Guide to
CLI command of RS1010

V1.00

July.2013

Revision History

Version	Date	Description
V1.00	2013-7-2	

Table of Contents

1 General Description

This document is intended to instruct in the basics configuration and maintenance of RS1010 Prior experience with communication knowledge will be great helpful to understand this document but is not indispensable.

2 Access mode

There are two ways involved in managing RS1010 One is by RS232 interface, the other is by telnet.

The RS232 connection operates at 19200 baud, 8 data bits, 1 stop bit and no parity. Initially, the IP address, gateway, subnet mask are set in this mode.

When placed in remote, RS1010 can be accessed through a telnet connection as well. In this mode, the IP address, user name and password should be Configured via RS232 interface.

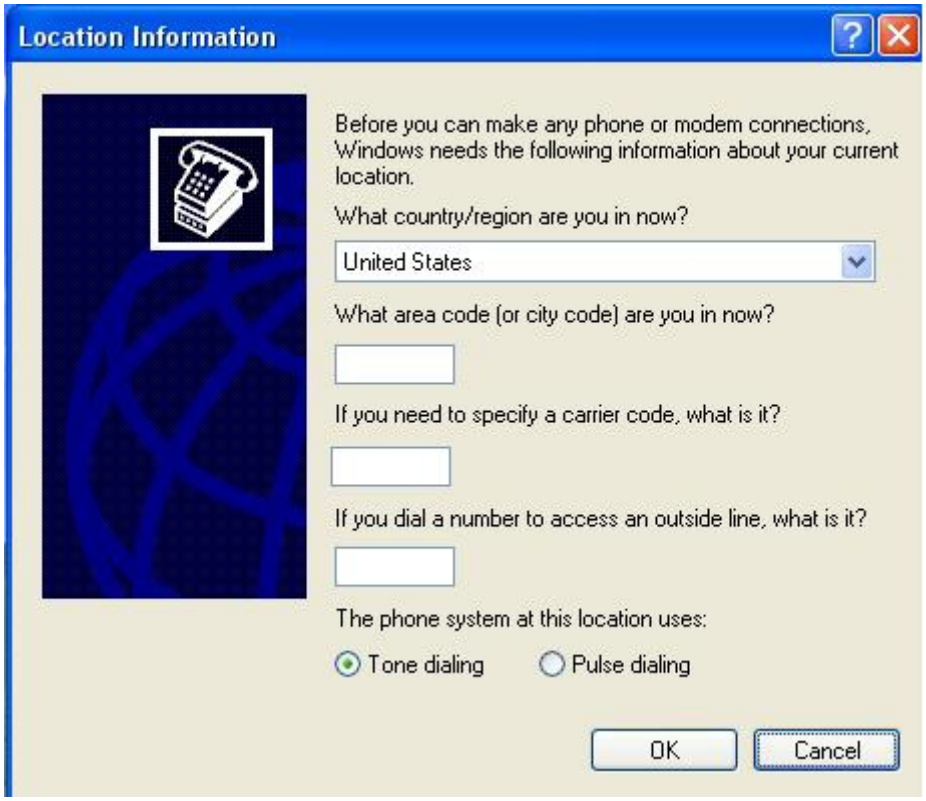
The device can also support telnet access across routers. In this way, the Gateway, Subnet mask, IP address should be set correctly.

3 How to access the interface

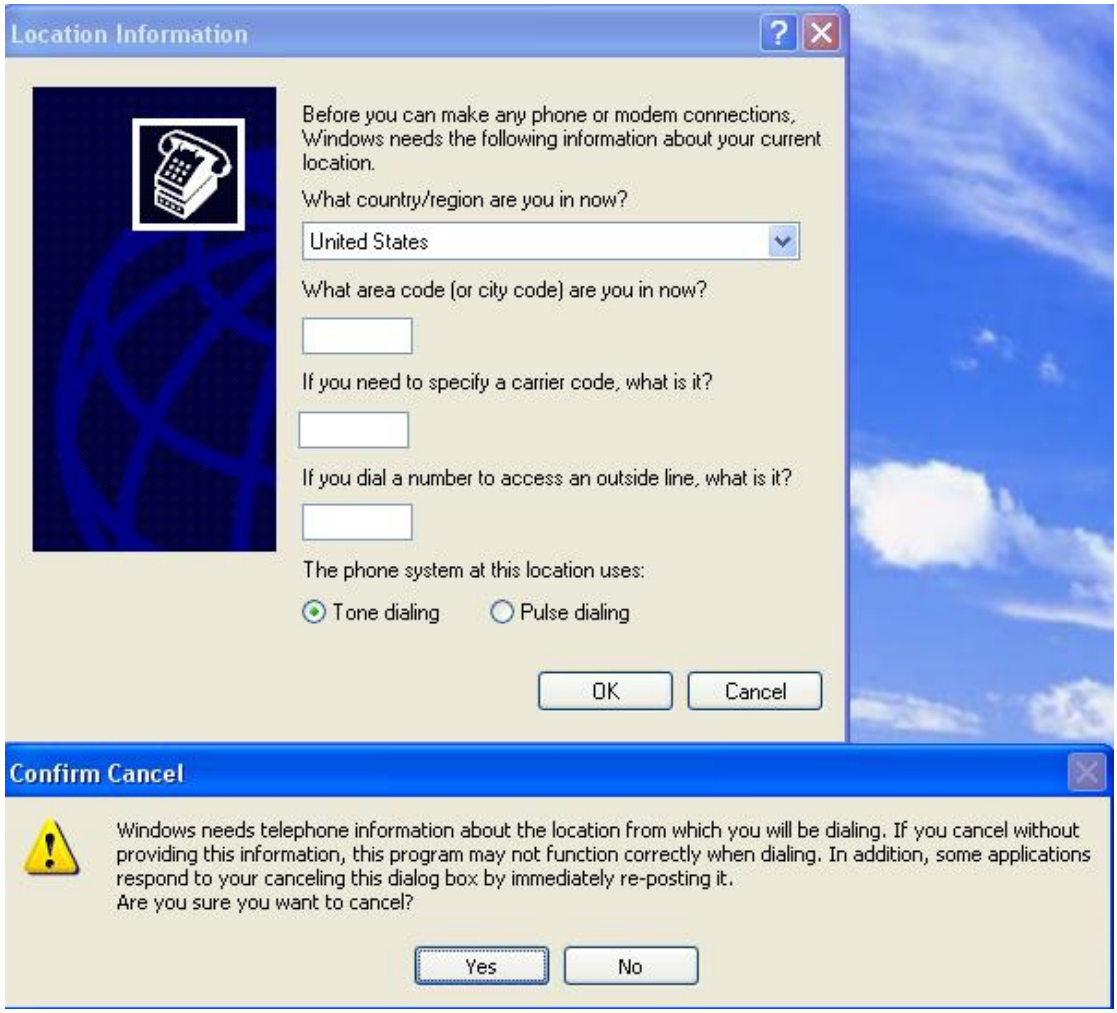
3.1 BY RS232 INTERFACE

3.1.1 Set Hyper Terminal

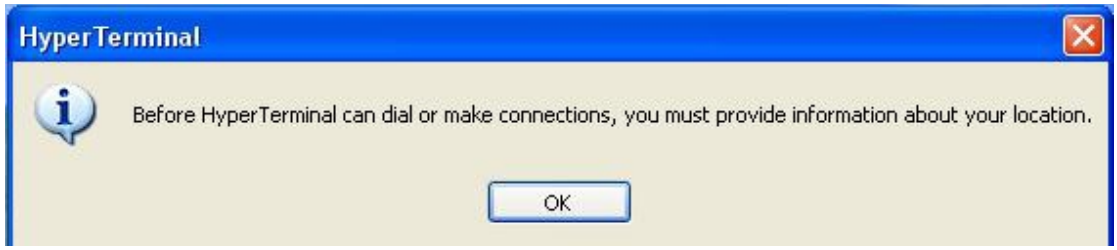
3.1.2 Click "Cancel"



