether you need to lock areacode or specifc phone number
areacode|phoneno Area code or phone number which has to be locked.
```
Example :
> [root @ h323]$ lock area 06
> Il devient impossible d'appeler les portables depuis la LiveBox.
>
> [root @ h323]$ lock area 0620
> Il devient impossible d'appeler certains portables SFR depuis la LiveBox.
>
> Plages de numéros des principaux opérateurs
> SFR 0603 0609 0610 0611 0612 0613 0614 0615 0616 0617 0618 0619 0620 0621 0622 0623
> 0624 0625 0626 0627
>
> Bouygues Télécom 0660 0661 0662 0663 0664 0665 0666 0667 0668 0698 0699
>
> Orange 0607 0608 0630 0632 0633 0634 0670 0671 0672 0673 0674 0675 0676 0677 0678
> 0679 0680 0681 0682 0683 0684 0685 0686 0687 0688 0689
> Tous les numéros appartenant à chaque plage ne pourront être appellés
>
> [root @ h323]$ lock phone 0492156436
> Il devient impossible d'appeler le numéro 0492156436 depuis la LiveBox
>
> Pour visualiser les restrictions mises en place, il faut utiliser la commande listlock
>
> [root @ h323]$ listlock
> Restricted calls:
> ========================
> ---------------------------------------
> number | TypeOfNumber
> ---------------------------------------

```
06 | area
0620 | area
0492156436 | phone
```

Pour supprimer un verrou, il suffit d'utiliser la commande dellock suivit du numéro, comme pour lock

```
[root @ h323]$ dellock 0620
Vérification :
[root @ h323]$ listlock
Restricted calls:
=========================
---------------------------------------
number | TypeOfNumber
---------------------------------------
06 | area
0492156436 | phone
```

A <CMD> maxdigits
Syntaxe :
```
maxdigits <1-17>. Default value is 4.
if Less than maxdigits, then use '#' at the end of digit string
```

A <CMD> memalloc
Syntaxe :
```
pcibitmap    : Used = 0 Max = 9
pcbbitmap    : Used = 0 Max = 10
q931msgs     : Used = 0 Max = 20
rtpsess      : Used = 0 Max = 9
H245CtlBlks  : Used = 0 Max = 20
H245BigBufs  : Used = 1 Max = 2
H245Reqs     : Used = 0 Max = 20
Cap2CM       : Used = 0 Max = 20
Lcs2CM       : Used = 0 Max = 20
RlcPams      : Used = 0 Max = 20
LcsAck2CM    : Used = 0 Max = 20
H245Respses  : Used = 0 Max = 20
CMD MODE     : Used = 0 Max = 2
TunPDU       : Used = 0 Max = 10
ReqMode      : Used = 0 Max = 5
AudioMode    : Used = 0 Max = 25
VoiceBufs    : Used = 0 Max = 100
Timers    : Used = 19 Max = 100
```

A <CMD> prefix
Syntaxe :
```
prefix <in/out> <add/delete> <on/off>
  in     - Indicates prefix for inbound calls.
  out    - Indicates prefix for outbound calls.
  add    - Indicates prefix to be added.
  delete - Indicates prefix to be deleted.
  on     - Indicates configuration is active.
  off    - Indicates configuration is inactive.
```

A <CMD> presentci
Syntaxe :

```
presentci  <yes/no> -o <port> <prefix>
   yes          - Gives the authority to Called Party to display Calling Number
   no           - Restricts the Called Party from displaying Calling Number
   portno       - RJ11 port on which calling party number display has to be
enabled/disabled
```

A <CMD> sendGRQ

Syntaxe :
```
sendGRQ yes/no
```

A <CMD> tracecall

Syntaxe :
```
tracecall <on/off>
```

A <CMD> tracemsg

Syntaxe :
```
tracemsg <ras/q931/h245> <on/off>
```

A <CMD> tunnel

Syntaxe :
```
tunnel <on/off>    tunnel        - Enable encapsulation  procedures.
                    NO/no indicates disable tunnel mode.
                    YES/yes indicates enable tunnel mode.
```

A <CMD> usegk

Syntaxe :
```
usegk <flag> -o primary <GKADDR> port <portno1> secondary
<GKADDR1><port><portno2>
   flag          - flag specifies if the specific RG has to be
                     registered or unregistered with GateKeeper.
                 - NO/no indicates unregister with GateKeeper.
                 - YES/yes indicates register with GateKeeper.
   GKADDR    - Primary Gatekeeper IPV4 Address.
   portno1       - Primary Gatekeeper's port no.If not specified it will
                   assume default port number.
   GKADDR1   - Secondary Gatekeeper IPV4 Address.
    portno2       - Secondary Gatekeeper's Port no.If not specified it will
                   assume default port number.
```

A <CMD> h323id

Syntaxe :
```
h323id <h323-id>
```

A <LIST> h450

A <CMD> activate
Syntaxe :
```
activate $port $destination -o $forwarding_type
 forwarding_type:
```

```
    1 - Forward UnConditional
    2 - Forward On Busy
    3 - Forward on No Answer
```

A <CMD> CFNR
Syntaxe :
```
CFNR $port $no_of_rings
```

A <CMD> deactivate
Syntaxe :
```
deactivate $port
```

A <CMD> history
Syntaxe :
```
Diversion Table Empty
```

A <CMD> listCFNR
Syntaxe :
```
===============================================
Port Number                 CFNR Value

===============================================
1                     3
2                     3
3                     3
===============================================
```

A <CMD> listdvr
Syntaxe :
```
No Entry
```

A <LIST> voice

A <CMD> countryopt
Syntaxe :
```
Country : FRANCE
```

A <CMD> portdiag
Syntaxe :
```
Make sure that port considered for diagnosis should be
in on-hook state.
Enter the port number<1-3>
1
Enter one of the options.
1. Dial Tone.
2. Busy Tone.
3. Ringback Tone.
4. Dial Number.
5 or 6. Apply Ring.
7 Apply ROC  Ring.
8. ROC Busy TOne.
9. Spl. Dial Tone.
10. Mesg Waiting Indicator Tone.
11.Spl.Information Tone.
12.VOIP Dial Tone.
13 or 14.On-HOOK Caller ID Display.
```

```
15.OFF-HOOK Caller ID Display.
0. Quit from 1-15 actions .
q  Quit from  port diagnosis .
To perform actions from 1-4 & 8-12,15 the phone should be in off-hook.
To perform actions from 5-7 and 13 the phone should be in on-hook.
```

O <CMD> 1si3216
Syntaxe :
```
      (pas de message)
```

O <CMD> 2si3050
Syntaxe :
```
      (pas de message)
```

O <CMD> 3si3216
Syntaxe :
```
      (pas de message)
```

O <CMD> codecdownload
Syntaxe :
```
      (pas de message)
```

O <CMD> DetectTone
Syntaxe :
```
DetectTone <portNum> -o [-t <Tone_type>
  -t <Tone_type>    - Tone type to be detected
```

O <CMD> DSPConnect
Syntaxe :
```
      (pas de message)
```

O <CMD> dspdownload
Syntaxe :
```
      (pas de message)
```

O <CMD> DSPQuit
Syntaxe :
```
      (pas de message)
```

O <CMD> Dtmfenable
Syntaxe :
```
Dtmfenable <portNum> -o [-t <enable/disable>
```

O <CMD> ecparams
Syntaxe :
```
ecparams <port> -o -nlp <value> -hreg <value> -conv <value> -beta<value>
-dthr <value>
   port          -        RJ11 port
   nlp           -        NLP Enable(1) or Disable(0)
   hreg          -        H-registers Reset (1-reset)
    conv             -         Convergence(1) Enable/Disable(0) .

