PON OLT Equipment MIB Specifications

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(Cover Included)

Revision History

Version No.	Prepared by / Revised by	Revision Date	Reason for Revision	Main Contents Revised (Main Points)
	Zhu Min	2012-11-23		
	Zhu Min	2013-8-16		Consummate relevant contents

1 Overview

This document is applicable to the PON OLT products, such as C200, C220, C300 and C320.

Most information of MIB objects shall be got from the corresponding MIB, and the MIB file is the final and the most accurate source of information of all the MIB objects. This document is only to list key information and the belonging MIB file.

If there are no special specifications, the corresponding MIB has no change among versions, and is suitable for all the OLT versions released.

2 Definition of Composite Index

In the OLT equipment, to get index of some MIB tables, you need to combine some fields into 32 bytes, such index is called as **composite index** in this document. Corresponding to it, the index directly using numbers like 1, 2, 3 is called as **regular index** in this document.

The composite index used in the OLT equipment management can be divided into two categories: one is platform composite index, and the other is PON equipment composite index. General functions of different kinds of equipment usually use composite index, while the management of the PON equipment uses PON composite index.

2.1 Platform Composite Index

The platform index of MIB tables usually consists of a MIB scalar. When accessing an MIB table, you need to select corresponding method to constitute the composite index according to the type of the interface.

The platform composite index is a 32-bit integer without a symbol, and the composite index's high 4 bits are used to indicate the type of the index:

formation:	Type(4 bits)	LocationDescription(28 bits)			
NormalPort=1	Type(4 bits)	Shelf(4 bits)	Slot(8 bits)	Port(Olt)(8bits)	8 bits
AdlcPvc=2	Type(4 bits)	Shelf(4 bits)	Slot(8 bits)	Port(8 bits)	PvcNo(8 bits)
EponOnu=3	Type(4 bits)	Shelf(4 bits)	Slot(5)+Olt(3)bits	Onu (8 bits)	8 bits
EponGpon=4	Type(4 bits)	Shelf(4 bits)	Slot(5)+Olt(3)bits	Onu (8 bits)	Gport(8 bits)
ATM PVC=5	Type(4 bits)	Shelf(4 bits)	Slot(8 bits)	Port(4 bits)	PvcNo(12 bits)
Vdsl=6	Type(4 bits)	Shelf(4 bits)	Slot(8 bits)	Port(8 bits)	PvcNo(8 bits)
Smartgrp=241	Type(4 bits)	Subtype(4bits)	not used(8 bits)	index (16 bits)	
Vlan = 242	Type(4 bits)	Subtype(4bits)	not used(8 bits)	index (16 bits)	
SupVlan=243	Type(4 bits)	Subtype(4bits)	not used(8 bits)	index (16 bits)	

2.1.1 Slot Conversion of Platform Composite Index

Slot fields of the platform composite index needs to fill in a logic slot value, and the logic slot value is got via the conversion of physical slot value. The conversion modes of different OLT equipment are different, for details, refer to relevant section.

Slot Conversion of C220 Shelf

```
if (slot <= 6)
{
    composite index slot = slot - 1;
```



```
}
else if ((slot >= 9) && (slot <= 14))
{
    composite index slot = slot - 3;
}
else
{
    composite index slot = 0;
}
```

Slot Conversion of C200 Shelf

```
if (slot <= 3)
{
    composite index slot = slot;
}
else if (slot == 6)
{
    composite index slot = 5;
}
else if ((slot >= 4) && (slot <= 5))
{
    if (The main control card is inserted in the slot)
    {
        composite index slot = 0;
    }
    else
    {
        composite index slot = 4;
    }
}
```

Slot Conversion of C300 Shelf

```
if ((slot >= 2) && (slot <= 9))
{
    composite index slot = slot - 2;
}
else if ((slot >= 12) && (slot <= 22))
{
    composite index slot = slot - 4;
}
```

```
else
{
        composite index slot = 0;
}
```

Slot Conversion of C320 Shelf

```
if((0 < vSlot) && (ucSlotnum >= vSlot))
    {
        *vpCardId = vSlot - 1;
    }
```

2.1.2 Type 1 Index

Type 1 index indicates port or OLT.

From high bit to low bit:

bit31 to bit28 indicates Type, which is 1,

bit27 to bit24 indicates Shelf No., which is 0,

bit23 to bit16 indicates Slot No., to fill in Slot No. after conversion, refer to 1.2

bit15to bit8 indicates Port No. or OLT No., be equal to Port No. or (OLT No. – 1)

bit7 to bit0 fill in 0

4	4	8	8	8
Type: 1	Shelf	Cardid	Port (Olt)	Vc/SrvPortId

For example: gpon-olt_1/2/3’s index is 0x10000200.

2.1.3 Type 3 Index

Type 3 index indicates ONU. The PON cards having 8 ports or less than 8 ports use this index type.

From high bit to low bit:

bit31 to bit28 indicates Type, which is 3,

bit27 to bit24 indicates Shelf No., which is 0,

bit23 to bit19 indicates Slot No., to fill in Slot No. after conversion, refer to 1.2

bit18 to bit16 indicates OLT NO., be equal to (OLT NO. – 1)

bit15 to bit8 indicates ONU NO., be equal to (ONU NO. – 1)

bit7 to bit0 fill in 0

4	4	8	8	8
Type: 3	Shelf	Cardid(5b)Olt(3b)	Onu	

For example: gpon-onu_1/2/3:2's index is 0x30020100.

2.1.4 Type 4 Index

Type 4 index indicates ONU virtual link. The PON cards having 8 ports or less than 8 ports use this index type.

From high bit to low bit:

bit31 to bit28 indicates Type, which is 3,

bit27 to bit24 indicates Shelf No., which is 0,

bit23 to bit19 indicates Slot No., to fill in Slot No. after conversion, refer to1.2

bit18 to bit16 indicates OLT NO., be equal to (OLT NO. – 1)

bit15 to bit8 indicates ONU NO., be equal to (ONU NO. – 1)

bit7 to bit0 indicates ONU virtual link, be equal to 0 for EPON equipment

4	4	8	8	8
Type: 4	Shelf	Cardid(5b)Olt(3b)	Onu	Vport/SrvPortId

Of them, Vport and SrvPortId are differentiated via the highest bit of the belonging field. If it is 1, it indicates srvport.

For example: gpon-onu_1/2/3:2 VPORT1's index is 0x40020101, gpon-onu_1/2/3:2 service port1's index is 0x40020181.

2.1.5 Type 9 Index

Type 9 index indicates 16-port PON card's ONU. The PON cards having 8 ports or less than 8 ports use Type 3 index.

From high bit to low bit:

bit31 to bit28 indicates Type, which is 9,

bit27 to bit24 indicates Shelf No., which is 0,

bit23 to bit19 indicates Slot No., to fill in Slot No. after conversion, refer to1.2

bit18 to bit16 indicates OLT NO., be equal to (OLT NO. – 1)

bit15 to bit8 indicates ONU NO., be equal to (ONU NO. – 1)

bit7 to bit0 fill in 0

4	3	9	8	8
Type: 9	Shelf(3b)	Cardid(5b)Olt(4b)	Onu	

2.1.6 Type 10 Index

Type 10 index indicates 16-port PON card's ONU virtual link. The PON cards having 8 ports or less than 8 ports use Type 4 index.

From high bit to low bit:

bit31 to bit28 indicates Type, which is 10,

bit27 to bit24 indicates Shelf No., which is 0,

bit23 to bit19 indicates Slot No., to fill in Slot No. after conversion, refer to1.2

bit18 to bit16 indicates OLT NO., be equal to (OLT NO. – 1)

bit15 to bit8 indicates ONU NO., be equal to (ONU NO. – 1)

bit7 to bit0 indicates ONU virtual link, be equal to 0 for EPON equipment

4	3	9	8	8
Type: 10	Shelf(3b)	Cardid(5b)Olt(4b)	Onu	Vport/SrvPortId

2.2 PON Composite Index

The index of PON MIB tables usually consists of one or multiple MIB scalars. When accessing an MIB table, if the index consists of one MIB scalar, you need to select corresponding method to constitute the composite index according to the type of the interface; if the index consists of multiple MIB scalars, only the first scalar constituting the index needs you to select corresponding method to constitute the composite index according to the type of the interface, while other scalars are all regular indices, which use numbers like 1, 2, 3, etc.

PON composite index is a 32-bit integer without symbols, and the composite index's high 4 bits are used to indicate the type of the index.

The slot No. in the PON composite index adopts physical slot No., with no need to be converted.

GPON PON port-level objects are all Type 1composite index, ONU -level objects are (PON port Type 1composite index + ONU No.).

EPON PON port-level objects are all Type 1composite index, ONU -level objects are Type 3composite index.

2.2.1 Type 1 Composite Index

Type 1indicates indicates port or OLT.
From high bit to low bit:
bit31 to bit28 indicates Type, which is 1,
bit27 to bit24 indicates Shelf No., which is 0,
bit23 to bit16 indicates Slot No., fill in Slot No.
bit15 to bit8 indicates Port No. or OLT No., fill in Port No. or OLT No.
bit7 to bit0 fill in 0

4	4	8	8	8
Type: 1	Shelf	Slot	Port(Olt)	

For example: gpon-olt_1/2/3's index is 0x10020300.

2.2.2 Type 3 Composite Index

Type 3 indicates ONU.
From high bit to low bit:
bit31 to bit28 indicates Type, which is 3,
bit27 to bit24 indicates Shelf No., which is 0,
bit23 to bit19 indicates Slot No., fill in Slot No.
bit18 to bit16 indicates OLT NO., fill in OLT NO.
bit15 to bit8 indicates ONU NO., fill in ONU NO.
bit7 to bit0 fill in 0

Note: For C300 and C320 NEs, bit18 to bit16 indicates OLT NO., fill in (OLT NO. — 1) while for other NEs, fill in OLT NO.

4	4	8	8	8
Type: 3	Shelf	Card(5bit)Olt(3bit)	Onu ID	

For example: gpon-onu_1/2/3:1's index is 0x30120100.

2.2.3 Type 6 Composite Index

Type 6 indicates slot.
From high bit to low bit:
bit31 to bit28 indicates Type, which is 6,
bit27 to bit24 indicates Shelf No., which is 0,
bit23 to bit16 indicates Slot No., fill in Slot No.

bit15 to bit8 fill in 0
bit7 to bit0 fill in 0

4	4	8	8	8
Type: 6	Shelf	slot		

For example: The index of the GPON card in Slot 2 is 0x60020000.

2.2.4 Type 7 Composite Index

Type 7 indicates profile.
From high bit to low bit:
bit31 to bit28 indicates Type, which is 7,
bit27 to bit24 indicates Shelf No., which is 0,
bit23 to bit16 fill in 0
bit15 to bit0 indicates profile No., fill in profile No.

4	4	8	8	8
Type: 7	Shelf	0	profile No.	

For example: Profile index is 0x70000001.

2.2.5 Type 9 Composite Index

Type 9 indicates ONU (The composite index is specially used for the ONUs of the PON cards having more than 8 ports, while the ONUs of the PON cards having 8 ports or less than 8 ports use Type 3).

From high bit to low bit:
bit31 to bit28 indicates Type, which is 9,
bit27 to bit25 indicates Shelf No., which is 0,
bit24 to bit20 indicates Slot No., fill in Slot No.
bit19 to bit16 indicates OLT NO., fill in OLT NO.
bit15 to bit8 indicates ONU NO., fill in ONU NO.
bit7 to bit0 fill in 0

Note: For C300 and C320 NEs, bit19 to bit16 indicates OLT NO., fill in (OLT NO. — 1) while for other NEs, fill in OLT NO.

4	4	8	8	8
Type: 3	Shelf (3bit)	Slot(5bit)Olt(4bit)	Onu ID	

3 System Control

3.1 NE Information

Basic NE information includes ObjectID, description information, system operation time, system location and so on.

Index Specification

Global variable, index.0

OID Specification

MIB Variable	OID	Specification
sysDescr	**.1.3.6.1.2.1.1.1**	**Read Only**
sysObjectID	**.1.3.6.1.2.1.1.2**	**Read Only**
sysUpTime	**.1.3.6.1.2.1.1.3**	**Read Only**
sysContact	**.1.3.6.1.2.1.1.4**	
sysName	**.1.3.6.1.2.1.1.5**	
sysLocation	**.1.3.6.1.2.1.1.6**	

3.2 Shelf Information

Get actual shelf type of the NE and configured shelf type, and set the configured shelf type of the NE

Index Specification

The index is zxAnRackNo (Rack No.) and zxAnShelfNo (Shelf No.), and Rack No. and Shelf No. are numbered from 0.

OID Specification

MIB Variable	OID	Specification
zxAnShelfActType	**.1.3.6.1.4.1.3902.1015.2.1.1.2.1.3**	**Read Only**
zxAnShelfCfgType	**.1.3.6.1.4.1.3902.1015.2.1.1.2.1.4**	
zxAnShelfRowStatus	**.1.3.6.1.4.1.3902.1015.2.1.1.2.1.15**	

- **Definitions of actual shelf type zxAnShelfActType and configured shelf type zxAnShelfCfgType**

0x00010101 C220 equipment Type-A shelf
0x00010102 C220 equipment Type-B shelf
0x00010103 C200 equipment Type-A shelf
0x00010104 C100 equipment Type-A shelf

3.3 Card Information

Get the configured card list on the NE

Index Specification

The index is zxAnRackNo (Rack No.), zxAnShelfNo (Shelf No.) and zxAnSlotNo (Slot No.). Rack No. and Shelf No. are numbered from 0, while Slot No. is numbered from 1.

OID Specification

MIB Variable	OID	Specification
zxAnCardCfgMainType	**.1.3.6.1.4.1.3902.1015.2.1.1.3.1.2**	**Configured card type**
zxAnCardActMainType	**.1.3.6.1.4.1.3902.1015.2.1.1.3.1.3**	**Actual card type (Read Only)**
zxAnCardActType	**.1.3.6.1.4.1.3902.1015.2.1.1.3.1.4**	**Card name (Read Only)**
zxAnCardOperStatus	**.1.3.6.1.4.1.3902.1015.2.1.1.3.1.5**	**Card status (Read Only)**
zxAnCardCpuLoad	**.1.3.6.1.4.1.3902.1015.2.1.1.3.1.9**	**CPU load (Read Only)**
zxAnCardMemUsage	**.1.3.6.1.4.1.3902.1015.2.1.1.3.1.11**	**Memory usage rate (%) (Read Only)**
zxAnCardStandbyStatus	**.1.3.6.1.4.1.3902.1015.2.1.1.3.1.13**	**Card active / standby status (Read Only)**
zxAnCardRowStatus	**.1.3.6.1.4.1.3902.1015.2.1.1.3.1.30**	

- **Definitions of zxAnCardCfgMainType and zxAnCardActMainType**

0x00010108 EC4GH
0x00010104 EC4GM
0x00010102 EC4G
0x00011002 EIG
0x00011001 EIGM
0x00012405 EIGMP
0x00011003 EIGMF
0x00011004 EIT1F
0x00011005 EIT2F
0x00012301 EPEB
0x00012302 EPFC
0x00012303 EPFB

0x00010101 GCSA
0x00010103 GCSC
0x00010105 GCSD
0x00010107 GCSE
0x00011101 CE1B
0x00011102 CE1BB
0x00011103 CL1A
0x00012402 GPTAB
0x00012403 GPTCB
0x00012404 GPFAB
0x00012401 GPTBB
0x00080101 MS8E
0x00080102 MS8EP
0x00081001 EI8E
0x00081002 EI8EP
0x00081101 ETC8B
0x00082301 EPUA
0x00082401 GPUA
0x00082601 V08B
0x00082602 V16B

- Card status

0 On-line
1 Off-line
2 Fail to provide services
3 hw on-line
4 Off-line
5 Being configured
6 Configuration failed
7 The configured card type isn't matched with actual type
8 De-activate
9 Fault
10 Failure

- Card active / standby status

1 Active status
2 Standby status
15 Unknown status

3.4 Version Information

To view the information of the version currently running of the NE (active version, boot

version and firmware version)

Index Specification

The index is zxAnRackNo (Rack No.), zxAnShelfNo (Shelf No.) and zxAnSlotNo (Slot No.). Rack No. and Shelf No. are numbered from 0, while Slot No. is numbered from 1.

OID Specification

MIB Variable	OID	Specification
zxAnCardHardVersion	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.1**	**Card hardware version**
zxAnVersionFileType	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.3**	**Active version type**
zxAnVersionTag	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.4**	**Active version No.**
.zxAnVersionFileLen	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.5**	**Length of the active version file**
zxAnVersionBuildTime	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.6**	**Active version time**
zxAnBootromFileType	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.8**	**Boot version type**
zxAnBootromTag	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.9**	**Boot version No.**
zxAnBootromFileLen	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.10**	**Length of the boot version file**
zxAnBootromBuildTime	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.11**	**Boot version time**
zxAnFirmware1FileType	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.13**	**Firmware type**
zxAnFirmware1Tag	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.14**	**Firmware No.**
zxAnFirmware1FileLen	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.15**	**Length of the firmware file**
zxAnFirmware1BuildTime	**.1.3.6.1.4.1.3902.1015.2.1.2.2.1.16**	**Firmware time**

3.5 Fan Information

Get the information of the fan operation.

Index Specification

The index is zxAnEnvFanIndex (fan unit id), which starts from 1. The maximum number is the number of actual fan units. If lower layers fail to read the number of fans correctly, there are 3 19-inch shelves and 4 21-inch shelves.

