

XGS-ONU-25-20NI Configuration Guide

XGS-ONU-25-20NI

CONFIGURATION GUIDE



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Introduction

This manual provides a quick guide for users to know CLI of XGSPON Stick It is useful for local support test with OLT and doing some trouble shootings.

Overview

This manual is organized as following:

Section 1: Explain how to TELNET

Section 2: Provide the way to change local access settings

Section 3: List the most common commands

Section 4: Explain local software image upgrade and switch

Section 5: Provide the way to OMCI mib command

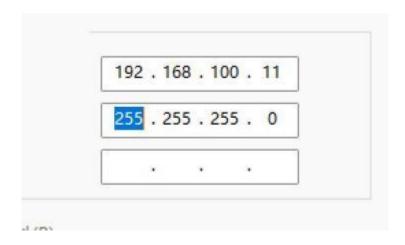
Section 6: Common service debug information



1. How to telnet

PC connection ont port 1 with cable, The manager IP Addr is:192.168.100.1

Steps 1 Set local IP address manually on laptop



Steps 2 Ping Default Gateway IP 192.168.100.1



Steps 3 If the initial account is changed, the initial password will become invalid. If you need to provide the password after the account change, please contact FS.



Steps 4 telent to ONT, username is "xxxxxx".

Steps 5 The password is "xxxxxx".

Steps 6 Input "enable" to enter configure mode





2. Ont local commands

Here we list the most common commands for testing and troubleshooting.

2.1 Hardware and Software information

2.1.1 Software version

The command to check ont version

[Command]

/ system/ ontver

Example:

#ONT>/system/ontver OntSwVer: R4.4.20.016

#ONT>

2.1.2 local ont series number command

Check local ont series number

The command to read ont series number [Command]

/ system/ misc/ eqsn get

Example:

#ONT/system/misc>eqsn get

eqsn: FTRO20210714

Set local ont series number

The command to write ont series number

[Command]

/system/misc/eqsn set //comment: eqsn setting is like"FTRO12345678"

format

Example:

#ONT/system/misc> eqsn set "FTRO12345678"

2.1.3 Stopreboot command

When ont abnormal, ont reboot all the time, the command can interrupt to reboot

[Command]

ONT/ system/ misc> stopreboot

Example:

ONT/ system/ misc> stopreboot

Stop reboot command OK



2.2 Optics Parameters

2.2.1 Optics monitoring information

To check optics monitor info

[Command]

/ system/ misc/ show trans state

Example:

ONT/ system/ misc> show trans state

Power : 3V3 (3.3)
Temperature : 45.0 C
Data Rx Power : -14.3 dBm
Data Tx Power : 7.9 dBm

APD Prot: No

Data Tx bias : 12.8 mA #ONT/system/misc>

2.3 PON and Service Connection

2.3.1 Link status

2.3.2 ONU information

The command to check onu info [Command] /traffic/pon/show onu Example:

#ONT/traffic/pon>show onu

Onu id 256 sdThreshold: 0 sfThreshold: 0



TO1: 80000 TO2: 1 eqd: 617219 Serial Number(vendor code): GPON Serial Number(sn): 227000fe Password: 41 42 43 44 45 46 47 48 49 4a Registration ID: 000000000 ------ INFO END ------#ONT/traffic/pon> 2.3.3 Traffic table To check the traffic info about DS US gem flow and T-count table [Command] /traffic/pon/show traffic all Example: # ONT/ traffic/ pon> show traffic all DS GEM FLOW Table FlowId GemIndex PortId TcontId DQ Dst EthFlow EthFlow QosMap Pri Def 0xf01 1034 1 255 1 2 0xb02 1035 1 255 3 0x903 1036 1 255 4 0xff7f 65533 1 255 0xff7e 65534 1 30 255 **US GEM FLOW Table** FlowId GemIndex PortId TcontId UQ AES gemRuleIndex 1034 1 7 1 15 0xf01 3 1 16 2 0xb02 1035 1 3 0x903 1 1 17 1036 1 TCONT Table Tcont number alloc ID traffic mgmt State Flow Id 1 1025 0

#ONT/traffic/pon>



2.3.4 Service Connection

```
The check service connection info about bridge port
[Command]
/ traffic/ omci/ show connection all
Example:
# ONT/ traffic/ omci> show connection all
   ------ Connection ID = 0 ------
Completed = 1, Bridge Id = 0x0a01, valid = 1
Total Port Num
              = 3
    Wan Port Num
                      = 2
        Unicast Port Num = 0
        Multicast Port Num = 0
        Broadcast Port Num = 1
        802.1p Port Num = 1
    Lan Port Num
        Iphost Port Num = 0
        Eth Port Num
        EthFlow Port Num = 0
        VirUni Port Num = 0
Bridge Port Id = 0xa10b, type = BRCT, TP Ptr = 0xfffd
    Pon Info:
          GemPort DsQ
                         UsQ
                                Mc Dir DFlow CPUQ UFlow Type Tcont
    0xfffd 0xfffd 0x0000 0x0000 00 002 00000 0000 00000 ETH |
Bridge Port Id = 0xa102, type = 802.1p, TP Ptr = 0xa102
 802. 1 P Info:
 IwTp GemPort DsQ UsQ
                           Mc Dir DFlow CPUQ UFlow Type Tcont
 0x0402 0x0402 0x0000 0x8000 00 003 00001 0000 00001 ETH | 0x0403
 0x0402 0x0402 0x0000 0x8000 00 003 00001 0000 00001 ETH | 0x0403
 0x0402 0x0402 0x0000 0x8000 00 003 00001 0000 00001 ETH | 0x0403
 0x0402 0x0402 0x0000 0x8000 00 003 00001 0000 00001 ETH | 0x0403
 0x0402 0x0402 0x0000 0x8000 00 003 00001 0000 00001 ETH | 0x0403
 0x0402 0x0402 0x0000 0x8000 00 003 00001 0000 00001 ETH | 0x0403
 0x0402 0x0402 0x0000 0x8000 00 003 00001 0000 00001 ETH | 0x0403
 0x0402 0x0402 0x0000 0x8000 00 003 00001 0000 00001 ETH | 0x0403
Bridge Port Id = 0x0a01, type = ETH, TP Ptr = 0x0a01, PortMode = BRIDGE
----- END [0] ------
# ONT/ traffic/ omci>
```



Service Connection(Debug Mode)

```
This command show the configuration of EMR from MEC
[Command]
/ traffic/ omci/ debug/ showemrcfg [Connection ID]
Example:
# ONT/ traffic/ omci/ debug> showemrcfg 0
Connection ID = 0
UNI Configuration:
  < SLOT = 1, PORT = 1, TYPE = 1 >
** Vlan Op:
    US MODE: ASIS
      OLD ( NO_VID, ALL_ PRI) -> NEW ( NO_VID, ALL_ PRI)
    DS MODE: ASIS
      OLD (NO VID, ALL PRI) -> NEW (NO VID, ALL PRI)
    US MODE: ASIS
      OLD (ALL_VID, ALL_ PRI) -> NEW (ALL_VID, ALL_ PRI)
    DS MODE: ASIS
      OLD (ALL_VID, ALL_ PRI) -> NEW (ALL_VID, ALL_ PRI)
** Vlan Filter:
    Mode
              : Forward all
    Number [2]: (ALL_VID, ALL_ PRI) (NO_VID, ALL_ PRI)
** MC Cfg
                 : usFlow 65535
    US Mode
                 : Unknown
    US TCI
              : 0x0
    DS MC Mode : ASIS
    DS MC TCI : 0x0
    DS IGMP Mode: Unknown
    DS IGMP TCI: 0x0
WAN Configuration:
  < Ds Flow Id = 2, Us Flow Id = 65535, Serv Type = ETH | >
** Vlan Op:
    US MODE: Replace VID with the old PRI
      OLD (0x2BE, ALL_ PRI) -> NEW (0x2BE, ALL_ PRI)
    DS MODE: Replace VID with the old PRI
      OLD (0x2BE, ALL_ PRI) -> NEW (0x2BE, ALL_ PRI)
** Vlan Filter:
    Mode
              : Forward all
    Number [2]: (ALL_VID, ALL_ PRI) (NO_VID, ALL_ PRI)
```