   Beta          -        Beta Factor(Value 5 to 64).

   dthr          -        Config Doubletalk Fact[Value:3 to 15].
```

O <CMD> gc

Syntaxe :

```
gc <port> -o -gtx <value> -grx <value> -gec <value>
   port        -        RJ11 port(1 or 2)
   gtx         -        Transmission Gain
   grx         -        Receiver Gain.
   gec         -        Ec Bulk Delay Fact .
```

O <CMD> jitter

Syntaxe :

```
JITTER PARAMETERS
=================

JITTER BUFFER SCHEME : ADAPTIVE
```

O <CMD> listgc

Syntaxe :

```
-------------------------------
Port     Gtx       Grx      Gec
-------------------------------
  1        0         0        0
  2        0         0        0
  3        0         0        0
-------------------------------
```

O <CMD> QuitTone

Syntaxe :

```
        (pas de message)
```

O <CMD> TestTone

Syntaxe :

```
TestTone <frequence> <amplitude>
```

O <CMD> voiceopt

Syntaxe :

```
VOICE PARAMETERS
================

VAD            : OFF
PLC            : ON
ECHO CANCELLER : ON
TAIL LENGTH    : 22 msec
```

O <CMD> callstat

Syntaxe :

```
Call Statistics:
================
Total Calls Orginated: 0
Total Calls Received:  0
Total Calls Completed: 0
Total Calls Dropped:   0
```

O <CMD> listdest

Syntaxe :

```
Destination Configurations:
===========================

-------------------------------------------
SlNo | DestIP          | DestE164Alias
-------------------------------------------
     No Entry Found
-------------------------------------------
```

O <CMD> listepinfo

Syntaxe :

```
  ************* RG Endpoint Information ***********


 +----------------------------+

  PortNo        : 1
  PhoneNo       : 20000133871229449
  H323Id        :
  VDN           : None
  CallerID      : Enabled
   Prefix       : 831
Codecs          : G729:4 G729A:4 PCMU:2
  DTMF Sinaling: out-of-band
  Pass Through : Disabled


 +----------------------------+

  PortNo        : 2
  PhoneNo       :
  H323Id        :
  VDN           : None
  CallerID      : Disabled
   Prefix       :
Codecs          :
  DTMF Sinaling: in-band
  Pass Through : Disabled


<<< PRESS q TO QUIT >>>


 +----------------------------+

  PortNo        : 3
  PhoneNo       :
  H323Id        :
  VDN           : None
  CallerID      : Disabled
   Prefix       :
Codecs          :
  DTMF Sinaling: in-band
```

```
     Pass Through : Disabled
```

O <CMD> listlock

Syntaxe :
```
Restricted  calls:
==========================
----------------------------------------
number             | TypeOfNumber
----------------------------------------
     No Entry Found
----------------------------------------
```

O <CMD> listrginfo

Syntaxe :
```
            RG Configuration
  ***********************************
  Interface               :    ppp0
  FastStart               :    disabled
  Tunnel                  :    disabled
  FastTunnel              :    disabled
  VDN                     :

  ********* Announcement Status **********

  WrongNo                 :    disabled
  NetWorkFail             :    disabled
  LineBusy                :    disabled

  ************* Outbound Prefix **********

  Add  Prefix             :    disabled
  Delete  Prefix          :    disabled
  Length                  :    0
  ************* Inbound Prefix **********

  Add  Prefix             :    disabled
  Delete  Prefix          :    disabled
  Length                  :    0

<<< PRESS q TO QUIT >>>
```

O <LIST> h235

A <CMD> security
Syntaxe :
```
security <enable/disable>
```

A <CMD> subscript
Syntaxe :
```
subscrpt <subscrption id> <password> <gatekeeper id>
```

A <CMD> list
Syntaxe :
```
 ********* Security Configuration *********