OID Specification

MIB Variable	OID	Specification
zxAnEnvFanActualSpeedLevel	**.1.3.6.1.4.1.3902.1015.2.1.3.10.10.10.1.3**	**Actual speed level of the fan unit**
.zxAnEnvFanOperStatus	**.1.3.6.1.4.1.3902.1015.2.1.3.10.10.10.1.5**	**Operation status**

		of the fan unit
zxAnEnvFanOnlineStatus	**.1.3.6.1.4.1.3902.1015.2.1.3.10.10.10.1.6**	**Online status of the fan unit**
zxAnEnvFanActualSpeed	**.1.3.6.1.4.1.3902.1015.2.1.3.10.10.10.1.7**	**Actual speed (RPM) of the fan unit**

zxAnEnvFanActualSpeedLevel:
{ lowSpeed (1) , standardSpeed (2) , highSpeed (3) , superSpeed (4) , other (10) }

zxAnEnvFanOperStatus:
{ up (1) , down (2) , unknown (3) }

zxAnEnvFanOnlineStatus:
{ online (1) , offline (2) , unknown (3) }

3.6 Address Information

{"zxAnL3IfIpAddressTable" , "1.3.6.1.4.1.3902.1015.4.1.3"} ,
{"zxAnL3IfIpAddressEntry" , "1.3.6.1.4.1.3902.1015.4.1.3.1"} ,
{"zxAnL3IfIp" , "1.3.6.1.4.1.3902.1015.4.1.3.1.1"} ,
{"zxAnL3IfMask" , "1.3.6.1.4.1.3902.1015.4.1.3.1.2"} ,
{"zxAnL3IfIpCatagory" , "1.3.6.1.4.1.3902.1015.4.1.3.1.3"} ,
{"zxAnL3IfIpRowStatus" , "1.3.6.1.4.1.3902.1015.4.1.3.1.4"} ,

4 Platform

4.1 VLAN

Relevant MIB file is: ZTE-AN-VLAN-MIB.mib

4.1.1 Create VLAN Interface

{"zxAnL3IfTable" , "1.3.6.1.4.1.3902.1015.4.1.1"} ,
{"zxAnL3IfEntry" , "1.3.6.1.4.1.3902.1015.4.1.1.1"} ,
{"zxAnL3IfIndex" , "1.3.6.1.4.1.3902.1015.4.1.1.1.1"} ,
{"zxAnL3IfName" , "1.3.6.1.4.1.3902.1015.4.1.1.1.2"} ,
{"zxAnIfReferIndex" , "1.3.6.1.4.1.3902.1015.4.1.1.1.3"} ,
{"zxAnL3IfArpProxyEnable" , "1.3.6.1.4.1.3902.1015.4.1.1.1.4"} ,
{"zxAnL3IfRowStatus" , "1.3.6.1.4.1.3902.1015.4.1.1.1.5"} ,

Name	Oid	Range	Description
zzxAnL3IfIndex	.1.3.6.1.4.1.3902.1015.4.1.1.1.1		
zxAnL3IfName	.1.3.6.1.4.1.3902.1015.4.1.1.1.2	STRING (SIZE (1 .. 32))	
zxAnIfReferIndex	.1.3.6.1.4.1.3902.1015.4.1.1.1.3		
zxAnL3IfArpProxyEnable	.1.3.6.1.4.1.3902.1015.4.1.1.1.4		
zxAnL3IfRowStatus	.1.3.6.1.4.1.3902.1015.4.1.1.1.5	rowStatus	

4.1.2 Configure IP Address of VLAN Interface

{"zxAnL3IfIp" , "1.3.6.1.4.1.3902.1015.4.1.3.1.1"} ,
{"zxAnL3IfMask" , "1.3.6.1.4.1.3902.1015.4.1.3.1.2"} ,
{"zxAnL3IfIpCatagory" , "1.3.6.1.4.1.3902.1015.4.1.3.1.3"} ,
{"zxAnL3IfIpRowStatus" , "1.3.6.1.4.1.3902.1015.4.1.3.1.4"} ,

Name	Oid	Range	Description

zzxAnL3IfIndex	.1.3.6.1.4.1.3902.1015.4.1.1.1.1		
zxAnL3IfIp	.1.3.6.1.4.1.3902.1015.4.1.3.1.1		
zxAnL3IfMask	.1.3.6.1.4.1.3902.1015.4.1.3.1.2		
zxAnL3IfIpCatagory	.1.3.6.1.4.1.3902.1015.4.1.3.1.3		
zxAnL3IfIpRowStatus	.1.3.6.1.4.1.3902.1015.4.1.3.1.4	rowStatus	

4.1.3 Configure Switchport

{"zxAnVlanPortConfVlanCmdTable" , "1.3.6.1.4.1.3902.1015.20.4"} ,
{"zxAnVlanPortConfVlanCmdEntry" , "1.3.6.1.4.1.3902.1015.20.4.1"} ,
{"zxAnVlanPortConfVlanCmd" , "1.3.6.1.4.1.3902.1015.20.4.1.1"} ,
{"zxAnVlanPortConfVlanId" , "1.3.6.1.4.1.3902.1015.20.4.1.2"} ,

4.1.4 Configure Serviceport

ZTE-AN-SERVICEPORT-MIB.mib

{"zxAnServicePort" , "1.3.6.1.4.1.3902.1015.8"} ,
{"zxAnServicePortObjects" , "1.3.6.1.4.1.3902.1015.8.1"} ,
{"zxAnServicePortConfTable" , "1.3.6.1.4.1.3902.1015.8.1.1"} ,
{"zxAnServicePortConfEntry" , "1.3.6.1.4.1.3902.1015.8.1.1.1"} ,
{"zxAnBridgePortIndex" , "1.3.6.1.4.1.3902.1015.8.1.1.1.1"} ,
{"zxAnUserOutSVid" , "1.3.6.1.4.1.3902.1015.8.1.1.1.10"} ,
{"zxAnServicePortRowStatus" , "1.3.6.1.4.1.3902.1015.8.1.1.1.100"} ,
{"zxAnUserTlsVlan" , "1.3.6.1.4.1.3902.1015.8.1.1.1.11"} ,
{"zxAnUserSVidCos" , "1.3.6.1.4.1.3902.1015.8.1.1.1.12"} ,
{"zxAnVlanTransMode" , "1.3.6.1.4.1.3902.1015.8.1.1.1.13"} ,
{"zxAnUserInStartVid" , "1.3.6.1.4.1.3902.1015.8.1.1.1.14"} ,
{"zxAnUserInEndVid" , "1.3.6.1.4.1.3902.1015.8.1.1.1.15"} ,
{"zxAnUserCVidCos" , "1.3.6.1.4.1.3902.1015.8.1.1.1.16"} ,
{"zxAnUserInSVid" , "1.3.6.1.4.1.3902.1015.8.1.1.1.17"} ,
{"zxAnSrvPortVlanXconnectEnable", "1.3.6.1.4.1.3902.1015.8.1.1.1.18"} ,
{"zxAnServicePortUserDscp" , "1.3.6.1.4.1.3902.1015.8.1.1.1.19"} ,
{"zxAnServicePortID" , "1.3.6.1.4.1.3902.1015.8.1.1.1.2"} ,
{"zxAnServicePortIngressTrafficPrf", "1.3.6.1.4.1.3902.1015.8.1.1.1.20"} ,
{"zxAnServicePortEgressTrafficPrf", "1.3.6.1.4.1.3902.1015.8.1.1.1.21"} ,
{"zxAnServicePortAdminStatus", "1.3.6.1.4.1.3902.1015.8.1.1.1.22"} ,

{"zxAnServicePortQueueId", "1.3.6.1.4.1.3902.1015.8.1.1.1.23"} ,
{"zxAnServicePortDesc" , "1.3.6.1.4.1.3902.1015.8.1.1.1.3"} ,
{"zxAnServicePortServiceMode" , "1.3.6.1.4.1.3902.1015.8.1.1.1.4"} ,
{"zxAnUserInVid" , "1.3.6.1.4.1.3902.1015.8.1.1.1.5"} ,
{"zxAnUserInPriority" , "1.3.6.1.4.1.3902.1015.8.1.1.1.6"} ,
{"zxAnUserEthType" , "1.3.6.1.4.1.3902.1015.8.1.1.1.7"} ,
{"zxAnUserEthFilter" , "1.3.6.1.4.1.3902.1015.8.1.1.1.8"} ,
{"zxAnUserOutCVid" , "1.3.6.1.4.1.3902.1015.8.1.1.1.9"} ,
{"zxAnUserSceneTable" , "1.3.6.1.4.1.3902.1015.8.1.2"} ,
{"zxAnUserSceneEntry" , "1.3.6.1.4.1.3902.1015.8.1.2.1"} ,
{"zxAnCpeIndex" , "1.3.6.1.4.1.3902.1015.8.1.2.1.1"} ,
{"zxAnSceneMode" , "1.3.6.1.4.1.3902.1015.8.1.2.1.2"} ,
{"zxAnServicePortGlobalObjects" , "1.3.6.1.4.1.3902.1015.8.1.50"} ,
{"zxAnServicePortCompatible" , "1.3.6.1.4.1.3902.1015.8.1.50.1"} ,

4.2 Multicast

Please refer to ZTE-AN-IGMP-MIB.mib.

4.2.1 Global Management

MIB Variable/ OID	Type	Description
zxAnIgmpAdminStatus 1.3.6.1.4.1.3902.1015.31.1.1.1.1	INTEGER	The administrative status of global igmp service. Default: enable
zxAnIgmpAging 1.3.6.1.4.1.3902.1015.31.1.1.1.2	Integer32	[30..3600] (Def: 300) The timeout period in seconds for aging out Multicast Groups dynamically learned with IGMP. Note that aging operates on a per interface per VLAN per multicast group basis. The value is 0 means that no igmp aging.
zxAnIgmpWorkingMode 1.3.6.1.4.1.3902.1015.31.1.1.1.3	INTEGER	[proxy(1), routing(2), snooping(3)] (Def: 1) IGMP working mode, igmp entity can work as a igmp proxy, igmp routing or igmp snooping.
zxAnIgmpMcastInAllVlan 1.3.6.1.4.1.3902.1015.31.1.1.1.4	INTEGER	[enable(1), disable(2)] (Def: 1) enable: multicast forward data in all

		vlans. disable: multicast play role in their vlans only
zxAnIgmpDefaultMvlan 1.3.6.1.4.1.3902.1015.31.1.1.1.5	Integer32	[0..4095](Def:1) Default multicast vlan ID. It is used to auto config (add or delete) multicast group to this default Mvlan. That is if this variable is set then all the operation (add or delete) about a group will not need to operate mvlan manually again to add or delete group to (from) a mvlan. The agent should add or delete a group to (from) the default mvlan automatically. 0 means no default multicast vlan.
zxAnIgmpAutoConfigGrpToDefaultMvlan 1.3.6.1.4.1.3902.1015.31.1.1.1.6	INTEGER	[enable(1), disable(2)] (Def: 1) Enable/disable auto add or delete grp to default mvlan. If it is enable(1),zxAnIgmpDefaultMvlan must be set a non zero value at first.
zxAnIgmpFastQureyBasedIpPool 1.3.6.1.4.1.3902.1015.31.1.1.1.7	INTEGER	[enable(1), disable(2)] (Def: 2) enable(1): enable fast query function based on user's IP log pool. This function helps to speed up the query in case of multi users in same port. disable(2): disable fast uery function.
zxAnIgmpHandleGeneralLeaveMsg 1.3.6.1.4.1.3902.1015.31.1.1.1.8	INTEGER	[enable(1),disable(2)] (Def: 2) enable(1): enable handling general leave msg. disable(2): disable handling general leave msg.
zxAnIgmpUserSideRoutingIp 1.3.6.1.4.1.3902.1015.31.1.1.1.9	IpAddress	The routing ip for user side when the device is looked as a igmp router.
zxAnIgmpV1AdminStatus 1.3.6.1.4.1.3902.1015.31.1.1.1.10	INTEGER	[accept(1), ignore(2), drop(3)] (Def: 1) The administrative status of IGMP v1 packet.
zxAnIgmpV2AdminStatus	INTEGER	[accept(1), ignore(2), drop(3)]

1.3.6.1.4.1.3902.1015.31.1.1.1.11		(Def: 1) The administrative status of IGMP v2 packet.
zxAnIgmpV3AdminStatus 1.3.6.1.4.1.3902.1015.31.1.1.1.12	INTEGER	[accept(1), ignore(2), drop(3)] (Def: 1) The administrative status of IGMP v3 packet.
zxAnIgmpBandwidthCtrl 1.3.6.1.4.1.3902.1015.31.1.1.1.13	INTEGER	[enable(1), disable(2)] (Def: 2) Adminstrative status of bandwidth traffic control for multicast service.
zxAnIgmpRobustnessVariable 1.3.6.1.4.1.3902.1015.31.1.1.1.14	Integer32	[2-5] (Def:2) IGMP proxy robustness variable.
zxAnIgmpQueryInterval 1.3.6.1.4.1.3902.1015.31.1.1.1.15	Integer32	[60-300](Def:125) IGMP proxy general query interval.
zxAnIgmpQueryMaxResponseTime 1.3.6.1.4.1.3902.1015.31.1.1.1.16	Integer32	[10-250] (Def:100), IGMP proxy query max response time.
zxAnIgmpLastMembQueryInterval 1.3.6.1.4.1.3902.1015.31.1.1.1.17	Integer32	[1-255] (Def:10), IGMP proxy last member query interval.
zxAnIgmpLastMembQueryCount 1.3.6.1.4.1.3902.1015.31.1.1.1.18	Integer32	[2-5] (Def:2) IGMP proxy last member query count.
zxAnIgmpV1QuerierTimeout 1.3.6.1.4.1.3902.1015.31.1.1.1.19	Integer32	[60-3600] (Def:400) IGMP proxy version 1 router present timeout.
zxAnIgmpUnsolicitedReportInterval1. 3.6.1.4.1.3902.1015.31.1.1.1.20	Integer32	[1-310](Def:310) IGMP proxy unsolicited report interval.
rfc2662:adslAturConfMinSnrMgn 1.3.6.1.2.1.10.94.1.1.14.1.20	INTEGER	[1-60](Def:10) IGMP proxy unsolicited report interval.

4.2.2 Multicast VLAN Management

Object name	Type	Description
zxAnIgmpVlanId 1.3.6.1.4.1.3902.1015.31.1.1.22.1.1	Integer32	[1-4094] Multicast vlan ID
zxAnMvlanAdminStatus 1.3.6.1.4.1.3902.1015.31.1.1.22.1.2	INTEGER	[enable(1), disable(2),drop(3)] (Def: 1) The administrative status of IGMP packet on this MVLAN.

zxAnMvlanWorkMode 1.3.6.1.4.1.3902.1015.31.1.1.22.1.3	INTEGER	[igmpv1(1), igmpv2(2), igmpv3(3)] (Def: 2) The IGMP woke mode of this MVLAN.
zxAnMvlanNetworkSideHostIp 1.3.6.1.4.1.3902.1015.31.1.1.22.1.4	IpAddress	The host ip of this MVLAN when working on proxy mode. (Def: 0)
zxAnMvlanGroupFilterEnable 1.3.6.1.4.1.3902.1015.31.1.1.22.1.5	TruthValue	
zxAnMvlanMaxGroups 1.3.6.1.4.1.3902.1015.31.1.1.22.1.6	Integer32	Max groups in mvlan,the value lies on the device's ability. Dsl8000 is 255, dsl9000 is 512,9800 is 1024. (Def:512)
zxAnMvlanCurrActGroups 1.3.6.1.4.1.3902.1015.31.1.1.22.1.7	Gauge32	Current active groups in mvlan
zxAnMvlanPriority 1.3.6.1.4.1.3902.1015.31.1.1.22.1.8	Integer32	[0-7] (Def: 0) IGMP protocol packet's priority in proxy/router mode.
zxAnMvlanHostVersion 1.3.6.1.4.1.3902.1015.31.1.1.22.1.9	INTEGER	[auto(1), igmpv2(2), igmpv3(3)] (Def: 2) Igmp version of host on proxy mode.
zxAnMvlanRowStatus 1.3.6.1.4.1.3902.1015.31.1.1.21.1.20	RowStatus	RowStatus

4.2.3 Multicast Group Management

Object name	type	description
zxAnIgmpSrcIp 1.3.6.1.4.1.3902.1015.31.1.1.24.1.1	IpAddress	Multicast source IpAddress in IGMPv3.If the device can't support IGMPv3, this object is 0.0.0.0
zxAnIgmpGrpIp 1.3.6.1.4.1.3902.1015.31.1.1.24.1.2	IpAddress	Multicast group IpAddress.
zxAnIgmpGroupBandwidthCost 1.3.6.1.4.1.3902.1015.31.1.1.24.1.3	Integer32	Estimated Bandwidth cost by this group,it is used as a traffic and bandwidth control parameter.
zxAnIgmpGroupPrejoinEnable 1.3.6.1.4.1.3902.1015.31.1.1.24.1.4	TruthValue	(Def: false)
zxAnIgmpGroupMaxHosts 1.3.6.1.4.1.3902.1015.31.1.1.24.1.5	Integer32	Max User in this Multicast Group.
zxAnIgmpGroupActHosts 1.3.6.1.4.1.3902.1015.31.1.1.24.1.6	Integer32	Current User in this Multicast Group.
zxAnIgmpGroupRowStatus	RowStatus	RowStatus of this row.

1.3.6.1.4.1.3902.1015.31.1.1.24.1.15		

4.2.4 Multicast Port Management

Add and delete multicast source and receiving ports via the table.

Object name	Type	Description
zxAnIgmpParamListCmd 1.3.6.1.4.1.3902.1015.31.1.1.26.1.1	INTEGER	The command to operate param list of zxAnMvlanGroupPortListTable. Each command is related to each meaming of zxAnMvlanGroupStaticPortList. Command operation ---------- addSrcPortToMvlan(1) Bind source port with mvlan delSrcPortFromMvlan(2) unbind source Port with mvlan addRecPortToMvlan(3) bind recievingPort with mvlan delRecPortFromMvlan(4) unbind recievingPort with mvlan addStaticGroup(5) Bind port with Static Multicast delStaticGroup(6) unbind port with Static Multicast
zxAnIgmpParamObject 1.3.6.1.4.1.3902.1015.31.1.1.26.1.2	IDENTIFIER	The value of object ID in param list,eg. addSrcPortToMvlan(1) zxAnIgmpParamObject is 'mvid.ifid' delSrcPortFromMvlan(2) zxAnIgmpParamObject is 'mvid.ifid' addRecPortToMvlan(3) zxAnIgmpParamObject is 'mvid.ifid' delRecPortFromMvlan(4) zxAnIgmpParamObject is 'mvid.ifid' addStaticGroup(5) zxAnIgmpParamObject is 'mvid.srcip.gpip.ifid' delStaticGroup(6) zxAnIgmpParamObject is 'mvid.srcip.gpip.ifid'

4.2.5 Receiving Port Property Management

Object name	Type	Description
zxAnIgmpIfIndex 1.3.6.1.4.1.3902.1015.31.1.1.21.1.1	ZxAnIfindex	The logical port No,ie. layer 2 bridge port. (ie: DSLPVC, PON_VPORT, VDSL)
zxAnIgmpPortAdminStatus 1.3.6.1.4.1.3902.1015.31.1.1.21.1.2	INTEGER	[enable(1), disable(2),drop(3)] (Def: 1) The administrative status of port's igmp service.
zxAnIgmpPortProtoVersion 1.3.6.1.4.1.3902.1015.31.1.1.21.1.3	INTEGER	[igmpv1(1), igmpv2(2), igmpv3(3)] (Def: 2) The version of IGMP protocol which is running on this port.
zxAnIgmpPortFastLeaveEnable 1.3.6.1.4.1.3902.1015.31.1.1.21.1.4	TruthValue	The status of fast-leave property, true:enable fast leave; false: disable fast leave.(Def: true)
zxAnIgmpPortUsage 1.3.6.1.4.1.3902.1015.31.1.1.21.1.5	INTEGER	[all(1), igmp(2), data(3)] (Def:1) The usage of the igmp port,igmp signalling only,data only or both signalling and data.
zxAnIgmpDataPort 1.3.6.1.4.1.3902.1015.31.1.1.21.1.6	ZxAnIfindex	If the logical port indicated by zxAnIgmpIfIndex is used as igmp signaling transporting, ie. zxAnIgmpPortUsage is data(2),zxAnIgmpDataPort must be configured to indicate which port will recieve the igmp data. If the zxAnIgmpPortUsage is All(1), zxAnIgmpDataPort is same as the zxAnIgmpIfIndex.
zxAnIgmpPortProxyIp 1.3.6.1.4.1.3902.1015.31.1.1.21.1.7	IpAddress	zxAnIgmpPortProxyIp is the ip of igmp proxy when zxAnIgmpWorkingMode is igmp_proxy(1). (Def: 0)
zxAnIgmpPortPacketLimit 1.3.6.1.4.1.3902.1015.31.1.1.21.1.8	Integer32	The maxium IGMP packet num can be processed in 1 second on this port, exceeding packets will be discarded.
zxAnIgmpPortMaxBandwidth 1.3.6.1.4.1.3902.1015.31.1.1.21.1.9	Integer32	The maximum permitted traffic in this logical port. (Def: 2048)
zxAnIgmpPortMaxConcurrGroups 1.3.6.1.4.1.3902.1015.31.1.1.21.1.10	Integer32	The max multicast groups supported by this port concurrently. (Def: 1)
zxAnIgmpPortCurrActGroups	Gauge32	The active multicast groups on this

1.3.6.1.4.1.3902.1015.31.1.1.21.1.11		port currentlly.
zxAnIgmpPortQueryInterval 1.3.6.1.4.1.3902.1015.31.1.1.21.1.12	Integer32	Def: 125
zxAnIgmpPortLastMembQueryIntvl 1.3.6.1.4.1.3902.1015.31.1.1.21.1.13	Integer32	[0-255] (Def: 10)
zxAnIgmpPortQueryMaxResponseTime 1.3.6.1.4.1.3902.1015.31.1.1.21.1.14	Integer32	[0-255] (Def: 100)
zxAnIgmpPortEtherPriority 1.3.6.1.4.1.3902.1015.31.1.1.21.1.15	Integer32	[0-7] Ether priority assigned to the upstream IGMP packet on the port.