3.1.3 Click "Yes"

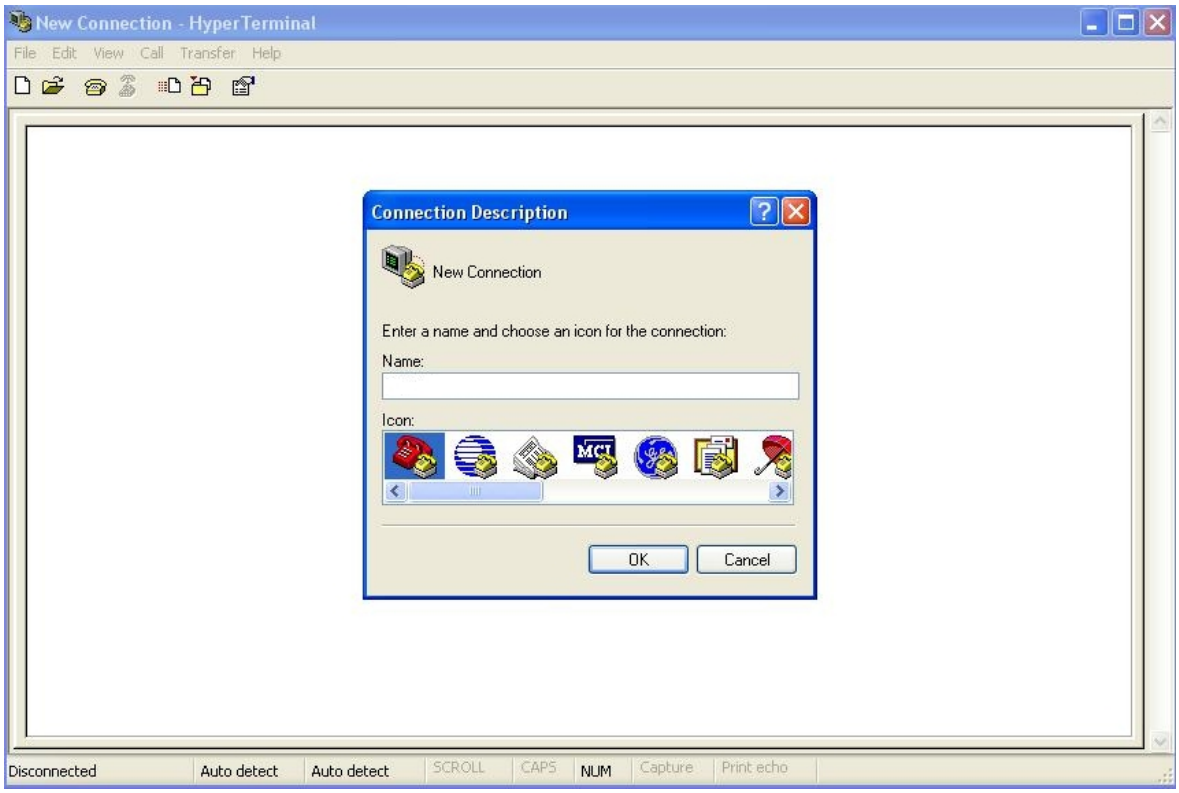


3.1.4 Click "OK"

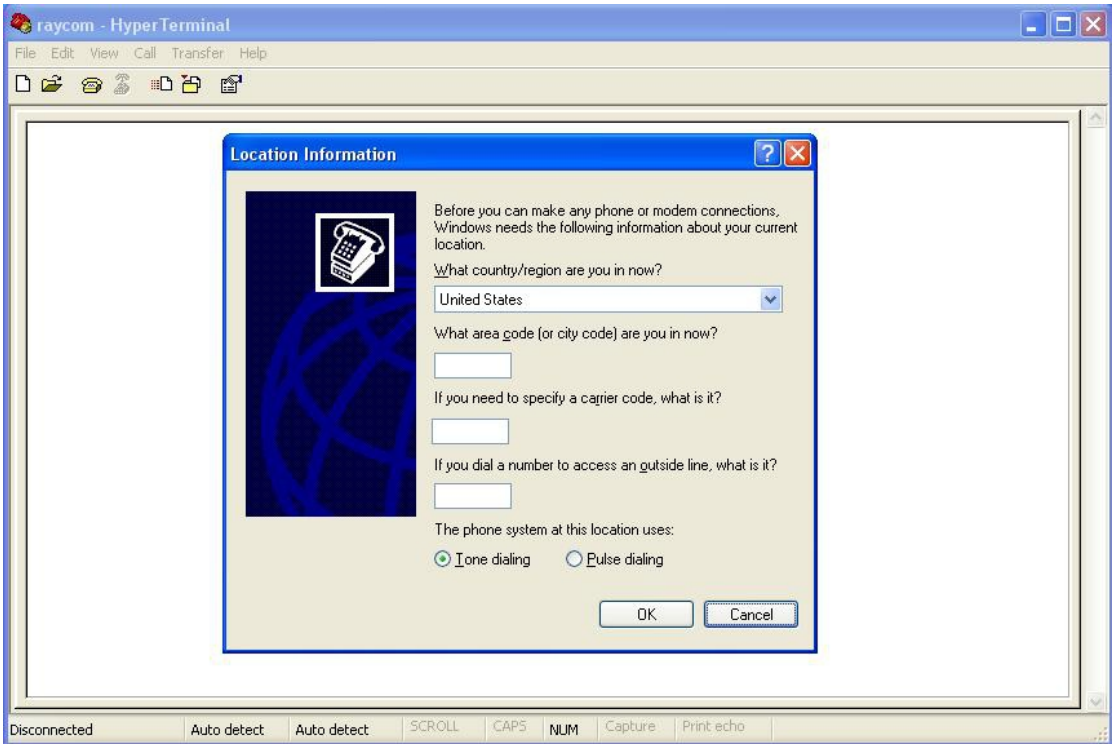


3.1.5 Name:

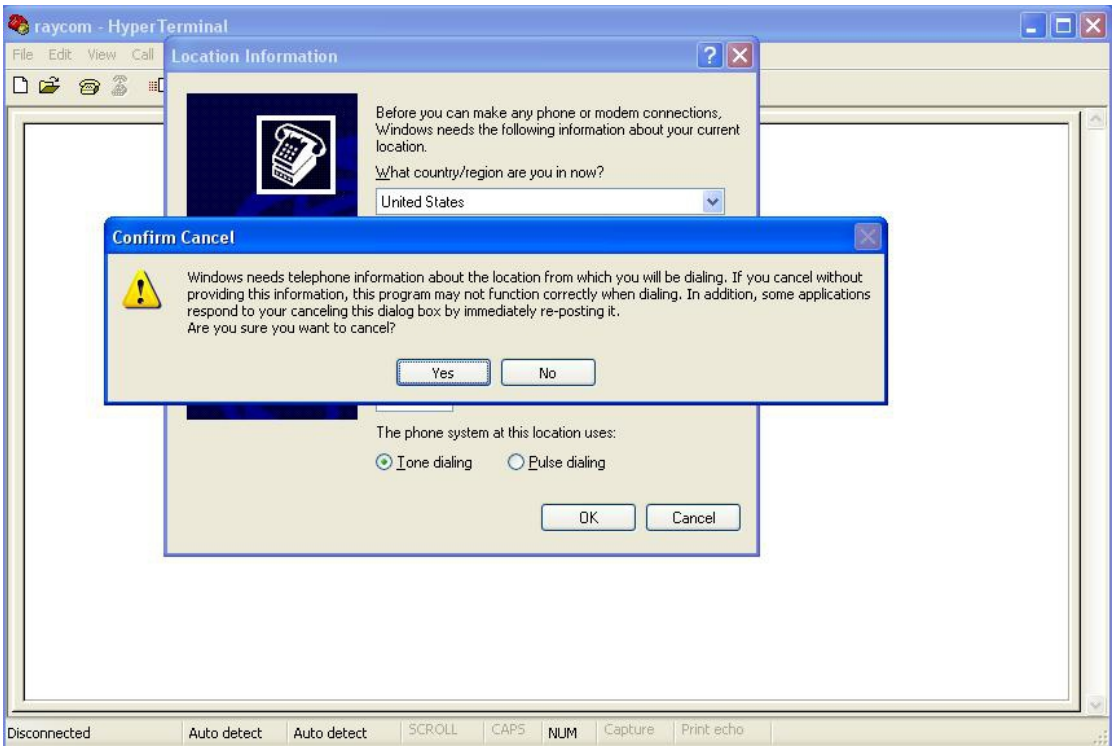
You can use number and letter as name. eg.“abc””122”, then point OK.



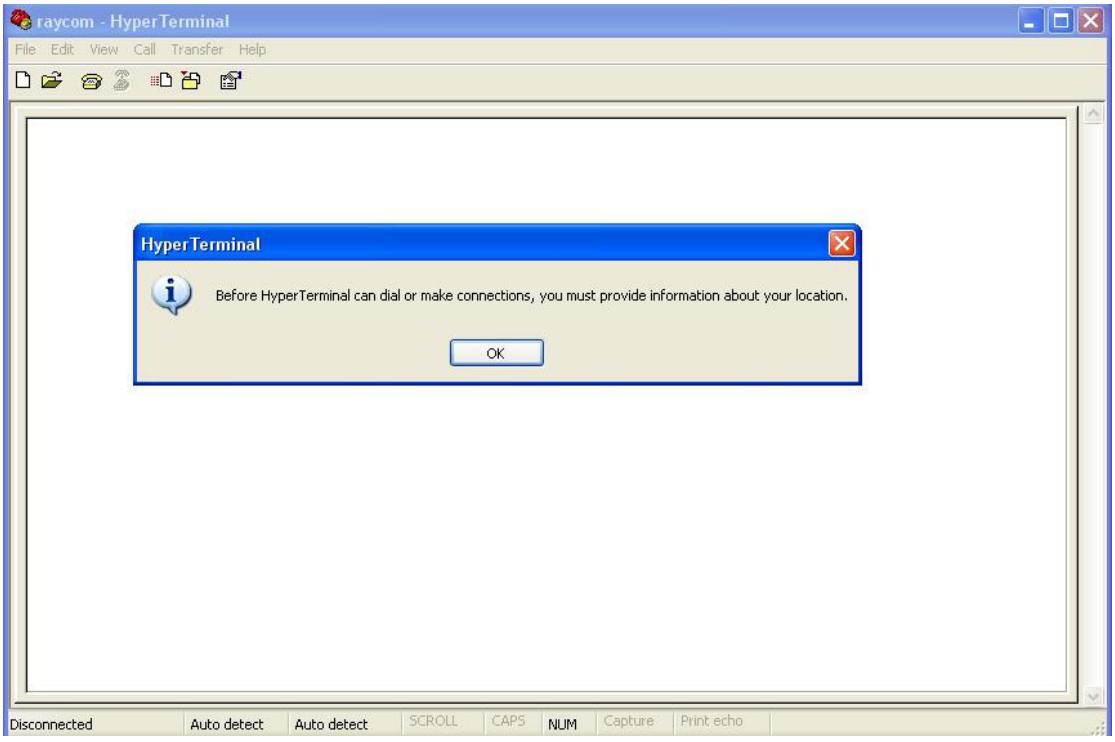
3.1.6 Click "Cancel"



3.1.7 Click "Yes"

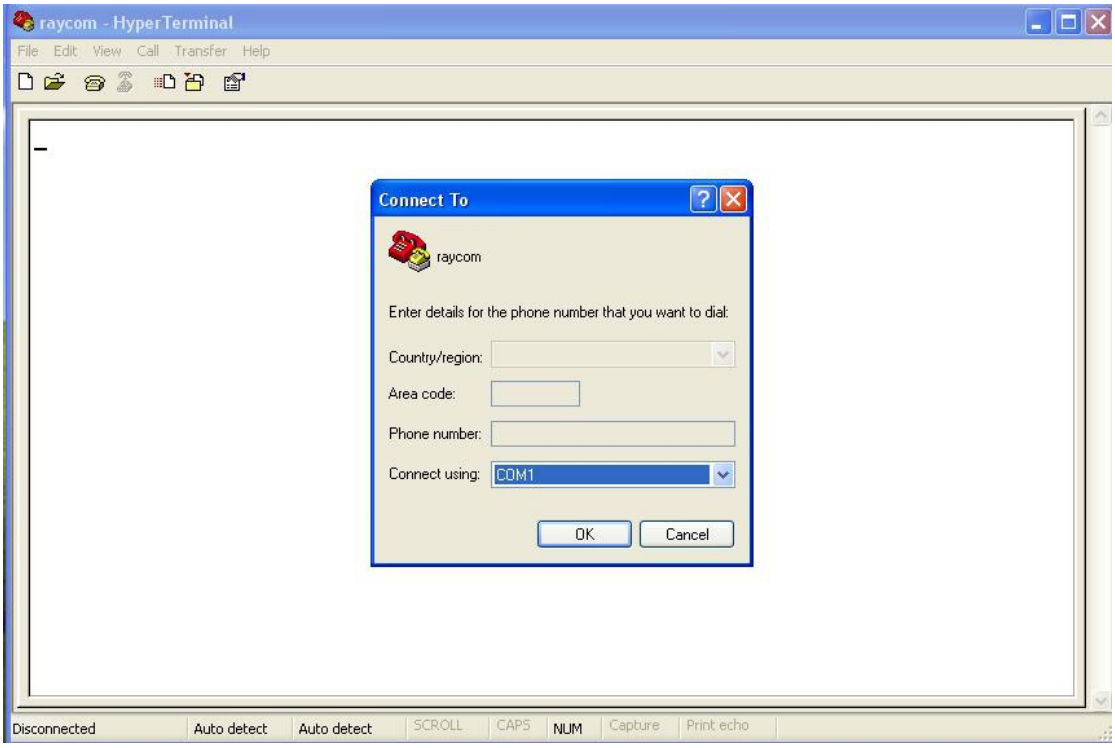


3.1.8 Click "OK"

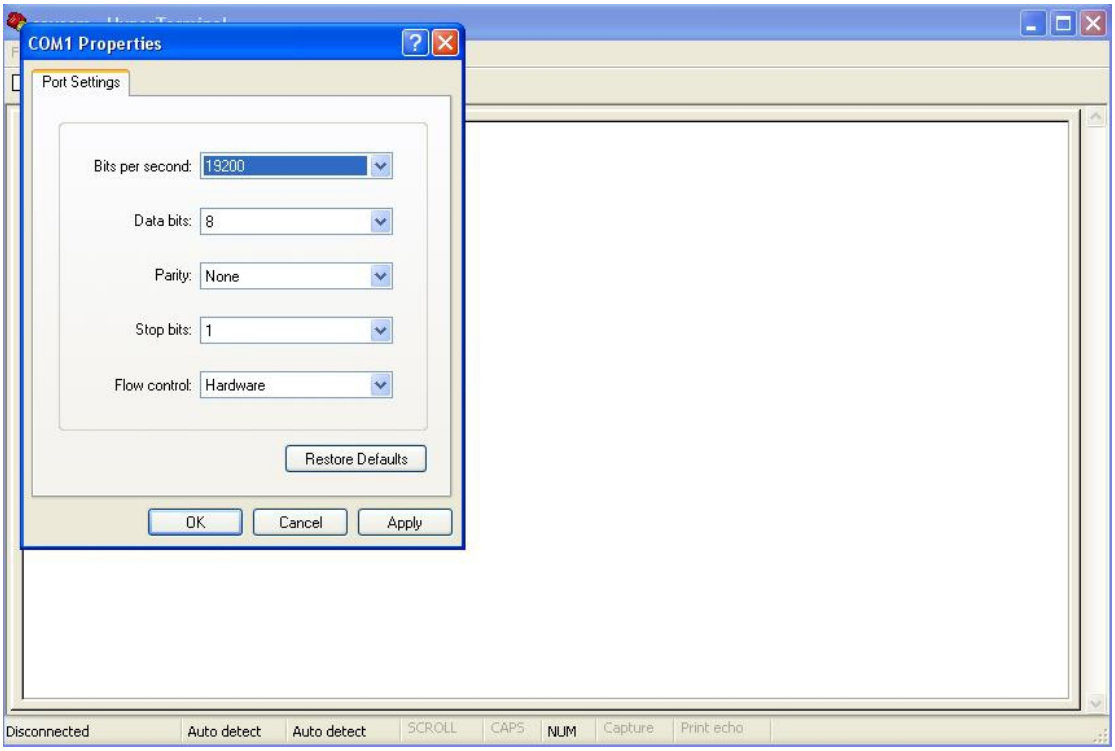


3.1.9 Choose port:

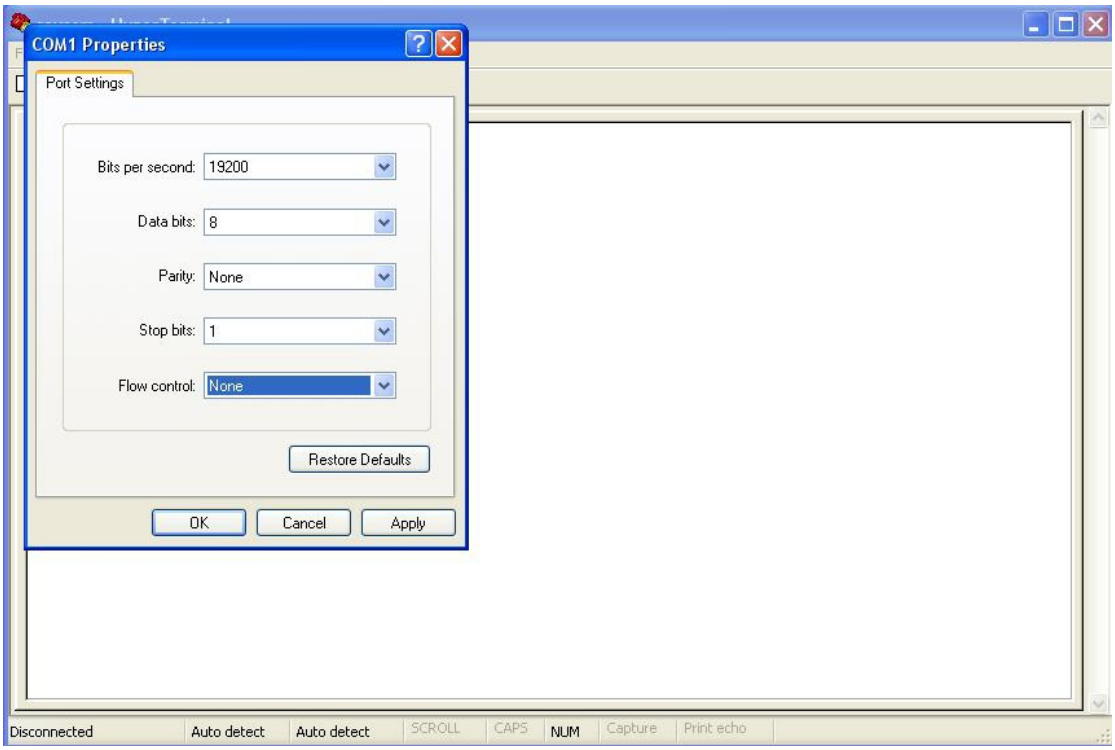
Choose the port which connects equipment with pc via serial line.click "ok"



3.1.10 Choose Bits per second:19200



3.1.11 Choose Flow control: None; click "OK"



3.1.12 The CLI interface

3.1.13 Press "Enter"

3.2 BY TELNET

You should Input the actual IP address of the device, username and password.