Security   :    enabled
---------------------------------------------------------------------
--------
  Subscription Id          Password            Gatekeeper        Id
---------------------------------------------------------------------
--------
00:60:4C:55:AA:BA   6091d4236197bc6b    woof_gkrasgrp  04
---------------------------------------------------------------------
--------
```

19) O <LIST> http

O <CMD> language
Syntaxe :
```
language [FR EN NL]
```

O <CMD> url
Syntaxe :
```
url on / off
```

20)   O <LIST> pstnclass

O <CMD> clear
Syntaxe :
```
clear <all/default/prefix>
```

O <CMD> clip
Syntaxe :
```
clip <on/off>
```

O <CMD> default
Syntaxe :
```
Default <FRANCE/HOLLANDE> -o -local <local area code>
```

O <CMD> incall
Syntaxe :
```
incall <on/off>
```

O <CMD> info
Syntaxe :
```
info <debug/pstn>
```

O <CMD> list

Syntaxe :

(pas d'affichage)

O <CMD> localcode

Syntaxe :
```
localcode <6 digits max/clear>
```

O <CMD> set

Syntaxe :
```
set <prefix (6 digits max)/default, -o
            -d delete number (0 to 6),
            -a add digits (6 digits max)>
            -l nb length (0 to 16)>
            -out <voip/pstn>
```

O <CMD> test

Syntaxe :
```
test <Call Number>
```

O <CMD> timer

Syntaxe :
```
timer <on/off>
```

O <CMD> trace

Syntaxe :
```
trace <on/off>
```

21) O <LIST> relayvoice

O <CMD> force

Syntaxe :
```
force <onV/onP/none>
```

O <CMD> icall

Syntaxe :
```
icall <on/off>
```

O <CMD> status

Syntaxe :

(pas de message)

O <CMD> trace

Syntaxe :
```
trace <on/off>
```

22) O <LIST> rip

O <CMD> list

Syntaxe :
```
Destination          Gateway              Netmask              Interface
Metric
--------------------------------------------------------------------------
-
0.0.0.0              80.13.5.129          0.0.0.0              ppp0          0
80.10.246.130        80.13.5.129          0.2.0.0              ppp0          0
80.13.5.147          127.0.0.1            255.255.255.255      lo0           0
80.13.11.53          127.0.0.1            255.255.255.255      lo0           0
80.13.11.164         127.0.0.1            255.255.255.255      lo0           0
80.13.40.32          127.0.0.1            255.255.255.255      lo0           0
80.13.40.161         127.0.0.1            255.255.255.255      lo0           0
193.252.19.123       80.13.5.129          0.2.0.0              ppp0          0
```

O <CMD> rip

Syntaxe :

RIP is OFF   RIP is ON

O <CMD> ver

Syntaxe :
```
     RIP version 1
```

23) O <LIST> sndcp

O <CMD> ipoa

Syntaxe :
```
ipoa <interface> <disable> <vpi> <vci> -o <default> <-nhp  ipaddress>
   ipoa <interface> <enable> <vpi> <vci> -o <-enc encapulation>
                                   <default>
                                 <-nhp  ipaddress>
                                 <-vpn OUI vpnId>
             interface          - interface number
             enable/disable     - enables or disable the bridge module
             vpi                - vpi
             vci                - vci
             -enc encapsulation - encapsulation type LLC/VC
            default             - use default PVC
            -nhp ipaddress      - next hop ip address
            -vpn <OUI> <vpnId> - Enable VPN encapsulation
                                 OUI  : Organizationally Unique
Identifier.
                                 vpnId : VPN Index.
```

O <CMD> list
Syntaxe :
```
list <param>
                      param - routedbridge (diplays Routed Bridge
parameters)
Routed Bridge is not configured
                            - ipoa (diplays IPoA parameters)
```


O <CMD> liststat
Syntaxe :
```
param – routedbridge (diplays Routed Bridge parameters)
                            - ipoa   (diplays IPoA parameters)
                            - pppoa  (diplays PPPoA parameters)
                            - pppoe  (diplays PPPoE parameters)
```


O <CMD> pppoa
Syntaxe :
```
pppoa <profile> -o <-if Interface> <-encap Encapsulation> <-restarttime
Timeout>
 <-auth Auth> <-myaddr IPAddr> <-peer PeerIPAddr> <-mtu MTU> <-mru MRU>
<-user Username> <-pass Password> <-vpi Vpi> <-vci Vci>
 <-nat [enable/disable]> <-netmask mask> <-vpn OUI vpnId>
     Interface       - interface name with unit number (eg ppp0 or ppp1)
     Encapsulation   - encapsulation type (LLC or VC)
     Timeout         - timeout (in milliseconds)
     Auth            - authentication (PAP, CHAP, MSCHAPV1, MSCHAPV2)
     IPAddr          - Desired self IP address (in dotted decimal)
     PeerIPAddr      - Peer IP Address (in dotted decimal)
     MTU             - Maximum Transmission Unit
     MRU             - Maximum Receive Unit, negotiated in LCP
     Username        - Username
     Password        - Password
     Vpi             - Vpi
     Vci             - Vci
     nat             - enable/disable(default- disable)
     netmask         - netmask for IP address received from Server
     vpn             - Enable VPN encapsulation
                      OUI   : Organizationally Unique Identifier.
                      vpnId : VPN Index.
```


O <CMD> pppoadefault
Syntaxe :
```
pppoadefault <Profile>
     Profile   - Profile to be set as default.
                 It should be already configured profile with AUTO mode.
```


O <CMD> pppoadel
Syntaxe :
```
pppoadel [profile_number/all]
```

O <CMD> pppoalist

Syntaxe :
```
Available free PPPOA Profiles :
0 1 2 3 4 5 6 7
No Default Profile Available
No PPPoA Configured Profile Available
```

O <CMD> pppoastart

Syntaxe :
```
pppoastart <Profile>
     Profile          - Profile number to be started.
                        It should be already configured and all mandatory
                        parameters should be present.
```

O <CMD> pppoastop

Syntaxe :
```
pppoastop <Profile>
     Profile          - Profile number to be stopped.
                         It should be already running.
```

O <CMD> pppoe

Syntaxe :
```
pppoe <profile> -o <-if Interface> <-encap Encapsulation> <-restarttime Timeout>
 <-auth Auth> <-myaddr IPAddr> <-peer PeerIPAddr> <-mtu MTU> <-mru MRU>
 <-hwaddr Ethaddr> <-service ServiceName> <-acname ACName> <-tag HostTag>
 <-user Username> <-pass Password> <-vpi Vpi> <-vci Vci> <-mode Mode>
 <-idletime idleTimeout> <-nat [enable/disable]> <-netmask mask> <-vpn OUI vpnId>
     Interface       - interface name with unit number (eg ppp0 or ppp1)
     Encapsulation   - encapsulation type (LLC or VC)
     Timeout         - timeout (in milliseconds)
     Auth            - authentication (PAP, CHAP, MSCHAPV1, MSCHAPV2)
     IPAddr          - Desired self IP address (in dotted decimal)
     PeerIPAddr      - Peer IP Address (in dotted decimal)
     MTU             - Maximum Transmission Unit
     MRU             - Maximum Receive Unit, negotiated in LCP
     Ethaddr         - Ethernet hw addr (specify bytes in decimal and use ':'
                        as delimiter, eg 10:11:12:13:14:15)
     ServiceName     - Service Name
     ACName          - Access Concentrator name
     HostTag         - Use Host unique tag
     Username        - Username
     Password        - Password
     Vpi             - Vpi
     Vci             - Vci
     Mode            - Mode in which PPP will run (AUTO, DIRECT)
     idleTimeout     - The idle timeout value (in minutes)
     nat             - enable/disable(default- disable)
     netmask         - netmask for IP address received from Server
     vpn             - Enable VPN encapsulation
                        OUI   : Organizationally Unique Identifier.
                        vpnId : VPN Index.
```

O <CMD> pppoedefault

Syntaxe :
```
pppoedefault <Profile>
     Profile   - Profile to be set as default.
     It should be already configured profile with AUTO mode.
```


O <CMD> pppoedel

Syntaxe :
```
pppoedel [profile_number/all]
```


O <CMD> pppoelist

Syntaxe :
```
Available free PPPOE Profiles :
1 2 3 4 5 6 7

No Default Profile Available
Configured PPPOE Profiles :
Profile# 0 [ACTIVE]:
INTERFACE: ppp0 MRU: 1492   MTU: 1492 ENCAPSULATION: LLC
IPADDR: 0.0.0.0   PEERIPADDR: 0.0.0.0  NETMASK: 255.255.255.0