4.2.6 Query MVLAN Line Card Port List

Object name	Type	Description
zxAnMvlanPortListShelf 1.3.6.1.4.1.3902.1015.31.1.1.23.1.1	Integer32	The shelf that contains the logical port list.
zxAnMvlanPortListCard 1.3.6.1.4.1.3902.1015.31.1.1.23.1.2	Integer32	The card that contains the logical port list.
zxAnMvlanPortSrcPortList 1.3.6.1.4.1.3902.1015.31.1.1.23.1.3	ZxAnPortList	Source port in mvlan
zxAnMvlanPortRecvPortList 1.3.6.1.4.1.3902.1015.31.1.1.23.1.4	ZxAnPortList	Receiving port in mvlan

4.2.7 Query MVLAN Dynamic and Static Interfaces

Object name	Type	Description
zxAnIgmpGroupStaticPortList 1.3.6.1.4.1.3902.1015.31.1.1.25.1.1	ZxAnPortList	static port in a mvlan group
zxAnIgmpGroupDynamicPortList 1.3.6.1.4.1.3902.1015.31.1.1.25.1.2	ZxAnPortList	dynamic port in a mvlan group

4.3 Port Location

4.3.1 DHCP82 Global Switch

DHCP82 global packet extracting switch: Disable / enable of DHCP82 globally. Disable-the drive doesn’t extract DHCP82 packet; Enable-extract packet.

Index Specification:

OID Specification:

MIB Variable	OID	Specification
zxAnPortLocatingDhcp82Enable zxAnPortLocatingDhcp82Enable_enable	1.3.6.1.4.1.3902.1015.32.21.1	INTEGER { enable (1) , disable (2) } Default value: 2.

4.3.2 DHCP82 Port Switch

DHCP82 Port Switch: DHCP82 disable / enable at the port interface level. Port disable-process the port locating information in DHCP82 message; Port enable-do not process the port locating information in DHCP82 message.

Index Specification:

Platform composite index Type 4

OID Specification:

MIB Variable	OID	Specification
zxAnPortLocatingDhcpIndex	1.3.6.1.4.1.3902.1015.32.21.20.1.1	platform composite index Type 4
zxAnPortLocatingPortDhcp82Enable	1.3.6.1.4.1.3902.1015.32.21.20.1.2	INTEGER { enable (1) , disable (2) }. Default value: 2.

4.3.3 PPPOE Port Switch

(config-if)#pppoe-plus enable vport 2

.1.3.6.1.4.1.3902.1015.32.40.10.1.2

4.3.4 Port Trust Status

Port Trust Status: port-level trust status. True-trust the port locating information in the uplink packet; False-not trust

Index Specification:

Platform composite index Type 4

OID Specification:

MIB Variable	OID	Specification
zxAnPortLocatingDhcpIndex	1.3.6.1.4.1.3902.1015.32.21.20.1.1	Platform composite index Type 4
zxAnPortLocatingPortTrust	1.3.6.1.4.1.3902.1015.32.21.20.1.4	INTEGER { true (1) , false (2) }. Default value: 2.

4.3.5 Port Trust Measure

Port-level trust measure: when the trust status is true, you can set trust measure as keep or replace; when the trust status is false, you can set trust measure as discard or add. Of them, keep-keep the port locating information in the uplink packet, replace-replace, discard-discard the uplink packet, add-add one port locating information again.

Index Specification:

Platform composite index Type 4

OID Specification:

MIB Variable	OID	Specification
zxAnPortLocatingDhcpIndex	1.3.6.1.4.1.3902.1015.32.21.20.1.1	Platform composite index Type 4
zxAnPortLocatingPortPolicy	1.3.6.1.4.1.3902.1015.32.21.20.1.5	INTEGER { keep (1) , replace (2) , discard (3) , add (4) }. Default value: 4.

4.3.6 Port Locating Format

Port Locating Format: configure the format of the port locating information.

Index Specification:

Platform composite index Type 4

OID Specification:

MIB Variable	OID	Specification
zxAnPortLocatingIndex	1.3.6.1.4.1.3902.1015.32.20.1.1	Platform composite index Type 4
zxAnPortLocatingIfaceFormat	1.3.6.1.4.1.3902.1015.32.20.1.2	china_tel, dsl_forum, china_net, ti, flexible_syntax, ft, gt, vf.

4.3.7 Port Remote ID Switch

RID Switch: RID disable-do not insert RID in the message; enable-insert RID in the message.

Index Specification:

Platform composite index Type 4

OID Specification:

MIB Variable	OID	Specification
zxAnPortLocatingIndex	1.3.6.1.4.1.3902.1015.32.20.1.1	Platform composite index Type 4
zxAnPortLocatingIfaceRemoteIdEnable	1.3.6.1.4.1.3902.1015.32.20.1.3	INTEGER { enable (1) , disable (2) }

4.3.8 Port Remote ID Content

Port RID Content: Configure specific content of RID, 1-64 characters.

Index Specification:

Platform composite index Type 4

OID Specification:

MIB Variable	OID	Specification
zxAnPortLocatingIndex	1.3.6.1.4.1.3902.1015.32.20.1.1	Platform composite index Type 4
zxAnPortLocatingIfaceRemoteId	1.3.6.1.4.1.3902.1015.32.20.1.4	DisplayString (SIZE (0 .. 64))

4.4 DHCP SNOOPING

ZTE-AN-DHCP-SNOOPING-MIB

5 PON Port for Public Use

5.1 IP Address Pool

{"zxAnXponMgmtIpAddress" , "1.3.6.1.4.1.3902.1015.1010.5.9.1.1"} ,
{"zxAnXponMgmtIpMask" , "1.3.6.1.4.1.3902.1015.1010.5.9.1.2"} ,
{"zxAnXponMgmtPriority" , "1.3.6.1.4.1.3902.1015.1010.5.9.1.3"} ,
{"zxAnXponMgmtCVlan" , "1.3.6.1.4.1.3902.1015.1010.5.9.1.4"} ,
{"zxAnXponMgmtSVlan" , "1.3.6.1.4.1.3902.1015.1010.5.9.1.5"} ,
{"zxAnXponMgmtNetworkIp" , "1.3.6.1.4.1.3902.1015.1010.5.9.1.6"} ,
{"zxAnXponMgmtNetworkMask" , "1.3.6.1.4.1.3902.1015.1010.5.9.1.7"} ,
{"zxAnXponMgmtNetworkGateway" , "1.3.6.1.4.1.3902.1015.1010.5.9.1.8"} ,
{"zxAnXponMgmtIpEnableStatus" , "1.3.6.1.4.1.3902.1015.1010.5.9.1.9"} ,
{"zxAnXponMgmtIpAssignationMode", "1.3.6.1.4.1.3902.1015.1010.5.9.1.10"} ,

6 EPON OLT

6.1 ONU Management

The table is used to create and delete the ONU under a certain OLT interface, to configure the authentication mode, authentication information, etc., and to perform basic management.

OID Specification

onuAdminObjectTable's OID is .1.3.6.1.4.1.3902.1015.1010.1.7.4.

Index Specification

{ ifIndex }, PON composite index Type 3 or 9.

MIB Specification

For detailed description, refer to ZXEPON-SERVICE-PRIVATE-MIB.mib.

Of them:

onuAuthLoid is LOID information, you can modify the LOID via setting this MIB object.

onuLatelyPassDot1xAuthTime is the final authorized pass time, and it can be used as ONU uptime.

```
onuAdminObjectTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF OnuAdminObjectEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            ""
        ::= { privateObjects 4 }

    onuAdminObjectEntry OBJECT-TYPE
        SYNTAX          OnuAdminObjectEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            ""
        INDEX       { ifIndex }
        ::= { onuAdminObjectTable 1}

    OnuAdminObjectEntry ::=
        SEQUENCE {
            onuDescript                 DisplayString,
            onuSplitterSn               INTEGER,
            onuOpticalLineSn            INTEGER,
```



```
onuUserInfo                    DisplayString,
onuType                        DisplayString,
onuAdminState                  INTEGER,
onuAuthMACAddress              MacAddress,
onuRegisterMACAddress          MacAddress,
onuAuthMACSn                   OCTET STRING,
onuRegisterSn                  OCTET STRING,
onuCurrentRegState             INTEGER,
onuRegisterTime                DisplayString,
onuCurrAdminAuthState          INTEGER,
onuLatelyPassAdminAuthTime     DisplayString,
onuCurrDot1xAuthState          INTEGER,
onuLatelyPassDot1xAuthTime     DisplayString,
onuMgmtOnlineStatus            INTEGER,
onuActiveStatus                INTEGER,
onuMgmtEntryStatus             RowStatus,
onuMgmtIpCfgMode               INTEGER,
onuAuthLoid                    DisplayString,
onuAuthPassword                DisplayString,
onuRegisterLoid                DisplayString,
onuRegisterPassword            DisplayString
}
```

6.2 Unauthenticated ONU

EPON uncfg onu [ZXEPON-SERVICE-PRIVATE-MIB.mib] 6.2 Unauthenticated ONU is the whole table
.iso.org.dod.internet.private.enterprises.zte.zxAn.zxAnPonMib.zxAnEponMib.privateObjects.onuUnPassedAdminAuthInfoTable
.1.3.6.1.4.1.3902.1015.1010.1.7.14.1

6.3 FEC Configuration

zxGponFECMode @ zxGponservice.mib
.1.3.6.1.4.1.3902.1012.3.11.3.1.1

7 EPON ONU

7.1 ONU Remote Operation

OID Specification

zxAnEponOnuActionTable's OID is .1.3.6.1.4.1.3902.1015.1010.1.1.2.1.

Index Specification

{ zxAnEponOnuIfIndex}, is PON composite index Type 3 or 9.

MIB Specification

For detailed description, refer to ZXANEPON-ONUMGMT-MIB.mi2.

At present, there is only one zxAnEponOnuAction object, and its role is to reset the ONU.

```
zxAnEponOnuActionTable OBJECT-TYPE
    SYNTAX          SEQUENCE OF ZxAnEponOnuActionEntry
    MAX-ACCESS      not-accessible
    STATUS          current
    DESCRIPTION
      "Update ONU parameters during run-time."
      ::= { zxAnEponOnuExtendedActionMgmt 1 }

zxAnEponOnuActionEntry OBJECT-TYPE
    SYNTAX          ZxAnEponOnuActionEntry
    MAX-ACCESS    not-accessible
    STATUS          current
    DESCRIPTION " "
    INDEX     { zxAnEponOnuIfIndex}
    ::= { zxAnEponOnuActionTable 1 }

ZxAnEponOnuActionEntry ::=
    SEQUENCE {
            zxAnEponOnuAction                   INTEGER
            }
```

7.2 LAN port

7.2.1 Port Status

Index Specification

Type 3's PON composite index and port No.

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuPhyAdminState	**.1.3.6.1.4.1.3902.1015.1010.1.1.3.1.1.1**	**Management status**
zxAnEponOnuEthPortLinkState	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.5.1.2**	**Online status**

- **zxAnEponOnuPhyAdminState definition**

1 disable
2 enable

- **zxAnEponOnuEthPortLinkState definition**

1 down
2 up

7.2.2 Auto-Negotiation Status

Index Specification

Type 3's PON composite index and port No.

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuAutoNegAdminState	**.1.3.6.1.4.1.3902.1015.1010.1.1.3.2.1.1**	**Enable auto-negotiation**
zxAnEponOnuAutoNegCapability	**.1.3.6.1.4.1.3902.1015.1010.1.1.3.2.1.2**	**Auto-negotiation capacity**
zxAnEponOnuAutoNegCapAdvertised	**.1.3.6.1.4.1.3902.1015.1010.1.1.3.2.1.3**	**Auto-negotiation advertisement capacity**

- **zxAnEponOnuAutoNegAdminState definition**

  1 disable
  2 enable

- **Meaning that each BIT of zxAnEponOnuAutoNegCapability indicates**

  zx-GLOBAL (0) ,
  zx-OTHER (1) ,
  zx-UNKNOWN (2) ,
  zx-10BASE-T (3) ,
  zx-10BASE-TFD (4) ,
  zx-100BASE-T4 (5) ,
  zx-100BASE-TX (6) ,
  zx-100BASE-TXFD (7) ,
  zx-FDX-PAUSE (8) ,
  zx-FDX-APAUSE (9) ,
  zx-FDX-SPAUSE (10) ,
  zx-FDX-BPAUSE (11) ,
  zx-100BASE-T2 (12) ,
  zx-100BASE-T2FD (13) ,
  zx-1000BASE-X (14) ,
  zx-1000BASE-XFD (15) ,
  zx-1000BASE-T (16) ,
  zx-1000BASE-TFD (17) ,
  zx-REM-FAULT1 (18) ,
  zx-REM-FAULT2 (19) ,
  zx-ISO-ETHERNET (20) }

- **Meaning that each BIT of zxAnEponOnuAutoNegCapAdvertised indicates**

  zx-GLOBAL (0) ,
  zx-OTHER (1) ,
  zx-UNKNOWN (2) ,
  zx-10BASE-T (3) ,
  zx-10BASE-TFD (4) ,
  zx-100BASE-T4 (5) ,
  zx-100BASE-TX (6) ,
  zx-100BASE-TXFD (7) ,
  zx-FDX-PAUSE (8) ,
  zx-FDX-APAUSE (9) ,
  zx-FDX-SPAUSE (10) ,
  zx-FDX-BPAUSE (11) ,

zx-100BASE-T2 (12) ,
zx-100BASE-T2FD (13) ,
zx-1000BASE-X (14) ,
zx-1000BASE-XFD (15) ,
zx-1000BASE-T (16) ,
zx-1000BASE-TFD (17) ,
zx-REM-FAULT1 (18) ,
zx-REM-FAULT2 (19) ,
zx-ISO-ETHERNET (20) }

7.2.3 Port VLAN Mode

Index Specification

Type 3's PON composite index and port No.

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuVlanMode	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.10.1.1.1**	

- **zxAnEponOnuVlanMode definition**

1 Transparent transmission mode
2 Tag mode
3 Translation mode
4 Trunk mode
5 Hybrid mode

7.2.4 Tag VLAN

Index Specification

Type 3's PON composite index and port No.

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuVlanTagVid	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.10.2.1.1**	**VID**
zxAnEponOnuVlanTagTpid	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.10.2.1.2**	**TPID**
zxAnEponOnuVlanTagCfi	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.10.2.1.3**	**CFI**
zxAnEponOnuVlanPriority	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.10.2.1.4**	**Priority**

7.2.5 Translation VLAN

Translation VLAN mode's port can configure multiple translation VLAN entries.

Index Specification

Type 3's PON composite index, port NO. and SN (start from 1).

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuVlanTransOriginalTag	.1.3.6.1.4.1.3902.1015.1010.1.1.1.10.3.1.2	Old VLAN
zxAnEponOnuVlanTransNewTag	.1.3.6.1.4.1.3902.1015.1010.1.1.1.10.3.1.3	New VLAN

7.2.6 Trunk VLAN

Index Specification

Type 3's PON composite index and port No.

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuVlanTrunkModeVlan	.1.3.6.1.4.1.3902.1015.1010.1.1.1.10.4.1.1	VLAN list

7.2.7 Hybrid VLAN

Index Specification

Type 3's PON composite index and port No.

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuVlanTrunkModeVlan	.1.3.6.1.4.1.3902.1015.1010.1.1.1.10.4.1.1	VLAN list
zxAnEponOnuVlanTagVid	.1.3.6.1.4.1.3902.1015.1010.1.1.1.10.2.1.1	VID

7.2.8 Port Receiving and Sending Byte Numbers

Both sending byte number and receiving byte number are 32-bit integer without a symbol, and are accumulative amount. The port's receiving rate and sending rate can be got through calculating receiving byte number in a period of time ÷ time.

Index Specification

Type 3's PON composite index and port No.

OID Specification

MIB Variable	OID	Specification
parameter1	**.1.3.6.1.4.1.3902.1015.1010.1.1.7.1.1.2**	**Receiving byte number**
parameter6	**.1.3.6.1.4.1.3902.1015.1010.1.1.7.1.1.7**	**Sending byte number**

7.2.9 Port Traffic Control

Ethernet port traffic control

Index Specification

Type 3's PON composite index and port No.

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuPortBackPressure	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.6.1.1**	**Traffic control**
zxAnEponOnuPortPolicing	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.7.1.1**	**Uplink traffic policing**
zxAnEponOnuPortPolicingCir	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.7.1.2**	**Uplink CIR**
zxAnEponOnuPortPolicingBucketDepth	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.7.1.3**	**Uplink CBS**
zxAnEponOnuPortPolicingExtraBurstSize	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.7.1.4**	**Uplink EBS**
zxAnEponOnuPortPolicingDownStream	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.7.1.5**	**Downlink traffic policing**
zxAnEponOnuPortPolicingCirDownStream	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.7.1.6**	**Downlink CIR**
zxAnEponOnuPortPolicingBucketDepthDownStream	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.7.1.7**	**Downlink CBS**
zxAnEponOnuPortPolicingExtraBurstSizeDownStream	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.7.1.8**	**Downlink EBS**

- **zxAnEponOnuPortBackPressure definition**
  1 deactive
  2 active

- **zxAnEponOnuPortPolicing definition**
  1 deactive
  2 active

- **zxAnEponOnuPortPolicingDownStream definition**

1 deactive
2 active

7.3 Multicast VLAN

multicast vlan port eth_0/2 add vlanlist 40

Name: zxAnEponOnuMulticastVlanTable
Type: OBJECT-TYPE
OID: 1.3.6.1.4.1.3902.1015.1010.1.1.1.12
Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).zte(3902).zxAn(1015).zxAnPonMib(1010).zxAnEponMib(1).zxAnEponOnuRemoteMgmt(1).zxAnEponOnuExtendedAttrMgmt(1).zxAnEponOnuMulticastVlanTable(12)
Module: ZXANEPON-ONUMGMT-MIB

Status: current
Max access: not-accessible
Sequences: 1: zxAnEponOnuMulticastVlanAction - INTEGER(2 - integer (32 bit))
2: zxAnEponOnuMulticastVlanList - OCTET STRING(4 - octets)

7.4 VOIP

7.5 ONU E1 port

7.5.1 Port Management Status

Index Specification

Type 3's PON composite index and port No.