Type ‘user’ for Username and password, then press enter

4 How to use CLI command

4.1 CLI Command List

device>?

Command Description

========== ==========

----------System commands----------

?/help View the list of system commands .

showsysinfo View the system information.

reset Shutdown and reboot the system.

setdefault Set the configuration to default.

setfactorydefault Set the configuration to factory default.

setip Configure the IP Address.

showip View the IP Address.

setmask Configure the Subnet Mask.

showmask View the Subnet Mask.

showneid View the NeId of the device.

setgw Configure the Gateway Address.

showgw View configured Gateway Address.

setmac Configure the MAC Address.

showmac View the MAC Address.

Please press "Enter" to continue.....

----------System commands----------

setsnmpget Configure SNMP READ/GET/GETNEXT community.

showsnmpget View configured SNMP READ/GET/GETNEXT community.

setsnmpset Configure SNMP WRITE/SET community.

showsnmpset View configured SNMP WRITE/SET community.

setforward Configure system RS232 port forwarding enable/disable.

showforward View system RS232 port forwarding enable/disable.

settime Configure system time.

showtime View system time.

adduser Add a user to TELNET.

deluser Delete a user from TELNET .

showuser View information of TELNET users.

Please press "Enter" to continue.....

----------Optical commands----------

settu12order Configure TU12 order.

showtu12order View TU12 order.

showfreetu12 View free TU12 of optical port.

setj0mode Configure the valid J0 overhead mode of optical port.

setohj0 Configure J0 overhead send/expect value of optical port

setohj1 Configure J1 overhead send/expect value of optical port

setc2expect Configure C2 overhead expect value of optical port.

setoh Configure other overhead send value of optical port.

showoh View the overhead status of optical port.

setals Enable/Disable ALS, and configure ALS work mode.

showals View ALS configuration of optical port.

manualals Manual laser restart when ALS is enabled.

showoptddminfo View the information of optical ports.

showoptalarm View the alarm of optical port.

showvc4perform View the vc4 performance information.

showoptalarmhistory View the alarm history of optical port.

Please press "Enter" to continue.....

----------E1 commands----------

addxc Create cross-connects (XC) of service card.

delxc Delete configured cross-connects (XC) of service card.

delallxc Delete all the cross-connect.

showxc View the configured cross-connects.

setactive Enable/Disable activity of the path.

setprotect Configure the protection status of the path.

setrecovertime Configure the recovering time of protection .

showrecovertime View the recovering time of protection .

switchtu12 Manually switch telecom-bus.

showactive View the active path.

showprotect View the protection status of the path.

showswitch View if path is set to manual protection mode.

showe1alarm View the alarm of the E1 tributary.

showtu12perform View the TU12 performance information.

showe1alarmhistory View the alarm history of E1 tributary.

Please press "Enter" to continue.....

----------EOS commands----------

setvcg Configure VCG protocol information of MSTP.

setv5k4 Configure transmit and expect value of V5 , K4 in VCG.

showvcg View VCG protocol information of MSTP.

showvcat View the SQ,CTRL of VCAT members.

enableeth Enable or Disable Ethernet port.

setportmode Configure Ethernet port mode.

seteth Configure Ethernet port.

showeth View Ethernet port configuration.

setporttable Configure the port based VLAN members of Ethernet port.

envlan Enable 802.1Q VLAN mode.

disvlan Disable 802.1Q VLAN mode.

addvlan Add new 802.1Q based VLAN to VLAN table.

delvlan Delete a configured 802.1Q based VLAN from VLAN table.

setpvid Configure Ethernet port VLAN ID and VLAN priority.

showvlan View VLAN table, VLAN ID, VLAN members and VLAN status.

showeosalarm View alarms of EOS.

showeosalarmhistory View the alarm history of EOS.

showethperform View the performance of the Ethernet.

clearperform Clear the performance of E1, Ethernet and optical port.

clearalarmhistory Clear the history information of alarm.

Please press "Enter" to continue.....

----------EOS commands----------

setmacage Configure the MAC address lookup table aging function.

setstormfilter Enable/disable broadcast storm filtering function.

setmaxpacket Configure the maximum packet size (1536\1552 bytes).

setethloop Configure the Loop-back of Ethernet port.

setethals Enable/Disable ALS, and configure ALS work mode.

manualethals Manual laser restart when ALS is enabled.

setperformmode Configure Ethernet performance count mode packets\bytes
showmacage View the aging timer of MAC address lookup table.
showstormfilter View the configuration of broadcast storm filtering.
showmaxpacket View maximum packet size configured(1536\1552 bytes).
showethloop View the Ethernet port Loop-back status.
showethals View Auto Laser Shut status of Ethernet optical port.
showperformmode View Ethernet performance count mode packets\bytes.
showethddminfo View Ethernet optical port information.

Please press "Enter" to continue.....
----------EOS commands for only XS060----------
setvlanmode Configure VLAN mode.
setqinqtpid Configure Tag Protocol Identifier of QINQ.
setqinqport Configure QINQ ports.
setporttag Configure tag on the packet of Ethernet port.
showqinq View the configuration of QINQ.
showporttag View tag information of Ethernet ports.

Please press "Enter" to continue.....
----------ETS\EXM commands----------
setets Configure the application Enable/Disable of ETS1,ETS2.
showets View the application Enable/Disable of ETS 1, ETS 2.
setexm Configure the application mode of EXM 1 , EXM 2.
showexm View the application Enable/Disable of EXM 1, EXM 2.
addexmxc Create cross-connect of the EXM path in "EXM_IN" mode.
delexmxc Delete cross-connect of EXM path in "EXM_IN " mode.
showexmxc View cross-connect of EXM path in "EXM_IN" mode.
showexmalarm View the EXM alarm information.
showexmalarmhistory View the alarm history of EXM.

Please press "Enter" to continue.....

```
------------------------------SEC commands--------------------------------
showcurrentclock        View current clock status.
setclocksource          Configure clock source priority(1-6).
setclockmode            Configure clock force mode.
sett21source            Configure T21 source.
sett3x                  Configure T31/T32 work mode and SSM value.
sett41                  Configure T41 source, work mode and SSM enable/disable.
manualt41               Manually configure T41 enable and SSM value.
setssm                  Enable/Disable SSM.
setfreqcheck            Enable/Disable frequency detection.
setrestoretime          Configure the confirming time after clock restore.
showclockconfig         View current clock configuration.
showsecalarmhistory     View the alarm history of current SEC.

Please press "Enter" to continue.....

------------------------------DCC commands--------------------------------
setdccmode              Configure DCC mode, and enable/disable DCC access.
setohsrcdir             Configure the source direction of other overheads.
showdcc                 View the configurations of DCC.
------------------------------TEST commands-------------------------------
setoptloop              Configure the Loop-back of optical port.
showoptloop             View loop status of the optical port.
sete1loop               Configure the Loop-back of E1 port.
showe1loop              View loop status of the E1 port.
setbert                 Configure E1 BERT.
enbert                  Enable/Disable BERT transmitter and receiver.
inserterr               Manually insert one bit error to BERT.
showbert                View BERT status.
clearbert               Reset E1 BERT.
Successfully Executed
```

You can key “?” or “help” in the command line to get the list of the command as follows:

【FORMAT】:

? \n

【EXPLANATION】:

To get a list of the commands for the system type '?' at the prompt

【PARAMETERSS】:

None

【E.g.】

For detailed command format, please key “? cmdname” or “help cmdname”. See the following examples.

【FORMAT】:

? [command]

【EXPLANATION】:

To get further information about any command, type the ? <space> followed by command.

【PARAMETERS】:

cmdname : Optional PARAMETERS,Type the command which needs to help.

【E.g.】

device>? setip

<FORMAT >: setip [ipaddr]

<EXPLANATION>: Change the IP Address of local device..

<PARAMETERS>:

ipaddr : IP address, e.g.<192.168.0.215>.

4.2 Transferring software and Configuration files

4.2.1 Download

The command needs the service of FTP.

【COMMAND】

download

【FORMAT】

download [host] [usrname][usrpwd][type][filename]

【EXPLANATION】

Download a firmware to the flash memory.

【PARAMETERS】

host : <IP address>,The IP address of Fileserver(FTP server).

usrname : < a string>, User login name.

usrpwd : < a string>,User login password.

type : <SDH> Card's name.

: <DATA> Configuration.

filename : < a string>,The filename to be download..

【E.g.】

device>download 192.168.0.117 target target SDH RSM155SB_0515A.bin

Download start, Please wait

4.2.2 Upload

【COMMAND】

upload

【FORMAT】

upload <host> <usrname> <usrpwd ><type>

【EXPLANATION】

Upload a config data to the manager.

【PARAMETERS】

host : <IP address>,The IP address of Fileserver(FTP server).

usrname : < a string>, User login name.

usrpwd : < a string>,User login password.

type : <DATA>, the type of upload.

4.3 System Command

4.3.1 Showsystem

【COMMAND】

showsysinfo

【FORMAT】

showsysinfon

【EXPLANATION】

View the system information.

【PARAMETERS】

None

【E.g.】

device>showsysinfo

System Hardware version: 1.0.2

System Software version: 1.1.0A1

Optical Port A: Exist

Optical Port B: Does not exist
Slot 1 : 8 E1 card
Slot 2 : 8 E1 card
Slot 3 : EOS Card Information:
Hardware version: 1.0.0
Software version: 0.0.1A3
VCG number : 1 , Ethernet number : 2
Ethernet 1:Type : RJ45 port
Ethernet 2:Type : SFP-Optical port
Power Supply 1 : Does not exist
Power Supply 2 : Does not exist

Successfully Executed!

4.3.2 Reset

【COMMAND】

reset

【FORMAT】

reset

【EXPLANATION】

Reset the system..

【PARAMETERS】

None

【E.g.】

device>reset
System will reset in a few minutes! Please Wait.....

4.3.3 Setdefault

【COMMAND】

setdefault

【FORMAT】

setdefault

【EXPLANATION】

Configure the system in default.

【PARAMETERS】

None

【Note】

After carrying out this command ,the device is restored as factory default settings.except the IP address,Trap IP information,RCF1213 system group information,SNMP information

【E.g.】

device>setdefault

System is configured to default settings.

Successfully Executed

4.3.4 Setfactorydefault

【COMMAND】

setfactorydefault

【FORMAT】

setfactorydefault

【EXPLANATION】

Configure the system in factory default configurations (including IP Address, Subnet Mask, Gateway Address and SNMP settings).

【PARAMETERS】

None

【Note】

After carrying out this command ,the device is restored as factory default settings

【E.g.】

device>setfactorydefault

System is configured to factory default settings.

Successfully Executed

4.3.5 Setip

【COMMAND】

setip

【FORMAT】

setip <IP Address>

【EXPLANATION】

Configure the system IP Address.

【PARAMETERS】

<IP Address> : IP address, e.g.<192.168.0.215>.

【E.g.】

device>setip 192.168.0.135

IP Address: 192.168.0.135

Successfully Executed

4.3.6 Showip

【COMMAND】

showip

【FORMAT】

showip

【EXPLANATION】

View current IP Address of the system.

【PARAMETERS】

None

【E.g.】

device>showip

IP Address: 192.168.0.135

Successfully Executed

4.3.7 Setmask

【COMMAND】

setmask

【FORMAT】

setmask <Subnet Mask>

【EXPLANATION】

Configure the Subnet Mask.

【PARAMETERS】

<Subnet Mask> : Subnet Mask, e.g.<255.255.255.0>.

【E.g.】

device>setmask 255.255.255.0

Subnet Mask : 255.255.255.0

Successfully Executed

4.3.8 Showmask

【COMMAND】

showmask

【FORMAT】

showmask

【EXPLANATION】

View current Subnet Mask of the system

【PARAMETERS】

None

【E.g.】

device>showmask

Subnet Mask: 255.255.255.0

Successfully Executed

4.3.9 Showneid

【COMMAND】

showneid

【FORMAT】

showneid

【EXPLANATION】

view the NeId of the device..

【PARAMETERS】

None

【E.g.】

device>showneid

neid: 1

Successfully Executed

4.3.10 Setgw

【COMMAND】

setgw

【FORMAT】

setgw <Gateway Address>

【EXPLANATION】

Configure the Gateway Address.

【PARAMETERS】

<Gateway Address> : Gateway Address, e.g.<192.168.0.1>.

【E.g.】

device>setgw 192.168.0.4

Default gateway: 192.168.0.4

Successfully Executed

4.3.11 Showgw

【command】

showgw

【FORMAT】

showgw

【EXPLANATION】

View Default Gateway Address.

【PARAMETERS】

None

【E.g.】

device>showgw

Default Gateway : 192.168.0.4

Successfully Executed

4.3.12 Setmac

【COMMAND】

setmac

【FORMAT】

setmac < MAC Address>

【EXPLANATION】

Configure the Ethernet MAC Address.

【PARAMETERS】

< MAC Address> : Ethernet Mac address, e.g.<00.25.04.00.00.01>.

【E.g.】

device>setmac 00.19.AB.18.11.38

Setting MAC Address: 00.19.AB.18.11.38

MAC Address will be effective only after system restart.

Please reset the system to activate new MAC Address.

Successfully Executed

device>reset

System will reset in a few minutes Please Wait.....

4.3.13 Showmac

【COMMAND】

showmac

【FORMAT】

showmac

【EXPLANATION】

View current MAC Address of the system.