          RESTARTTIME: 3000 HWADDR: 0:96:76:85:170:186 ACNAME:
SERVICE:     HOSTTAG: 0   IDLETIMEOUT: 1
MODE: DIRECT USER: fti/fvwpgy4   PASSWORD: ******* VPI: 8 VCI: 35
AUTHENTICATION: CHAP  NAT: enable
VPN ENCAPSULATION: disable
          VPN OUI: 0    VPN Index: 0
```


O <CMD> pppoestart

Syntaxe :
```
pppoestart <Profile>
     Profile          - Profile number to be started.
It should be already configured and all mandatory parameters should be
present.
```


O <CMD> pppoestop

Syntaxe :
```
pppoestop <Profile>
     Profile          - Profile number to be stopped.
     It should be already running.
```


O <CMD> ppptrace

Syntaxe :
```
ppptrace [on | off]
      Enables or Disables PPP console messages.
```

O <CMD> routedbridge

Syntaxe :
```
routedbridge <interface> <disable> <vpi> <vci>
routedbridge <interface> <enable> <vpi> <vci> -o <-enc encapulation> <-vpn OUI vpnId>
              interface          - interface number
              enable/disable     - enables or disable the bridge module
              vpi                - vpi
              vci                - vci
              -enc encapsulation - encapsulation type LLC/VC
              -vpn <OUI> <vpnId> - Enable VPN encapsulation
                                   OUI   : Organizationally Unique Identifier.
                                   vpnId : VPN Index.
```

O <LIST> pppreset

O <CMD> add
Syntaxe :
```
add $actionNumber $delay $bip
 $actionNumber: 0 ... 9
 $delay:        waiting minutes before perform the action
 $bip:          yes/no
```

O <CMD> del
Syntaxe :
```
del $actionNumber
 $actionNumber: 0 ... 9
```

O <CMD> list
Syntaxe :
```
Action num:  0  Delay:  1320 min  Bip: no
Action num:  1  Delay:   105 min  Bip: yes
Action num:  2  Delay:    14 min  Bip: yes
Action num:  3  Delay:     1 min  Bip: no
```

O <CMD> trace
Syntaxe :
```
trace <on|off>
```

O <LIST> pppresettest

O <CMD> list
Syntaxe :
```
Test       state: off.
PPP        state: off.
PPP unreg state: off.
Hook       state: off.
VoIP       state: off.
```

O <CMD> state
Syntaxe :
```
state $type $value
 $type: test/ppp/voip/hook/unreg
 $value: on/off
```

O <CMD> coef

Syntaxe :
```
coef $value
 $value: 1 .. 1000
```

O <LI ST> relay

O <CMD> list
Syntaxe :
```
Relay Status                  : DISABLE
Maximum Supported Sessions    : 256
Active Sessions               : 0
Session Idle Time(In Seconds): 600

No interfaces are configured.
```

O <CMD> relay
Syntaxe :
```
relay client -o <-if Interface>
relay server -o [<-if Interface>] [<-pvc vpi vci> <-encap
encapsulationtype>]

relay delete -o [<-if Interface>] [<-pvc vpi vci>]
 relay [<enable>] <disable>]
```

O <CMD> relayparams
Syntaxe :
```
relayparams -o -max maximum supported sessions -idletime idletime
```

O <CMD> adsl2link   adsl2link UP[DOWN]
Syntaxe :
```
list <param>
                param - routedbridge (diplays Routed Bridge parameters)
                      - ipoa (diplays IPoA parameters)
```

24)   O <LIST> sntp

O <CMD> sntp
Syntaxe :
```
sntp delete -o -index <index value>
     config -o -ip <Server IP Address>
     config -o -name <Server Domain Name>
     list
     start
     stop
```

O <CMD> timezone_set
Syntaxe :
```
timezoneset <index>  -- sets the timezone
```

O <CMD> timezone_help

Syntaxe :

```
TimeZone Index  Explaination
  1              (GMT-12.00) Eniwetok, Kwajalein
  2              (GMT-11:00) Midway Island, Samoa
  3              (GMT-10:00) Hawaii
  4              (GMT-09:00) Alaska
  5              (GMT-08:00) Alaska Daylight Time
  6              (GMT-08:00) Pacific Time (US& Canada); Tijuana
  7              (GMT-07:00) Pacific Daylight Time (US& Canada); Tijuana
  8              (GMT-07:00) Arizona
  9              (GMT-07:00) Mountain Time (US & Canada)
 10              (GMT-06:00) Mountain Daytime Time (US & Canada)
 11              (GMT-06:00) Central America
 12              (GMT-06:00) Central Time (US & Canada)
 13              (GMT-05:00) Central Daylight Time (US & Canada)
 14              (GMT-06:00) Mexico City
 15              (GMT-05:00) Mexico City Daylight Time
 16              (GMT-06:00) Saskatchewan
 17              (GMT-05:00) Bogota, Lima, Quito
 18              (GMT-05:00) Eastern Time (US & Canada)
 18              (GMT-04:00) Eastern Daylight Time (US & Canada)
 20              (GMT-05:00) Indiana (East)
 21              (GMT-04:00) Atlantic Time (Canada)
 22              (GMT-03:00) Atlantic Daylight Time (Canada)
 23              (GMT-04:00) Caracas, La PazSantiago
 24              (GMT-04:00) Santiago
 25              (GMT-03:00) Santiago Daylight Time
 26              (GMT-03:30) Newfoundland
 27              (GMT-02:30) Newfoundland Daylight Time
 28              (GMT-03:00) Brasilia
 29              (GMT-02:00) Brasilia Daylight Time
 30              (GMT-03:00) Buenos Aires, Georgetown
 31              (GMT-03:00) Greenland
 32              (GMT-02:00) Greenland Daylight Time
 33              (GMT-02:00) Mid-Atlantic
 34              (GMT-01:00) Mid-Atlantic Daylight Time
 35              (GMT-01:00) Azores
 36              (GMT-00) Azores Daylight Time
 37              (GMT-01:00) Cape Verde Is
 38              (GMT-00) Casablanca, Monrovia
 39              (GMT-00) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London
 40              (GMT+01:00) Dublin, Edinburgh, Lisbon, London : Daylight Time
 41              (GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
 42              (GMT+02:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna:
Daylight Time
 43              (GMT+01:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague
 44              (GMT+02:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague :
Daylight Time
 45              (GMT+01:00) Brussels, Copenhagen, Madrid, Paris
 46              (GMT+02:00) Brussels, Copenhagen, Madrid, Paris : Daylight Time
 47              (GMT+01:00) Sarajevo, Skopie, Sofija, Vilnius, Warsaw, Zagreb
 48              (GMT+02:00) Sarajevo, Skopie, Sofija, Vilnius, Warsaw, Zagreb :
Daylight Time
 49              (GMT+01:00) West Central Asia
 50              (GMT+02:00) Adthens, Istanbul, Minsk
 51              (GMT+03:00) Adthens, Istanbul, Minsk: Daylight Time
 52              (GMT+02:00) Bucharest
 53              (GMT+03:00) Bucharest Daylight Time
 54              (GMT+02:00) Cairo
 55              (GMT+03:00) Cairo Daylight Time
```