< Ds Flow Id = 1, Us Flow Id = 1, Serv Type = ETH | >

** Vlan Op:

US MODE: Replace VID with the old PRI

OLD (0x2BE, ALL_ PRI) -> NEW (0x2BE, ALL_ PRI)

DS MODE: Replace VID with the old PRI

OLD (0x2BE, ALL_ PRI) -> NEW (0x2BE, ALL_ PRI)

** Vlan Filter:

Mode : Forward all

Number [3]: (0x2BE, ALL_ PRI) (NO_VID, ALL_ PRI) (0x0, ALL_ PRI)

2.3.5 Performance counters

2.3.5.1 Gem port counter

The information of RX/TX packets in GemPort

[Command]

/traffic/pon/show pm gem all

Example:

#ONT/traffic/pon>show pm gem all

-----port 1034 flow 0001-----

RX GEM frames : 611
RX GEM bytes : 243164
Tx GEM frames : 638
Tx GEM bytes : 225814

-----port 1035 flow 0002-----

RX GEM frames : 0
RX GEM bytes : 0
Tx GEM frames : 8
Tx GEM bytes : 590

-----port 1036 flow 0003-----

RX GEM frames : 3 RX GEM bytes : 216 Tx GEM frames : 54 Tx GEM bytes : 3804

-----port 65533 flow 0004-----

RX GEM frames : 751 RX GEM bytes : 1 12106

Tx GEM frames : 0
Tx GEM bytes : 0



-----port 65534 flow 0030-----

RX GEM frames : 153448 RX GEM bytes : 196619932

Tx GEM frames : 0
Tx GEM bytes : 0

#ONT/traffic/pon>

2.4 Ethernet service

2.4.1 UNI port information

```
To check Ethernet port physical link
[Command]
#ONT/traffic/eth>show pack
build time Dec 26 2022: 06:45:47
------ Line Pack -- PWR 0X0
Line Slot 10, NumOfPorts 1, type 49, subtype 75, state 2
----- Configuration -----
port | enable | loop | Mode | RL Type | RL Us Rate| RL Ds Rate|
    Yes
         No
               Auto
                        0
                             0
----- Status -----
1) link state: Up, link mode: 1G Full
------ Bridge Pack ------
Type:
       75
State:
       2
MAC Table: 0
MAC Aging: 0
MTU:
------ Chip Data -----
eth Fd:
port Mask:
           0x0018
         28
type
***** DEBUG INFO *******
        EmrLogId: 5
       EmrAdminEn: 0
      Emrbelnited: 1
      EmrDumpConn: 0
      EmrPwrShedEn: 0x0
     EmrConnItemNum: 2
     EmrUsDsReverseEn: 1
   EmrConnAllVidCheck: 0
```



EmrMcastGemVlanOp En : 1 g EmrSaveConnItemEn : 1 g EmrMcastCrossVlanEn : 1 EmrUniExtractPriMatch : 1

#ONT/traffic/eth>

2.4.2 IGMP information

IGMP Domain

To check which groups have been joined at each UNI:

[Command]

/traffic/eth/show igmp domain

Example:

ONT/ traffic/ eth> show igmp domain

p Domain Id 0 auto:0 vid 0x000 pri:0 Op:unknown cfgver IGMP_V3

Stb Query v2Exist Querier Snoop Fast Host Port Proxy

Ver Ver Present EN LEAVE Track Mask Mode

Unknown Unknown 0 0x00000000 1 1 1 0000003f DISABLE

wanIp wanMac lanIp lanMac

QRV QQIC(ms) LMQI(ms) MaxResp(ms)

v2 DefCfg 2 125000 1000 10000

v2RunCfg 0 0 0 0

v3DefCfg 2 125000 1000 10000

v3RunCfg 0 0 0 0

v3GSCfg 0 0 0 0

pDomain Id 1193 auto:0 vid 0x4a9 pri:0 Op:add & repri cfgver IGMP_V3

Stb Query v2Exist Querier Snoop Fast Host Port Proxy

Ver Ver Present EN LEAVE Track Mask Mode

wanIp wanMac lanIp lanMac

0x6f6f6f82 0x102012301032 0xc0a80101 0x102012301014

mldWanIp: 000.000.000.000 mldQuerierIp: 000.000.000.000



QRV QQIC(ms) LMQI(ms) MaxResp(ms) 125000 1000 10000 v2DefCfg 2 v2RunCfg 0 0 v3DefCfg 2 125000 1000 10000 125000 0 v3RunCfg 2 10000 v3GSCfg 0 0 0 0 index Group(all 11) | portmask | age (sec) [000] ff02:0000:0000:0000:0000:0000:0000 0x000000b IP 0x0000000b 238 [001] ff02:0000:0000:0000:0001:ffc5:c826 0x00000002 IP 0x00000002 104 [002] ff02:0000:0000:0000:0001:ffce:4bfd 0x00000002 0x0000002 33 [003] ff02:0000:0000:0000:0001:ff56:b804 8000000008 IΡ 0x00000008 236 [004] 224.000.000.252 0x00000008 IP 0x00000008 237 0x0000000b IP 0x0000000b 237 [005] 239.255.255.250 [006] ff02:0000:0000:0000:0000:0000:000b 0x000000b IP 0x0000000b 237 [007] 239.002.001.001 0x00000008 IP 0x00000008 241 [008] ff02:0000:0000:0000:0001:ff5b:63fe 0x00000001 IP 0x0000001 239 [009] ff02:0000:0000:0000:0000:0001:0003 0x00000008 IP 0x00000008 236 [010] 224.000.000.251 0x0000000b IP 0x0000000b 241 **IGMP** statistic To check RX/TX IGMP packet [Command] #ONT/traffic/eth>show igmp pm ===== IGMP Domain(0) Counters ===== ==== IGMP Domain(1193) Counters ===== +++++++ wan port counters +++++++ Rx v3GeneralQuery 10 Tx v3GeneralQuery 10 Tx MLDv2GeneralQuery : 10 LanPortId 0 | 1 | 2 | 3



```
0
                      1
                            0
Rx MLDV1Join
                                  0
                      2
Tx MLDV1|oin
                0
                            0
                                  0
Tx MLDV1done
                 0
                       1
                                   0
                             0
                                   37
Rx MLDV2loin
                29
                      17
                             0
Tx MLDV2Join
                3
                      0
                            0
                                  2
Rx MLDV2done
                 0
                       4
                              0
                                    0
Tx MLDV2done
                                   0
                 0
                             0
TxV2Join
             1
                   1
                         0
                                6
RxV3|oin
             18
                   14
                           0
                                34
TxV3|oin
             6
                   n
RxV3Leave
              0
                     4
                           0
                                 0
GroupErr
              0
                    2
                                N
#ONT/traffic/eth>show IGMP uni
To check IGMP all UNI configuration
[Command]
/ traffic/ eth/ show igmp uni
Example:
# ONT/ traffic/ eth> show igmp uni
======= Domain 0 Port config =========
lport 0 | maxGroup 128 | curGroup 0 | aclNum 0
             0 | exceedDeny 0 | curBw 0
lport 1 | maxGroup 128 | curGroup 0 | aclNum 0
     | maxBw 0 | exceedDeny 0 | curBw 0
lport 2 | maxGroup 128 | curGroup 0 | aclNum 0
     l maxBw
               0 | exceedDeny 0 | curBw 0
lport 3 | maxGroup 128 | curGroup 0 | aclNum 0
               0 | exceedDeny 0 | curBw 0
     | maxBw
lport 4 | maxGroup 128 | curGroup 0 | aclNum 0
               0 | exceedDeny 0 | curBw 0
     l maxBw
lport 5 | maxGroup 128 | curGroup 0 | aclNum 0
                0 | exceedDeny 0 | curBw 0
========= Domain 1 193 Port config ============
lport 0 | maxGroup 128 | curGroup 5 | aclNum 0
               0 | exceedDeny 0 | curBw 0
     | maxBw
lport 1 | maxGroup 128 | curGroup 0 | aclNum 0
               0 | exceedDeny 0 | curBw 0
     l maxBw
lport 2 | maxGroup 128 | curGroup 0 | aclNum 0
               0 | exceedDeny 0 | curBw 0
     l maxBw
```