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuE1PortEnable	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.9.1.1**	

- **zxAnEponOnuE1PortEnable definition**
  1 disable
  2 enable

7.6 POTS Port Management

7.6.1 Port Management Status

Index Specification

Type 3's PON composite index and port No.

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuVoipPortEnable	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.8.1.1**	

- **zxAnEponOnuVoipPortEnable definition**
  1 disable
  2 enable

7.7 ONU Fiber Length

View the fiber length between the OLT and ONU

Index Specification

{ ifIndex }, Type 3 or 9 PON composite index.

OID Specification

For details, refer to ZXEPON-SERVICE-MIB.mib dot3MpcpStatTable, the table's OID is .1.3.6.1.4.1.3902.1015.1010.1.2.1.

MIB Variable	OID	Specification
dot3MpcpRoundTripTime	**.1.3.6.1.4.1.3902.1015.1010.1.2.1.1.10**	

- **dot3MpcpRoundTripTime**
  dot3MpcpRoundTripTimeindicates RoundTrip time between the OLT and ONU
  Fiber length = dot3MpcpRoundTripTim * 1.635 / 1000

7.8 ONU Version and Model

ONU model, software version, hardware version, etc.

Index Specification

Type 3’s PON composite index

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuModel	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.1.1.3**	**ONU model**
zxAnEponOnuSoftwareVersion	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.1.1.6**	**Software version**
zxAnEponOnuHardwareVersion	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.1.1.5**	**Hardware version**

8 GPON OLT

8.1 ONU Management

Refer to zxGponOntDevMgmtTable defined in zxGponService.mib. It is used to create and delete the ONU under a certain OLT interface, to configure the authentication mode, authentication information, etc., and to perform basic management.

Of them, zxGponOntRegId corresponds to PW, LOID authentication information, which can be modified via modifying the field.

Name	Oid	Range	Description
zxGponOntDevMgmtTypeName	.1.3.6.1.4.1.3902.1012.3.28.1.1.1	STRING (SIZE (0 .. 64))	
zxGponOntDevMgmtProvisionSn	.1.3.6.1.4.1.3902.1012.3.28.1.1.5	(SIZE (8))	SN configured by Olt for the purpose of register
zxGponOntDevMgmtEntryStatus	.1.3.6.1.4.1.3902.1012.3.28.1.1.9		
zxGponOntRegMode	.1.3.6.1.4.1.3902.1012.3.28.1.1.12	regModeSn(1), regModePw(2), regModeSnPlusPw(3), regModeRegisterId(4), regModeRegisterIdPlus8021x(5), regModeRegisterIdPlusMutual(6), regModeTefPw(7), regModeSnPlusTefPw(8), regModeLoid(9), regModeLoidPlusPw(10)	This object indicates the onu registration mode,'regModePwAutoBindSn' mode s is an extension of 'regModePw'. 'regModePwAutoBindSn' mode indicates serial number will binds password automatically.

8.2 ONU Status

Name: zxGponOntPhaseState
OID: .1.3.6.1.4.1.3902.1012.3.28.2.1.4
Description:
INTEGER { logging (0) , los (1) , syncMib (2) , working (3) , dyinggasp (4) , authFailed (5) , offline (6) }

8.3 T-CONT Profile

Refer to zxGponBandwidthProfileTable defined in zxGponService.mib.

Name	Oid	Range	Description
zxGponBWProfileIndex	.1.3.6.1.4.1.3902.1012.3.26.1.1.1		
zxGponBWProfileName	.1.3.6.1.4.1.3902.1012.3.26.1.1.2	(SIZE (0 .. 64))	
zxGponBWProfileFixed	.1.3.6.1.4.1.3902.1012.3.26.1.1.3		
zxGponBWProfileAssured	.1.3.6.1.4.1.3902.1012.3.26.1.1.4		
zxGponBWProfileMaximum	.1.3.6.1.4.1.3902.1012.3.26.1.1.5		
zxGponBWProfileType	.1.3.6.1.4.1.3902.1012.3.26.1.1.6	{ type1 (1) , type2 (2) , type3 (3) , type4 (4) , type5 (5) }	
zxGponBWProfileEntryStatus	.1.3.6.1.4.1.3902.1012.3.26.1.1.8		

8.4 Gemport Traffic Profile

Refer to zxGponTrafficProfileTable defined in zxGponService.mib.

Name	Oid	Range	Description
zxGponTrafficProfileIndex	.1.3.6.1.4.1.3902.1012.3.26.2.1.1		
zxGponTrafficProfileName	.1.3.6.1.4.1.3902.1012.3.26.2.1.2	(SIZE (0 .. 64))	
zxGponTrafficProfileS	.1.3.6.1.4.1.3902.1012.3.26		

ir	.2.1.3		
zxGponTrafficProfileP ir	.1.3.6.1.4.1.3902.1012.3.26 .2.1.4		
zxGponTrafficProfile EntryStatus	.1.3.6.1.4.1.3902.1012.3.26 .2.1.6		

8.5 T-CONT

Refer to zxOnuTrafficMgmtUnitTable defined in zxGponService.mib.

Name	Oid	Range	Description
zxOnuTrafficMgmtUnitTcont Idx	.1.3.6.1.4.1.3902.1012.3.30 .1.1.1		An arbitrary(unique) integer for identifying an entry in the table, from 1 to N.
zxOnuTrafficMgmtUnitTcont UpBWIdxPtr	.1.3.6.1.4.1.3902.1012.3.30 .1.1.3		This attribute is the index of template used by T-CONT BW configuration.
zxOnuTrafficMgmtUnitEntry Status	.1.3.6.1.4.1.3902.1012.3.30 .1.1.8		This entry can be create modified and delete.

8.6 GEM-Port

Refer to zxGponGemPortTable defined in zxGponService.mib.

Name	Oid	Range	Description
zxGponGemPortIdx	.1.3.6.1.4.1.3902.1012.3.30 .2.1.1		An arbitrary(unique) integer for identifying an entry in the table. It is the virtual portid index
zxGponGemPortName	.1.3.6.1.4.1.3902.1012.3.30 .2.1.2	(SIZE (0 .. 64))	This attribute specifies the name of the GEM port.
zxGponGemPortType	.1.3.6.1.4.1.3902.1012.3.30 .2.1.3	{ unicast (1) , multicast (2) }	This attribute specifies the type of the GEM port. Only 'unicast' is supported at present.
zxGponGemPortTcontIdx	.1.3.6.1.4.1.3902.1012.3.30 .2.1.4		It is equal to the 'zxOnuTrafficMgmtUnitTcontI dx' of 'zxOnuTrafficMgmtUnitTable'.
zxGponGemPortEntryStatus	.1.3.6.1.4.1.3902.1012.3.30 .2.1.10		This entry can be create modified and delete.

8.7 Gemport Traffic Limit

Refer to zxGponGemPortLimitRateTable defined in zxGponService.mib.

Name	Oid	Range	Description
zxGponGemPortLimitUpTrafficPtr	.1.3.6.1.4.1.3902.1012.3.30.3.1.1		The GEM PORT upstream traffic descriptor profile.
zxGponGemPortLimitDownTrafficPtr	.1.3.6.1.4.1.3902.1012.3.30.3.1.2		The GEM PORT downstream traffic descriptor profile.

8.8 VLAN (Service Port)

Refer to zxAnServicePortConfTable defined in ZTE-AN-SERVICEPORT-MIB.mib.

Name	Oid	Range	Description
zxAnServicePortServiceMode	1.3.6.1.4.1.3902.1015.8.1.1.1.4	1-15	
zxAnUserInVid	1.3.6.1.4.1.3902.1015.8.1.1.1.5	0-4094	
zxAnUserOutCVid	1.3.6.1.4.1.3902.1015.8.1.1.1.9	0-4094	
zxAnUserOutSVid	1.3.6.1.4.1.3902.1015.8.1.1.1.10	0-4094	
zxAnServicePortRowStatus	1.3.6.1.4.1.3902.1015.8.1.1.1.100		

8.9 Un-configured ONU

Please refer to zxGponUnCfgSnOntInfoTable defined in zxGponService.mib.

Name	Oid	Range	Description
zxGponUnCfgSnIdx	.1.3.6.1.4.1.3902.1012.3.13.3.1.1		
zxGponUnCfgSnOntSN	.1.3.6.1.4.1.3902.1012.3.13.3.1.2	(SIZE (8))	
zxGponUnCfgSnOntRID	.1.3.6.1.4.1.3902.1012.3.13.3.1.3	STRING	The register ID of the

		(SIZE (4))	un-configured ONT.

This table is read only, and is used to get uncfg ONT SN information.

8.10 Traffic-profile

Please refer to zxAnQos3TrafficConfigTable defined in ZTE-AN-QOS3-MIB.mib

Name	Oid	Range	Description
zxAnQos3TrafficConfigTable	.1.3.6.1.4.1.3902.1015.21.4.6.2		
zxAnQos3TrafficConfigEntry	.1.3.6.1.4.1.3902.1015.21.4.6.2.1		
zxAnQos3TrafficPrf	.1.3.6.1.4.1.3902.1015.21.4.6.2.1.2		
zxAnQos3TrafficDirection	.1.3.6.1.4.1.3902.1015.21.4.6.2.1.1		
zxAnQos3TrafficConfigRowStatus	.1.3.6.1.4.1.3902.1015.21.4.6.2.1.20		

The relationship between profile and ONU interface

Name	Oid	Range	Description
zxAnQos3Rack	.1.3.6.1.4.1.3902.1015.21.4.3.1.1.1		
zxAnQos3Shelf	.1.3.6.1.4.1.3902.1015.21.4.3.1.1.2		
zxAnQos3Slot	.1.3.6.1.4.1.3902.1015.21.4.3.1.1.3		
zxAnQos3Port	.1.3.6.1.4.1.3902.1015.21.4.6.2.1.4		
zxAnQos3Onu	.1.3.6.1.4.1.3902.1015.21.4.6.2.1.5		
zxAnQos3VCircuitType	.1.3.6.1.4.1.3902.1015.21.4.3.1.1.6		
zxAnQos3LogicalId	.1.3.6.1.4.1.3902.1015.21.4.3.1.1.7		

9 GPON ONU

9.1 Service

Via creating the mapping from serviceConfigure user flow to gemport, refer to zxGponServiceTable defined in zxGponOntMgmt.mib.

Name	Oid	Range	Description
zxGponServiceIndex	.1.3.6.1.4.1.3902.1012.3.50.11.1.1.1		
zxGponServiceName	.1.3.6.1.4.1.3902.1012.3.50.21.1.1.2	STRING (SIZE (1 .. 32))	
zxGponServiceType	.1.3.6.1.4.1.3902.1012.3.50.21.1.1.2	internet(1),iptv(2),voip(3),internet-iptv(4),hybrid(5)	
zxGponServiceGemPort	.1.3.6.1.4.1.3902.1012.3.50.21.1.1.4		
zxGponServiceMapType	.1.3.6.1.4.1.3902.1012.3.50.21.1.1.5	cos(1), vlan (2),cos-vlan (3)	
zxGponServiceMapVlan	.1.3.6.1.4.1.3902.1012.3.50.21.1.1.7	STRING(SIZE(24))	
zxGponServiceEntryStatus	.1.3.6.1.4.1.3902.1012.3.50.11.1.1.1	2 bytes	This entry can be create modified and delete.

9.2 LAN Port

9.2.1 Port Management

Refer to zxGponPptpEthUNITable defined in zxGponOntMgmt.mib.

Name	Oid	Range	Description
zxGponPptpEthUNIAdminState	1.3.6.1.4.1.3902.1012.3.50.14.1.1.5		

9.2.2 Traffic Management

9.3 LAN Port VLAN

Please refer to following tables defined in zxGponOntMgmt.mib. Add and delete ONU UNI port's VLAN via configuring following tables.

Configuring ONU user port's vlan filter usually concerns two MIB tables, for the meaning of each MIB variable, refer to definitions in the MIB file:

```
{"zxGponVlanPortTable"              ,       "1.3.6.1.4.1.3902.1012.3.50.15.100.1"} ,
{"zxGponVlanPortEntry"              ,       "1.3.6.1.4.1.3902.1012.3.50.15.100.1.1"} ,
{"zxGponVlanPortType"               ,       "1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.1"} ,
{"zxGponVlanPortIndex"              ,       "1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.2"} ,
{"zxGponVlanPortMode"               ,       "1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.3"} ,
{"zxGponVlanPortPvid"               ,       "1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.4"} ,

{"zxGponVlanPortConfVlanCmdTable",          "1.3.6.1.4.1.3902.1012.3.50.15.100.2"} ,
{"zxGponVlanPortConfVlanCmdEntry",          "1.3.6.1.4.1.3902.1012.3.50.15.100.2.1"} ,
{"zxGponVlanPortConfVlanCmd"        ,       "1.3.6.1.4.1.3902.1012.3.50.15.100.2.1.1"} ,
{"zxGponVlanPortConfVlanId"         ,       "1.3.6.1.4.1.3902.1012.3.50.15.100.2.1.2"} ,
```

In the following, take the configuration of gpon-onu_1/3/1:1 eth_0/1 to specify:

1. Transparent transmission mode:

```
ZXAN(gpon-onu-mng)#show onu running config gpon-onu_1/3/1:1
pon-onu-mng gpon-onu_1/3/1:1
   vlan port eth_0/1 mode transparent
!
```

The corresponding MIB configuration is:

```
snmpset -v2c -c public ipaddr .1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.3 i 4
```

2. Trunk mode:

```
ZXAN(gpon-onu-mng)#show onu running config gpon-onu_1/3/1:1
pon-onu-mng gpon-onu_1/3/1:1
   vlan port eth_0/1 mode trunk
   vlan port eth_0/1 vlan 100
!
```

The corresponding MIB operation:

```
snmpset -v2c -c public ipaddr .1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.3 i 2
```

snmpset -v2c -c public ipaddr .1.3.6.1.4.1.3902.1012.3.50.15.100.2.1.1.268632320.2.1.1 i 1 .1.3.6.1.4.1.3902.1012.3.50.15.100.2.1.2.268632320.2.1.1 i 100

Other vlan processing modes are similar. Try to configure according to MIB definition by yourselves.

9.3.1 ZxGponVlanPortTable

Name	Oid	Range	Description
zxGponVlanPortType	.1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.1	ethuni(1), gemport-unicast(2), gemport-multicast(3), wifiuni(4), veip(5), wan(6)	This attribute indicates the type of port
zxGponVlanPortIndex	.1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.2	4 bytes	This attribute indicates the port index. For eth UNI: The third byte specifies the slot Id associated with this UNI; the forth byte specifies the port Id associated with this UNI. For flow: The forth byte specifies the flow Id.(4 bytes) For IPHost: The third and forth bytes provides a unique number for each instance of this managed entity.
zxGponVlanPortMode	.1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.3	iaccess(1),trunk(2), hybrid(3),transparent(4), na(5)	the access mode of the port
zxGponVlanPortPvid	.1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.4	1..4094	the pvid of the port
zxGponVlanPortDefaultPriority	.1.3.6.1.4.1.3902.1012.3.50.15.100.1.1.5	0..7	the default priority of the port

9.3.2 ZxGponVlanPortConfVlanCmdTable

Name	Oid	Range	Description
zxGponVlanPortConfVlanCmd	.1.3.6.1.4.1.3902.1012.3.50.15.100.2.1.1	addTaggedVlan(1),	The command to operate Vlan list of

		delTaggedVlan(2),	zxGponVlanPortConfTable.Each command is related to each meaming of zxGponVlanPortConfVlanObjName.
zxGponVlanPortConfVlanId	.1.3.6.1.4.1.3902.1012.3.50.15.100.2.1.2	1..4094	The value of object name in Vlan list,eg.pkgName,chanName.Different command has different operated Vlan list,so this object has different meanings.please see the DESCRIPTION of zxGponVlanPortConfVlanListCmd.

9.3.3 ZxGponVlanTranslateTable

Name	Oid	Range	Description
zxGponVlanTranslateVlanId	.1.3.6.1.4.1.3902.1012.3.50.15.100.3.1.1	1 .. 4094	VlanId for Vlan translate.
zxGponVlanTranslatePriority	.1.3.6.1.4.1.3902.1012.3.50.15.100.3.1.2	0..8	Priority for Vlan translate,the scope of priority is from 0 to 8 and '8' indicates no configuration.
zxGponVlanTranslateCVlanId	.1.3.6.1.4.1.3902.1012.3.50.15.100.3.1.3	0..4094	Inner VLAN for Vlan translate,'0' indicates no translation.
zxGponVlanTranslateCVlanPriority	.1.3.6.1.4.1.3902.1012.3.50.15.100.3.1.4	0..8	Inner VLAN priority for Vlan translate,'8' indicates no translation.
zxGponVlanTranslateSVlanId	.1.3.6.1.4.1.3902.1012.3.50.15.100.3.1.5	0..4094	Outer VLAN for Vlan translate,'0' indicates no SVLAN.
zxGponVlanTranslateSVlanPriority	.1.3.6.1.4.1.3902.1012.3.50.15.100.3.1.6	0..8	Outer VLAN priority for Vlan translate,'8' indicates copy priority from inner VLAN priority.
zxGponVlanTranslateRowStatus	.1.3.6.1.4.1.3902.1012.3.50.15.100.3.1.7		This object indicates the status of this entry

9.4 Multicast VLAN

Please refer to zxGponMCastVlanTable defined in zxGponOntMgmt.mib.

Name	Oid	Range	Description
zxGponMCastVlanId	.1.3.6.1.4.1.3902.1012.3.50.15.24.1.1		
zxGponMCastVlanEntryStatus	.1.3.6.1.4.1.3902.1012.3.50.15.24.1.2		

9.5 VOIP

Please refer to zxGponOntMgmt.mib.

9.5.1 IP Host

Please refer to zxGponIPHostConfigDataTable defined in zxGponOntMgmt.mib.