```
56              (GMT+02:00) Harare, Pretoria
57              (GMT+02:00) Helsinki, Ringa, Talinn
58              (GMT+03:00) Helsinki, Ringa, Talinn :Daylight Time
59              (GMT+02:00) Jeruslam
60              (GMT+03:00) Baghdad
61              (GMT+04:00) Baghdad Daylight Time
62              (GMT+03:00) Kuwait, Riyadh
63              (GMT+03:00) Moscow, St.Peterburg, Volgograd
64              (GMT+04:00) Moscow, St.Peterburg, Volgograd :Daylight Time
65              (GMT+03:00) Nairobi
66              (GMT+03.00) Tehran
67              (GMT+04.00) Tehran Daylight Time
68              (GMT+04:00) Abu Dhabi,Muscat
69              (GMT+04:00) Baku, Tbilisi, Yerevan
70              (GMT+05:00) Baku, Tbilisi, Yerevan :Daylight Time
71              (GMT+04:30) Kabul
72              (GMT+05:00) Ekaterinburg
73              (GMT+06:00) Ekaterinburg Daylight Time
74              (GMT+05:00) Islamabad, Karachi, Tashkent
75              (GMT+05:30) Calcutta, Chennai, Mumbai, New Delhi
76              (GMT+05:45) Kathmandu
77              (GMT+06:00) Almaty, Novosibirsk
78              (GMT+07:00) Almaty, Novosibirsk Daylight Time
79              (GMT+06:00) Astana, Dhaka
80              (GMT+06:00) Sri Jayawardenepura
81              (GMT+06:30) Rangoon
82              (GMT+07:00) Babgkok, Hanoi, Jakarta
83              (GMT+07:00) Krasnoyarsk
84              (GMT+08:00) Krasnoyarsk Daylight Time
85              (GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi
86              (GMT+08:00) Irkutsk, Ulaan Bataar
87              (GMT+09:00) Irkutsk, Ulaan Bataar Daylight Time
88              (GMT+08:00) Kuala Lumpur, Singapore
89              (GMT+08:00) perth
90              (GMT+08:00) Taipei
91              (GMT+09:00) Asaka, Sapporo, Tokyo
92              (GMT+09:00) Seoul
93              (GMT+09:00) Yakutsk
94              (GMT+10:00) Yakutsk Daylight Time
95              (GMT+09:30) Adelaide
96              (GMT+10:30) Adelaide Daylight Time
97              (GMT+09:30) Darwin
98              (GMT+10:00) Brisbane
99              (GMT+10:00) Canberra, Melboune, Sidney
100             (GMT+11:00) Canberra, Melboune, Sidney: Daylight Time
101             (GMT+10:00) Guam, Port Moresby
102             (GMT+10:00) Hobart
103             (GMT+11:00) Hobart Daylight Time
104             (GMT+10:00) Vladivostok
105             (GMT+11:00) Vladivostok Daylight Time
106             (GMT+11:00) Magadan, Solomon Is., New Caledonia
107             (GMT+12:00) Auckland, Wellington
108             (GMT+13:00) Auckland, Wellington :Daylight Time
109             (GMT+12:00) Fiji, Kamchatka, Marshall Is.
110             (GMT+13:00) Nuku'alofa
```

O <CMD> timezone_disp

Syntaxe :
```
TimeZone Index  Explaination
```

```
     39                 (GMT-00) Greenwich Mean Time: Dublin, Edinburgh, Lisbon,
London
```

25) <u>O <LIST> vlan</u>

O <CMD> create

Syntaxe :
```
create <vlan_name> <vlan_id> <vlan mode>
 where vlan_name          - name of the vlan (32 characters)
       vlan_id                   - id of the vlan (2 - 4094)
       vlan_mode             - either bridge or router
```

O <CMD> delete

Syntaxe :
```
delete <vlan_name>
 where vlan_name          - name of the vlan (32 characters)
```

O <CMD> delete8021q

Syntaxe :
```
     ???
```

O <CMD> disable

Syntaxe :
```
disable <vlan_name>
 where vlan_name          - name of a particular vlan (32 characters)
 or    all                - for all vlans
```

O <CMD> disable8021q

Syntaxe :
```
     ...
```

O <CMD> enable

Syntaxe :
```
enable <vlan_name>
 where vlan_name          - name of a particular vlan (32 characters)
 or    all                - for all vlans
```

O <CMD> enable8021q

Syntaxe :
```
8021q has already enabled
```

O <CMD> listport

Syntaxe :
```
listport <port_name/all>
 where port_name          - name of a particular port (32 characters)
```

```
 or    all              - for all ports
exemple :
port name       port vid         rx tag ctrl    ingress filter  gvrp
eth0              1                 all          OFF             OFF
atm1              3                 all          OFF             OFF
atm2              3                 all          OFF             OFF
atm3              3                 all          OFF             OFF
atm4              3                 all          OFF             OFF
```

O <CMD> listvlan

Syntaxe :
```
listvlan <vlan_name/all>
 where vlan_name        - name of a particular vlan (32 characters)
 or    all              - for all vlans
exemple :
listvlan all
vlan name  vlan id vlan mode active/not a. no of ports   port names
default     1      bridged    active    5     eth0, atm1, atm2, atm3, atm4,
stb1        3      bridged    active    5     eth0, atm1, atm2, atm3, atm4,
visio       2      routed     active    1         eth0, vif0
```

O <CMD> portconfig

Syntaxe :
```
portconfig <port_name> -o [-rxtagctrl <all/tagged>] [-pvid <pvid>] [-
ingress <on/off>] [-gvrp<on/off>]
 where port_name        - name of a particular port (32 characters)
    -rxtagctrl <all/tagged>   - allow only tagged or all on port.
                                default is all
    -pvid <pvid>              - port id (1-100). Default is 1
    -ingress <on/off>         - to enable/disable ingress filtering on
                                the port. default value is OFF
     -gvrp <on/off>           - to enable/diable GVRP on the port.
                                default value is OFF
```

O <CMD> qosmapping

Syntaxe :
```
qosmapping <enable/disable>
```

O <LIST> classify

O <CMD> add
Syntaxe :
```
add <vlan_name> <port_name/all> [ -smac <mac_value> | -ethertype <protocol_value> | -
ethertype <protocol_name] ]
 where vlan_name            - name of a particular vlan (32 characters)
      port_name             - name of a particular port (32 characters)
  or  all                   - to apply for all ports
      -smac <mac_value>     - if source mac needs to be added. Format is
                              xx:xx:xx:xx:xx:xx
  or  -ethertype <type_value>  - if ether type by protocol value in hex is to be
                                 added. Format is 0xAAAA or 0XAAAA
  or -ethertype <protocol_name> - if ethertype by protocol name is to be added. format
                                  is string of 32 characters max.
```

The valid list of protocol names can be found using the 'ethertypes' command in
'l2filter'

O <CMD> delete
Syntaxe :
```
delete <filter_id>
 where filter_id          - unique id returned while adding
```

O <CMD> deleteall
Syntaxe :
```
deleteall <vlan_name>
where vlan_name          - name of a particular vlan (32 characters)
```

O <CMD> list
Syntaxe :
```
list <vlan_name/all>
where vlan_name          - name of a particular vlan (32 characters)
 or    all               - for all ports
exemple :
list all
filter id        vlan name        port name        type             value
```

O <LIST> egress

O <CMD> addport
Syntaxe :
```
addport <port_name> <vlan_name> [-adctrl <forbidden/fixed/normal>] [-txtagctrl
<untagged/tagged>]
 where port_name     - name of a particular port (32 characters)
       vlan_name        - name of a particular vlan (32 characters)
-adctrl <forbidden/fixed/normal>  - administration control parameter. Default value is
                                 forbidden
-txtagctrl <untagged/tagged>      - the forwarded packets should be tagged or untagged.
                                 Default value is untagged
```

O <CMD> deleteport
Syntaxe :
```
deleteport <port_name> <vlan_name>
where port_name - name of the port, to be deleted (32 characters)
vlan_name        - name of the vlan, to be deleted from (32 characters)
```

O <CMD> list
Syntaxe :
```
list <vlan_name/all>
 where vlan_name  - name of a particular vlan (32 characters)
 or    all              - for all ports
exemple :
list all
vlan name         port name         tx tag ctrl      tx admin ctrl
default           eth0              untagged         Fixed
default           atm1              untagged         Fixed
default           atm2              untagged         Fixed
default           atm3              untagged         Fixed
default           atm4              untagged         Fixed
stb1              eth0               tagged          Fixed
stb1              atm1              untagged         Fixed
stb1              atm2              untagged         Fixed
```