lport 4 | maxGroup 128 | curGroup 0 | aclNum 0 | maxBw 0 | exceedDeny 0 | curBw 0

#ONT/traffic/eth>

2.4.3 Performance counter

Gem counter

The show gem port PM data [Command]
/ traffic/ omci/ show pm gem
Example:
ONT/ traffic/ omci> show pm gem
------gem port cfg------

enable : 0

gem port id: 0xfffe pm data me id: 0xfffe

Index: 0

lost packets : 0x00000000
misinsert packets: 0x00000000
rx packets : 0x000000000
rx blocks : 0x000000000
tx blocks : 0x000000000
impaired blocks : 0x000000000
tx packets : 0x00000000

enable : 0

gem port id: 0x40a pm data me id: 0x40a

Index: 1

lost packets : 0x00000000
misinsert packets: 0x00000000
rx packets : 0x000000000
rx blocks : 0x000000000
tx blocks : 0x000000000



impaired blocks: 0x00000000 tx packets: 0x00000000

enable : 0

gem port id: 0x40b pm data me id: 0x40b

Index: 2

lost packets : 0x00000000
misinsert packets: 0x00000000
rx packets : 0x000000000
rx blocks : 0x000000000
tx blocks : 0x00000000
impaired blocks : 0x00000000
tx packets : 0x00000000

enable : 0

gem port id: 0x40c pm data me id: 0x40c

Index: 3

lost packets : 0x00000000
misinsert packets: 0x00000000
rx packets : 0x000000000
rx blocks : 0x000000000
tx blocks : 0x000000000
impaired blocks : 0x000000000
tx packets : 0x000000000

enable : 0

gem port id: 0xfffd pm data me id: 0xfffd

Index: 4

lost packets : 0x00000000
misinsert packets: 0x00000000
rx packets : 0x000000000
rx blocks : 0x000000000
tx blocks : 0x000000000
impaired blocks : 0x000000000
tx packets : 0x000000000



ALU pm data me id: 0xffff

lost DS packets : 0x00000000
lost US packets : 0x00000000
rx packets : 0x00000000
rx blocks : 0x00000000
tx blocks : 0x00000000
impaired blocks : 0x00000000
tx packets : 0x00000000
rx bad headers : 0x00000000

ALU47 pm data me id: 0xffff

lost DS packets : 0x00000000
lost US packets : 0x00000000
rx packets : 0x000000000
rx blocks : 0x000000000
tx blocks : 0x000000000
impaired blocks : 0x000000000

tx packets : 0x008x

rx bad headers : 0x00000000

Arris pm data me id: 0xffff

lost packets : 0x00000000

impaired blocks: 0x00000000

GAL TDM pm data me id: 0xffff

 GemFrmLoss
 : 0x00000000

 BufUnderflows
 : 0x00000000

 BufOverflows
 : 0x00000000

-----gem port cfg end-----

#ONT/traffic/omci>

Eth counter

The show eth PM data
[Command]
/traffic/omci/show pm uni 10 1
Example:
#ONT/traffic/eth>show pm uni 10 1



UNI slot 10 port 1 PM

=====Counters for phyport[4]=====

ifInOctets 48139 ifInUcastPkts 608 ifIn MulticastPkts 46 ifOutOctets 37430 ifOutUcastPkts 373 Tx Pkts64Octets 211 Tx Pkts65to127Octets 149 Tx Pkts128to255Octets 2 Tx Pkts256to511Octets 2 Tx Pkts512to1023Octets 2 7 Tx Pkts1024to1518Octet Rx Pkts64Octets 600

#ONT/traffic/eth>

Rx Pkts65to127Octets

Rx Pkts128to255Octets

2.5 System Log

2.5.1 PON manager

To check PON implementation

[Command]

/ system/ log/ show pmr

Example:

ONT/ system/ log> show pmr

Log: pmr

tick upTime1 file line level message

c7f3c315 20 pmr_main_gpon.c 1 14 4 PMR_ Init OK

c7f3c6e 1 21 pmr_handler_gpo 423 4 rcv VOS_TIME_OUT

c7f3c6e2 21 pmr_handler_gpo 454 4 rcv

MEC MSG PACK MGR READY ACK

c7f3c6e2 21 pmr_handler_gpo 457 4 kill Init timer [1], ret=[0]