Name	Oid	Range	Description
zxGponIPHostConfigDataId	.1.3.6.1.4.1.3902.1012.3.50.11.1.1.1	(1~n) read-only	This attribute provides a unique number for each instance of this managed entity. The ONT creates as many instances as there are independent IP stacks on the ONT.
zxGponIPHostConfigDataIPAddress	.1.3.6.1.4.1.3902.1012.3.50.16.1.1.5	IpAddress 4 bytes	Address used for all IP services hosted by the ONT, and has a default value of 0x0 [not set]. If this value is set, it will override any values returned in DHCP.
zxGponIPHostConfigDataIPMask	.1.3.6.1.4.1.3902.1012.3.50.16.1.1.6	IpAddress 4 bytes	Subnet mask for the IP services hosted by the ONT, and has a default value of 0x0 [not set]. If this value is set, it will override any values returned in DHCP.
zxGponIPHostConfigDataGateway	.1.3.6.1.4.1.3902.1012.3.50.16.1.1.7	IpAddress 4 bytes	Default Gateway Address used for all IP services hosted by the ONT, and has a default value of 0x0 [not set]. If this value is set, it will override any values returned in DHCP.

9.5.2 VoIP Protocol Configuration

Name	Oid	Range	Description
zxGponVoIPConfigDataSignalProtocolUsed	.1.3.6.1.4.1.3902.1012.3.50.17.2.1.2	0x00 = None 0x01 = SIP 0x02 = H.248 0x03 = MGCP 0xFF = Selected by Non-OMCI Management Interface	This attribute identifies the type of VoIP signaling protocol used for ONT. Only one type of protocol is allowed

9.5.3 SIP Agent

Name	Oid	Range	Description
zxGponSIPAgentConfigDataId	.1.3.6.1.4.1.3902.1012.3.50.17.3.1.1	(1~n) (2 bytes)	This attribute provides a unique number for each instance of this managed entity.
zxGponSIPAgentConfigDataProxyServer	.1.3.6.1.4.1.3902.1012.3.50.17.3.1.2	STRING(SIZE(0..128))	This attribute provides a pointer to a LargeString ME that contains the name (IP address or URI) of the SIP Proxy Server for SIP signaling messages.
zxGponSIPAgentConfigDataPrimaryDNS	.1.3.6.1.4.1.3902.1012.3.50.17.3.1.4	4 bytes	This attribute defines the Primary SIP DNS IP Address. If this value is zero, the Primary SIP DNS should not be used. Default value of 0.
zxGponSIPAgentConfigDataUDPTCPPort	.1.3.6.1.4.1.3902.1012.3.50.17.3.1.6	2 bytes	This attribute indicates the UDP/TCP port num. This attribute associates the SIP Agent with the TCP/UDP service to be used for communication with the SIP Server.Default value is 0xFFFF.
zxGponSIPAgentConfigDataHostId	.1.3.6.1.4.1.3902.1012.3.50.17.3.1.7	2 bytes	This attribute associates the SIP Agent with the TCP/UDP service to be used for

			communication with the SIP Server.Default value is 0xFFFF.
zxGponSIPAgentConfigDataEntryStatus	.1.3.6.1.4.1.3902.1012.3.50.11.1.1.1	2 bytes	This entry can be create modified and delete.

9.5.4 SIP User

Name	Oid	Range	Description
zxGponUNIIndex	.1.3.6.1.4.1.3902.1012.3.50.11.1.1.3	(1~n) (2 bytes)	This attribute provides a unique number for each instance of this managed entity.
zxGponSIPUserDataAgentId	.1.3.6.1.4.1.3902.1012.3.50.17.4.1.1	2 bytes	Points to the SIP Agent Config Data ME to be used for signaling.
zxGponSIPUserDataUserPartAOR	.1.3.6.1.4.1.3902.1012.3.50.17.4.1.2	STRING(SIZE(0..128))	This attribute provides a pointer to a LargeString ME that contains the user identification part of the Address of Record. This can take the form of an alphanumeric string or the directory number used to reference the user in the network. 0xFFFF indicates that no user part AOR has been defined.
zxGponSIPUserDataUserName	.1.3.6.1.4.1.3902.1012.3.50.17.4.1.4	STRING(SIZE(0..25))	This attribute defines the Customer ID used for outgoing SIP messages display attribute in ASCII string format. Default value shall be null (all zeros).
zxGponSIPUserDataPassword	.1.3.6.1.4.1.3902.1012.3.50.17.4.1.5	STRING(SIZE(0..128))	A pointer to an Authentication Security Method ME that contains a SIP user name and password used for authentication. 0xFFFF indicates no username/password.

zxGponSIPUserDataEntryStatus	.1.3.6.1.4.1.3902.1012.3.50.17.4.1.17	2 bytes	This entry can be create modified and delete.

9.5.5 MGC Config

Name	Oid	Range	Description
zxGponMGCConfigDataId	.1.3.6.1.4.1.3902.1012.3.50.17.7.1.1	2 bytes	This attribute provides a unique number for each instance of this managed entity.(1~n)
zxGponMGCConfigDataPrimaryMGC	.1.3.6.1.4.1.3902.1012.3.50.17.7.1.2	STRING(SIZE(0..128))	This attribute points to a network address ME that contains the name (IP address or resolved name) of the primary MGC that controls the signalling messages. The port is optional and defaults to 2944 for text message formats and 2955 for binary message formats.
zxGponMGCConfigDataTCPUDPPort	.1.3.6.1.4.1.3902.1012.3.50.17.7.1.12	2 bytes	This attribute specifies the port (1~65535) of TCP/UDP used for communication with the MGC.
zxGponMGCConfigDataTerminationIDbase	.1.3.6.1.4.1.3902.1012.3.50.17.7.1.19	STRING (SIZE(0..25))	The attribute specifies the base string for the H.248 physical termination id(s) for this ONT. This string is intended to uniquely identify an ONT. Vendor specific termination identifiers (i.e. port ids) are optionally added to this string to uniquely identify a termination on a specific ONT.
	.1.3.6.1.4.1.3902.1015.32.20.1.2	STRING	Port location information
zxGponMGCConfigDataEntryStatus	.1.3.6.1.4.1.3902.1012.3.50.17.7.1.21	2 bytes	This entry can be create modified and delete.

9.6 POTS Port

Please refer to zxGponPptpEthUNITable defined in zxGponOntMgmt.mib.

Name	Oid	Range	Description

zxGponPptpPOTSUNIAdminState	1.3.6.1.4.1.3902.1012.3.50.17.1.1.1		
zxGponPptpPOTSUNIOperState	1.3.6.1.4.1.3902.1012.3.50.17.1.1.9		

9.7 Flow Configuration

Please refer to zxGponOntMgmt.mib.

9.7.1 ZxGponFlowTable

Name	Oid	Range	Description
zxGponFlowIndex	.1.3.6.1.4.1.3902.1012.3.50.11.1.1.1	1..255	This attribute indicates the index of flow in ONT, from 1 to M.(1 bytes)
zxGponFlowEntryStatus	.1.3.6.1.4.1.3902.1012.3.50.13.1.1.3		This entry can be create modified and delete.

9.7.2 ZxGponFlowTciModeTable

Name	Oid	Range	Description
zxGponFlowTciModeForwardOper	.1.3.6.1.4.1.3902.1012.3.50.11.1.1.1	mode0(1), mode1(2), mode2(3), mode3(4), mode4(5), mode5(6), mode6(7), mode7(8),	When a frame is received, the frame is processed according to the following Forward Operations. The operations are invoked based on the value of VID, user priority, or the entire TCI or whether or not the TCI field exists. This attribute indicates the received frame is treated as indicated below.(1 byte) tag-filter-action untag-filter-action forward-mode 'transparent' 'transparent' 'mode0' 'discard' 'transparent' 'mode1' 'transparent' 'discard' 'mode2' 'vid-filter' 'transparent' 'mode3' 'vid-filter' 'discard' 'mode4' 'prio-filter' 'transparent' 'mode7' 'prio-filter' 'discard' 'mode8' 'prio-vid-filter' 'transparent' 'mode11' 'prio-vid-filter' 'discard' 'mode12'

		mode8(9),	'vid-match'	'transparent'	'mode15'
			'vid-match'	'discard'	'mode16'
		mode9(10),	'prio-match'	'transparent'	'mode17'
			'prio-match'	'discard'	'mode18'
		mode10(11),	'prio-vid-match'	'transparent'	'mode19'
			'prio-vid-match'	'discard'	'mode20'
		mode11(12),	'forward'	'discard'	'mode21'
		mode12(13),			
		mode13(14),			
		mode14(15),			
		mode15(16),			
		mode16(17),			
		mode17(18),			
		mode18(19),			
		mode19(20),			
		mode20(21),			
		mode21(22)			

9.7.3 ZxGponFlowTciTable

Name	Oid	Range	Description
zxGponFlowTciIndex	.1.3.6.1.4.1.3902.1012.3.50.13.3.1.1	2 bytes	This attribute specifies the TCI value which is provisioned at a bridging port.
zxGponFlowTciEntryStatus	.1.3.6.1.4.1.3902.1012.3.50.13.3.1.2		This entry can be create modified and delete.

9.7.4 GEM Port Flow Configuration

Please refer to zxGponGemFlowTable defined in zxGponOntMgmt.mib.

Name	Oid	Range	Description
zxGponGemFlowId	.1.3.6.1.4.1.3902.1012.3.50.13.4.1.1	1..255	This attribute indicates the flow id related with this GEM flow.
zxGponGemFlowPriBitMap	.1.3.6.1.4.1.3902.1012.3.50.13.4.1.2	1 byte	This attribute indicates the priority bit map of this GEM flow. This bitmap specifies the priorities used by this connection when using 802.1p mapping.Each bit from bit0(LSB) to bit7(MSB) indicates whether priority0~priority7 is occupied. When the flow type of zxGponGemFlowId is not 'switch',zxGponGemFlowPriBitMap must be assigned non-zero; Otherwise,zxGponGemFlowPriBitMap is optional which can be assigned as zero.
zxGponGemFlowEntryStatus	.1.3.6.1.4.1.3902.1012.3.50.13.4.1.3		This entry can be create modified and delete.

9.8 Remote Operation

OID Specification

zxGponONTActionTable's OID is .1.3.6.1.4.1.3902.1012.3.50.11.3.

Index Specification

{ zxGponOltIndex, zxGponONTIndex }, zxGponOltIndex are PON Type 1composite index, others are regular index.

MIB Specification

For detailed description, refer to zxGponOntMgmt.mib.

Of them, zxGponONTReboot is to reset the ONU.

```
zxGponONTActionTable        OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxGponONTActionEntry
        MAX-ACCESS      not-accessible
        STATUS          current
```



```
        DESCRIPTION
            ""
        ::= { zxGponRmONTEquipMgmt 3 }

    zxGponONTActionEntry OBJECT-TYPE
        SYNTAX          ZxGponONTActionEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "It is entry in the zxGponONTActionTable."
        INDEX     { zxGponOltIndex, zxGponONTIndex }
        ::= { zxGponONTActionTable 1 }

    ZxGponONTActionEntry ::=
        SEQUENCE {
            zxGponONTReboot                TruthValue,
            zxGponONTTest                  TruthValue,
            zxGponONTSyncTime              TruthValue,
            zxGponONTRestore               TruthValue,
            zxGponONTTestResult            INTEGER,
            zxGponONTRestoreFactory        TruthValue
        }
```

9.9 MAC Address Table Query

MIB object name and OID:
{"zxGponBridgePortAddrListTotalNum", "1.3.6.1.4.1.3902.1012.3.50.15.28.1.2"} ,
{"zxGponBridgePortAddrListData" , "1.3.6.1.4.1.3902.1012.3.50.15.28.1.4"} ,

Index Specification:
Level-5 index: INDEX { zxGponOltIndex, zxGponONTIndex, zxGponBridgePortType, zxGponBridgePortIndex, zxGponBridgePortAddrListIndex }
Indicate Type 1's PON composite index respectively.ONU numbering. Bridge port type. Bridge port numbering. Last time address sequence.

Operation specification:
Only support getnext operation

MIB reference:
zxGponBridgePortAddrListTable defined in **zxGponOntMgmt.mib**

9.10 WIFI Configuration

{"zxAnOnuWifiIfAdminStatus" , "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.1"} ,
{"zxAnOnuWifiIfRadioMeasEnable" , "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.2"} ,
{"zxAnOnuWifiIfIsolationEnable" , "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.3"} ,
{"zxAnOnuWifiIfWirelessWorkMode", "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.4"} ,
{"zxAnOnuWifiIfRegulatoryDomain", "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.5"} ,
{"zxAnOnuWifiIfArcEnable" , "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.6"} ,
{"zxAnOnuWifiIfArcInterval" , "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.7"} ,
{"zxAnOnuWifiIfOperationalStatus", "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.8"} ,
{"zxAnOnuWifiIfChannelBandwidth", "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.9"} ,
{"zxAnOnuWifiIfSgiEnable" , "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.10"} ,
{"zxAnOnuWifiIfChannel" , "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.11"} ,
{"zxAnOnuWifiIfTxRate" , "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.12"} ,
{"zxAnOnuWifiIfTxPower" , "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.13"} ,
{"zxAnOnuWifiIfQosType" , "1.3.6.1.4.1.3902.1015.1010.12.2.2.1.14"} ,

9.11 VEIP Configuration

switchport-bind switch_0/1 veip 1

{"zxGponUNIMACBridgePortConfigTable", "1.3.6.1.4.1.3902.1012.3.50.15.3"} ,
{"zxGponUNIMACBridgePortConfigEntry", "1.3.6.1.4.1.3902.1012.3.50.15.3.1"} ,
{"zxGponUNIMACBridgePortConfigBridgeId","1.3.6.1.4.1.3902.1012.3.50.15.3.1.1"} ,
{"zxGponUNIMACBridgePortConfigBridgePort", "1.3.6.1.4.1.3902.1012.3.50.15.3.1.2"} ,
{"zxGponUNIMACBridgePortConfigPortPrio", "1.3.6.1.4.1.3902.1012.3.50.15.3.1.3"} ,
{"zxGponUNIMACBridgePortConfigPortPathCost", "1.3.6.1.4.1.3902.1012.3.50.15.3.1.4"} ,
{"zxGponUNIMACBridgePortConfigPortSpanTreeInd",
"1.3.6.1.4.1.3902.1012.3.50.15.3.1.5"} ,
{"zxGponUNIMACBridgePortConfigEncapMethod","1.3.6.1.4.1.3902.1012.3.50.15.3.1.6"} ,
{"zxGponUNIMACBridgePortConfigLANFCSInd", "1.3.6.1.4.1.3902.1012.3.50.15.3.1.7"} ,
{"zxGponUNIMACBridgePortConfigPortMACAddr",
"1.3.6.1.4.1.3902.1012.3.50.15.3.1.8"} ,
{"zxGponUNIMACBridgePortConfigEntryStatus", "1.3.6.1.4.1.3902.1012.3.50.15.3.1.9"} ,
{"zxGponUNIMACBridgePortConfigOutboundTDPtr",
"1.3.6.1.4.1.3902.1012.3.50.15.3.1.10"} ,
{"zxGponUNIMACBridgePortConfigInboundTDPtr",
"1.3.6.1.4.1.3902.1012.3.50.15.3.1.11"} ,
{"zxGponUniMacBridgePortAddrLearnDepth", "1.3.6.1.4.1.3902.1012.3.50.15.3.1.12"} ,
{"zxGponUniMacBPortOutboundTdPrf", "1.3.6.1.4.1.3902.1012.3.50.15.3.1.13"} ,
{"zxGponUniMacBPortInboundTdPrf", "1.3.6.1.4.1.3902.1012.3.50.15.3.1.14"} ,

Level-3 index: INDEX { zxGponOltIndex, zxGponONTIndex, zxGponUNIIndex }

Of them, **zxGponUNIIndex** code is (2 << 16) | (UNI slot << 8) | UNI port

2 indicates VEIP type.

When creating VEIP bridge port, you need to specify zxGponUNIMACBridgePortConfigBridgeId.

9.12 UNI Port Performance Statistics

//Ethernet statistics needs to be enabled on the ONU,
you can set via operating {"zxGponOmciEthStatsEntryStatus",
"1.3.6.1.4.1.3902.1012.3.50.8.1.1.17"} control performance statistics, when it is set as 4, it indicates to start; when it is set as 6, it indicates to delete.
Level-3 index: zxGponOltIndex, zxGponONTIndex, zxGponUNIIndex

Ethernet performance statistics
Uplink:
{"zxGponOmciEthStatsUpTable" , "1.3.6.1.4.1.3902.1012.3.50.8.16"} ,
{"zxGponOmciEthStatsUpEntry" , "1.3.6.1.4.1.3902.1012.3.50.8.16.1"} ,
{"zxGponOmciEthStatsUpIntervalEndTime", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.1"} ,
{"zxGponOmciEthStatsUpThresDataId", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.2"} ,
{"zxGponOmciEthStatsUpDropEvents", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.3"} ,
{"zxGponOmciEthStatsUpOctets" , "1.3.6.1.4.1.3902.1012.3.50.8.16.1.4"} ,
{"zxGponOmciEthStatsUpPkts" , "1.3.6.1.4.1.3902.1012.3.50.8.16.1.5"} ,
{"zxGponOmciEthStatsUpBroadcastPkts", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.6"} ,
{"zxGponOmciEthStatsUpMulticastPkts", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.7"} ,
{"zxGponOmciEthStatsUpCRCErrPkts", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.8"} ,
{"zxGponOmciEthStatsUpUndersizePkts", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.9"} ,
{"zxGponOmciEthStatsUpOversizePkts", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.10"} ,
{"zxGponOmciEthStatsUp64OctetsPkts", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.11"} ,
{"zxGponOmciEthStatsUp65To127OctetsPkts", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.12"} ,
{"zxGponOmciEthStatsUp128To255OctetsPkts", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.13"} ,
{"zxGponOmciEthStatsUp256To511OctetsPkts", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.14"} ,
{"zxGponOmciEthStatsUp512To1023OctetsPkts",
"1.3.6.1.4.1.3902.1012.3.50.8.16.1.15"} ,
{"zxGponOmciEthStatsUp1024To1518OctetsPkts",
"1.3.6.1.4.1.3902.1012.3.50.8.16.1.16"} ,
{"zxGponOmciEthStatsUpEntryStatus", "1.3.6.1.4.1.3902.1012.3.50.8.16.1.30"} , //Used to start the performance statistics, when it is set as 4, it indicates to start statistics; when it is set as 6, it indicates to delete statistics.