【PARAMETERS】

None

【E.g.】

device>showmac

System MAC Address: 00.19.AB.18.11.38

Successfully Executed

4.3.14 Setsnmpget

【COMMAND】

setsnmpget

【FORMAT】

setsnmpget <community>

【EXPLANATION】

Configure SNMP READ/GET/GETNEXT community.

【PARAMETERS】

<community> : 1-31 Alpha-numeric Characters (case sensitive).

Successfully Executed!

【E.g.】

device>setsnmpget public

System SNMP get community : public

Successfully Executed

4.3.15 Showsnmpget

【COMMAND】

showsnmpget

【FORMAT】

showsnmpget

【EXPLANATION】

View SNMP READ/GET/GETNEXT community.

【PARAMETERS】

None

【E.g.】

device>showsnmpget

System SNMP READ/GET/GETNEXT community: public(Case sensitive)

Successfully Executed

4.3.16 Setsnmpset

【COMMAND】

setsnmpset

【FORMAT】

setsnmpset <community>

【EXPLANATION】

Configure SNMP WRITE/SET community.

【PARAMETERS】

<community> : 1-31 Alpha-numeric Characters (case sensitive).

Successfully Executed

【E.g.】

device>setsnmpset private

System SNMP set community : private

Successfully Executed

4.3.17 Showsnmpset

【COMMAND】

showsnmpset

【FORMAT】

showasnmpset

【EXPLANATION】

Show SNMP WRITE/SET community.

【PARAMETERS】

None

【E.g.】

device>showsnmpset

System SNMP SET/WRITE community: private(Case sensitive)

Successfully Executed

4.3.18 Setforward

【COMMAND】

setforward

【FORMAT】

setforward <enable|disable>

【EXPLANATION】

Configure RS232 port forwarding enable or disable.

【PARAMETERS】

<enable|disable>: enable|disable.

【E.g.】

device>setforward disable

RS232 port forwarding: Disable

Successfully Executed

4.3.19 Showforward

【COMMAND】

showforward

【FORMAT】

showforward

【EXPLANATION】

View system RS232 port forwarding enable/disable.

【PARAMETERS】

None

【E.g.】

device>showforward

RS232 port forwarding : Disable

Successfully Executed

4.3.20 Settime

【COMMAND】

settime

【FORMAT】

settime <year> <month> <day> <hour> <minute> <second>

【EXPLANATION】

Configure system time.

【PARAMETERS】

<year>: 2000-2099.

<month> : 1-12.

<day> : 1-31.

<hour> : 0-23.

<minute> : 0-60.

<second> : 0-60.

【E.g.】

device>settime 2010 6 28 10 29 50

2010-6-28 (Year-Month-Day), 10-29-50 (Hour-Minute-Second)

Successfully Executed

4.3.21 Showtime

【COMMAND】

showtime

【FORMAT】

showtime

【EXPLANATION】

View system time.

【PARAMETERS】

None

【E.g.】

device>showtime

2010-6-28 (Year-Month-Day), 10-30-36 (Hour-Minute-Second)

Successfully Executed

4.3.22 Adduser

【COMMAND】

adduser

【FORMAT】

adduser <UserName> <Password>

【EXPLANATION】

Add a user to TELNET.

【PARAMETERS】

<UserName>:1-15 Alpha-numeric Characters (case sensitive), User login name.

<Password>:1-15 Alpha-numeric Characters (case sensitive), User login password.

【Note】

You can add six users at most by using this command.

【E.g.】

device>adduser me me

TELNET UserName : me

TELNET Password : me

Successfully Executed

4.3.23 Deluser

【COMMAND】

deluser

【FORMAT】

deluser <UserName> <Password>

【EXPLANATION】

Delete a user from TELNET.

【PARAMETERS】

<serName>:1-15 Alpha-numeric Characters (case sensitive), User login name.

<Password>:1-15 Alpha-numeric Characters (case sensitive), User login password.

【E.g.】

device>deluser me me

Successfully deleted Telnet User.

Successfully Executed

4.3.24 Showuser

【COMMAND】

showuser

【FORMAT】

showuser

【EXPLANATION】

View information of TELNET users.

【PARAMETERS】

None

【E.g.】

device>showuser

TELNET Manage UserName :user Password :user

==========

Successfully Executed

4.4 Optical conmmands

4.4.1 settu12order

【COMMAND】

settu12order

【FORMAT】

settu12order <mode>

【EXPLANATION】

Configure TU12 order.

【PARAMETERS】

<mode>: logic|path|line.

【E.g.】

device>settu12order logic

Tu12 ordering mode : Logic

Successfully Executed

4.4.2 showtu12order

【COMMAND】

showtu12order

【FORMAT】

showtu12order

【EXPLANATION】

View TU12 order.

【PARAMETERS】

None

【E.g.】

device>showtu12order

TU12 Order: Logic

Successfully Executed

4.4.3 showfreetu12

【COMMAND】

showfreeti12

【FORMAT】

showfreetu12

【EXPLANATION】

View free TU12 resource of optical ports.

【PARAMETERS】

None

【E.g.】

device>showfreetu12
Optical port A free TU12 IDs: None
Optical port B free TU12 IDs: None
Successfully Executed

4.4.4 setj0mode

【COMMAND】

setj0mode

【FORMAT】

setj0mode <optID> <j0mode>

【EXPLANATION】

Configure the valid mode of optical port's J0 overhead.

【PARAMETERS】

<optID>: opta|optb.

<j0mode>: byte|string.

【E.g.】

device>setj0mode opta byte
Optical port A J0 mode: Byte
Successfully Executed

4.4.5 setohj0

【COMMAND】

setohj0

【FORMAT】

setohj0 <optID> <ohtype> <valuetype> [crc] [value]

【EXPLANATION】

Configure J0 overhead send /expect value of optical port.

【PARAMETERS】

<optID>: opta|optb.

<ohtype>: send|expect.

<valuetype>: byte|string.

[crc] : enable|disable, valid when valuetype == string.

: 0 , valid when valuetype == byte.

[value] : when valuetype == byte, (1 byte, Hex format e.g. 0x01);

: when valuetype == string, 0-15 Alpha-numeric characters.

【Note】

If you want to set the valuetype of j0 as “string”,you must use command “setj0mode” to set “j0mode” as “string”.when the valuetype of j0 is“byte”,you should use command “setj0mode” to set “j0mode” as “byte”.so that you can see the value of j0 by command “showoh”.the value is hex.

【E.g.】

device>setohj0 opta send byte 0 0x01

Optical port A send J0 byte: 1

Successfully Executed

4.4.6 setohj1

【COMMAND】

setohj1

【FORMAT】

setohj1 <optID> <ohtype> <crc> <value>

【EXPLANATION】

Configure J1 overhead send /expect value of optical port.

【PARAMETERS】

<optID>: opta|optb.

<ohtype>: send|expect.

<crc>: enable|disable.

<value> : the value of J1 is 0-15 Alpha-numeric characters.

【E.g.】

device>setohj1 opta send disable baba

Optical port A send J1 string: baba

Optical port A J1 CRC status: Disable

Successfully Executed

4.4.7 setc2expect

【COMMAND】

setc2expect

【FORMAT】

setc2expect <optID> <value>

【EXPLANATION】

Configure expect value of optical port's c2 overhead.

【PARAMETERS】

<optID>: opta|optb.

<value> : the value of overhead (1 byte, Hex format e.g. 0x01).

【E.g.】

device>setc2expect opta 0x04

Optical port A expected receive C2 overhead: 0x4

Successfully Executed

4.4.8 Setoh

【COMMAND】

setoh

【FORMAT】

setoh <optID> <ohtype> <value>

【EXPLANATION】

Configure send value of optical port's other overhead.

【PARAMETERS】

<optID>: opta|optb.

<ohtype>: k1|k2|s1|x1|x2|c2|k3|n1.

<value> : the value of overhead (1 byte, Hex format e.g. 0x01).

【E.g.】

device>setoh opta k1 0x12

Optical port A send K1 overhead: 0x12

Successfully Executed

4.4.9 Showoh

【COMMAND】

showoh

【FORMAT】

showoh <opt>

【EXPLANATION】

View the overhead status of optical ports.

【PARAMETERS】

<opt>: opta|optb.

【E.g.】

device>showoh opta

```
        K1     K2     S1     X1     X2     K3     N1     C2
============================================================
Send     12      0      b     aa     aa      0      0      2
Receive  ff      f8     b     aa     aa      0      0      2
Expect   --      --     --    --     --      --     --     4
J0 CRC Mode :   enable
Send          J0  :     1
Receive       J0  :     1
Expect        J0  :     1

J1 CRC Mode :   disable
Send          J1(Char) :      bababbb
Receive       J1(Char) :      bababbb
Expect        J1(Char) :
Send          J1(Bytes) : 80 62 61 62 61 62 62 62  0  0  0  0  0  0  0  0
Receive       J1(Bytes) : 80 62 61 62 61 62 62 62  0  0  0  0  0  0  0  0
expect        J1(Bytes) : 80  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0

Successfully Executed
```

4.4.10 Setals

【COMMAND】

setals

【FORMAT】

setals <enable/disable> [mode]

【EXPLANATION】

Enable/Disable Auto Laser Shut, and configure Auto Laser Shut work mode, when ALS is enabled.

【PARAMETERS】

<enable/disable>: enable|disable.

[mode]:long|short (long:100 seconds ; short:12.5 seconds).

【E.g.】

```
device>setals enable short
Auto laser shut :  Enable
Auto laser shut mode : 12.5 seconds (short)
Successfully Executed
```

4.4.11 Showals

【COMMAND】

showals

【FORMAT】

showals

【EXPLANATION】

View Auto Laser Shut configuration of the optical ports.

【PARAMETERS】

None

【E.g.】

device>showals
Auto laser shut: Enable
ALS Mode : 12.5 seconds (short)
Successfully Executed

4.4.12 Manualals

【COMMAND】

manualals

【FORMAT】

manualals <opt>

【EXPLANATION】

Manual laser restart when Auto Laser Shut is enabled.

【PARAMETERS】

<opt>: opta|optb.

【E.g.】

device>manualals opta
Manual laser restart on optical port A.
Successfully Executed

4.4.13 Showoptddminfo

【COMMAND】

showoptddminfo

【FORMAT】

showoptddminfo

【EXPLANATION】

View the alarm limen and the working status of the opt .

【PARAMETERS】

None

【E.g.】

device>showddminfo

```
 OPTICAL      WAVELENGTH       DISTANCE          CODE
============================================================
 OPT_A          1310nm          40.0km           NRZ
 OPT_B          1310nm          40.0km           NRZ

 OPTICAL   TEMPERATURE   BIASCURRENT    TX_POWER    RX_POWER
======================================================================
 OPT_A     46.594℃         2.90mA        -2.01dBm     -15.37dBm
 OPT_B     44.875℃         2.75mA        -1.99dBm     -13.28dBm
```

Alarm Threshold:

```
 OPTICAL    LTH        RPH        RPL        LPL
=========================================================
 OPT_A    85.000℃   -10.00dBm   -34.46dBm   -5.00dBm
 OPT_B    85.000℃   -10.00dBm   -34.46dBm   -4.97dBm
```

Successfully Executed

4.4.14 Showoptalarm

【COMMAND】

showoptalarm

【FORMAT】

showoptalarm

【EXPLANATION】

View the alarm of optical ports.

【PARAMETERS】

None

【E.g.】

device>showoptalarm

```
 OPT     NOP     RPD     TF     TD     LTH     RPH     RPL     LPL
=========================================================================
 OPT_A   --      --      --     --     --      --      --      --       --
 OPT_B   --      --      --     --     --      --      --      --       --

 OPT      OOF     LOF
====================================
```

```
 OPT_A    --       --

 OPT_B    --       --

 OPT   MS_RDI MS-EXC MS-DEG MS-AIS AU-LOP AU-AIS AU-PJALARM   LOM
=================================================================
 OPT_A --       --      --      --    --      --         --      --
 OPT_B --       --      --      --    --      --         --      --

 OPT   HP_UNEQ  HP_RDI  HP_PLM  HP_EXC  HP_DEG  HP_AIS
=============================================================
 OPT_A    --       --       --       --       --       --
 OPT_B    --       --       --       --       --       --
```

Successfully Executed

4.4.15 showvc4perform

【COMMAND】

showvc4perform

【FORMAT】

showvc4perform <opt> <recordID>

【EXPLANATION】

View the vc4 performance information.

【PARAMETERS】

<opt> : opta|optb.

<recordId> : 1 , the current 15min. information.

: 2-17, 1st 15 min. interval to 16th 15 min.
interval history information.

: 18, current 24 hours information.

: 19, history 24 hours information.

【E.g.】

```
device>showvc4perform opta 1

Perform record : 2009- 5 - 12 (Year-Month-Day) , 2 hour 12 minute 49 second

RS-B1 : EB = 7 , ES = 2 ,SES = 0,UAS = 0
MS-B2 : EB = 8 , ES = 2 , SES = 0 , UAS = 0
MS-REI: EB =8 , ES =2 , SES =0 , UAS = 0
HOVC-B3: EB =0 , ES =0 , SES =0 , UAS = 90
```

HOVC-REI: EB =0 , ES =0 , SES =0 , UAS = 90

HOVC-PJE: 0

HOVC-NJE: 0

Successfully Executed

4.4.16 Showoptalarmhistory

【COMMAND】

showoptalarmhistory

【FORMAT】

showoptalarmhistory <optID> <alarmtype>

【EXPLANATION】

View the history alarm of optical port.

【PARAMETERS】

<optID> : opta|optb.

<alarmtype> : port|rs|ms|hp.