c7f3d3c4 25 pmr handler gpo 555 4 rcv MEC MSG CFG PACK TYPE,

16

38

result = 0, hwType[62] MappingMode 1

c7f3e045 28 pmr_data_cortin 90 4 DBACfged 0

c7f3e045 28 pmr_handler_gpo 391 4 rcv PON_ MSG_CFG_ DBA_ ENABLE,

result = 0

c7f3e051 28 pmr_handler_gpo 632 4 rcv PON_ MSG_CFG_SDSF, result =

0

c7f3e0f3 28 pmr_data_cortin 163 4 report state transition: Unknown -->

Init

c7f3e0f3 28 pmr_pack_cortin 293 1 Pon drv active ok



```
c7f3e0f4
            28 pmr_handler_gpo 589
                                        4 rcv MEC_MSG_ACTIVATE_PACK,
result = 0
c7f3e6c7
            29 pmr event corti 303
                                       4 state transtion: 1 --> 3 event[assign
onu_id message]
c7f3e6c7
            29 pmr_data_cortin 163
                                       4 report state transtion: Init -->
Preparing
            2a pmr_handler_gpo 1000
c7f3e6f5
                                         4 rcv PON_MSG_LINK_ACTIVE, result
= 0
            2a pmr_handler_gpo 495
c7f3e773
                                         4 Re-configure Pack slot = 128,
actualType = 62
c7f3e7ec
            2a pmr_data_cortin 90
                                       4 DBACfged 0
            2a pmr_handler_gpo 391
                                        4 rcv PON_ MSG_CFG_ DBA_ ENABLE,
c7f3e7ec
result = 0
                                         4 rcv PON MSG CFG SDSF, result = 0
            2a pmr_handler_gpo 632
c7f3e7f8
            2a pmr_handler_gpo 567
                                        4 Re-act Pack slot = 128
c7f3e8af
c7f3e950
            2a pmr_handler_gpo 1000
                                          4 rcv PON_MSG_LINK_ACTIVE, result
= 0
c7f42982
            3b pmr_event_corti 224
                                        4 default Allocid MSG: allocid = 0x0,
status = 0
            3b pmr event corti 303
                                        4 state transtion: 3 --> 4 event[assign]
c7f42986
onu_id message]
c7f42ae9
             3b pmr event corti 303
                                        4 state transtion: 4 --> 5 event[ranging
time message1
c7f42ca4
            3b pmr_data_cortin 163
                                       4 report state transtion: Preparing -->
Ready
                                       1 recv omci, force report state change
c7f42ca5
             3b pmr_event_corti 351
oldState 3
c7f42e64
                                         4 rcv MEC_MSG_PON_LINK_UP,
             3c pmr_handler_gpo 956
result = 0
c7f42f9d
             3c pmr_handler_gpo 936
                                        4 rcv MEC_MSG_CFG_RESET, result =
0
c7f43452
                                       4 report assign Alloc-ID = 1025, Status
             3d pmr_event_corti 151
= ALLOCATE
c8008c5c
             3d pmr_handler_gpo 632
                                         4 rcv PON_MSG_CFG_SDSF, result =
0
c8008c73
             3d pmr_handler_gpo 632
                                         4 rcv PON_MSG_CFG_SDSF, result =
             3e pmr handler gpo 796
c8008cf9
                                         4 rcv PON_MSG_CFG_TCONT, allocid
= 65535 \text{ type} =
1025 mgmt = 0 enable = 0 result = 1
                                         4 rcv PON_MSG_CFG_TCONT, allocId
c8008d12
              3e pmr_handler_gpo 796
= 1025 \text{ type} = 1 \text{ mgmt} = 2 \text{ enable} = 1 \text{ result} = 0
c8008d7d
              3e pmr handler gpo 689
                                          4 rcv PON MSG CFG US FLOW act
Rem, tcontQ = 7, flow = 1, gemport = 1034 result = 2
c8008d88
              3e pmr handler gpo 689
                                          4 rcv PON_MSG_CFG_US_FLOW act
Add, tcontQ = 7, flow = 1, gemport = 1034 result = 0
```



```
c8008d91
             3e pmr_handler_gpo 663
                                         4 rcv PON_MSG_CFG_DS_FLOW act
Rem, result = 1
c8008dcd
             3e pmr_handler_gpo 663
                                        4 rcv PON_ MSG_CFG_ DS_ FLOW act
Add, result = 0
c8008dce
             3e pmr_handler_gpo 689
                                        4 rcv PON_ MSG_CFG_US_ FLOW act
Rem, tcontQ = 3, flow = 2, gemport = 1035 result = 2
             3e pmr_handler_gpo 689
                                         4 rcv PON_ MSG_CFG_US_ FLOW act
c8008dd8
Add, tcontQ = 3, flow = 2, gemport = 1035 result = 0
c8008de2
             3e pmr handler gpo 663
                                        4 rcv PON_ MSG_CFG_ DS_ FLOW act
Rem, result = 1
             3e pmr_handler_gpo 663
c8008e1d
                                        4 rcv PON_ MSG_CFG_ DS_ FLOW act
Add, result = 0
c8008e1f
             3e pmr_handler_gpo 689
                                        4 rcv PON_ MSG_CFG_US_ FLOW act
Rem, tcontQ = 1, flow = 3, gemport = 1036 result = 2
             3e pmr handler gpo 689
                                        4 rcv PON_ MSG_CFG_US_ FLOW act
c8008e29
Add, tcontQ = 1, flow = 3, gemport = 1036 result = 0
c8008e33
             3e pmr_handler_gpo 663
                                        4 rcv PON_ MSG_CFG_ DS_ FLOW act
Rem, result = 1
             3e pmr_handler_gpo 663
c8008e6e
                                        4 rcv PON_ MSG_CFG_ DS_ FLOW act
Add, result = 0
c8008f1a
            3e pmr_handler_gpo 663
                                       4 rcv PON_ MSG_CFG_ DS_ FLOW act
Rem, result = 1
c8008f33
            3e pmr_handler_gpo 663
                                       4 rcv PON_ MSG_CFG_ DS_ FLOW act
Add, result = 0
c8009032
             3e pmr handler gpo 663
                                        4 rcv PON_ MSG_CFG_ DS_ FLOW act
Rem, result = 1
c800904b
             3e pmr_handler_gpo 663
                                        4 rcv PON_ MSG_CFG_ DS_ FLOW act
Add, result = 0
c80091d4
             3f pmr_handler_gpo 796
                                        4 rcv PON_ MSG_CFG_TCONT, allocid
= 1025 type = 1 mgmt = 2 enable = 1 result = 18
# ONT/ system/ log>
```

2.5.2 PON manager driver

To check PN manager driver [Command] /system/log/show pmr_drv Example:

```
#ONT/system/log>show pmr_drv
Log: pmr_drv
tick upTime1 file line level message
c7f3d2e 1 24 pmr_pack_cortin 244
c7f3d3a9 25 pmr_pack_cortin 253 4 pon device is opened. fd[9], cnt[0]
c7f3d3c2 25 pmr_pack_cortin 287 4 GPON driver init OK, pti[0xaa]
```



c7f3d3c4	25 pmr_pack_cortin 396	4 serial number: 46 54 52 30 20 21		
07 14				
c7f3d3c4	25 pmr_pack_cortin 421	4 passward: 00 00 00 00 00 00 00 00		
00 00				
c7f3e051	28 pmr_pack_cortin 441	1 Succeed to SD threshold 9		
c7f3e051	28 pmr_pack_cortin 462	1 Succeed to SF threshold 5		
c7f3e6c4	29 pmr_pack_cortin 235	4 Disable Tx Laser Power Supply		
when SN-Disable				

2.5.3 Misc manager

```
To check misc implementation
[Command]
/ system/ log/ show mmr
Example:
# ONT/ system/ log> show mmr
Log: mmr
   tick_upTime1
                       file line level message
c800ac5b
                 mmr_led_cfg.c 1121
                                     4 mmr_LedHandleEvent: event(800)
            46
                 mmr_led_cfg.c 1121
                                     4 mmr_LedHandleEvent:
c800ac5b
            46
mmr_led_cfg.c 1121
                                     4 mmr_ LedHandleEvent:
c800ac5c
            46
event(100000000000100)
            46
                 mmr_led_cfg.c 737
                                     4 mmr_LedCfgSetState: type(phone)
c800ac5c
                                               4 mmr_LedHandleEvent:
state(goff) c800ac5d
                          mmr_led_cfg.c 1121
                      46
event(40000000000000)
c800ac5d
            46
                 mmr_led_cfg.c 1121
                                     4 mmr_ LedHandleEvent:
event(100000000000100)
c800ac5d
            46
                 mmr_led_cfg.c 737
                                     4 mmr_ LedCfgSetState: type(phone)
state(goff)
c800ac5e
            46
                 mmr_led_cfg.c 1121
                                     4 mmr_ LedHandleEvent:
event(100000000000100)
c800ac5e
            46
                 mmr_led_cfg.c 737
                                     4 mmr_ LedCfgSetState: type(phone)
state(goff)
c800ac5e
            46
                 mmr_led_cfg.c 1121
                                     4 mmr_LedHandleEvent:
event(100000000000100)
```