Downlink:

{"zxGponOmciEthStatsDownTable" ,"1.3.6.1.4.1.3902.1012.3.50.8.17"} ,
{"zxGponOmciEthStatsDownEntry" ,"1.3.6.1.4.1.3902.1012.3.50.8.17.1"} ,
{"zxGponOmciEthStatsDownIntervalEndTime", "1.3.6.1.4.1.3902.1012.3.50.8.17.1.1"} ,
{"zxGponOmciEthStatsDownThresDataId", "1.3.6.1.4.1.3902.1012.3.50.8.17.1.2"} ,
{"zxGponOmciEthStatsDownDropEvents", "1.3.6.1.4.1.3902.1012.3.50.8.17.1.3"} ,
{"zxGponOmciEthStatsDownOctets" , "1.3.6.1.4.1.3902.1012.3.50.8.17.1.4"} ,
{"zxGponOmciEthStatsDownPkts" ,"1.3.6.1.4.1.3902.1012.3.50.8.17.1.5"} ,
{"zxGponOmciEthStatsDownBroadcastPkts", "1.3.6.1.4.1.3902.1012.3.50.8.17.1.6"} ,
{"zxGponOmciEthStatsDownMulticastPkts", "1.3.6.1.4.1.3902.1012.3.50.8.17.1.7"} ,
{"zxGponOmciEthStatsDownCRCErrPkts", "1.3.6.1.4.1.3902.1012.3.50.8.17.1.8"} ,
{"zxGponOmciEthStatsDownUndersizePkts", "1.3.6.1.4.1.3902.1012.3.50.8.17.1.9"} ,
{"zxGponOmciEthStatsDownOversizePkts","1.3.6.1.4.1.3902.1012.3.50.8.17.1.10"} ,
{"zxGponOmciEthStatsDown64OctetsPkts","1.3.6.1.4.1.3902.1012.3.50.8.17.1.11"} ,
{"zxGponOmciEthStatsDown65To127OctetsPkts",
"1.3.6.1.4.1.3902.1012.3.50.8.17.1.12"} ,
{"zxGponOmciEthStatsDown128To255OctetsPkts",
"1.3.6.1.4.1.3902.1012.3.50.8.17.1.13"} ,
{"zxGponOmciEthStatsDown256To511OctetsPkts",
"1.3.6.1.4.1.3902.1012.3.50.8.17.1.14"} ,
{"zxGponOmciEthStatsDown512To1023OctetsPkts",
"1.3.6.1.4.1.3902.1012.3.50.8.17.1.15"} ,
{"zxGponOmciEthStatsDown1024To1518OctetsPkts",
"1.3.6.1.4.1.3902.1012.3.50.8.17.1.16"} ,
{"zxGponOmciEthStatsDownEntryStatus", "1.3.6.1.4.1.3902.1012.3.50.8.17.1.30"} ,
//Used to start the performance statistics, when it is set as 4, it indicates to start statistics; when it is set as 6, it indicates to delete statistics.

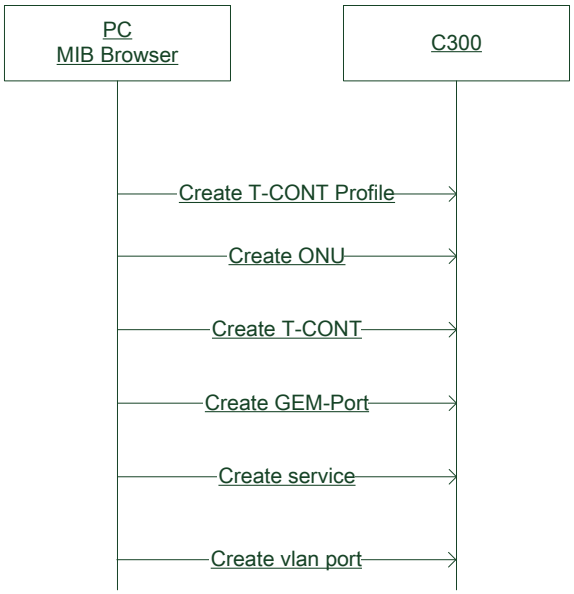
10 Configuration Process Examples

10.1 GPON HSI Service

10.1.1 Configuration Data

Item	Data
T-CONT Bandwidth profile	Index 2 Type1 fixed 20M
ONU	Slot 3 olt 1 onu 1 type ZTE-F622 register mode : sn CIGG00000001
T-CONT	Index 1 Link profile 20M
GEM-Port	Index 1 Link T-CONT 1
service	Index 1 Link GEM-Port 1 ServiceType:internet ServiceMapType:VLAN ServiceMapVlan:200
vlan port	vlanPortMode:hybrid untag add pvid vlanProfile0 at ethUni, then vlan 10 translate to vlan 100.

10.1.2 Configuration Steps



In CLI case:

ZXAN(config-gpon)#profile tcont T1-20M type 1 fixed 20000

ZXAN(config-if)#onu 1 type ZTE-F622 sn CIGG00000001

ZXAN(config-if)#tcont 1 p T1-10M

ZXAN(config-if)#gemport 1 name Gem1 unicast tcont 1

ZXAN(gpon-onu-mng)# service vlanProfile00 type internet gemport 1 vlan 100

ZXAN(gpon-onu-mng)# vlan port eth_0/1 mode hybrid

ZXAN(gpon-onu-mng)# vlan port eth_0/1 vlan 10

ZXAN(gpon-onu-mng)# vlan port eth_0/1 translate vlan 10 svlan 100

STEP	MIB Variable	Parameter
Create T-CONT Profile	zxGponBWProfileIndex	0x70000002
	zxGponBWProfileName	T1-20M (string) profile name
	zxGponBWProfileFixed	20000 rate 20M
	zxGponBWProfileAssured	0
	zxGponBWProfileMaximum	0
	zxGponBWProfileType	1 fixed bandwidth
	zxGponBWProfileEntryStatus	4 Creation
Create ONU	zxGponOntDevMgmtTypeName	ZTE-F622 (string) ONU type
	zxGponOntDevMgmtProvisionSn	Hex format number for ONU SN,e.g.CIGG00000001 means '43:49:47:47:00:00:00:01'
	zxGponOntDevMgmtEntryStatus	4 creation
	zxGponOntRegMode	1 registration mode:SN
Create T-CONT	zxOnuTrafficMgmtUnitTcontIdx	1 T-CONT ID
	zxOnuTrafficMgmtUnitTcontUpBWIdxPtr	0x70000002 associated Ifid
	zxOnuTrafficMgmtUnitEntryStatus	4 creation
Create GEM-Port	zxGponGemPortIdx	1 GEM-Port ID
	zxGponGemPortName	Gem1 (string) PORT Name
	zxGponGemPortType	1 PORT Type unicast
	zxGponGemPortTcontIdx	1 associated T-CONT(ID)
	zxGponGemPortEntryStatus	4 creation
Create service	zxGponServiceIndex	1
	zxGponServiceName	vlanProfile00
	zxGponServiceType	1 internet
	zxGponServiceGemPort	gemport 1
	zxGponServiceMapType	2 vlan
	zxGponServiceMapVlan	100

STEP	MIB Variable	Parameter
	zxGponServiceEntryStatus	4 creation
Create vlan port	zxGponVlanPortType	1 ethuni
	zxGponVlanPortIndex	1
	zxGponVlanPortMode	3 hybrid
	zxGponVlanPortPvid	10
	zxGponVlanPortConfVlanCmd	1 addTaggedVlan
	zxGponVlanPortConfVlanId	10
	zxGponVlanTranslateVlanId	10
	zxGponVlanTranslatePriority	8 no configuration
	zxGponVlanTranslateSVlanId	100
	zxGponVlanTranslateSVlanPriority	8 no configuration

PS: The 2nd index is need for ONU/TCONT/GEMPORT creation.

The primary Index: OLT Ifindex

The 2nd Index: ONU ID (e.g. 1, 2, 3, 4, …)

10.2 GPON VOIP

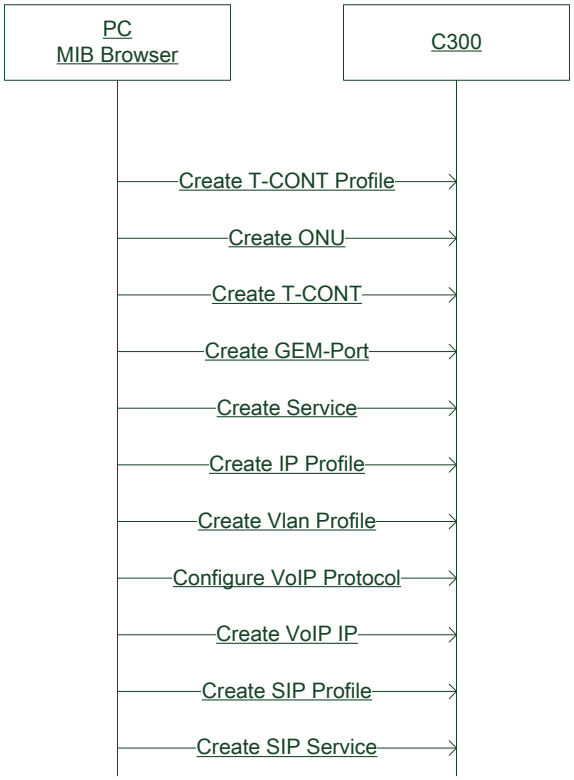
10.2.1 SIP

Configuration Data

Item	Data
T-CONT Bandwidth profile	Index 2 Type1 fixed 20M
ONU	Slot 3 olt 1 onu 1 type ZTE-F622 register mode : sn CIGG00000001

Item	Data
T-CONT	Index 1 Link profile 20M
GEM-Port	Index 1 Link T-CONT 1
service	Index 1 Link GEM-Port 1 ServiceType:voip ServiceMapType:VLAN ServiceMapVlan:200
VoIP (SIP)	SignalProtocolUsed:SIP VLAN 200 ONT IP: 10.40.110.101, Mask: 255.255.255.0, Gateway: 10.40.110.254 POTS1: AOR: 66660050 Username: 66660050 Password: 123 POTS2: AOR: 66660051 Username: 66660051 Password: 123

Configuration Steps



In CLI case:

PON configuration is the same as 2.1.2.

ZXAN(gpon-onu-mng)#service voip type voip iphost 1 gemport 1 vlan 200

ZXAN(config-gpon)#onu profile ip ipProfile static gateway 10.40.110.254

ZXAN(config-gpon)# onu profile vlan vlanProfile tag-mode tag cvlan 200

ZXAN(gpon-onu-mng)#voip protocol sip

ZXAN(gpon-onu-mng)#voip-ip mode static ip-profileipProfile ip 10.40.110.101 mask 255.255.255.0 vlan-profile vlanProfile host 1

ZXAN(config-gpon)#onu profile sip sipProfile proxy 10.40.123.25

ZXAN(gpon-onu-mng)#sip-service pots_0/1 profile sipProfile userid 66660050 username 66660050 password 123

ZXAN(gpon-onu-mng)#sip-service pots_0/2 profile sipProfile userid 66660051 username 66660051 password 123

Steps	MIB Variable	Parameter
Create service	zxGponServiceIndex	1
	zxGponServiceName	voip
	zxGponServiceType	3 voip
	zxGponServiceIfId	2 iphost
	zxGponServiceGemPort	gemport 1
	zxGponServiceMapType	2 vlan
	zxGponServiceMapVlan	200
	zxGponServiceEntryStatus	4 creation
Create IP Profile	zxGponVoipIpProfileName	ipProfile
	zxGponVoipIpProfileGateway	’0a:28:6e:fe’ 10.40.110.254
	zxGponVoipIpProfileRowStatus	4 creation
Create Vlan Profile	zxGponVoipVlanProfileName	vlanProfile
	zxGponVoipVlanProfileTagMode	1 tag
	zxGponVoipVlanProfileCVlanId	200
	zxGponVoipVlanProfileRowStatus	4 creation
Create VoIP IP	zxGponOnuVoipIpMode	1 static
	zxGponOnuVoipIpProfile	ipProfile
	zxGponOnuVoipVlanProfile	vlanProfile
	zxGponOnuVoipHostId	1
	zxGponOnuVoipIpAddr	’0a:28:6e:65’ 10.40.110.101
	zxGponOnuVoipIpAddrPfxLen	24 255.255.255.0

Steps	MIB Variable	Parameter
Configure VoIP Protocol	zxGponVoIPConfigDataSignalProtocolUsed	2 sip
Create SIP Profile	zxGponSipProfileId	0x70000001
	zxGponSipProfileName	sipProfile
	zxGponSipProxyServerAddress	’0a:28:7b:19’ 10.40.123.25
	zxGponSipRowStatus	4 creation
Create SIP Server	zxGponUNIIndex	1
	zxGponSipUserProfileId	0x70000001
	zxGponSipUserPartAor	66660050
	zxGponSipUsername	66660050
	zxGponSipUserPassword	123
	zxGponSipUserRowStatus	4 creation
	zxGponUNIIndex	2
	zxGponSipUserProfileId	0x70000001
	zxGponSipUserPartAor	66660051
	zxGponSipUsername	66660051
	zxGponSipUserPassword	123
	zxGponSipUserRowStatus	4 creation

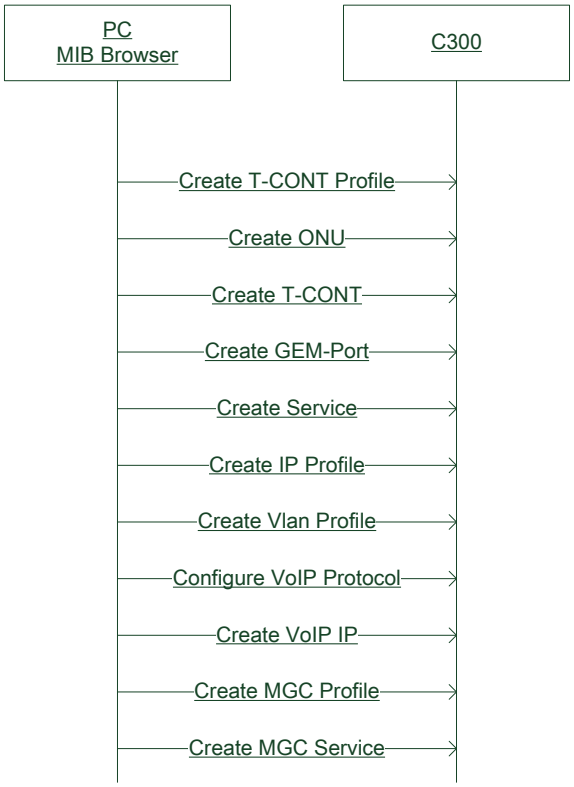
10.2.2 H.248

Configuration Data

Item	Data
T-CONT Bandwidth profile	Index 2 Type1 fixed 20M
ONU	Slot 3 olt 1 onu 1 type ZTE-F622 register mode : sn CIGG00000001
T-CONT	Index 1 Link profile 20M
GEM-Port	Index 1 Link T-CONT 1

Item	Data
service	Index 1 Link GEM-Port 1 ServiceType:voip ServiceMapType:VLAN ServiceMapVlan:200
VoIP (SIP)	Link Service 1 SignalProtocolUsed: H.248 VLAN: 200 ONT IP: 10.40.110.101, Mask: 255.255.255.0, Gateway: 10.40.110.254 Server: 10.63.198.200 user-tid: AG589, postfix-len:5, postfix-start:1 rtp-tid: RTP, postfix-len:3, postfix-start:0

Configuration Steps



In CLI case:

PON configuration is same as 2.1.2.

ZXAN(gpon-onu-mng)#service voip type voip iphost 1 gemport 1 vlan 200

ZXAN(config-gpon)#onu profile ip ipProfile static gateway 10.40.110.254

ZXAN(config-gpon)# onu profile vlan vlanProfile tag-mode tag cvlan 200

ZXAN(gpon-onu-mng)# voip protocol h248 domain domain1

ZXAN(gpon-onu-mng)#voip-ip mode static ip-profile ipProfile ip 10.40.110.101 mask 255.255.255.0 vlan-profile vlanProfile host 1

ZXAN(config-gpon)#onu profile mgc mgcProfile server1 10.63.198.200

ZXAN(config-gpon)#onu profile mgc mgcProfile user-tid prefix AG589 postfix-len 5 postfix-start 1

ZXAN(config-gpon)#onu profile mgc mgcProfile rtp-tid prefix RTP postfix-len 3 postfix-start 0

ZXAN(gpon-onu-mng)#mgc-service pots_0/1 profile mgcProfile

Steps	MIB Variable	Parameter
Create service	zxGponServiceIndex	1
	zxGponServiceName	voip
	zxGponServiceType	3 voip
	zxGponServiceIfId	2 iphost
	zxGponServiceGemPort	gemport 1
	zxGponServiceMapType	2 vlan
	zxGponServiceMapVlan	200
	zxGponServiceEntryStatus	4 creation
Create IP Profile	zxGponVoipIpProfileName	ipProfile
	zxGponVoipIpProfileGateway	’0a:28:6e:fe’ 10.40.110.254
	zxGponVoipIpProfileRowStatus	4

Steps	MIB Variable	Parameter
		creation
Create Vlan Profile	zxGponVoipVlanProfileName	vlanProfile
	zxGponVoipVlanProfileTagMode	1 tag
	zxGponVoipVlanProfileCVlanId	200
	zxGponVoipVlanProfileRowStatus	4 creation
Create VoIP IP	zxGponOnuVoipIpMode	1 static
	zxGponOnuVoipIpProfile	ipProfile
	zxGponOnuVoipVlanProfile	vlanProfile
	zxGponOnuVoipHostId	1
	zxGponOnuVoipIpAddr	’0a:28:6e:65’ 10.40.110.101
	zxGponOnuVoipIpAddrPfxLen	24 255.255.255.0
Configure VoIP Protocol	zxGponVoIPConfigDataSignalProtocolUsed	3 h248
	zxGponVoIPOnuDomainName	domain1
Create Mgc Profile	zxGponMgcProfileId	0x70000001
	zxGponMgcProfileName	mgcProfile
	zxGponMgcPrimaryServer	’0a:28:7b:19’ 10.40.123.25
	zxGponMgcUserTidAssignPolicy	2 specified
	zxGponMgcUserTidPrefix	AG589
	zxGponMgcUserTidPostfixLen	5
	zxGponMgcUserTidPostfixStartNum	1
	zxGponMgcRtpTidAssignPolicy	2 specified
	zxGponMgcRtpTidPrefix	RTP
	zxGponMgcRtpTidPostfixLen	3
	zxGponMgcRtpTidPostfixStartNum	0
	zxGponSipRowStatus	4 creation
Create Mgc Server	zxGponUNIIndex	1
	zxGponMgcUserProfileId	0x70000001
	zxGponMgcUserRowStatus	4

Steps	MIB Variable	Parameter
		creation

10.3EPON HIS Service

10.4 EPON VOIP

11 Optical Module and Optical Power

11.1V1.2.0 PON Optical Module

OID Specification

zxAnOLTOpticalDiagTable's OID is .1.3.6.1.4.1.3902.1015.1010.11.1.

Index Specification

{ zxAnOltIndex }, Type 1 PON composite index.

MIB Specification

For detailed description, refer to ZXAN-TRANSCEIVER-MIB.mib.

Only optical modules of the PON port use this MIB.

C300V1.2.3 changes to use platform MIB, the following MIB do not support any more.