【E.g.】

device>showoptalarmhistory opta rs

Optical port A LOF alarms record:

Index	Occurred Time	Cleared Time
1	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
2	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
3	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
4	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
5	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
6	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0

Optical port A RS-TIM alarms record:

Index	Occurred Time	Cleared Time
1	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
2	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
3	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
4	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
5	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
6	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0

Time : Year-Month-Day, Hour-Minute-Second

Successfully Executed

4.5 E1 commands

4.5.1 Addxc

【COMMAND】

addxc

【FORMAT】

addxc <tu12number> <srcID> <startpathID> <dstID> <VCGID>

<startpathID> [type] [active]

【EXPLANATION】

Create cross-connect (XC) for service card.

【PARAMETERS】

<tu12number>: 1-63.

<srcID>: opta|optb.

<startpathID>: 1-63.

<dstID>: opta|optb|card1|card2|card3.

<VCGID>: 0 (when dstID is E1 card of 8 E1, or opta, optb);

: 1 (when dstID is EOS card of 1 VCG);

: 1-4 (when dstID is EOS card of 4 VCG).

<startpathID>: 1-63 (when dstID is opta or optb);

: 1-8 (when dstID is E1 card of 8 E1);

: 1-48 (when dstID is EOS card of 1 VCG);

: 1-63 (when dstID is EOS card of 4 VCG).

[type]: 1+1|1+0, (valid when dstID == card1|card2|card3).

[active]: enable|disable, (valid when dstID == card1|card2|card3).

【E.g.】

device>addxc 8 opta 1 card2 0 1 1+1 enable

SOURCE DESTINATION

INDEX	OPT	PATH	SLOTID	PATH	TYPE	ACTIVE	PROTECTION	STATUS	PATH
1	optA	1	2	1	1+1	enable	enable	added	--
2	optA	2	2	2	1+1	enable	enable	added	--
3	optA	3	2	3	1+1	enable	enable	added	--
4	optA	4	2	4	1+1	enable	enable	added	--

5	optA	5	2	5	1+1	enable	enable	added	--
6	optA	6	2	6	1+1	enable	enable	added	--
7	optA	7	2	7	1+1	enable	enable	added	--
8	optA	8	2	8	1+1	enable	enable	added	--

Successfully Executed

4.5.2 Delxc

【COMMAND】

delxc

【FORMAT】

delxc <tu12number> <srcID> <startpathID> <dstID> <startpathID>

【EXPLANATION】

Delete cross-connect (XC) for service card.

【PARAMETERS】

<tu12number>: 1-63.

<srcID>: opta|optb.

<startpathID>: 1-63.

<dstID>: opta|optb|card1|card2|card3.

<startpathID>: 1-63 (when dstID is opta oroptb);

: 1-8 (when dstID is E1 card of 8 E1);

: 1-48 (when dstID is EOS card of 1 VCG);

: 1-63 (when dstID is EOS card of 4 VCG).

【E.g.】

device>delxc 4 opta 1 card2 1

SOURCE DESTINATION

INDEX	OPT	PATH	SLOTID	PATH TYPE	ACTIVE	PROTECTION	STATUS	PATH
1	optA	1	2	1	1+1	enable	enable	deleted	--
2	optA	2	2	2	1+1	enable	enable	deleted	--
3	optA	3	2	3	1+1	enable	enable	deleted	--
4	optA	4	2	4	1+1	enable	enable	deleted	--

Successfully Executed

4.5.3 Delallxc

【COMMAND】

delallxc

【FORMAT】

delallxc

【EXPLANATION】

Delete all cross-connects.

【PARAMETERS】

None

【E.g.】

device>delallxc

All cross-connects has been deleted.

Successfully Executed

4.5.4 Showxc

【COMMAND】

showxc

【FORMAT】

showxc

【EXPLANATION】

View the cross-connect (XC) configuration and working status.

【PARAMETERS】

None

【E.g.】

device>showxc

Slot 2: 8 E1 Card does not exist

.

SOURCE DESTINATION

INDEX OPT PATH SLOTID PATH TYPE ACTIVE PROTECTION STATUS PATH

==========

1 optA 5 2 5 1+1 enable enable configured --

2 optA 6 2 6 1+1 enable enable configured --

3 optA 7 2 7 1+1 enable enable configured --

4 optA 8 2 8 1+1 enable enable configured --

Please press "Enter" to continue.....

Successfully Executed

4.5.5 Setactive

【COMMAND】

setactive

【FORMAT】

setactive <cardID> <tu12number> <startpathID> <active>

【EXPLANATION】

Enable/Disable activity of the path.

【PARAMETERS】

<cardID>: card1|card2|card3.

<tu12number>: 1-63.

<startpathID>: 1-8 (when dstID is E1 card of 8 E1);

: 1-48 (when dstID is EOS card of 1 VCG);

: 1-63 (when dstID is EOS card of 4 VCG).

<active>: enable|disable.

【E.g.】

device>setactive card2 4 5 disable

TU12_ID	ACTIVE
5	Disable
6	Disable
7	Disable
8	Disable

Successfully Executed

4.5.6 Setprotect

【COMMAND】

setprotect

【FORMAT】

setprotect <cardID> <tu12number> <startpathID> <protect>[mode]

【EXPLANATION】

Configure the protection status of the path.

【PARAMETERS】

<cardID>: card1|card2|card3.

<tu12number>: 1-63.

<startpathID>: 1-8 (when dstID is E1 card of 8 E1);

: 1-48 (when dstID is EOS card of 1 VCG);

: 1-63 (when dstID is EOS card of 4 VCG).

<protect>: enable|disable.

[mode]: auto|preferreda|preferredb.(valid when protect == enable)

【Note】

This command is useful only when the type of protection switching is 1+1

【E.g.】

device>setprotect card2 4 5 enable preferredb

TU12_ID	PROTECTION	PROTECTION MODE
5	Enable	Preferredb
6	Enable	Preferredb
7	Enable	Preferredb
8	Enable	Preferredb

Successfully Executed

4.5.7 Setrecovertime

【COMMAND】

setrecovertime

【FORMAT】

setrecovertime <recovertime>

【EXPLANATION】

Configure the recovering time of protection.

【PARAMETERS】

<recovertime>: 1-10 min

【E.g.】

device>setrecovertime 5

Recover Time : 5 min

Successfully Executed!

4.5.8 Showrecovertime

【COMMAND】

showrecovertime

【FORMAT】

showrecovertime

【EXPLANATION】

View the recovering time of protection.

【PARAMETERS】

None

【E.g.】

device> showrecovertime

Recover Time: 5 min

Successfully Executed

4.5.9 switchtu12

【COMMAND】

switchtu12

【FORMAT】

switchtu12 <cardID> <tu12number> <startpathID> <operatedir>

【EXPLANATION】

Manually configure the switching criteria.

【PARAMETERS】

<cardID>: card1|card2|card3.

<tu12number>: 1-63.

<startpathID>: 1-8 (when dstID is E1 card of 8 E1);

: 1-48 (when dstID is EOS card of 1 VCG);

: 1-63 (when dstID is EOS card of 4 VCG).

<operatedir>: forcea|forceb.

【Note】

This command is useful only when the type of protection switching is 1+1.and the “PROTECT” is disable.

Preferreda: Optical link will switch to optical port a if OPTA links is available

Preferredb: Optical link will switch to optical port b if OPTB links is available

Forcea: optical link will remain or switch to optical port a whether optical port a is available or not

Forceb:optical link will remain or switch to optical port b whether optical port b is available or not

Auto: Optical link will switch to other optical port only if current optical link is not available (current switching)

【E.g.】

device>switchtu12 card2 4 5 forceb

TU12_ID MANUAL SWITCH

==========

5 Forceb

6 Forceb

7 Forceb
8 Forceb

Successfully Executed

4.5.10 Showactive

【COMMAND】

showactive

【FORMAT】

showactive

【EXPLANATION】

View if the path is configured as active or not.

【PARAMETERS】

None

【E.g.】

device>showactive

Slot 2: 8 E1 Card does not exist.

INDEX	SLOTID	PATH	ACTIVE
1	2	5	disabled
2	2	6	disabled
3	2	7	disabled
4	2	8	disabled

Please press "Enter" to continue.....

Successfully Executed

4.5.11 Showprotect

【COMMAND】

showprotect

【FORMAT】

showprotect

【EXPLANATION】

View the protection status of the path.

【PARAMETERS】

None

【E.g.】

device>showprotect

Slot 2: 8 E1 Card does not exist.

INDEX	SLOTID	PATH	PROTECTION	PROTECTION MODE
1	2	5	enable	Preferredb
2	2	6	enable	Preferredb
3	2	7	enable	Preferredb
4	2	8	enable	Preferredb

Please press "Enter" to continue.....

Successfully Executed

4.5.12 Showswitch

【COMMAND】

showswitch

【FORMAT】

showswitch <cardId>

【EXPLANATION】

View if path is configured to manual protection mode.

【PARAMETERS】

<cardId>: card1|card2|card3.

【E.g.】

device>showswitch card2

PATH_ID	OPT_TU12ID	MANUAL_OPERATE
1	5	--
2	6	--
3	7	--
4	8	--

Successfully Executed

4.5.13 showe1alarm

【COMMAND】

showe1alarm

【FORMAT】

showe1alarm <cardID>

【EXPLANATION】

View E1 tributary alarms.

【PARAMETERS】

<cardID> : card1|card2.

【E.g.】

device>showe1alarm card2
E1 Interface Alarm Information :

E1	LOS
1	alarm
2	alarm
3	alarm
4	alarm
5	alarm
6	alarm
7	alarm
8	alarm

Please press "Enter" to continue.....

Bus A Alarm Information :

E1	TU-PJALM	TU-LOP	LP-RDI	LP-PLM	LP-UNEQ	TU-AIS
1	--	--	--	--	--	--
2	--	--	--	--	--	--
3	--	--	--	--	--	--
4	--	--	--	--	--	--
5	--	--	--	--	--	--
6	--	--	--	--	--	--
7	--	--	--	--	--	--
8	--	--	--	--	--	--

Please press "Enter" to continue.....

Bus B Alarm Information :

E1 TU-PJALM TU-LOP LP-RDI LP-PLM LP-UNEQ TU-AIS

1	--	--	--	--	--	--
2	--	--	--	--	--	--
3	--	--	--	--	--	--
4	--	--	--	--	--	--
5	--	--	--	--	--	--
6	--	--	--	--	--	--
7	--	--	--	--	--	--
8	--	--	--	--	--	--

Successfully Executed

4.5.14 showtu12perform

【COMMAND】

showtu12perform

【FORMAT】

showtu12perform <cardID> <tu12ID> <recordID>

【EXPLANATION】

View TU12 performance information.

【PARAMETERS】

<cardID> : card1|card2|card3.

<tu12ID> : 1-8 : valid when cardID is card1 or card2;

: 1-63 (when dstID is EOS card of 4 VCG).

<recordID> : 1, current 15min. information;

: 2-17, 1st 15 min. interval to 16th 15 min.
interval history information;

: 18, current 24 hours information;

: 19, history 24 hours information.

【E.g.】

device>showtu12perform card2 1 1

Perform record : 2011- 2 - 9 (Year-Month-Day) , 10 hour 4 minute 56 second :

BUSA_V5 : EB = 0 , ES = 0 ,SES = 0,UAS = 0

BUSA_REI: EB = 0 , ES = 0 , SES = 0 , UAS = 0

BUSA_PPJ: 0

BUSA_NPJ: 0

BUSB_V5 : EB = 0 , ES = 0 ,SES = 0,UAS = 0

BUSB_REI: EB = 0 , ES = 0 , SES = 0 , UAS = 0

BUSB_PPJ: 0

BUSB_NPJ: 0

PPI_CV : EB = 0 , ES = 0 ,SES = 0,UAS = 0

Successfully Executed!

4.5.15 showe1alarmhistory

【COMMAND】

showe1alarmhistory

【FORMAT】

showe1alarmhistory <cardID> <e1ID> <alarmtype>

【EXPLANATION】

View E1 tributary alarm history.

【PARAMETERS】

<cardID> : card1|card2.

<e1ID> : 1-8.

<alarmtype> : port|busa|busb.

【E.g.】

device>showe1alarmhistory card2 1 port

Card_2 E1 1 LOS alarm records :

Index	Occurred Time	Cleared Time
1	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
2	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
3	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
4	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
5	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
6	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0

Time : Year-Month-Day, Hour-Minute-Second

Successfully Executed

4.6 EOS commands

4.6.1 Setvcg

【COMMAND】

setvcg

【FORMAT】

setvcg <VCGID> <PFI> <EXI> <LCAS>

【EXPLANATION】

Configure VCG protocol information of MSTP.

【PARAMETERS】

<VCGID> : 1-4.

<PFI> : enable|disable.

<EXI> : linear|null.

<LCAS> : enable|disable.

【E.g.】

device>setvcg 1 enable linear enable

VCG ID: 1

PFI: Enable

EXI: Linear

LCAS: Enable

Successfully Executed

4.6.2 setv5k4

【COMMAND】

setv5k4

【FORMAT】

setv5k4 <vcgId> <v5> <k4>

【EXPLANATION】

Configure transmit and expect value of V5 , K4 in VCG.

【PARAMETERS】

<vcgId>: 0-4.

0: valid when EOS card is x4014 or xs011.The value of V5 , K4 are same in all vcgs.

1-4: valid when EOS card is xs020.

1-max: refer to 'showsysinfo' for max VCG number.

<v5>: v5 value(Hex format e.g. 0x01).

<k4>: k4 value(Hex format e.g. 0x01).