2.5.4 Ethernet manager

To check Ethernet implementation [Command]
/ system/ log/ show emr
Example:
#ONT/system/log> show emr
Log: emr



```
tick_upTime1
                    file line level message
                   emr_main.c 7847
                                      4 Send ACK message to 0x90009,
c8009325
             3f
result -1, send 0
c800932c
             3f
                  emr_main.c 7764
                                      4 EMR_MSG_CFG_UNI_PKT_LIMIT
c800932c
                  emr main.c 7288
                                      4 Config SLOT 14 PORT 1,
             3f
uniPktLimit. dhcp 10, uniPktLimit. igmp 16, uniPktLimit. arp 10
             3f
c800932c
                   emr_main.c 7847
                                      4 Send ACK message to 0x9000b, result
3, send 0
c800ab3a
             45
                                      4 EMR _MSG _CFG_L3_UNI_IGS
                   emr_main.c 7770
             45
                    emr main.c 6426
                                        1 mldQuerierIp error:
c800ab3a
c800ab3a
             45
                     emr_main.c 6433
                                        1 mldQuerierIp error:
             45
                    emr_igs.c 873
                                     4 lport1 action1 vlan1193 ver3,
c800ab49
hostTrack1, funcMode3 imLeave3 wip6f6f6f9a gueryc0a80101
                                     4 cfg igmp: robust 2, gryInt 125,
                    emr_igs.c 878
c800ab49
             45
qryResInt 100, maxMC 128, lastMem 10 ret 0
c800ab49
                      emr igs.c 309
                                      4 lport 1 action 1 vlan 1 193 maxGroup
128 maxBw 0 exceedDeny 0 rangCnt 0 multicastcnt 0
                                        4 Config RG Igmp Snooping
c800ab58
             45 emr_pack_cortin 2721
paramter. ret 0
                                         4 Configure RG Iport 1 U/S flow for
c800ab59
             45 emr_pack_cortin 2704
IGMP wan 3 wanService 0x4 service 1 op 1 newOuterTci 0x4a9/0x0
                                       4 Send ACK message to 0x9002f,
c800ab59
             45
                    emr main.c 7847
result 0, send 0
c800ab6c
             45
                   emr_main.c 7770
                                       4 EMR MSG CFG L3_UNI_IGS
c800ab6c
             45
                   emr_main.c 6426
                                       1 mldQuerierlp error:
c800ab6c
             45
                   emr_main.c 6433
                                       1 mldQuerierlp error:
             45
                                      4 lport2 action1 vlan1193 ver3,
c800ab7a
                      emr_igs.c 873
hostTrack1, funcMode3 imLeave3
wip6f6f6f9a queryc0a80101
c800ab7a
              45
                      emr_igs.c 878
                                      4 cfg igmp: robust 2, qryInt 125,
gryResInt 100, maxMC 128, lastMem 10 ret 1
c800ab7a
                      emr_igs.c 309
                                      4 lport 2 action 1 vlan 1 193 maxGroup
              45
128 maxBw 0 exceedDeny 0 rangCnt 0 multicastcnt 0
```

2.5.5 Downstream ploam

To check downstream ploam implementation
[Command]
/ system/ log/ show ds_ ploam
Example:
ONT/ system/ log> show ds_ ploam
Log: ds_ ploam
tick_upTime1 file line level message
c7f42982 3b pmr_event_corti 255 1 g PmrOntDefTcont = 0x0



c7f42982	3b	pmr_event_corti 417	7	4 ONU-ID=0x3ff, Type=Assign ONU-
ID[0x03]: c7f42982 01 00	3b	pmr_event_corti 422	2	4 00 00 46 54 52 30 20 21 07 14
c7f42982 00 00	3b	pmr_event_corti 422	2	4 00 00 00 00 00 00 00 00 00 00
c7f42982 00 00	3b	pmr_event_corti 422	2	4 00 00 00 00 00 00 00 00 00 00
c7f42ae5	3b	pmr_event_corti 417	7	4 ONU-ID=0x00, Type=Ranging
Time[0x04]: c7f42ae5	3b	pmr_event_corti 422	2	4 03 00 09 70 31 00 00 00 00 00
00 00 c7f42ae5	3b	pmr_event_corti 422	2	4 00 00 00 00 00 00 00 00 00 00
00 00 c7f42ae5	3b	pmr_event_corti 422	2	4 00 00 00 00 00 00 00 00 00 00
00 00 c7f42b54 Control[0x0d		pmr_event_corti 417	7	4 ONU-ID=0x00, Type=Key
c7f42b54	-	pmr_event_corti 422	2	4 00 00 01 10 00 00 00 00 00 00
00 00 c7f42b54	3b	pmr_event_corti 422	2	4 00 00 00 00 00 00 00 00 00 00
00 00 c7f42b54	3b	pmr_event_corti 422	2	4 00 00 00 00 00 00 00 00 00
00 00	2 h	nmr quant carti 41	7	4 ONU-ID=0x00, Type=Key
c7f42b54 Control[0x0c		pmr_event_corti 417	,	4 ONO-ID-0X00, Type-Key
c7f42b54		pmr_event_corti 422	2	4 00 00 01 10 00 00 00 00 00 00
c7f42b54	3b	pmr_event_corti 422	2	4 00 00 00 00 00 00 00 00 00 00
00 00 c7f42b54	3b	pmr_event_corti 422	2	4 00 00 00 00 00 00 00 00 00 00
00 00 c7f42b54		pmr_event_corti 41	7	4 ONU-ID=0x00, Type=Key
Control[0x0cc7f42b54	-	pmr_event_corti 422	2	4 00 01 01 10 00 00 00 00 00 00
00 00		. – –		
c7f42b54 00 00	3b	pmr_event_corti 422	2	4 00 00 00 00 00 00 00 00 00 00
c7f42b55	3b	pmr_event_corti 422	2	4 00 00 00 00 00 00 00 00 00 00
00 00 c7f43451	3d	pmr_event_corti 27°	ļ	1 Allocid MSG: allocid = 0x401, status
= 0 c7f43452 ID[0x0a]:	3d	pmr_event_corti 417	7	4 ONU-ID=0x00, Type=Assign Alloc-



c7f43452	3d pmr_event_corti 422	4	04 01 01 00 00 00 00 00 00 00
00 00			
c7f43452	3d pmr_event_corti 422	4	00 00 00 00 00 00 00 00 00
00 00			
c7f43452	3d pmr_event_corti 422	4	00 00 00 00 00 00 00 00 00
00 00			

2.5.6 OMCI log

To check the OMCI message between OLT and ONT.

[Command]

/ system/ log/ show omci

Example:

ONT/ system/ log> show omci

Log: omci

Log: omci				
tick upTi	me1	file line	level	message
c7f433b6	3d	omci_msg.c	178	4 01 15 80 6f ff f0 00 0c cc 02 ee 00 00
08 00 00				
c7f433b6	3d	omci_msg.c	184	4 06 00 07 00 00 01 00 00 00 00 00 00
00 00 00 00				
c7f433b6	3d	omci_msg.c	187	4 zero: 0x0, len: 0x28 crc: 0xddd2b809
c7f433b7	3d	omci_main.c	107	4 Receive OMCI message
c7f433b7	3d	omci_msg.c	172	4 tick: 0x11ea06ab PRI: 0, TI: 0x1358,
DID: 10, DB:	0, AR:	1, AK: 0, MT:	14, Cl	ass: 2, inst: 0x0
c7f433b8	3d	omci_msg.c	178	4 00 ee 00 00 00 00 00 00 00 00 00 00
00 00 00 00				
c7f433b8	3d	omci_msg.c	184	4 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00				
c7f433b8	3d	omci_msg.c	187	4 zero: 0x0, len: 0x28 crc: 0x9ef9315
c7f433b8	3d	omci_msg.c	551	4 Send out OMCI msg
c7f433b8	3d	omci_msg.c	172	4 tick: 0x11ea0828 PRI: 0, TI: 0x1358,
DID: 10, DB:	0, AR:	0, AK: 1, MT:	14, Cla	ass: 2, inst: 0x0
c7f433b8	3d	omci_msg.c	178	4 01 15 80 70 ff f0 00 0c cc 02 ee 00 00
00 00 80				
c7f433b8	3d	omci_msg.c	184	4 07 00 07 00 00 01 00 00 00 00 00 00
00 00 00 00				
c7f433b8	3d	omci_msg.c	187	4 zero: 0x0, len: 0x28 crc: 0xf4238696
c7f433b9	3d	omci_ main.c	107	4 Receive OMCI message
c7f433b9	3 d	omci_msg.c	172	4 tick: 0x11ea0e7b PRI: 0, TI: 0x1359,
DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0				
c7f433ba	3d	omci_msg.c	178	4 00 ef 00 00 00 00 00 00 00 00 00 00
00 00 00 00				
c7f433ba	3d	omci_msg.c	184	4 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00				
c7f433ba	3d	omci_msg.c	187	4 zero: 0x0, len: 0x28 crc: 0x46edb4cc