Optical power unit is 0.001dBm.

```
zxAnOLTOpticalDiagTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF ZxAnOLTOpticalDiagEntry
    MAX-ACCESS not-accessible
    STATUS      deprecated
    DESCRIPTION
        " "
    ::= { zxAnTransceiver 1 }

zxAnOLTOpticalDiagEntry OBJECT-TYPE
    SYNTAX      ZxAnOLTOpticalDiagEntry
    MAX-ACCESS  not-accessible
    STATUS      deprecated
    DESCRIPTION
            ""
    INDEX   { zxAnOltIndex }
    ::= { zxAnOLTOpticalDiagTable 1 }

ZxAnOLTOpticalDiagEntry ::= SEQUENCE {
    zxAnOltIndex        Integer32,
    zxAnTransceiverTemp     Integer32,
    zxAnTransceiverVoltage          Integer32,
    zxAnTxBiasCurrent   Integer32,
    zxAnTxOpticalPower  Integer32,
    zxAnRxOpticalPower              Integer32,
    zxAnTransceiverLinkRate         Integer32,
```



```
zxAnTransceiverWaveLength        Integer32,
zxAnTransceiverVendorName        OCTET STRING,
zxAnTransceiverVendorPn          OCTET STRING
}
```

11.2 Optical Module

All optical modules of the Ethernet port and PON port in V1.2.3 query via this MIB.
CES optical modules in V1.2.5 also query via this MIB.

11.2.1 Information Query

OID Specification

zxAnOpticalModuleMonTable's OID is .1.3.6.1.4.1.3902.1015.3.1.13.

OLT's transmitting optical power
zxAnOpticalPowerTxCurrValue: .1.3.6.1.4.1.3902.1015.3.1.13.1.4
The index is ifid
gpon-olt_1/3/1 corresponds to: 0x10010000

gei_1/19/1 corresponds to:0x100F0000
gei_1/19/2 corresponds to:0x100F0100
...

0Fcorresponds to logic cardid
01 corresponds to logic port No.

Index Specification

{ ifIndex }, platform Type 1 composite index.

MIB Specification

For detailed description, refer to ZTE-AN-INTERFACE-MIB.mib.

```
zxAnOpticalModuleMonTable      OBJECT-TYPE
    SYNTAX          SEQUENCE    OF    ZxAnOpticalModuleMonEntry
    MAX-ACCESS    not-accessible
    STATUS          current
    DESCRIPTION "This table provides objects to monitor optical module
      in a network element. It also provides
    objects for setting high and low threshold levels."
    ::=    { zxAnInterfaceObjects    13 }
```



```
zxAnOpticalModuleMonEntry      OBJECT-TYPE
    SYNTAX          ZxAnOpticalModuleMonEntry
    MAX-ACCESS    not-accessible
    STATUS          current
    DESCRIPTION "An entry in zxAnOpticalModuleMonTable."
    INDEX           { ifIndex }
    ::=   { zxAnOpticalModuleMonTable 1 }

ZxAnOpticalModuleMonEntry   ::=   SEQUENCE {
    zxAnOpticalPowerRxCurrValue                 Integer32,
    zxAnOpticalPowerRxLowerThresh               Integer32,
    zxAnOpticalPowerRxUpperThresh               Integer32,

    zxAnOpticalPowerTxCurrValue                 Integer32,
    zxAnOpticalPowerTxLowerThresh               Integer32,
    zxAnOpticalPowerTxUpperThresh               Integer32,

    zxAnOpticalIfRxRate                         Integer32,
    zxAnOpticalIfTxRate                         Integer32,

    zxAnOpticalBiasCurrent                      Integer32,
    zxAnOpticalSupplyVoltage                    Integer32,
    zxAnOpticalWavelength                       Integer32,
    zxAnOpticalTemperature                      Integer32,
    zxAnOpticalVenderPn                         DisplayString,
    zxAnOpticalVenderName                       DisplayString,

    zxAnOpticalBiasCurrLowerThresh              Integer32,
    zxAnOpticalBiasCurrUpperThresh              Integer32,
    zxAnOpticalVoltageLowerThresh               Integer32,
    zxAnOpticalVoltageUpperThresh               Integer32,
    zxAnOpticalTempLowerThresh                  Integer32,
    zxAnOpticalTempUpperThresh                  Integer32,

    zxAnOpticalIfRate                           Integer32,
    zxAnOpticalFiberType                        INTEGER,
    zxAnOpticalVersionLevel                     DisplayString,
    zxAnOpticalVendorSn                         DisplayString,
    zxAnOpticalProductionDate                   DisplayString,
    zxAnOpticalModuleType                       DisplayString,
    zxAnOpticalFiberInterfaceType               DisplayString,
    zxAnOpticalMaterialNumber                   OCTET STRING,
    zxAnOpticalRegisterData                     OCTET STRING
    }
```

11.2.2 Threshold Value Setting

Index Specification

Profile name, character string

OID Specification

MIB Variable	OID	Specification
zxAnOptPrfRxPwrLowerThresh	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.2**	**Receiving optical power lower threshold**
zxAnOptPrfRxPwrUpperThresh	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.3**	**Receiving optical power upper threshold**
zxAnOptPrfTxPwrLowerThresh	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.4**	**Transmitting optical power lower threshold**
zxAnOptPrfTxPwrUpperThresh	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.5**	**Transmitting optical power upper threshold**
zxAnOptPrfBiasCurrLowerThresh	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.6**	**Current lower threshold**
zxAnOptPrfBiasCurrUpperThresh	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.7**	**Current upper threshold**
zxAnOptPrfVoltageLowerThresh	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.8**	**Voltage lower threshold**
zxAnOptPrfVoltageUpperThresh	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.9**	**Voltage upper threshold**
zxAnOptPrfTempLowerThresh	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.10**	**Temperature lower threshold**
zxAnOptPrfTempUpperThresh	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.11**	**Temperature upper threshold**
zxAnOptPrfOfflineTrapEnable	**.1.3.6.1.4.1.3902.1015.3.1.23.2.1.12**	**Online alarm switch**

11.2.3 Threshold Value Loading

Index Specification

Type 1 platform composite index

OID Specification

MIB Variable	OID	Specification
zxAnOpticalIfAlmPrf	**.1.3.6.1.4.1.3902.1015.3.1.23.3.1.2**	**Profile name**

11.3Receiving Optical Power at OLT Side

1.3.6.1.4.1.3902.1015.1010.11.2.1.2

Level-2 index: Type 1 PON composite index and ONU ID

For example: the index that gpon-onu_1/2/2:3 corresponds to: 268567040.3

Corresponding snmp operation command should be:

snmpwalk -v2c -c public 172.17.56.250
1.3.6.1.4.1.3902.1015.1010.11.2.1.2.268567040.3

*0.002 – 30.

11.4Optical Power at EPON ONU Side

Index Specification

Type 3 PON composite index

OID Specification

MIB Variable	OID	Specification
zxAnEponOnuTransTemperature	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.29.1.1**	**Temperature**
zxAnEponOnuSupplyVoltage	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.29.1.2**	**Voltage**
zxAnEponOnuTxBiasCurrent	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.29.1.3**	**Current**
zxAnEponOnuTxPower	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.29.1.4**	**Transmitting optical power dBm**
zxAnEponOnuRxPower	**.1.3.6.1.4.1.3902.1015.1010.1.1.1.29.1.5**	**Receiving optical power dBm**

11.5 Optical Power at GPON ONU Side

{"zxGponRmANIMgmt" , "1.3.6.1.4.1.3902.1012.3.50.12"} ,
{"zxGponPonTable" , "1.3.6.1.4.1.3902.1012.3.50.12.1"} ,
{"zxGponPonEntry" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1"} ,
{"zxGponPonSRInd" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.1"} ,
{"zxGponPonTotalTcontNum" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.2"} ,
{"zxGponPonGemBlockLen" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.3"} ,
{"zxGponPonPiggybackDBAReporting", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.4"} ,
{"zxGponPonWholeOnuDBAReporting", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.5"} ,
{"zxGponPonSFThreshold" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.6"} ,
{"zxGponPonSDThreshold" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.7"} ,
{"zxGponPonAlarmReport" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.8"} ,
{"zxGponPonAlarmDisableInterval", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.9"} ,
{"zxGponPonRxOpticalLevel" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.10"} ,
{"zxGponPonLowerRxOpticalThreshold", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.11"} ,
{"zxGponPonUpperRxOpticalThreshold", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.12"} ,
{"zxGponPonOntResponseTime" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.13"} ,
{"zxGponPonTxOpticalLevel" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.14"} ,
{"zxGponPonLowerTxOpticalThreshold", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.15"} ,
{"zxGponPonUpperTxOpticalThreshold", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.16"} ,
{"zxGponPonPowerFeedVoltage" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.17"} ,
{"zxGponPonLaserBiasCurrent" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.18"} ,
{"zxGponPonTemperature" , "1.3.6.1.4.1.3902.1012.3.50.12.1.1.19"} ,
{"zxGponPonLowerVoltageThreshold", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.20"} ,
{"zxGponPonUpperVoltageThreshold", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.21"} ,
{"zxGponPonLowerCurrentThreshold", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.22"} ,
{"zxGponPonUpperCurrentThreshold", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.23"} ,
{"zxGponPonLowerTemperatureThreshold", "1.3.6.1.4.1.3902.1012.3.50.12.1.1.24"} ,
{"zxGponPonUpperTemperatureThreshold","1.3.6.1.4.1.3902.1012.3.50.12.1.1.25"} ,

12 Performance Statistics

12.1 Ethernet Port Real-time Statistics

Both V1.2.0 and V1.2.3 support it.

12.1.1 ifTable Real-time Statistics

OID Specification

ifTable's OID is .1.3.6.1.2.1.2.2.

Index Specification

{ ifIndex } , Type 1 platform composite index.

MIB Specification

Refer to rfc2863.mib.

```
ifTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF IfEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "A list of interface entries.  The number of entries is
            given by the value of ifNumber."
    ::= { interfaces 2 }

ifEntry OBJECT-TYPE
    SYNTAX      IfEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "An entry containing management information applicable to a
            particular interface."
    INDEX     { ifIndex }
    ::= { ifTable 1 }

IfEntry ::=
    SEQUENCE {
        ifIndex             InterfaceIndex,
        ifDescr             DisplayString,
        ifType              IANAifType,
```

```
        ifMtu                   Integer32,
        ifSpeed                 Gauge32,
        ifPhysAddress           PhysAddress,
        ifAdminStatus           INTEGER,
        ifOperStatus            INTEGER,
        ifLastChange            TimeTicks,
        ifInOctets              Counter32,
        ifInUcastPkts           Counter32,
        ifInNUcastPkts          Counter32,    -- deprecated
        ifInDiscards            Counter32,
        ifInErrors              Counter32,
        ifInUnknownProtos       Counter32,
        ifOutOctets             Counter32,
        ifOutUcastPkts          Counter32,
        ifOutNUcastPkts         Counter32,    -- deprecated
        ifOutDiscards           Counter32,
        ifOutErrors             Counter32,
        ifOutQLen               Gauge32,      -- deprecated
        ifSpecific              OBJECT IDENTIFIER -- deprecated
    }
```

12.1.2 ifXTable Real-time Statistics

OID Specification

ifXTable's OID is .1.3.6.1.2.1.31.1.1.

Index Specification

{ ifIndex } , Type 1 platform composite index.

MIB Specification

Refer to rfc2863.mib.

```
ifXTable        OBJECT-TYPE
    SYNTAX      SEQUENCE OF IfXEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "A list of interface entries.  The number of entries is
            given by the value of ifNumber.  This table contains
            additional objects for the interface table."
    ::= { ifMIBObjects 1 }
```



```
ifXEntry            OBJECT-TYPE
    SYNTAX          IfXEntry
    MAX-ACCESS      not-accessible
    STATUS          current
    DESCRIPTION
            "An entry containing additional management information
            applicable to a particular interface."
    AUGMENTS        { ifEntry }
    ::= { ifXTable 1 }

IfXEntry ::=
    SEQUENCE {
        ifName                      DisplayString,
        ifInMulticastPkts           Counter32,
        ifInBroadcastPkts           Counter32,
        ifOutMulticastPkts          Counter32,
        ifOutBroadcastPkts          Counter32,
        ifHCInOctets                Counter64,
        ifHCInUcastPkts             Counter64,
        ifHCInMulticastPkts         Counter64,
        ifHCInBroadcastPkts         Counter64,
        ifHCOutOctets               Counter64,
        ifHCOutUcastPkts            Counter64,
        ifHCOutMulticastPkts        Counter64,
        ifHCOutBroadcastPkts        Counter64,
        ifLinkUpDownTrapEnable      INTEGER,
        ifHighSpeed                 Gauge32,
        ifPromiscuousMode           TruthValue,
        ifConnectorPresent          TruthValue,
        ifAlias                     DisplayString,
        ifCounterDiscontinuityTime TimeStamp
    }
```

12.1.3 zxAnEtherIfStatTable Real-time Statistics

```
    ZxAnEtherIfStatEntry    ::=    SEQUENCE {
        zxAnEtherIfStatFCSErrors                Counter32,
        zxAnEtherIfStat15minFCSErrors           Counter32,
        zxAnEtherIf15minFcsErrsThresh           Integer32,
        zxAnEtherIfStat1dayFCSErrors            Counter32,
        zxAnEtherIf1dayFcsErrsThresh            Integer32,
```

zxAnEtherIfOutDiscardPktRatio Integer32,
zxAnEtherIfInDiscardPktRatio Integer32,
zxAnEtherIfInErrPktRatio Integer32,
zxAnEtherIfOutPkts Counter64,
zxAnEtherIfInOctetsCorrect Counter64,
zxAnEtherIfOutOctetsCorrect Counter64,
zxAnEtherIfInOctetsError Counter64,
zxAnEtherIfOutOctetsError Counter64,
zxAnEthIfStat1SecFcsErrs Counter64,
zxAnEthIfStat1SecFcsErrsThresh Integer32,
zxAnEtherIfStatOutDiscardPkt Counter64,
zxAnEtherIfStatInDiscardPkt Counter64,
zxAnEtherIfStatReset INTEGER
}

12.2 OLT Ethernet Real-time Statistics

Both V1.2.0 and V1.2.3 versions support it.

12.2.1 Real-time Performance

OID Specification

zxAnXponOltIfStatTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.4.

Index Specification

{ zxAnXponOltIfIndex }, Type 1 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnXponOltIfStatTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnXponOltIfStatEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            "xPON interface statistics table"
        ::= { zxAnXpon 4 }

zxAnXponOltIfStatEntry OBJECT-TYPE
            SYNTAX          ZxAnXponOltIfStatEntry
            MAX-ACCESS      not-accessible
            STATUS          current
```



```
                DESCRIPTION
                ""
                INDEX       { zxAnXponOltIfIndex }
                ::= { zxAnXponOltIfStatTable 1}

ZxAnXponOltIfStatEntry ::=
            SEQUENCE {
             zxAnXponOltIfIndex                    INTEGER,
                    zxAnXponOltIfRxOctes                Counter64,
                    zxAnXponOltIfRxPkts                 Counter64,
                    zxAnXponOltIfRxUniPkts              Counter64,
                    zxAnXponOltIfRxNonUniPkts           Counter64,
                    zxAnXponOltIfRxMultPkts             Counter64,
                    zxAnXponOltIfRxBroadPkts            Counter64,
                    zxAnXponOltIfRxPktsDiscard          Counter64,
                    zxAnXponOltIfRxPktsErr              Counter64,
                    zxAnXponOltIfRxPDR                  DisplayString,
                    zxAnXponOltIfRxPER                  DisplayString,
                    zxAnXponOltIfTxOctes                Counter64,
                    zxAnXponOltIfTxPkts                 Counter64,
                    zxAnXponOltIfTxUniPkts              Counter64,
                    zxAnXponOltIfTxNonUniPkts           Counter64,
                    zxAnXponOltIfTxMultPkts             Counter64,
                    zxAnXponOltIfTxBroadPkts            Counter64,
                    zxAnXponOltIfTxPktsDiscard          Counter64,
                    zxAnXponOltIfTxPktsErr              Counter64,
                    zxAnXponOltIfTxPDR                  DisplayString,
                    zxAnXponOltIfTxPER                  DisplayString,
                    zxAnXponOltIfRxCRCAlignErrors       Counter64,
                    zxAnXponOltIfRxUndersizePkts        Counter64,
                    zxAnXponOltIfRxOversizePkts         Counter64,
                    zxAnXponOltIfRx64OctetPkts          Counter64,
                    zxAnXponOltIfTx64OctetPkts          Counter64,
                    zxAnXponOltIfRx65To127OctetPkts     Counter64,
                    zxAnXponOltIfTx65To127OctetPkts     Counter64,
                    zxAnXponOltIfRx128To255OctetPkts    Counter64,
                    zxAnXponOltIfTx128To255OctetPkts    Counter64,
                    zxAnXponOltIfRx256To511OctetPkts    Counter64,
                    zxAnXponOltIfTx256To511OctetPkts    Counter64,
                    zxAnXponOltIfRx512To1023OctPkts     Counter64,
                    zxAnXponOltIfTx512To1023OctPkts     Counter64,
                    zxAnXponOltIfRx1024To1518OctPkts    Counter64,
                    zxAnXponOltIfTx1024To1518OctPkts    Counter64,
                    zxAnXponOltIfStatus                 INTEGER
```

}

12.3 ONU Ethernet Real-time Statistics

Both V1.2.0 and V1.2.3 versions support it.

12.3.1 Real-time Performance

OID Specification

zxAnXponOnuIfStatTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.5.

Index Specification

{ zxAnXponOnuIfIndex }, Type 3 or 9 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnXponOnuIfStatTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnXponOnuIfStatEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            "xPON interface statistics table"
        ::= { zxAnXpon 5 }

zxAnXponOnuIfStatEntry OBJECT-TYPE
            SYNTAX          ZxAnXponOnuIfStatEntry
            MAX-ACCESS      not-accessible
            STATUS          current
            DESCRIPTION
            ""
            INDEX       { zxAnXponOnuIfIndex }
            ::= { zxAnXponOnuIfStatTable 1}

ZxAnXponOnuIfStatEntry ::=
        SEQUENCE {
          zxAnXponOnuIfIndex                INTEGER,
                zxAnXponOnuIfRxOctes            Counter64,
                zxAnXponOnuIfRxPkts             Counter64,
                zxAnXponOnuIfRxUniPkts          Counter64,
                zxAnXponOnuIfRxNonUniPkts       Counter64,
                zxAnXponOnuIfRxMultPkts         Counter64,
                zxAnXponOnuIfRxBroadPkts        Counter64,
```

```
zxAnXponOnuIfRxPktsDiscard          Counter64,
zxAnXponOnuIfRxPktsErr              Counter64,
zxAnXponOnuIfRxPDR                  DisplayString,
zxAnXponOnuIfRxPER                  DisplayString,
zxAnXponOnuIfTxOctes                Counter64,
zxAnXponOnuIfTxPkts                 Counter64,
zxAnXponOnuIfTxUniPkts              Counter64,
zxAnXponOnuIfTxNonUniPkts           Counter64,
zxAnXponOnuIfTxMultPkts             Counter64,
zxAnXponOnuIfTxBroadPkts            Counter64,
zxAnXponOnuIfTxPktsDiscard          Counter64,
zxAnXponOnuIfTxPktsErr              Counter64,
zxAnXponOnuIfTxPDR                  DisplayString,
zxAnXponOnuIfTxPER                  DisplayString,
zxAnXponOnuIfStatus                 INTEGER
}
```

12.4GPON OLT PON-Layer Real-time Statistics

Both V1.2.0 and V1.2.3 versions support it.