```
stb1                    atm3            untagged        Fixed
stb1                    atm4            untagged        Fixed
visio                   eth0             tagged         Fixed
```

26) O <LIST> wlan

O <CMD> accesslist
Syntaxe :
    (pas de message)

O <CMD> addstation
Syntaxe :
```
addstation <macaddr>
 Mac address should be specified as xx:xx:xx:xx:xx:xx
```

O <CMD> apname
Syntaxe :
```
apname <name>
```

O <CMD> assocclients
Syntaxe :
    (pas de message)

O <CMD> authentication
Syntaxe :
```
authentication open|shared
```

O <CMD> beacint
Syntaxe :
```
   number should be between 0 and 4095
```

O <CMD> channel
Syntaxe :
```
channel <number>
```

O <CMD> defwepkey
Syntaxe :
```
defaultwepkey <number>
   number should be between  1 and 4, inclusive
```

O <CMD> delstation
Syntaxe :
```
delstation <macaddr>
```

```
Mac address should be specified as xx:xx:xx:xx:xx:xx
```

O <CMD> dtim

Syntaxe :
```
<value> can be between 1-65535
```

O <CMD> flushlist

Syntaxe :
```
     (Détruit la liste)
```

O <CMD> fragthresh

Syntaxe :
```
   Values should be even numbers In  the range of 256 to 2346
```

O <CMD> macaccesstype

Syntaxe :
```
macaccesstype permit/deny
```

O <CMD> macfiltering

Syntaxe :
```
macfiltering enable/disable
```

O <CMD> mode

Syntaxe :
```
mode G_ONLY|MIXED
```

O <CMD> preamble

Syntaxe :
```
preamble auto|short|long
```

O <CMD> radio

Syntaxe :
```
radio [<on/off>]
```

O <CMD> rate

Syntaxe :
```
rate <rate>
   Sets the Trasnmit rate. <rate> can be:
auto|1|2|5|11|6|9|12|18|24|36|48|54
```

O <CMD> restdef

Syntaxe :

(rien à l'affichage)

O <CMD> rtsthresh

Syntaxe :
```
number should be between 0 and 3000
```


O <CMD> ssid

Syntaxe :
```
ssid -o -n <name> -h <yes or no>
```


O <CMD> statistics

Syntaxe :

(rien à l'affichage)

O <CMD> status

Syntaxe :
```
Mode is MIXED
SSID is Wanadoo_xxxx
SSID Hide disabled
Channel is 10
Fragmentation Threshold is 2346
RTS Threshold is 2347
Beacon Interval is 100
Current Transmit Rate: AUTO
Authentication type is open
WEP Enabled
WEP key is 128 bit type.
WEP key 1: xx xx xx xx xx xx xx xx xx xx xx xx xx
WEP key 2: 64 65 66 61 75 6c 74 5f 6b 65 79 5f 32
WEP key 3: 64 65 66 61 75 6c 74 5f 6b 65 79 5f 33
WEP key 4: 64 65 66 61 75 6c 74 5f 6b 65 79 5f 34
Default WEP key number is 1
WPA is Disabled
Preamble is Auto
DTIM is 3
Mac Filtering is Enabled
Mac Access type is Permit
```


O <CMD> wepkey128_1