C7f433ba 3d omci_msg.c 172 4 tick: 0x11ea0ff6 PRI: 0, TI: 0x1359, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 C7f433ba 3d omci_msg.c 178 4 01 15 80 71 ff f0 00 0c cc 02 ee 00 00 00 00 00 00 omci_msg.c 184 4 01 15 80 71 ff f0 00 0c cc 02 ee 00 00 00 00 00 00 00 omci_msg.c 184 4 00 00 07 00 00 10 00 00 00 00 00 00 00 00 00 00 00 omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xfb8c0e9e 07f433bb 3d omci_msg.c 172 4 Receive OMCI message 07f433bb 3d omci_msg.c 172 4 tick: 0x11ea1620 PRI: 0, TI: 0x135a, 0DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 omci_msg.c 178 4 oo 00 00 00 00 00 00 00 00 00 00 00 00	c7f433ba 3	3d	omci_msg.c	551	4 Send out OMCI msg
c7f433ba 3d omci_msg.c 178 4 01 15 80 71 ff f0 00 0c cc 02 ee 00 00 c7f433ba 3d omci_msg.c 184 4 08 00 07 00 00 01 00 00 00 00 00 00 00 00 c7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xfb8c0e9e c7f433bb 3d omci_msg.c 172 4 tick: 0x11ea1620 PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 omci_msg.c 172 4 tick: 0x11ea1620 PRI: 0, TI: 0x135a, 00 00 00 00 omci_msg.c 178 4 00 f0 00 00 00 00 00 00 00 00 00 00 00	c7f433ba	3d	•		_
00 00 80 c7f433ba 3d omci_msg.c 184 4 08 00 07 00 00 10 00 00 00 00 00 c7f433bb 3d omci_msg.c 177 4 tick: 0x11ea1620 PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bb 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x6b8c0e9e c7f433bb 3d omci_msg.c 172 4 tick: 0x11ea1620 PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bb 3d omci_msg.c 178 4 00 f0 00 00 00 00 00 00 00 00 00 00 00), AR:			ss: 2, inst: 0x0
c7f433ba 3d omci_msg.c 184 4 08 00 07 00 00 01 00 00 00 00 00 00 00 00 00 00		3d	omci_msg.c	178	4 01 15 80 71 ff f0 00 0c cc 02 ee 00 00
00 00 00 00 Orf433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xfb8c0e9e C7f433bb 3d omci_msg.c 172 4 tick: 0x11 ea1620 PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 omci_msg.c 178 4 00 f0 00 00 00 00 00 00 00 00 00 00 00		2 1		404	
C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xfb8c0e9e C7f433bb 3d omci_msg.c 172 4 keceive OMCI message C7f433bb 3d omci_msg.c 172 4 tick: 0x11ea1620 PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bb 3d omci_msg.c 178 4 00 f0 00 00 00 00 00 00 00 00 00 00 00		3a	omci_msg.c	184	4 08 00 07 00 00 01 00 00 00 00 00 00
C7f433bb 3d omci_main.c 107 4 Receive OMCI message ODD: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 1, AK: 0, MT: 14, Class: 2, inst: 0x0 0 00 00 00 00 00 00 00 00 00 00 00 00 0		34	omci msa c	127	1 zaro: 0v0 lan: 0v28 crc: 0vfh8c0a9a
c7f433bb 3d omci_msg.c 172 4 tick: 0x11ea1620 PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bb 3d omci_msg.c 178 4 00 f0 00 00 00 00 00 00 00 00 00 00 00					
DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 C7f433bb 3d omci_msg.c 178 4 00 f0 00 00 00 00 00 00 00 00 00 00 O0 00 00 00 C7f433bc 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x4d64b34b C7f433bc 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x4d64b34b C7f433bc 3d omci_msg.c 172 4 tick: 0x11ea179a PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 C7f433bc 3d omci_msg.c 178 4 09 00 07 00 00 10 00 00 00 00 00 00 C7f433bc 3d omci_msg.c 178 4 01 15 80 72 fff 0 00 0c cc 02 ee 00 00 C7f433bd 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x4d64b34b C7f433ba 3d omci_msg.c 178 4 01 15 80 72 fff 0 00 0c cc 02 ee 00 00 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xb7263d35 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xb7263d35 C7f433ba 3d omci_msg.c 172 4 tick: 0x11ea1e0e PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 C7f433ba 3d omci_msg.c 178 4 00 00 00 00 00 00 00 00 00 00 00 00 C7f433ba 3d omci_msg.c 178 4 00 f1 00 00 00 00 00 00 00 00 00 00 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 C7f433ba 3d omci_msg.c 172 4 tick: 0x11ea16b PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 0, AR: 1, MT: 14, Class: 2, inst: 0x0 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 C7f433ba 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x11 conto 0x1 conto 0x1 conto 0x1 cont				_	•
c7f433bb 00 00 00 3d omci_msg.c 178 4 00 f0 00 00 00 00 00 00 00 00 00 00 00					·
00 00 00 00 c7f433bc 3d omci_msg.c 184 4 00 00 00 00 00 00 00 00 00 00 00 c7f433bc 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x4d64b34b c7f433bc 3d omci_msg.c 172 4 tick: 0x11ea179a PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433bc 3d omci_msg.c 178 4 01 15 80 72 ff f0 00 0c cc 02 ee 00 00 00 00 00 c7f433bc 3d omci_msg.c 184 4 09 00 07 00 00 100 00 00 00 00 00 00 00 c7f433bc 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xb7263d35 c7f433bd 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xb7263d35 c7f433bd 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xb7263d35 c7f433bd 3d omci_msg.c 172 4 tick: 0x11ea1e0e PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 172 4 tick: 0x11ea1e0e PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 178 4 00 f1 00 00 00 00 00 00 00 00 00 00 c7f433be 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 c7f433be 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 c7f433be 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 c7f433be 3d omci_msg.c 172 4 tick: 0x11ea1f8b PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 178 4 00 00 00 00 00 00 00 00 00 00 00 c7f433be 3d omci_msg.c 178 4 01 15 80 73 ff f0 00 0c cc 02 ee 00 00 c7f433be 3d omci_msg.c 178 4 2ero: 0x0, len: 0x28 crc: 0xd5864143 c7f433bf 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xd5864143 c7f433bf 3d omci_msg.c 172 4 tick: 0x11ea25cb PRI: 0, TI: 0x135c, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bf 3d omci_msg.c 172 4 tick: 0x11ea25cb PRI: 0, TI: 0x135c, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bf 3d omci_msg.c 172 4 tick: 0x11ea25cb PRI: 0, TI: 0x135c, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0					
00 00 00 00 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x4d64b34b c7f433bc 3d omci_msg.c 551 4 Send out OMCI msg c7f433bc 3d omci_msg.c 172 4 tick: 0x11ea179a PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433bc 3d omci_msg.c 178 4 01 15 80 72 ff f0 00 0c cc 02 ee 00 00 00 00 00 00 00 00 00 00 00 00	00 00 00 00		· ·		