【E.g.】

device>setv5k4 1 0x11 0x22

VCG 1 : V5 = 0x11 ; K4 = 0x22

Successfully Executed

4.6.3 showvcg

【COMMAND】

showvcg

【FORMAT】

showvcg

【EXPLANATION】

View VCG protocol information of MSTP.

【PARAMETERS】

None

【E.g.】

```
device>showvcg

 VCG_ID  ENCAPSULATION     PFI     EXI     LCAS      V5     K4
=====================================================================
  1          GFP          Enable    linear   Enable    0x11    0x22
  2          GFP          Disable   null     Enable    0xa     0xd
  3          GFP          Disable   null     Enable    0xa     0xd
  4          GFP          Disable   null     Enable    0xa     0xd
Successfully Executed
```

4.6.4 Showvcat

【COMMAND】

showvcat

【FORMAT】

showvcat

【EXPLANATION】

View the SQ, CTRL of VCAT members.

【PARAMETERS】

None

【E.g.】

```
device>showvcat

 PATH_ID   TX_SQ    TX_CTRL     RX_SQ     RX_CTRL
=================================================================
  1         0         f         3f         5
  2         1         f         3f         5
  3         2         f         3f         5
  4         3         f         3f         5
```

5	4	f	3f	5
6	5	f	3f	5
7	6	f	3f	5
8	7	f	3f	5
9	8	f	3f	5
10	9	f	3f	5
11	a	f	3f	5
12	b	f	3f	5
13	c	f	3f	5

CTRL: 0-LCAS Disable, 1-Add, 2-Normal, 3-Normal (EoQ) End of Queue,
5-Idle, F-DNU
SQ : LCAS protocol is defined in ITU-T G.7042,SQ means sequence,
indication segment,1-3E denotes the effective number in the sequence,
3F denotes that is not loaded into the sequence.
Please press "Enter" to continue.....

4.6.5 Enableeth

【COMMAND】

enableeth

【FORMAT】

enableeth <ethID> <enable|disable>

【EXPLANATION】

Enable/disable Ethernet port

【PARAMETERS】

ethID>: 1-4, valid when EOS card is x4014 or xs011. Port(1-4) is LAN port.
1-6, valid when EOS card is xs020 . Port(1-2) is LAN port, Port(3-6) is WAN port.
1-max: refer to 'showsysinfo' for max Ethernet number.

<enable|disable>: enable|disable.

【E.g.】

device>enableeth 2 disable
Ethernet port 2 : Disable
Successfully Executed

4.6.6 Setportmode

【COMMAND】

setportmode

【FORMAT】

setportmode <ethID> <mode>

【EXPLANATION】

Configure Ethernet port mode.

【PARAMETERS】

<ethID>: 1-4, valid when EOS card is x4014 or xs011. Port(1-4) is LAN port.

1-6, valid when EOS card is xs020 . Port(1-2) is LAN port, Port(3-6) is WAN port.

1-max: refer to 'showsysinfo' for max Ethernet number.

<mode>: access | trunk | hybrid.

【E.g.】

device>setportmode 3 trunk

Ethernet port 3 mode: trunk

Successfully Executed

4.6.7 Seteth

【COMMAND】

seteth

【FORMAT】

seteth <ethID> <flow> [auto][speed][duplex]

【EXPLANATION】

Configure auto-negotiation, speed, duplex mode, and flow control of Ethernet port.

【PARAMETERS】

<ethID>: 1-4, valid when EOS card is x4014 or xs011. Port(1-4) is LAN port.

1-6, valid when EOS card is xs020 . Port(1-2) is LAN port, Port(3-6) is WAN port.

1-max: refer to 'showsysinfo' for max Ethernet number.

<flow>: enable | disable.

*Invalid parameters as follow when EOS card is xs020 and port is WAN port.

[auto]: enable | disable.

[speed]: 10 | 100 |1000, (effective if auto==disabled).

[duplex]: full | half, (effective if auto==disabled).

【E.g.】

device>seteth 1 enable disable 100 half

```
ETH_ID    AUTO     SPEED      DUPLEX        FLOW
=====================================================
  1       disabled 100        half          enable
Successfully Executed
```

4.6.8 Showeth

【COMMAND】

showeth

【FORMAT】

showeth

【EXPLANATION】

View Ethernet port configuration and working status, including port ID, auto-negotiation, speed, duplex mode, and flow control.

【PARAMETERS】

None

【E.g.】

```
device>showeth

    CONFIGURED SETTINGS                          CURRENT-STATUS

 ETH_ID AUTO  SPEED  DUPLEX  FLOW  -- ENABLE  STATUS  SPEED  DUPLEX
=======================================================================
  1    Disable  100   Half     Enable  -- Enable  Unlink    --     --
  2    Enable   --    --       Enable  -- Enable  Unlink    --     --
  3    Enable   --    --       Enable  -- Enable  Unlink    --     --
  4    Enable   --    --       Enable  -- Enable  Unlink    --     --
  5    Disable  100   Full     Enable  -- Enable  Link      100    Full
  6    Disable  100   Full     Enable  -- Enable  Link      100    Full
  7    Disable  100   Full     Enable  -- Enable  Link      100    Full
  8    Disable  100   Full     Enable  -- Enable  Link      100    Full

 ETH_ID    MODE      VLAN ID     PORT MEMBERS        VLAN PRIORITY
=======================================================================
  1        Hybrid      1           1,5                  0
  2        Hybrid      1           2,6                  0
  3        Trunk       1           3,7                  0
  4        Hybrid      1           4,8                  0
  5        Hybrid      1           1,5                  0
```

6	Hybrid	1	2,6	0
7	Hybrid	1	3,7	0
8	Hybrid	1	4,8	0

Successfully Executed

4.6.9 Setporttable

【COMMAND】

setporttable

【FORMAT】

setporttable <ethID> <port-members>

【EXPLANATION】

Configure port based VLAN members of Ethernet port.

【PARAMETERS】

<ethID>: 1-4, valid when EOS card is x4014 or xs011. Port(1-4) is LAN port.

1-6, valid when EOS card is xs020 . Port(1-2) is LAN port, Port(3-6) is WAN port.

1-max: refer to 'showsysinfo' for max ethernet numbe.

<port-members>:1,2,3,4,5,6. e.g.(1,2,5:vlan member include 1,2,and 5).

x4014 card : LAN port 1,2,3,4 ; WAN port 5.

xs020 card : LAN port 1,2 ; WAN port 3,4,5,6 .

Other card: refer to ‘showsysinfo’ for max Ethernet numbe

【E.g.】

device>setporttable 3 2,3,5

ETH ID MEMBERS

==========

3 2,3,5

Successfully Executed

4.6.10 Envlan

【COMMAND】

envlan

【FORMAT】

envlan

【EXPLANATION】

Enable 802.1Q VLAN mode.

【PARAMETERS】

None

【Note】

This command is not available for XS060, if you want to set 802.1Q VLAN for XS060, the command "setvlanmode" is the only way.

【E.g.】

device>envlan
802.1Q VLAN mode: Enable
Successfully Executed

4.6.11 Disvlan

【COMMAND】

disvlan

【FORMAT】

disvlan

【EXPLANATION】

Disable 802.1Q VLAN mode.

【PARAMETERS】

None

【Note】

This command is not available for XS060, if you want to set 802.1Q VLAN for XS060, the command "setvlanmode" is the only way.

【E.g.】

device>disvlan
802.1Q VLAN mode: Disable
Successfully Executed

4.6.12 Addvlan

【COMMAND】

addvlan

【FORMAT】

addvlan <VLAN-ID> <VLAN-members>

【EXPLANATION】

Add new VLAN to VLAN table.

【PARAMETERS】

<VLAN-ID>: 1-4094.

xs060 card :

e.g. 1

e.g. 1-100

e.g. 1,2,3
e.g. 1,2,3,5-100

<VLAN-members>:1,2,3,4,5,6. e.g.(1,2,5 : vlan member include 1,2,and 5)
x4014 card : LAN port 1,2,3,4 ; WAN port 5 .
xs020 card : LAN port 1,2 ; WAN port 3,4,5,6 .
Other card: refer to 'showsysinfo' for max Ethernet number.

【Note】

For XS060 card, the VLAN ID can be 1~4094, you can type single number for the parameter " VLAN-ID" , e.g. 1/2/… , to add new VLAN to VLAN table one by one, you can also type such as 1-50, or 1,2,3 or 1,2,3,5-100 for the parameter "VLAN-ID" to add new VLAN to VLAN table batch by batch.

【E.g.】

```
device>addvlan 2 2,3,4,5

 INDEX   VLAN-ID      VLAN-MEMBERS
====================================
 2          2       2,3,4,5
Successfully Executed
```

4.6.13 Delvlan

【COMMAND】

delvlan

【FORMAT】

delvlan <VLAN-ID>

【EXPLANATION】

Delete VLAN from VLAN table.

【PARAMETERS】

<VLAN-ID>: 1-4094.
xs060 card :
e.g. 1
e.g. 1-100
e.g. 1,2,3
e.g. 1,2,3,5-100

【E.g.】

```
device>delvlan 1
vlan_1 has been deleted successfully
Successfully Executed
```

4.6.14 Setpivd

【COMMAND】

setpvid

【FORMAT】

setpvid <ethID> <VLAN-ID> <VLAN-priority>

【EXPLANATION】

Configure Ethernet port VLAN ID and VLAN priority.

【PARAMETERS】

<ethID>: 1-4, valid when EOS card is x4014 or xs011. Port(1-4) is LAN port.

1-6, valid when EOS card is xs020 . Port(1-2) is LAN port, Port(3-6) is WAN port.

1-max: refer to 'showsysinfo' for max Ethernet number.

<VLAN-ID>: 1-4094.

<VLAN-priority>: 0-7.

【E.g.】

device>setpvid 4 4 3
Ethernet port 4 VID: 4
Ethernet port 4 VLAN priority: 3
Successfully Executed

4.6.15 Showvlan

【COMMAND】

showvlan

【FORMAT】

showvlan

【EXPLANATION】

View VLAN table, VLAN ID, VLAN members and VLAN status.

【PARAMETERS】

None

【E.g.】

device>showvlan

```
 INDEX      VLAN ID        VLAN MEMBERS
==========================================
  2          2           2,3,4,5
```

802.1Q VLAN mode: Disable
Successfully Executed

4.6.16 Showeosalarm

【COMMAND】

showeosalarm

【FORMAT】

showeosalarm

【EXPLANATION】

View EOS alarms.

【PARAMETERS】

None

【E.g.】

```
device>showeosalarm
ETH ID          LINK-DOWN
================================
 1              alarm
 2              alarm
 3              alarm
 4              alarm
VCG ID  GFP-LOF   LINE_MACLOOP  LOLOA-AIIVT   RLOLCAS-GIDM
=========================================================================
 1      alarm          --             --             --
 2      --             --             --             --
 3      --             --             --             --
 4      --             --             --             --
Please press "Enter" to continue.....

Bus_A Alarm Information :
 E1 TU-AIS  TU-LOP LP-UNEQ  LP-RDI  LP-PLM  LP-AIS  K4B1-LOM  K4B1-PLM
=========================================================================
 1 alarm      --       --       --       --       --       --       --
 2 alarm      --       --       --       --       --       --       --
 3 alarm      --       --       --       --       --       --       --
 4 alarm      --       --       --       --       --       --       --

Please press "Enter" to continue.....
```

4.6.17 Showeosalarmhistory

【COMMAND】

showeosalarmhistory

【FORMAT】

showeosalarmhistory <Id> <alarmtype>

【EXPLANATION】

View the alarm history of EOS.

【PARAMETERS】

<Id> : 1-63 (TU12 information ,when card3 is EOS card of 4 vcgs) .

: 1-48 (TU12 information , when card3 is EOS card of 1 vcg) .

: 1-4 (ethernet information) .

<alarmtype> : eth|busa|busb .

【E.g.】

device>showeosalarmhistory 1 busa

Card_3 TU12 1 BUSA-TU-AIS alarm records :

Index	Occurred Time	Cleared Time
1	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
2	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
3	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
4	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
5	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
6	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0

Card_3 TU12 1 BUSA-TU-LOP alarm records :

Index	Occurred Time	Cleared Time
1	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
2	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
3	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
4	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
5	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
6	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0

Time : Year-Month-Day, Hour-Minute-Second

Please press "Enter" to continue.....

4.6.18 Showethperform

【COMMAND】

showethperform

【FORMAT】

showethperform <ID> <recordID>

【EXPLANATION】

View Ethernet port performance.

【PARAMETERS】

<ID> : 1-6 , Ethernet port 1-6.

: 7-10 , VCG 1-4.

1-max: refer to 'showsysinfo' for max Ethernet number.

<recordID> : 1, current 15min. information;

: 2-17, 1st 15 min. interval to 16th 15 min.

interval history information;

: 18, current 24 hours information;

: 19, history 24 hours information.

【E.g.】

device>showethperform 1 1

Perform record : 2011- 2 - 9 (Year-Month-Day) , 12 hour 57 minute 14 second :

RX-ALLPACKETS : 0 , 0

RX-ALLBYTES : 0 , 0

RX-DROPPACKETS : 0 , 0

TX-ALLPACKETS : 0 , 0

TX-ALLBYTES : 0 , 0

RX-DROPBYTES : 0 , 0

RX-ERRORPACKETS : 0 , 0

Description :

Perform_Counter (H32) , (L32) = (H32) << 32 |(L32) ;

H32 : High 32 bits; L32 : low 32 bits

4.6.19 Clearperform

【COMMAND】

clearperform

【FORMAT】

clearperform <opt|cardID>

【EXPLANATION】

Clear the performance of E1, Ethernet and optical ports.