```
wepkey128_1 <byte0> <byte1> <byte2> <byte3> <byte4> <byte5> <byte6>
<byte7> <byte8> <byte9> <byte10> <byte11> <byte12>
   Sets the key 1 for 128bit encription.
```

O <CMD> wepkey128_2

Syntaxe :
```
wepkey128_2 <byte0> <byte1> <byte2> <byte3> <byte4> <byte5> <byte6>
<byte7> <byte8> <byte9> <byte10> <byte11> <byte12>
   Sets the key 2 for 128bit encryption
```

O <CMD> wepkey128_3

Syntaxe :
```
wepkey128_3 <byte0> <byte1> <byte2> <byte3> <byte4> <byte5> <byte6>
<byte7> <byte8> <byte9> <byte10> <byte11> <byte12>
   Sets the key 3 for 128bit encription
```

O <CMD> wepkey128_4

Syntaxe :
```
wepkey128_4 <byte0> <byte1> <byte2> <byte3> <byte4> <byte5> <byte6>
<byte7> <byte8> <byte9> <byte10> <byte11> <byte12>
    Sets the key 4 for 128bit encription
```

O <CMD> wepkey64_1

Syntaxe :
```
wepkey64_1 <byte0> <byte1> <byte2> <byte3> <byte4>
  Sets the key1 for 64bit encryption
```

O <CMD> wepkey64_2

Syntaxe :
```
wepkey64_2 <byte0> <byte1> <byte2> <byte3> <byte4>
  Sets the key2 for 64bit encryption
```

O <CMD> wepkey64_3

Syntaxe :
```
wepkey64_3 <byte0> <byte1> <byte2> <byte3> <byte4>
  Sets the key3 for 64bit encryption
```

O <CMD> wepkey64_4

Syntaxe :
```
wepkey64_4 <byte0> <byte1> <byte2> <byte3> <byte4>
  Sets the key4 for 64bit encryption
```

O <CMD> wepmode

Syntaxe :
```
wepmode <mode>
    Sets the WEP mode to Disable (0) or 64 Key length or 128 key length
```

O <CMD> wl

Syntaxe :
```
wl -o command [args ...]
```


O <LIST> wpa

A <CMD> status
Syntaxe :
```
WPA is Disabled
```

A <CMD> wpa_enable
Syntaxe :
```
      (active wpa)
```

A <CMD> wpa_disable
Syntaxe :
```
      (désactive wpa)
```

27)   O <LIST> wpost

O <CMD> off
Syntaxe :
```
      wpost is OFF
```


O <CMD> on
Syntaxe :
```
      wpost is ON
```


O <CMD> post
Syntaxe :
```
HTTP return code 204
```


O <CMD> trace
Syntaxe :
```
Trace level is 0000
```


O <CMD> url
Syntaxe :
```
URL is http://maj.wanadoo.fr:80/servlets/maj
```


6. Ls sur un firmwware 220142

[root @ home]$ ls

A <CMD> reboot
O <CMD> date
O <CMD> version

O <CMD> showver   nouveau !
A <LIST> ipqos
O <CMD> list
O <CMD> stats
A <CMD> ifconfig
O <CMD> route
A <CMD> bitmap
O <LIST> sndcp
A <CMD> save
A <CMD> erase
O <LIST> bridge
O <LIST> bt
A <LIST> ethernet
A <LIST> rarpd
O <LIST> arp
A <LIST> auth
A <LIST> logger
A <LIST> snmp
A <LIST> atm
O <LIST> adsl
A <CMD> dhcp
O <LIST> sntp
O <LIST> dhcpserver
A <CMD> dhcpr
A <LIST> dns
A <LIST> igmp
O <LIST> wlan
O <LIST> relayvoice
O <LIST> pstnclass
O <LIST> http
O <LIST> rip
O <LIST> h323
A <LIST> rtp   nouveau !
O <LIST> vlan
O <LIST> acf
O <LIST> wpost
O <CMD> mread
O <CMD> mwrite
O <CMD> memshow
O <CMD> aread
O <CMD> awrite
O <CMD> apregdump
[root @ home]$

1) A <LIST> rtp

A <CMD> config

Syntaxe :
```
config MinPort MaxPort.
```

O <CMD> listports

Syntaxe :
```
MinPort : [44000]
MaxPort : [49000]
```

O <CMD> rrstats

Syntaxe :
```
SessId    FromIP        CumLost   Jitter  PktsRcvd        OctetsRcvd
```

O <CMD> srstats

Syntaxe :
```
SessId    IPAddr        RTPPort    PktsSent OctetsSent LastSRTime
```

2) O <CMD> showver

Syntaxe :

```
showver [options]
options can be one or more option (for instance: showver -boot -app1)
option =
 -h   : prints this message (used lonely)
 -all : shows infos of all parts
 -fsn : shows factory serial number
 -boot : shows boot version
 -app1 : shows application 1 version
 -app2 : shows application 2 version
 -apps <=> -app1 -app2
 -run  : shows running application (app1 or app2)
 -dsl1 : checks L1 code 1 integrity
 -dsl2 : checks L1 code 2 integrity
 -dsls <=> -dsl1 -dsl2
 -cmv1 : lists cmv1
 -cmv2 : lists cmv2
 -cmvs <=> -cmv1 -cmv2
 -deflist  : lists deflist1
 -deflist2 : lists deflist2
 -deflists <=> -deflist -deflist2
```

Exemple :
[root @ home]$ **showver -all**

######## Factory Serial Number ########

FSN : 441129857
Flash dump
0xbfc00000 : 0x01b90512 0x0039ffff

############# Boot version ############
ERROR : used boot seems to be an old one!!!.
It does not supply informations to application.

############# Running Appli ############
Running appli : App 2

############# App1 version ############
App1 checksum   : OK
App1 description : AD6843 application (Sagem3202_220108)
App1 version   : 0
App1 revision   : 7
App1 spare[0]   : 0
App1 spare[1]   : 0
App1 spare[2]   : 0
App1 spare[3]   : 0

################ Dsl1 ###############
Dsl1 checksum   : OK
Dsl1 description : STRATIPHY ANEXA

################ CMV1 ###############
Cmv1 checksum   : OK
CMV Set : 3
Group: 5, Address: 13, offset: 0, data: 0x00000001
Group: 5, Address: 0, offset: 0, data: 0x00000004
Group: 1, Address: 0, offset: 0, data: 0x00000002

############# App2 version ############
App2 checksum   : OK
App2 description : AD6843 application (Sagem3202_220142)
App2 version   : 0
App2 revision   : 8
App2 spare[0]   : 0
App2 spare[1]   : 0
App2 spare[2]   : 0
App2 spare[3]   : 0

################ Dsl2 ###############
Dsl2 checksum   : OK
Dsl2 description : STRATIPHY ANEXA

################ CMV2 ###############
Cmv2 checksum   : OK
CMV Set : 3
Group: 5, Address: 13, offset: 0, data: 0x00000001
Group: 5, Address: 0, offset: 0, data: 0x00000004
Group: 1, Address: 0, offset: 0, data: 0x00000002

############# DEFLIST ############
Deflist1 checksum : OK

"home","auth","modifyuser admin -o -services ftp,http -permissions admin","modifyuser root -o -services ftp,cli -permissions admin","home","wlan","channel 10","wepmode 128","home","atm","vcadd 8 35 ubr aal5 -o -peak 377","vcadd 8 38 nrtvbr aal5 -o -peak 302 -avg 302 -mbs 75","vcadd 8 39 cbr aal5 -o -peak 75","vcadd 8 40 rtvbr aal5 -o -peak 1","vcadd 8 41 rtvbr aal5 -o -peak 1","home","sndcp","pppoestop 0","pppoe 0 -o -encap llc -auth CHAP -vpi 8 -vci 35 -mode direct -nat enable","home","bridge","group eth0 atm1 -o -if atm2 -if atm3 -if atm4","pvc add atm1 8 38 llc","pvc add atm2 8 39 llc","pvc add atm3 8 40 llc","pvc add atm4 8 41 llc","bridge enable","home","vlan","enable8021q","create stb1 3 bridge","egress","addport eth0 stb1 -adctrl fixed -txtagctrl tagged","addport atm1 stb1 -adctrl fixed -txtagctrl untagged","addport atm2 stb1 -adctrl fixed -txtagctrl untagged","addport atm3 stb1 -adctrl fixed -txtagctrl untagged","addport atm4 stb1 -adctrl fixed -txtagctrl untagged","exit","enable stb1","portconfig atm1 -o -pvid 3","portconfig atm2 -o -pvid 3","portconfig atm3 -o -pvid 3","portconfig atm4 -o -pvid 3","exit","vlan","enable8021q","create visio 2 router","egress","addport eth0 visio -adctrl fixed -txtagctrl tagged","exit","enable visio","home","acf","intf ppp0","server -m SYSF","loadint 240 0","server -d urlc 193.252.20.34","server -d urls gw.ftp.sagem.com","home","h323","tunnel off","sendGRQ yes","dsptimer 5","voice","countryopt -o -c FRANCE","voiceopt -o -vad off -plc on -ec on -t 22","home","ifconfig -o lo0 inet 127.0.0.1 netmask 255.0.0.0","ifconfig -o eth0 inet 192.168.1.1 netmask 255.255.255.0","ifconfig -o usb0 inet 192.168.2.1 netmask 255.255.255.0","ifconfig -o wlan0 inet 192.168.3.1 netmask 255.255.255.0","ifconfig -o bth0 inet 192.168.4.1 netmask 255.255.255.0","ifconfig -o vif0 inet 192.168.5.1 netmask 255.255.255.0","ifconfig -o vif1 inet 192.168.6.1 netmask 255.255.255.0","home","dhcpserver","stop","subnet usb0 add -o -subnet 192.168.2.0 -netmask 255.255.255.0 -startip 192.168.2.10 -endip 192.168.2.10","subnet wlan0 add -o -subnet 192.168.3.0 -netmask 255.255.255.0 -startip 192.168.3.10 -endip 192.168.3.20","subnet bth0 add -o -subnet 192.168.4.0 -netmask 255.255.255.0 -startip 192.168.4.10 -endip 192.168.4.20","subnet vif0 add -o -subnet 192.168.5.0 -netmask 255.255.255.0 -startip 192.168.5.10 -endip 192.168.5.20","start","home","ipqos","policy set usb0 ppp0 0 allow","policy set wlan0 ppp0 0 allow","policy set bth0 ppp0 0 allow","policy set vif0 ppp0 0 allow","policy set vif1 ppp0 0 allow","setwt 20 0 0 0 0 80 0 0","attach ppp0 -o linkspeed 155 admission no borrow yes ackpriority disable","createtc dfmark 5","policy set ph0 ppp0 0 allow tc 1","policy set ppp0 ppp0 0 allow dport 1720 tc 1","spoof usb0 trusted","spoof wlan0 trusted","spoof bth0 trusted","spoof vif0 trusted","spoof vif1 trusted","home"

7. Ls sur un firmwware 220160

[root @ home]$ ls

A <CMD> reboot
O <CMD> date
O <CMD> version
O <CMD> show   modifié
A <LIST> ipqos
O <CMD> list
O <CMD> stats
A <CMD> ifconfig
O <CMD> route
A <CMD> bitmap
O <LIST> sndcp
A <CMD> save
A <CMD> erase
O <LIST> bridge
O <LIST> bt

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A <LIST> ethernet
A <LIST> rarpd
O <LIST> arp
A <LIST> auth
A <LIST> logger
A <LIST> snmp
A <LIST> atm
O <LIST> adsl
O <LIST> usbhost                    nouveau
O <CMD>  usb                        nouveau
O <CMD>  rndis                       nouveau
A <CMD>  dhcp
O <LIST> sntp
O <LIST> dhcpserver
A <CMD>  dhcpr
A <LIST> dns
A <LIST> igmp
O <LIST> wlan
O <LIST> relayvoice
O <LIST> pstnclass
O <LIST> http
O <LIST> rip
O <LIST> h323
A <LIST> rtp
O <LIST> vlan
O <LIST> acf
O <LIST> wpost
O <CMD>  mread
O <CMD>  mwrite
O <CMD>  memshow
O <CMD>  aread
O <CMD>  awrite
O <CMD>  apregdump
[root @ home]$
```