c7f433bc 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x4d64b34b c7f433bc 3d omci_msg.c 551 4 Send out OMCI msg c7f433bc 3d omci_msg.c 172 4 tick: 0x11ea179a PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 crf433bc 3d omci_msg.c 178 4 01 15 80 72 ff f0 00 0c cc 02 ee 00 00 00 00 00 00 omci_msg.c 184 4 09 00 07 00 00 01 00 00 00 00 00 00 00 00 00 00 c7f433bd 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xb7263d35 c7f433bd 3d omci_msg.c 172 4 tick: 0x11ea1e0e PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 crf433be 3d omci_msg.c 178 4 00 f1 00 00 00 00 00 00 00 00 00 00 00 00 00		3d	omci_msg.c	184	4 00 00 00 00 00 00 00 00 00 00 00 00
c7f433bc 3d omci_msg.c 551 4 Send out OMCI msg c7f433bc 3d omci_msg.c 172 4 tick: 0x11ea179a PRI: 0, TI: 0x135a, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433bc 3d omci_msg.c 178 4 01 15 80 72 ff f0 00 0c cc 02 ee 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00					
C7f433bc			_		
DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433bc 3d omci_msg.c 178 4 01 15 80 72 ff f0 00 0c cc 02 ee 00 00 00 00 80 c7f433bc 3d omci_msg.c 184 4 09 00 07 00 00 100 00 00 00 00 00 00 00 00 c7f433bc 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xb7263d35 c7f433bd 3d omci_msg.c 172 4 tick: 0x11ea1e0e PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 178 4 00 f1 00 00 00 00 00 00 00 00 c7f433be 3d omci_msg.c 184 4 00 00 00 00 00 00 00 00 00 00 c7f433be 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 c7f433be 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 c7f433be 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 c7f433be 3d omci_msg.c 172 4 tick: 0x11ea1f8b PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 172 4 tick: 0x11ea1f8b PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 178 4 00 00 00 00 00 00 00 00 00 00 c7f433be 3d omci_msg.c 178 4 2ero: 0x0, len: 0x28 crc: 0x96512982 c7f433be 3d omci_msg.c 172 4 tick: 0x11ea1f8b PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bf 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xd5864143 c7f433bf 3d omci_msg.c 172 4 tick: 0x11ea25cb PRI: 0, TI: 0x135c, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bf 3d omci_msg.c 172 4 tick: 0x11ea25cb PRI: 0, TI: 0x135c, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bf 3d omci_msg.c 178 4 00 f2 00 00 00 00 00 00 00 00 00 00 c7f433bf 3d omci_msg.c 178 4 00 f2 00 00 00 00 00 00 00 00 00 c7f433bc 3d omci_msg.c 178 4 00 f2 00 00 00 00 00 00 00 00 00 c7f433bc 3d omci_msg.c 178 4 00 f2 00 00 00 00 00 00 00 00 00 00 c7f433bc 3d omci_msg.c 178 4 00 f2 00 00 00 00 00 00 00 00 00 00 c7f433bc 3d omci_msg.c 184 4 00 00 00 00 00 00 00 00 00 00 00 00			_		9
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00 00 80 c7f433bc					
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00 00 00 00 c7f433bc 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xb7263d35 c7f433bd 3d omci_main.c 107 4 Receive OMCI message c7f433bd 3d omci_msg.c 172 4 tick: 0x11ea1e0e PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 178 4 00 f1 00 00 00 00 00 00 00 00 00 00 00 00 00		3d	omci msg.c	184	4 09 00 07 00 00 01 00 00 00 00 00 00
c7f433bc 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xb7263d35 c7f433bd 3d omci_main.c 107 4 Receive OMCI message c7f433bd 3d omci_msg.c 172 4 tick: 0x11ea1e0e PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 178 4 00 f1 00 00 00 00 00 00 00 00 00 00 00 00 00		J G	oooo.c		1 03 00 07 00 00 01 00 00 00 00 00
c7f433bd 3d omci_msg.c 172 4 tick: 0x11ea1e0e PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 178 4 00 f1 00 00 00 00 00 00 00 00 00 00 00 00 00	c7f433bc 3	3d	omci_msg.c	187	4 zero: 0x0, len: 0x28 crc: 0xb7263d35
DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433be	c7f433bd	3d	omci_main.c	107	4 Receive OMCI message
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00 00 00 00					
c7f433be 3d omci_msg.c 184 4 00 00 00 00 00 00 00 00 00 00 00 00 00		3d	omci_msg.c	178	4 00 f1 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00		٦.4		104	4 00 00 00 00 00 00 00 00 00 00 00
c7f433be 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0x96512982 c7f433be 3d omci_msg.c 551 4 Send out OMCI msg c7f433be 3d omci_msg.c 172 4 tick: 0x11ea1f8b PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 178 4 01 15 80 73 ff f0 00 0c cc 02 ee 00 00 00 00 80 c7f433be 3d omci_msg.c 184 4 0a 00 07 00 00 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00		30	omci_msg.c	184	4 00 00 00 00 00 00 00 00 00 00 00 00
c7f433be 3d omci_msg.c 551 4 Send out OMCI msg c7f433be 3d omci_msg.c 172 4 tick: 0x11ea1f8b PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 178 4 01 15 80 73 ff f0 00 0c cc 02 ee 00 00 00 00 80 c7f433be 3d omci_msg.c 184 4 0a 00 07 00 00 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00		34	omci msg c	187	4 zero: 0x0 len: 0x28 crc: 0x96512982
c7f433be 3d omci_msg.c 172 4 tick: 0x11ea1f8b PRI: 0, TI: 0x135b, DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433be 3d omci_msg.c 178 4 01 15 80 73 ff f0 00 0c cc 02 ee 00 00 00 00 00 80 c7f433be 3d omci_msg.c 184 4 0a 00 07 00 00 01 00 00 00 00 00 00 00 00 00 00					
DID: 10, DB: 0, AR: 0, AK: 1, MT: 14, Class: 2, inst: 0x0 c7f433be					_
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c7f433be 3d omci_msg.c 184 4 0a 00 07 00 00 01 00 00 00 00 00 00 00 00 00 00					
00 00 00 00 c7f433be	00 00 80				
c7f433be 3d omci_msg.c 187 4 zero: 0x0, len: 0x28 crc: 0xd5864143 c7f433bf 3d omci_main.c 107 4 Receive OMCI message c7f433bf 3d omci_msg.c 172 4 tick: 0x11ea25cb PRI: 0, TI: 0x135c, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bf 3d omci_msg.c 178 4 00 f2 00 00 00 00 00 00 00 00 00 00 00 00 00 c7f433c0 3d omci_msg.c 184 4 00 00 00 00 00 00 00 00 00 00		3d	omci_msg.c	184	4 0a 00 07 00 00 01 00 00 00 00 00 00
c7f433bf 3d omci_main.c 107 4 Receive OMCl message c7f433bf 3d omci_msg.c 172 4 tick: 0x11ea25cb PRI: 0, TI: 0x135c, DID: 10, DB: 0, AR: 1, AK: 0, MT: 14, Class: 2, inst: 0x0 c7f433bf 3d omci_msg.c 178 4 00 f2 00 00 00 00 00 00 00 00 00 00 00 00 00 c7f433c0 3d omci_msg.c 184 4 00 00 00 00 00 00 00 00 00 00					
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00 00 00 c7f433c0 3d omci_msg.c 184 4 00 00 00 00 00 00 00 00 00 00 00					
c7f433c0 3d omci_msg.c 184 4 00 00 00 00 00 00 00 00 00 00 00		Ju	offici_ff18g.C	170	4 00 12 00 00 00 00 00 00 00 00 00 00
- 8		3d	omci msg.c	184	4 00 00 00 00 00 00 00 00 00 00 00 00
	00 00 00 00		0/-		