【PARAMETERS】

<opt|cardID> : opta|optb|card1|card2|card3|all.

【E.g.】

device>clearperform all

All performance counters cleared.

Successfully Executed

4.6.20 clearalarmhistory

【COMMAND】

clearalarmhistory

【FORMAT】

clearalarmhistory <opt|cardID>

【EXPLANATION】

Clear the alarm history.

【PARAMETERS】

<opt|cardID> : opta|optb|card1|card2|card3|all.

【Note】

After carrying out “clearalarmhistory all”. the alarm history of current SEC and EXM/ETS have be cleared.

【E.g.】

device>clearperform all
All performance counters cleared.
Successfully Executed

4.6.21 Setmacage

【COMMAND】

setmacage

【FORMAT】

setmacage <enable|disable><time>

【EXPLANATION】

Configure the MAC address lookup table aging function.

【PARAMETERS】

<enable|disable>: enable | disable.

<time> : 12|300 (Second). MAC address lookup table age time.

【E.g.】

device>setmacage enable 12
MAC Table aging : Enable
MAC Table aging timer: 12 seconds
Successfully Executed

4.6.22 Setstormfilter

【COMMAND】

setstormfilter

【FORMAT】

setstormfilter <enable|disable>

【EXPLANATION】

Enable/disable broadcast storm filtering function.

【PARAMETERS】

<enable|disable>: enable | disable.

【E.g.】

device>setstormfilter disable

Ethernet broadcast storm filter ： Disable

Successfully Executed

4.6.23 Setmaxpacket

【COMMAND】

setmaxpacket

【FORMAT】

setmaxpacket <packet size>

【EXPLANATION】

Configure the maximum packet size (1536 or 1552 bytes).

【PARAMETERS】

<packet size>: 1536 | 1552 .

【E.g.】

device>setmaxpacket 1536

Undefined command

device>Ethernet maximum packet size: 1536 bytes

4.6.24 Setethloop

【COMMAND】

setethloop

【FORMAT】

setethloop <ethId><loop|unloop>

【EXPLANATION】

Configure the Loop-back of Ethernet port.

【PARAMETERS】

<ethId>: 1-2. valid when EOS card is XS020 or XS030.

<loop|unloop>: loop | unloop.

【E.g.】

device>setethloop 1 loop

Ethernet port 1: Loop

Successfully Executed

4.6.25 Setethals

【COMMAND】

setethals

【FORMAT】

setethals <alsenable> [mode]

【EXPLANATION】

Enable/Disable Auto Laser Shut, and configure Auto Laser Shut work mode, when ALS is enabled.

【PARAMETERS】

<alsenable>: enable|disable.

[mode]: long|short. long:100s ; short:12.5s

【E.g.】

device>setethals enable long

Ethernet optical ALS: Enable

Ethernet optical ALS interval: 100 seconds

Successfully Executed

4.6.26 Manualethals

【COMMAND】

manualethals

【FORMAT】

manualethals

【EXPLANATION】

Manual laser restart of Ethernet port when Auto Laser Shut is enabled.

【PARAMETERS】

None

【E.g.】

device>manualethals

Manual Ethernet optical laser restart successfull

Successfully Executed

4.6.27 setperformmode

【command】

setperformmode

【FORMAT】

setperformmode <mode>

【EXPLANATION】

Configure Ethernet port performance count mode (packets or bytes).

【PARAMETERS】

<mode>: packets |bytes

【E.g.】

device>setperformmode bytes
Ethernet performance count mode: bytes
Successfully Executed

4.6.28 Showmacage

【COMMAND】

showmacage

【FORMAT】

showmacage

【EXPLANATION】

View the aging timer of MAC address lookup table.

【PARAMETERS】

None

【E.g.】

device>showmacage
MAC Table aging timer: 12 seconds
Successfully Executed

4.6.29 Showstormfilter

【COMMAND】

showstormfilter

【FORMAT】

showstormfilter

【EXPLANATION】

View the configuration of broadcast storm filtering function.

【PARAMETERS】

None

【E.g.】

device>showstormfilter

Ethernet broadcast storm filter : Disable

Successfully Executed

4.6.30 Showmaxpacket

【COMMAND】

showmaxpacket

【FORMAT】

showmaxpacket

【EXPLANATION】

View maximum packet size configured (1536 or 1552 bytes).

【PARAMETERS】

None

【E.g.】

device>showmaxpacket

Ethernet maximum packet size: 1536 bytes

Successfully Executed

4.6.31 Showethloop

【COMMAND】

showethloop

【FORMAT】

showethloop

【EXPLANATION】

View the Ethernet port Loop-back status.

【PARAMETERS】

None

【E.g.】

device>showethloop

ETH_ID LOOP

==========

1 loop

Successfully Executed

4.6.32 Showethals

【COMMAND】

showethals

【FORMAT】

showethals

【EXPLANATION】

View Auto Laser Shut configuration of the Ethernet optical port.

【PARAMETERS】

None

【E.g.】

device>showethals

Ethernet optical ALS: Enable

ALS Mode: Long (100 seconds)

Successfully Executed

4.6.33 Showperformmode

【COMMAND】

showperformmode

【FORMAT】

showperformmode

【EXPLANATION】

View Ethernet port performance count mode (packets or bytes).

【PARAMETERS】

None

【E.g.】

device>showperformmode

Ethernet performance count mode: bytes

Successfully Executed

4.6.34 Showethddminfo

【COMMAND】

showddminfo

【FORMAT】

showddminfo

【EXPLANATION】

View the alarm threshold and the working status of

the Ethernet Optical port.

【PARAMETERS】

None

【E.g.】

device>showethddminfo

OPT WAVELENGTH DISTANCE CODE

==========

ETH_1 1310nm 10.0km 8B10B

OPT TEMPERATURE BIASCURRENT TX_POWER RX_POWER

==========

ETH_1 25.742℃ 0.27mA -36.41dBm --

Alarm Threshold:

OPT LTH RPH RPL LPL

==========

ETH_1 85.000℃ 6.90dBm -50.67dBm -24.22dBm

Successfully Executed

4.7 EOS commands only for XS060

4.7.1 setvlanmode

【COMMAND】

setvlanmode

【FORMAT】

setvlanmode <vlanMode>

【EXPLANATION】

Configure VLAN mode.

【PARAMETERS】

<vlanMode>: disable|802.1q|qinq

4.7.2 setqinqtpid

【COMMAND】

setqinqtpid

【FORMAT】

setqinqtpid <value>

【EXPLANATION】

Configure Tag Protocol Identifier of QINQ.

【PARAMETERS】

<value>:0x0000-0xffff

xs060 card : 0x8100 is invalid.

4.7.3 setqinqport

【COMMAND】

setqinqport

【FORMAT】

setqinqport <port-members> <portMode>

【EXPLANATION】

Configure QINQ ports.

【PARAMETERS】

<port-members>:1,2,3,...,max e.g(1,2,5:vlan members include 1,2 and 5)

refer to 'showsysinfo' for max Ethernet number.

<portMode>:uplink |customer

uplink:Configure the ports as Uplink ports

customer:Configure the ports as customer ports.

Note: 'Uplink' and 'customer' are used to make a distinction between 802.1q tag and qinq tag when QINQ Tag Protocol Identifier=0x8100. 'Customer' will consider the 0x8100 tag as 802.1q tag, 'uplink' will consider the 0x8100 tag as qinq tag

4.7.4 setporttag

【COMMAND】

setporttag

【FORMAT】

setporttag <ethID> <VIDs> <tag-mode>

【EXPLANATION】

Configure tag on the packet of Ethernet port.

【PARAMETERS】

<ethID>:1-max: refer to 'showsysinfo' for max Ethernet number.

<VIDs>:1-4094,Vlan IDs to set

<tag-mode>:tag|untag.

4.7.5 showqinq

【COMMAND】

showqinq

【FORMAT】

showqinq

【EXPLANATION】

View the configuration of QINQ.

【PARAMETERS】

None

【E.g.】

device>showqinq

QINQ TPID : 0x9100 ;

PORT_ID	QINQ_PORT_MODE
1	customer
2	customer
3	customer

4.7.6 showporttag

【COMMAND】

Showporttag

【FORMAT】

showporttag

【EXPLANATION】

View tag information of Ethernet ports

【PARAMETERS】

None

【E.g.】

device>showporttag

PORT_ID	VLAN_MODE	VIDs	TAG
1	hybrid	1	untag
2	hybrid	1	untag
3	hybrid	1	untag

Successfully Executed!

4.8 ETS/EXM commands

4.8.1 Setets

【COMMAND】

setets

【FORMAT】

setets <etsId> <enable|disable>

【EXPLANATION】

Configure the application Enable/Disable of ETS 1, ETS 2.

【PARAMETERS】

<etsId> : 1-2 .

<enable|disable> : enable|disable.

【E.g.】

device>setets 1 disable

ETS 1 mode : Disable

EXM 1 has been configured in "EXM-IN" mode!

Successfully Executed

4.8.2 Showets

【COMMAND】

showets

【FORMAT】

showets

【EXPLANATION】

View the application Enable/Disable of ETS 1, ETS 2.

【PARAMETERS】

None

【E.g.】

device>showets

ETS 1 (T31/T41) : Disable

EXM 1 mode : "EXM-IN"

ETS 2 (T32/T42) : Enable

Successfully Executed

4.8.3 Setexm

【COMMAND】

setexm

【FORMAT】

setexm <exmId> <enable|disable> [direction]

【EXPLANATION】

Configure the application mode of EXM 1 , EXM 2.

【PARAMETERS】

<exmId> : 1-2 .

<enable|disable> : enable|disable.

[direction] : in|out.

Successfully Executed

【E.g.】

device>setexm 1 enable out

EXM 1 mode : "EXM-OUT"

Successfully Executed

4.8.4 Showexm

【COMMAND】

showexm

【FORMAT】

showexm

【EXPLANATION】

View the application Enable/Disable of EXM 1, EXM 2.

【PARAMETERS】

None

【E.g.】

device>showexm

EXM 1 mode : "EXM-OUT"

EXM 2 mode : Disable

ETS 2 (T32/T42) : Enable

Successfully Executed!

4.8.5 Addexmxc

【COMMAND】

addexmxc

【FORMAT】

addexmxc <srcID> <startpathID> <exmID> <active> <type> [protectEnable]

【EXPLANATION】

Create cross-connect (XC) of the EXM path in "EXM_IN " mode.

【PARAMETERS】

<srcID>: opta|optb.

<pathID>: 1-63.

<exmID>: 1-2.

<active>: enable|disable.

<type>: 1+1|1+0.

[protectEnable] : enable|disable. (valid when type = 1+1).

Successfully Executed

【E.g.】

device>addexmxc opta 1 1 enable 1+1 enable

INDEX OPT PATH EXM_ID STATUS ACTIVE TYPE PROTECTION PATH

==========

1 optA 1 1 added enable 1+1 enable --

Successfully Executed

4.8.6 Delexmxc

【COMMAND】

delexmxc

【FORMAT】

delexmxc <exmID>

【EXPLANATION】

Delete cross-connect (XC) of EXM path in "EXM_IN " mode.

【PARAMETERS】

None

【E.g.】

device>delexmxc 1

EXM1 cross-connects has been deleted.

Successfully Executed

4.8.7 Showexmxc

【COMMAND】

showexmxc

【FORMAT】

showexmxc

【EXPLANATION】

View cross-connect (XC) status of EXM path in "EXM_IN" mode.

【PARAMETERS】

None

【E.g.】

device>showexmxc

```
  INDEX  OPT PATH  EXM_ID  STATUS  ACTIVE  TYPE   PROTECTION   PATH
=========================================================================
   1      optA  1     1    configured  enable    1+1       enable     optA
```

Successfully Executed

4.8.8 Showexmalarm

【COMMAND】

showexmalarm

【FORMAT】

showexmalarm

【EXPLANATION】

View the EXM alarm information.

【PARAMETERS】

None

【E.g.】

device>showexmalarm

```
   LOS     AIS     LOF     LOMF     RAL   RAL_CRC LAL_CRC
=============================================================
 1 alarm     --      --       --       --      --      --
```

Successfully Executed

4.8.9 Showexmalarmhistory

【COMMAND】

showexmalarmhistory

【FORMAT】

showexmalarmhistory

【EXPLANATION】

View EXM alarm history.

【PARAMETERS】

None

【E.g.】

device>showexmalarmhistory

Device EXM 1 Fail alarm records :

Index	Occurred Time	Cleared Time
1	2011- 2- 9,14-39-33	2011- 2- 9,14-40-24
2	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
3	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
4	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
5	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0
6	2000- 0- 0, 0- 0- 0	2000- 0- 0, 0- 0- 0

Successfully Executed

4.9 SEC commands

4.9.1 Showcurrentclock

【COMMAND】

showcurrentclock

【FORMAT】

showcurrentclock .

【EXPLANATION】

View current clock status.

【PARAMETERS】

None

【E.g.】

device>showcurrentclock

Current clock mode: Free-run

Reference source: --

SSM value: 0xb

Please press "Enter" to continue.....

CLOCK	LTI	TIME DEG	SSM MISMATCH	CLOCK	TIMERING	PRIORITY
T11	alarm	--	--	yes	--	2
T12	alarm	--	--	yes	--	3
T21	alarm	--	--	yes	--	---
T31	alarm	--	--	no	--	---

T32 alarm -- -- yes -- ---
Successfully Executed

4.9.2 Setclocksource

【COMMAND】

setclocksource

【FORMAT】

setclocksource <priority> <clocksource>

【EXPLANATION】

Configure clock source priority (1-6).

【PARAMETERS】

<priority> : 1-6.