3) LIST> usbhost

O <CMD> rdsr
>   **Syntaxe :**
>   rdsr
>   HPI STATUS REGISTER = 0x30

O <CMD> wraddr
>   **Syntaxe :**
>   wraddr <addr>
>   addr = 0 - ffff (hexadecimal)

O <CMD> wreldata
>   **Syntaxe :**
>   wreldata <data>
>   ata = 0 - ffff (hexadecimal)

O <CMD> rdeldata
>   **Syntaxe :**
>   rdeldata

Data = 0x0

O <CMD> wrdata
Syntaxe :
wrdata <addr> <data>

addr = 0 - ffff (hexadecimal)
data = 0 - ffff (hexadecimal)

O <CMD> memget
Syntaxe :
memget <addr> <nb>
addr = 0 - ffff (hexadecimal)
nb   = 0 - 65535 (decimal)

O <CMD> wrmlbx
Syntaxe :
wrmlbx <data>
data = 0 - ffff (hexadecimal)

O <CMD> rdmlbx
Syntaxe :
rdmlbx
Mailbox Data = 0x0

O <CMD> rdint
Syntaxe :
rdint
USBH Interrupt = 0x1 (0x1:off 0x0:on)

O <CMD> wrctrlreg
Syntaxe :
wrctrlreg <ctrl_reg_addr> <ctrl_reg_value> <ctrl_reg_logic>

ctrl_reg_addr = 0 - ffff (hexadecimal)
ctrl_reg_value = 0 - ffff (hexadecimal)
ctrl_reg_logic = 0,1,2 {0:direct write, 1:AND the register value, 2:OR the register value}

O <CMD> rdctrlreg
Syntaxe :
rdctrlreg <ctrl_reg_addr>
ctrl_reg_addr = 0 - ffff (hexadecimal)

O <CMD> memset
Syntaxe :
memset <mem_addr> <length> <mem_value>
mem_addr = 0 - ffff (hexadecimal)
length : size of buffer in byte (decimal)
mem_value : a 4 bytes word (hexadecimal)

O <CMD> rsthusb
Syntaxe :
rsthusb <port_nb> <time_reset>
port_nb : 0, 1, 2 or 3 (decimal)
time_reset : time interval in ms (decimal) must be >= 10ms

O <CMD> dwiw

Syntaxe :

dwiw <chip_addr> <addr> <length> <endpoint>

Do What I Want : is used to try something defined at debug moment

chip_addr, addr : (hexadecimal)

length, endpoint : (decimal)

O <CMD> exe_td

Syntaxe :

exe_td <TD_addr>

TD_addr : addr of TD (hexadecimal)

O <CMD> prep_td

Syntaxe :

prep_td <TD_addr>

TD_addr : addr (in controller memory) where TD is stored (hexadecimal)

O <CMD> sendb

Syntaxe :

sendb <buff_addr> <buff_length> <sending_state>

buff_addr : addr (in controller memory) of buffer (hexadecimal)

buff_length : buffer length <= 0x3ff (hexadecimal)

sending_state : 1 (send buffer) or 0 (don't send buffer) (decimal)

O <CMD> rst

Syntaxe :

rst

hard resets the host controller

4) O <CMD> usb

Syntaxe :

usb <number>

5) O <CMD> rndis

Syntaxe :

rndis <number>

[root @ home]$rndis -help

Retourne : rndiscmd stub