2.5.7 MEC log

To check implement of OMCI message [Command] / system/ log/ show mec Example: # ONT/ system/ log> show mec Log: mec tick upTime1 file line level message c7f3bf0b 1 f mec main.c 474 4 Starting MEC c7 f3 bfb0 1f mec alu specifi 3390 4 ALU spec register 1f mec_alu_specifi 3414 4 This is ALU ISAM-based OLT 4.0 c7f3bfb2 c7f3bfb4 1f mec_main.c 415 4 Get major ID[0xe8] minor ID[0x1] c7f3bfbb 1f mec main.c 2763 4 PON TYPE 1 c7f3bfc8 20 mec_init.c 160 4 Get major ID[0xe8] minor ID[0x1] c7f3bfc8 20 mec_init.c 172 4 Get active entity 0 c7 f3 bfcf 20 mec_init.c 188 4 Get commit entity 0 4 mec_ ImageValid: file magic is c7f3bfd2 20 mec_init.c 1059 0x23494255 4 check: ubi & kernel inst 1 c7f3bfd2 20 mec_init.c 1094 20 mec init.c 455 c7f3c0ec 4 Restoring MIB c7f3c0f0 20 mec init.c 444 4 ReStore cardholder slot [128] MIB 20 mec_init.c 444 4 ReStore cardholder slot [1] MIB c7f3c0f4 4 ReStore cardholder slot [10] MIB c7f3c0f7 20 mec init.c 444 20 mec_init.c 444 4 ReStore cardholder slot [2] MIB c7f3c0fa 20 mec_init.c 444 4 ReStore cardholder slot [4] MIB c7f3c0ff c7f3c102 20 mec_init.c 444 4 ReStore cardholder slot [14] MIB 20 c7f3c18c mec_cfg.c 82 4 Set active image: inst = 0, sync msg return OK c7f3c20f 20 mec_cfg.c 82 4 Set commit image: inst = 0, sync msg return OK c7f3c244 20 4 unknown softswitch type mec_voip.c 744 20 mec country.c 72 4 --- default country std E164. c7f3c247 mec_country.c 120 c7f3c247 20 4 --- default country code is 1. 20 mec voip.c 1 178 4 Set Country Code: slot[0] port[0] [1] c7f3c248 4 g MecVoipData. Default.country_code c7f3c248 20 mec_voip.c 768 [1] c7f3c24a 20 mec_voip.c 501 4 Load Country Code 1 from private mib 20 4 --- country code 1 is valid. c7 f3 c24a mec_country.c 186 c7f3c279 20 mec_main.c 529 4 Starting mib save timer 20 mec_ip_path_mai 123 4 MEC_ Ip PathInit { log } : The c7f3c299 customer is ALU c7f3c29c 20 mec_ip_path_mai 164 4 MEC_IpPathInit { log } : use the default xml /etc/US.xml!



c7f3c2ae	20	mec_main.c 1334	4 Misc Manager is ready
c7f3c6e1	21	mec_ main.c 1285	4 Pon Manager is ready
c7f3ca66	22	mec_ main.c 1344	4 Net Manager is ready
c7f3cb2c	22	mec_ main.c 1305	4 Voip Manager is ready
c7f3d29c	24	mec_main.c 1295	4 Ethnet Manager is ready

3. OMCI MIB

3.1 MIB dump CLI

To print the ONT OMCI MIB . CLI "dump" will save the file in /s/s/tmp/mibdump.txt. CLI" /s/s/" will go to dir /s/s. CLI "cat /tmp/mibdump.txt" will print all the OMCI MIB.

[Command]

/s/m/dump

/s/s/

cat /tmp/mibdump.txt

Example:

#ONT/ system/ shell> / s/ m/ dump

MIB is saved to the file /tmp/mibdump.txt.

#ONT/system/shell>/s/s/

#ONT/system/shell>cat /tmp/mibdump.txt

Total 292 tables

Table Ontg, Ont-g, ME 256, total 1 instances

EntityID = 0×0000 VID = $41 + 40 \times 43 \times 40$

Version = 33 46 45 35 33 33 34 37 41 55 41 41 30 32

SerialNum = 41 4c 43 4c f8 da 2d 07

 $\begin{array}{ll} TraffMgtOpt & = 0x00 \\ AtmCCOpt & = 0x00 \\ BatteryBack & = 0x00 \\ AdminState & = 0x00 \\ OpState & = 0x00 \\ OntState & = 0x03 \\ \end{array}$

3.2 MIB reset CLI

To Reset mib to default values

[Command]

/s/m/reset

Example:

/s/m/reset



3.3 MIB show CLI

Usage: show CLASSID

CLASSID: the class ID of the ME, defined in 983.2/984.4, currently the following

MEs are supported:

[Command] /s/m/show ID

Example:

#ONT/system/mib>show 45

Table MacBriServProf, MAC Bridge Service Profile, total 1 instances

EntityID = 0x0e01SpanTreeInd = 0LearningInd = 0AtmBriInd = 0= 32768**Priority** = 5120 MaxAge HelloTime = 512 ForwardDelay = 3840

DiscardUnknow = 0
MacLearningDepth = 0
DynFilterAgeTime = 0

#ONT/system/mib>

4. Common service debug information

4.1 Check general traffic configure

/system/ontver

/system/ontver build

/traffic/pon/show traffic all

/traffic/omci/show connection all

traffic/omci/debug/show 0

/traffic/eth/show connect all

traffic/pon/show link

/traffic/eth/show pack

/s/s/ifconfig

/system/misc/eqsn get

/ system/ misc/ show trans state

/s/log/show omci

/s/log/show mec

/s/log/show emr

/s/log/show pmr



/s/log/show pmr_drv /s/log/show mec_fm /s/log/show us_ploam /s/log/show ds_ploam /system/log/show net /s/m/dump /s/s/ cat /tmp/mibdump.txt

4.2 Check detail traffic configure

/traffic/omci/show connection all /traffic/omci/debug/show 0 /traffic/eth/debug/showconn all /traffic/eth/debug/showconn 0 /traffic/eth/show connect all /stytem/log/show mec

4.3 CheckIPTVconfigure

/traffic/eth/show igmp domain

/traffic/eth/show igmp uni

/traffic/eth/show igmp pm all

/traffic/eth>show igmp pm

/system/ontver

/ system/ ontver build

/traffic/pon/show traffic all

traffic/omci/show connection all

traffic/omci/debug/show 0/

/traffic/eth/show connect all

/traffic/pon/show link

traffic/eth/show pack/

/s/s/ifconfig

/system/misc/eqsn get

/ system/ misc/ show trans state/ s/ log/

show omci

/s/log/show mec

/s/log/show emr

/s/log/show pmr

/s/log/show pmr_drv

/s/log/show mec_fm

/s/log/show us_ploam

/s/log/show ds_ploam

/system/log/show net

/s/m/dump

/s/s/



cat /tmp/mibdump.txt

4.4 Check traffic PM

/traffic/pon/show pm gem all /traffic/omci/show pm gem /traffic/omci/show pm eth /traffic/omci/show pm omci