<clocksource> : local|t11|t12|t21|t31|t32|remove.

【E.g.】

device>setclocksource 1 t11
Successfully Executed

4.9.3 Setclockmode

【COMMAND】

setclockmode

【FORMAT】

setclockmode <force> [source] [holdover]

【EXPLANATION】

Configure clock force mode.

【PARAMETERS】

<force>: enable|disable.

[source] : local|t11|t12|t21|t31|t32, (valid when force == enable).

[holdover] : enable|disable, (valid when force == enable).

【E.g.】

device>setclockmode enable t11 enable
Force Clock: Enable
Force clock source: T11
Force clock holdover mode: Enable
Successfully Executed

4.9.4 sett21source

【COMMAND】

sett21source

【FORMAT】

sett21source <cardID> <E1_ID>

【EXPLANATION】

Configure T21 source.

【PARAMETERS】

<cardID> : card1|card2.

<E1_ID> : 1-8.

【E.g.】

device>sett21source card2 3

T21 source: Card 2, E1 3

Successfully Executed

4.9.5 sett3x

【COMMAND】

sett3x

【FORMAT】

sett3x <t31|t32> <mode> [ssmValue]

【EXPLANATION】

configure T31 / T32 work mode and SSM Value.

【PARAMETERS】

<t31|t32>: t31|t32.

<mode>: clock|data,

: clock, 2.048MHz,

: data, 2.048MB/s.

[ssmValue] : 0x00|0x02|0x04|0x08|0x0b|0x0f,(mode==clock),

: 0x00, QL_ignorance,

: 0x02, QL_PRC,

: 0x04, QL_SSU-T,

: 0x08, QL_SSU-L,

: 0x0b, QL_SEC,

: 0x0f, QL_DNU.

【E.g.】

device>sett3x t31 clock 0x04

T31 Mode : 2.048MHz , SSM value = 0x4

Successfully Executed

4.9.6 sett41

【COMMAND】

sett41

【FORMAT】

sett41 <source> <mode> <enable|disable>

【EXPLANATION】

Configure T41 source, work mode and enable/disable SSM.

【PARAMETERS】

<source> : device|opta|optb.

: device, clock from SEC,

: opta, clock from T11,

: optb, clock from T12,

<mode>: clock|data,

: clock, 2.048MHz,

: data, 2.048MB/s.

<enable|disable>: enable|disable.

【E.g.】

device>sett41 optb data enable

T41 source : Optical port B

T41 Mode : 2.048MB/s

T41 SSM : Enable

Successfully Executed

4.9.7 manualt41

【COMMAND】

manualt41

【FORMAT】

manualt41 <enable|disable> [ssmValue]

【EXPLANATION】

Manually enable/disable T41 and SSM value.

【PARAMETERS】

<enable|disable>: enable|disable.

[ssmValue] : 0x00|0x02|0x04|0x08|0x0b|0x0f, (valid when mode is "data").

: 0x00, QL_ignorance,

: 0x02, QL_PRC,

: 0x04, QL_SSU-T,

: 0x08, QL_SSU-L,

: 0x0b, QL_SEC,

: 0x0f, QL_DNU.

【E.g.】

device>manualt41 enable 0x08
T41 force mode : enable , send SSM vlaue = 0x8
Successfully Executed

4.9.8 Setssm

【command】

setssm

【FORMAT】

setssm <enable|disable>

【EXPLANATION】

Enable/Disable SSM.

【PARAMETERS】

<enable|disable>: enable|disable.

【E.g.】

device>setssm enable
SSM function : enable
Successfully Executed

4.9.9 Setfreqcheck

【COMMAND】

setfreqcheck

【FORMAT】

setfreqcheck <enable|disable>

【EXPLANATION】

Enable/Disable frequency detection.

【PARAMETERS】

<enable|disable>: enable|disable.

【E.g.】

device>setfreqcheck disable
Check Frequence : disable
Successfully Executed

4.9.10 Setrestoretime

【COMMAND】

setrestoretime

【FORMAT】

setrestoretime <time>

【EXPLANATION】

Configure the confirming time after clock restore.

【PARAMETERS】

<time>: 0-12 minutes.

【E.g.】

device>setrestoretime 4

Clock restore time: 4 minutes

Successfully Executed

4.9.11 Showclockconfig

【COMMAND】

showclockconfig

【FORMAT】

showclockconfig

【EXPLANATION】

View current clock configuration.

【PARAMETERS】

None

【E.g.】

device>showclockconfig

Force Clock: Enable

Force clock source: T11

Force clock holdover mode: Enable

Clock proprity 1 : T11

Clock proprity 2 : T12

Clock proprity 3 : local

Clock proprity 4 : Invalid

Clock proprity 5 : Invalid

Clock proprity 6 : Invalid

Please press "Enter" to continue.....

SSM function : Enable

The confirming time after clock restore : 4

T21 source : Card 2 , E1 3

Frequency check : Disable

T31 Mode : 2.048MHz , SSM value = 0x4
T32 Mode : 2.048Mb/s

T41 source : Optical port B
T41 Mode : 2.048MB/s
T41 SSM : Enable
T41 force mode : enable , send SSM vlaue = 0x8
Successfully Executed

4.9.12 Showsecalarmhistory

【COMMAND】

showsecalarmhistory

【FORMAT】

showsecalarmhistory

【EXPLANATION】

View the alarm history of current SEC.

【PARAMETERS】

None

【E.g.】

device>showsecalarmhistory
SDH Equipment Clock LTI alarms record :

Index Occurred Time Cleared Time
==========
1 2011- 2- 9,15-24- 0 2011- 2- 9,15-37- 9
2 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
3 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
4 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
5 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
6 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
SDH Equipment Clock SSM MISMATCH alarms record :

Index Occurred Time Cleared Time
==========
1 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
2 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0

3 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
4 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
5 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
6 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
Time : Year-Month-Day, Hour-Minute-Second
Please press "Enter" to continue.....

SDH Equipment Clock TIME DEG alarm records :
Index Occurred Time Cleared Time
==========
1 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
2 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
3 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
4 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
5 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
6 2000- 0- 0, 0- 0- 0 2000- 0- 0, 0- 0- 0
Time : Year-Month-Day, Hour-Minute-Second
Successfully Executed

4.10 DCC commands

4.10.1 Setdccmode

【COMMAND】

setdccmode

【FORMAT】

setdccmode <mode> <optadcc> <optbdcc>

【EXPLANATION】

Configure DCC mode, and enable/disable DCC access.

【PARAMETERS】

<mode>: standard|customized.
standard :d1,d2,d3;
customized:d6,d7,d8.
<optadcc> : enable|disable.
<optbdcc> : enable|disable.

【E.g.】

device>setdccmode standard enable disable
DCC mode: Standard
Optical port A DCC: Enable
Optical port B DCC: Disable

Successfully Executed

4.10.2 Setohsrcdir

【COMMAND】

setohsrcdir

【FORMAT】

setohsrcdir <optasrcdir> <optbsrcdir>

【EXPLANATION】

Configure the source direction of other overheads.

【PARAMETERS】

<optasrcdir>: opta|optb.

<optbsrcdir>: opta|optb.

【E.g.】

device>setohsrcdir opta optb

OPT_A overhead source : OPTA

OPT_B overhead source : OPTB

Successfully Executed

4.10.3 Showdcc

【COMMAND】

showdcc

【FORMAT】

showdcc

【EXPLANATION】

View the settings of DCC.

【PARAMETERS】

None

【E.g.】

device>showdcc

DCC mode: Standard

Optical port A DCC: Enable

Optical port B DCC: Disable

Optical port A overhead source: OPT A

Optical port B overhead source: OPT B

Successfully Executed

4.11 TEST commands

4.11.1 Setoptloop

【COMMAND】

setoptloop

【FORMAT】

setoptloop <optID> <device> <line>

【EXPLANATION】

Configure the Loop-back of optical port.

【PARAMETERS】

<optID>: opta|optb.

<device> : loop|unloop.

<line>: loop|unloop.

【E.g.】

device>setoptloop opta loop unloop

OPT	DEVICE LOOP	LINE LOOP
opta	loop	unloop

Successfully Executed

4.11.2 Showoptloop

【COMMAND】

showoptloop

【FORMAT】

showoptloop

【EXPLANATION】

View loop status of the optical ports.

【PARAMETERS】

None

【E.g.】

device>showoptloop

OPT	DEVICE LOOP	LINE LOOP
opta	loop	unloop
optb	unloop	unloop

Successfully Executed

4.11.3 sete1loop

【COMMAND】

sete1loop

【FORMAT】

sete1loop <cardID> <tu12number> <startpathID> <line> <device>

【EXPLANATION】

Configure the loopback of E1 port.

【PARAMETERS】

<cardID>: card1|card2.

<tu12number>: 1-8.

<startpathID>: 1-8.

<line> : loop|unloop.

<device>: loop|unloop.

【E.g.】

device>sete1loop card2 4 1 loop loop

E1	DEVICE LOOP	LINE LOOP
1	loop	loop
2	loop	loop
3	loop	loop
4	loop	loop
5	unloop	unloop
6	unloop	unloop
7	unloop	unloop
8	unloop	unloop

Successfully Executed

4.11.4 showe1loop

【COMMAND】

showe1loop

【FORMAT】

showe1loop <cardID>

【EXPLANATION】

View loop status of the E1 ports.

【PARAMETERS】

<cardID>: card1|card2.

【E.g.】

```
device>showe1loop card2

 E1          DEVICE LOOP      LINE LOOP
==============================================
 1             loop             loop
 2             loop             loop
 3             loop             loop
 4             loop             loop
 5           unloop           unloop
 6           unloop           unloop
 7           unloop           unloop
 8           unloop           unloop

Successfully Executed
```

4.11.5 Setbert

【COMMAND】

setbert

【FORMAT】

setbert <txDirection> <cardID> <txE1ID> <rxDirection> <cardID> <rxE1ID>

【EXPLANATION】

Configure E1 Bit Error Test and test E1 channel.

【PARAMETERS】

<txDirection> : bus|e1.

<cardID> : card1|card2.

<txE1ID> : 1-8.

<rxDirection> : bus|e1.

<cardID> : card1|card2.

<rxE1ID> : 1-8.

【E.g.】

```
device>setbert bus card2 1 e1 card2 1
 NAME        STATUS     DIRECTION   CARD ID     E1 ID
============================================================
```

Transmit	Disable	Bus	2	1
Receive	Disable	E1	2	1

Successfully Executed

4.11.6 Enbert

【COMMAND】

enbert

【FORMAT】

enbert <tx> <rx>

【EXPLANATION】

Enable/Disable BERT transmitter and receiver.

【PARAMETERS】

<tx> : enable|disable.

<rx> : enable|disable.

【Note】

After using command “setbert” to set “tx” and “rx”,use this command to enable or disable the “tx” and “rx”.

【E.g.】

device>enbert enable enable

NAME	STATUS	DIRECTION	CARD ID	E1 ID
Transmit	Enable	Bus	2	1
Receive	Enable	E1	2	1

Successfully Executed

4.11.7 Inserterr

【COMMAND】

inserterr

【FORMAT】

inserterr

【EXPLANATION】

Manually insert one bit error to BERT .

【PARAMETERS】

None

【Note】

When you use this command: frist, use “setbert” command to set “txDirection” and “rxDirection”,then use “enbert” command to enable “tx” and “rx”. Now you can insert bit error by using “inserterr” command.

【E.g.】

```
device>inserterr
Successfully inserted an error bit.
Successfully Executed
```

4.11.8 Showbert

【COMMAND】

showbert

【FORMAT】

showbert

【EXPLANATION】

View BERT status.

【PARAMETERS】

None

【E.g.】

```
device>showbert
 NAME       STATUS     DIRECTION   CARD ID     E1 ID
============================================================
 Transmit      Enable       Bus          2           1
 Receive       Enable       E1           2           1

  BER ALARM INDICATION :
   LOS    AIS     PATTERN LOS
==============================================
 Normal   Normal     Normal
Local bit error counter = 0 , 1
 Description :
      Perform Counter (H32) , (L32) = (H32) << 32 |(L32) ;
          H32 : High 32 bits;  L32 : low 32 bits
Successfully Executed
```

4.11.9 Clearbert

【COMMAND】

clearbert

【FORMAT】

clearbert

【EXPLANATION】

Reset E1 BERT .

【PARAMETERS】

None

【E.g.】

device>clearbert

Reset of BER test done

Successfully Executed

4.12 Hidden commands

4.12.1 Showtimalarm

【COMMAND】

showtimalarm

【FORMAT】

showtimalarm

【EXPLANATION】

View TIM alarms on STM-1 port.

【PARAMETERS】

None

【E.g.】

device>showtimalarm

View TIM alarms on STM-1 port.

Successfully Executed

4.12.2 Disabletimalarm

【COMMAND】

disabletimalarm

【FORMAT】

disabletimalarm

【EXPLANATION】

Ignore TIM alarms on STM-1 port.

【PARAMETERS】

None

【E.g.】

device>disabletimalarm

Ignore TIM alarms on STM-1 port.

Successfully Executed

4.12.3 Frontpanel

【COMMAND】

frontpanel

【FORMAT】

frontpanel

【EXPLANATION】

Show all the indications (LEDs) in front panel.

【PARAMETERS】

None

【E.g.】

device>frontpanel

```
 LED     UALM    NOPA     NOPB     CARD1     CARD2      CARD3    ALS
=================================================================
 Status      ON      ON       ON        ON         ON         ON      ON

 LED      DALM    RPDA    RPDB     TALM1      TALM2      TALM3
=================================================================
 Status      OFF     OFF      OFF       OFF        OFF        OFF
```

Successfully Executed