12.4.1 Real-time Performance

OID Specification

.zxGponOltPmStatisRealtimeInfoTable's OID is .1.3.6.1.4.1.3902.1012.3.12.13.

Index Specification

{ zxGponMgmtPonOltId }, Type 1 PON composite index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOltPmStatisRealtimeInfoTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxGponOltPmStatisRealtimeInfoEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            ""
        REFERENCE
            ""
        ::= { zxGponStandardOlt 13 }
```



```
zxGponOltPmStatisRealtimeInfoEntry OBJECT-TYPE
    SYNTAX          ZxGponOltPmStatisRealtimeInfoEntry
    MAX-ACCESS    not-accessible
    STATUS          current
    DESCRIPTION
        ""
    INDEX     { zxGponMgmtPonOltId }
    ::= { zxGponOltPmStatisRealtimeInfoTable 1 }

ZxGponOltPmStatisRealtimeInfoEntry ::=
    SEQUENCE {
        zxGponOltPmStatisInfoCorrectNonIdleGemFramesUpstream
Unsigned32,
        zxGponOltPmStatisInfoCorrectIdleGemFramesUpstream
Unsigned32,
        zxGponOltPmStatisInfoErroredGemFramesUpstream          Unsigned32,
        zxGponOltPmStatisInfoGemPayloadBytesUpstream
Unsigned32,
        zxGponOltPmStatisInfoCorrectEthernetFramesUpstream
Unsigned32,
        zxGponOltPmStatisInfoErroredEthernetFramesUpstream
Unsigned32,
        zxGponOltPmStatisInfoTotalOmciFramesUpstream                Unsigned32,
        zxGponOltPmStatisInfoERR                Unsigned32,
        zxGponOltPmStatisInfoREI                Unsigned32,
        zxGponOltPmStatisInfoValidEthernetPacketDownstream
Unsigned32,
        zxGponOltPmStatisInfoCpuPacketDownstream              Unsigned32,
        zxGponOltPmStatisInfoPloamDownstream              Unsigned32,
        zxGponOltPmStatisInfoPloamUpstream                  Unsigned32,
        zxGponOltPmStatisInfoInvalidPacketUpstream              Unsigned32,
        zxGponOltPmFecCorrectedBytes
Unsigned32,
        zxGponOltPmFecCorrectedWords
Unsigned32,
        zxGponOltPmFecUncorrectedWords
Unsigned32,
        zxGponOltPmFecTotalRxWords
Unsigned32,
        zxGponOltPmBipErrBits
Unsigned32,
        zxGponOltPmCrcErrPkts
Unsigned32,
        zxGponOltPmStatisReset                                  INTEGER
```


}

12.5 GPON ONU PON-Layer Real-time Statistics

Both V1.2.0 and V1.2.3 versions support it.

12.5.1 Real-time Performance

OID Specification

zxGponOntPmStatisRealtimeInfoTable's OID is .1.3.6.1.4.1.3902.1012.3.28.6.1.

Index Specification

{ zxGponMgmtPonOltId, zxGponMgmtPonOnuId }, of them. zxGponMgmtPonOltId is Type 1 PON composite index, while others are regular index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOntPmStatisRealtimeInfoTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxGponOntPmStatisRealtimeInfoEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "unused attribute"
        REFERENCE
            "G.984.3"
        ::= { zxGponPrivateOnu 6 }

    zxGponOntPmStatisRealtimeInfoEntry OBJECT-TYPE
        SYNTAX          ZxGponOntPmStatisRealtimeInfoEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            ""
        INDEX     { zxGponMgmtPonOltId, zxGponMgmtPonOnuId }
        ::= { zxGponOntPmStatisRealtimeInfoTable 1 }

    ZxGponOntPmStatisRealtimeInfoEntry ::=
        SEQUENCE {
            zxGponOntPmStatisInfoCorrectNonIdleGemFramesUpstream        Unsigned32,
            zxGponOntPmStatisInfoCorrectIdleGemFramesUpstream           Unsigned32,
            zxGponOntPmStatisInfoErroredGemFramesUpstream
```


Unsigned32,
zxGponOntPmStatisInfoGemPayloadBytesUpstream
Unsigned32,
zxGponOntPmStatisInfoCorrectEthernetFramesUpstream Unsigned32,
zxGponOntPmStatisInfoErroredEthernetFramesUpstream Unsigned32,
zxGponOntPmStatisInfoTotalOmciFramesUpstream Unsigned32,
zxGponOntPmStatisInfoERRi
Unsigned32,
zxGponOntPmStatisInfoREIi
Unsigned32,
zxGponOntPmStatisInfoUnreceivedBurstsUpstream Unsigned32,
zxGponOntPmStatisInfoBipErrorUpstream Unsigned32,
zxGponOntPmStatisInfoCorrectedBitsUpstream Unsigned32,
zxGponOntPmStatisInfoNotCorrectedWordsUpstream Unsigned32,
zxGponOntPmStatisInfoLostBurst Unsigned32,
zxGponOntTxCorrectNonIdleGemFrms
Unsigned32,
zxGponOntTxCorrectIdleGemFrms
Unsigned32,
zxGponOntTxOmciFrms
Unsigned32,
zxGponOntTxPloamFrms
Unsigned32,
zxGponOntRxPloamFrms
Unsigned32,
zxGponOntLofiAlarms
Unsigned32,
zxGponOntPmFecCorrectedBytes
Unsigned32,
zxGponOntPmFecCorrectedWords
Unsigned32,
zxGponOntPmFecUncorrectedWords
Unsigned32,
zxGponOntPmFecTotalRxWords
Unsigned32,
zxGponOntPmCrcErrPkts
Unsigned32,
zxGponOntPmReset
INTEGER
}

12.6 Ethernet Port Performance (V1.2.3)

12.6.1 Real-time Performance

OID Specification

zxAnEthIfCurrStatsTable's OID is .1.3.6.1.4.1.3902.1015.3.11.2.2.

Index Specification

{ ifIndex } , Type 1 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-STATS-MIB.mib.

```
zxAnEthIfCurrStatsTable       OBJECT-TYPE
            SYNTAX          SEQUENCE OF ZxAnEthIfCurrStatsEntry
            MAX-ACCESS    not-accessible
            STATUS          current
            DESCRIPTION
                "Current performance data table of the ethernet interfaces."
            ::= { zxAnIfPerfObjects 2 }


      zxAnEthIfCurrStatsEntry       OBJECT-TYPE
            SYNTAX          ZxAnEthIfCurrStatsEntry
            MAX-ACCESS    not-accessible
            STATUS          current
            DESCRIPTION
                "Current performance data entry of the ethernet interfaces."
            INDEX     { ifIndex}
            ::= { zxAnEthIfCurrStatsTable 1 }

      ZxAnEthIfCurrStatsEntry ::= SEQUENCE {
            zxAnEthIfInOctets                    Counter64,
            zxAnEthIfInPkts                      Counter64,
            zxAnEthIfInUcastPkts                 Counter64,
            zxAnEthIfInMcastPkts                 Counter64,
            zxAnEthIfInBcastPkts                 Counter64,
            zxAnEthIfInOversizedPkts             Counter64,
            zxAnEthIfInUndersizedPkts            Counter64,
            zxAnEthIfOutOctets                   Counter64,
            zxAnEthIfOutPkts                     Counter64,
            zxAnEthIfOutUcastPkts                Counter64,
            zxAnEthIfOutMcastPkts                Counter64,
```



```
zxAnEthIfOutBcastPkts                Counter64,
zxAnEthIfOutPausePkts                Counter64,
zxAnEthIfOutDiscardPkts              Counter64,
zxAnEthIfOutCollisions               Counter64,
zxAnEthIfSingleCollisions            Counter64,
zxAnEthIfMultipleCollisions          Counter64,
zxAnEthIfFcsErrors                   Counter64,
zxAnEthIfAlignmentErrors             Counter64,
zxAnEthIfReset                       INTEGER
}
```

12.6.2 15-MiniteReal-time Performance

OID Specification

zxAnEthIfCurr15MinPerfTable's OID is .1.3.6.1.4.1.3902.1015.3.12.2.2.

Index Specification

{ ifIndex } , Type 1 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-ETH-PERF-MIB.mib.

```
zxAnEthIfCurr15MinPerfTable      OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnEthIfCurr15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
              "The 15 minutes interval performance data table of the ethernet
            interfaces."
        ::= { zxAnEthIfPerfObjects 2 }

    zxAnEthIfCurr15MinPerfEntry      OBJECT-TYPE
        SYNTAX          ZxAnEthIfCurr15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 15 minutes interval performance data entry of the ethernet
            interfaces."
        INDEX     { ifIndex}
        ::= { zxAnEthIfCurr15MinPerfTable 1 }

    ZxAnEthIfCurr15MinPerfEntry ::= SEQUENCE {
        zxAnEthIfC15MTimeElapsed                Gauge32,
```

```
        zxAnEthIfC15MInOctets                Counter64,
        zxAnEthIfC15MInPkts                  Counter64,
        zxAnEthIfC15MInUcastPkts             Counter64,
        zxAnEthIfC15MInMcastPkts             Counter64,
        zxAnEthIfC15MInBcastPkts             Counter64,
        zxAnEthIfC15MInOversizedPkts         Counter64,
        zxAnEthIfC15MInUndersizedPkts        Counter64,
        zxAnEthIfC15MOutOctets               Counter64,
        zxAnEthIfC15MOutPkts                 Counter64,
        zxAnEthIfC15MOutUcastPkts            Counter64,
        zxAnEthIfC15MOutMcastPkts            Counter64,
        zxAnEthIfC15MOutBcastPkts            Counter64,
        zxAnEthIfC15MOutPausePkts            Counter64,
        zxAnEthIfC15MOutDiscardPkts          Counter64,
        zxAnEthIfC15MOutCollisions           Counter64,
        zxAnEthIfC15MSingleCollisions        Counter64,
        zxAnEthIfC15MMultipleCollisions      Counter64,
        zxAnEthIfC15MFcsErrors               Counter64,
        zxAnEthIfC15MAlignmentErrors         Counter64,
        zxAnEthIfC15MReset                   INTEGER
        }
```

12.6.3 24-Hour Real-time Performance

OID Specification

zxAnEthIfCurr1DayPerfTable's OID is .1.3.6.1.4.1.3902.1015.3.12.2.3.

Index Specification

{ ifIndex } , Type 1 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-ETH-PERF-MIB.mib.

```
zxAnEthIfCurr1DayPerfTable      OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnEthIfCurr1DayPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
              "The 1 day interval performance data table of the ethernet
            interfaces."
        ::= { zxAnEthIfPerfObjects 3 }

    zxAnEthIfCurr1DayPerfEntry      OBJECT-TYPE
        SYNTAX          ZxAnEthIfCurr1DayPerfEntry
```



```
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "The 1 day interval performance data entry of the ethernet
            interfaces."
        INDEX     { ifIndex}
        ::= { zxAnEthIfCurr1DayPerfTable 1 }

    ZxAnEthIfCurr1DayPerfEntry ::= SEQUENCE {
        zxAnEthIfC1DTimeElapsed          Gauge32,
        zxAnEthIfC1DInOctets             Counter64,
        zxAnEthIfC1DInPkts               Counter64,
        zxAnEthIfC1DInUcastPkts          Counter64,
        zxAnEthIfC1DInMcastPkts          Counter64,
        zxAnEthIfC1DInBcastPkts          Counter64,
        zxAnEthIfC1DInOversizedPkts      Counter64,
        zxAnEthIfC1DInUndersizedPkts     Counter64,
        zxAnEthIfC1DOutOctets            Counter64,
        zxAnEthIfC1DOutPkts              Counter64,
        zxAnEthIfC1DOutUcastPkts         Counter64,
        zxAnEthIfC1DOutMcastPkts         Counter64,
        zxAnEthIfC1DOutBcastPkts         Counter64,
        zxAnEthIfC1DOutPausePkts         Counter64,
        zxAnEthIfC1DOutDiscardPkts       Counter64,
        zxAnEthIfC1DOutCollisions        Counter64,
        zxAnEthIfC1DSingleCollisions     Counter64,
        zxAnEthIfC1DMultipleCollisions   Counter64,
        zxAnEthIfC1DFcsErrors            Counter64,
        zxAnEthIfC1DAlignmentErrors      Counter64,
        zxAnEthIfC1DReset                INTEGER
        }
```

12.6.4 15-Minite Historical Performance

OID Specification

zxAnEthIfHis15MinPerfTable's OID is .1.3.6.1.4.1.3902.1015.3.12.2.4.

Index Specification

{ ifIndex } , Type 1 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-ETH-PERF-MIB.mib.

```
zxAnEthIfHis15MinPerfTable      OBJECT-TYPE
```

```
        SYNTAX          SEQUENCE OF ZxAnEthIfHis15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
              "The 15 minutes interval history performance data table of the
            ethernet interfaces."
        ::= { zxAnEthIfPerfObjects 4 }

zxAnEthIfHis15MinPerfEntry       OBJECT-TYPE
        SYNTAX          ZxAnEthIfHis15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 15 minutes interval performance data entry of the ethernet
            interfaces."
        INDEX     { ifIndex, zxAnEthIfH15MIntervalNo }
        ::= { zxAnEthIfHis15MinPerfTable 1 }

ZxAnEthIfHis15MinPerfEntry ::= SEQUENCE {
        zxAnEthIfH15MIntervalNo                  Integer32,
        zxAnEthIfH15MIntervalValidData          TruthValue,
        zxAnEthIfH15MDateTime                    DateAndTime,
        zxAnEthIfH15MInOctets                    Counter64,
        zxAnEthIfH15MInPkts                      Counter64,
        zxAnEthIfH15MInUcastPkts                 Counter64,
        zxAnEthIfH15MInMcastPkts                 Counter64,
        zxAnEthIfH15MInBcastPkts                 Counter64,
        zxAnEthIfH15MInOversizedPkts             Counter64,
        zxAnEthIfH15MInUndersizedPkts            Counter64,
        zxAnEthIfH15MOutOctets                   Counter64,
        zxAnEthIfH15MOutPkts                     Counter64,
        zxAnEthIfH15MOutUcastPkts                Counter64,
        zxAnEthIfH15MOutMcastPkts                Counter64,
        zxAnEthIfH15MOutBcastPkts                Counter64,
        zxAnEthIfH15MOutPausePkts                Counter64,
        zxAnEthIfH15MOutDiscardPkts              Counter64,
        zxAnEthIfH15MOutCollisions               Counter64,
        zxAnEthIfH15MSingleCollisions            Counter64,
        zxAnEthIfH15MMultipleCollisions          Counter64,
        zxAnEthIfH15MFcsErrors                   Counter64,
        zxAnEthIfH15MAlignmentErrors             Counter64
        }
```

12.6.5 24-Hour Historical Performance

OID Specification

zxAnEthIfHis1DayPerfTable's OID is .1.3.6.1.4.1.3902.1015.3.12.2.5.

Index Specification

{ ifIndex } , Type 1 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-ETH-PERF-MIB.mib.

```
zxAnEthIfHis1DayPerfTable       OBJECT-TYPE
            SYNTAX          SEQUENCE OF ZxAnEthIfHis1DayPerfEntry
            MAX-ACCESS    not-accessible
            STATUS          current
            DESCRIPTION
                  "The 1 day interval history performance data table of the ethernet
                interfaces."
            ::= { zxAnEthIfPerfObjects 5 }

      zxAnEthIfHis1DayPerfEntry       OBJECT-TYPE
            SYNTAX          ZxAnEthIfHis1DayPerfEntry
            MAX-ACCESS    not-accessible
            STATUS          current
            DESCRIPTION
                "The 1 day interval performance data entry of the ethernet
                interfaces."
            INDEX     { ifIndex, zxAnEthIfH1DIntervalNo }
            ::= { zxAnEthIfHis1DayPerfTable 1 }

      ZxAnEthIfHis1DayPerfEntry ::= SEQUENCE {
            zxAnEthIfH1DIntervalNo                  Integer32,
            zxAnEthIfH1DIntervalValidData         TruthValue,
            zxAnEthIfH1DDateTime                    DateAndTime,
            zxAnEthIfH1DInOctets                   Counter64,
            zxAnEthIfH1DInPkts                     Counter64,
            zxAnEthIfH1DInUcastPkts                Counter64,
            zxAnEthIfH1DInMcastPkts                Counter64,
            zxAnEthIfH1DInBcastPkts                Counter64,
            zxAnEthIfH1DInOversizedPkts            Counter64,
            zxAnEthIfH1DInUndersizedPkts           Counter64,
            zxAnEthIfH1DOutOctets                  Counter64,
            zxAnEthIfH1DOutPkts                    Counter64,
            zxAnEthIfH1DOutUcastPkts               Counter64,
```

```
zxAnEthIfH1DOutMcastPkts          Counter64,
zxAnEthIfH1DOutBcastPkts          Counter64,
zxAnEthIfH1DOutPausePkts          Counter64,
zxAnEthIfH1DOutDiscardPkts        Counter64,
zxAnEthIfH1DOutCollisions         Counter64,
zxAnEthIfH1DSingleCollisions      Counter64,
zxAnEthIfH1DMultipleCollisions    Counter64,
zxAnEthIfH1DFcsErrors             Counter64,
zxAnEthIfH1DAlignmentErrors       Counter64
}
```

12.6.6 Performance Threshold Alarm Profile

OID Specification

zxAnEthIfAlmProfileTable's OID is .1.3.6.1.4.1.3902.1015.3.12.2.8.
zxAnEthIfAlmProfileConfTable's OID is .1.3.6.1.4.1.3902.1015.3.12.2.6.

Index Specification

{ zxAnEthIfAlmProfileName, zxAnEthIfPerfVariable }

MIB Specification

Refer to ZTE-AN-INTERFACE-ETH-PERF-MIB.mib.
Type 1 platform composite index.

```
zxAnEthIfAlmProfileTable      OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnEthIfAlmProfileEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
              "The performance alarm threshold profile table of the ethernet
             interfaces.It can be used to delete all of the performance alarm
             threshold profiles which has the same name configured in
             'zxAnEthIfAlmProfileConfTable'."
        ::= { zxAnEthIfPerfObjects 8 }

    zxAnEthIfAlmProfileEntry      OBJECT-TYPE
        SYNTAX          ZxAnEthIfAlmProfileEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
             "The performance alarm threshold profile entry of the ethernet
             interfaces."
        INDEX      { zxAnEthIfAlmProfileName}
        ::= { zxAnEthIfAlmProfileTable 1 }
```

```
    ZxAnEthIfAlmProfileEntry ::= SEQUENCE {
        zxAnEthIfAlmProfileRowStatus      RowStatus
        }


zxAnEthIfAlmProfileConfTable      OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnEthIfAlmProfileConfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
             "The performance alarm threshold profile table of the ethernet
            interfaces."
        ::= { zxAnEthIfPerfObjects 6 }

    zxAnEthIfAlmProfileConfEntry      OBJECT-TYPE
        SYNTAX          ZxAnEthIfAlmProfileConfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The performance alarm threshold profile entry of the ethernet
            interfaces.These variables in the profile configuration is optional,
            if not configured, it means the correspongding alarm is not
            reported, but the alarm and clear alarm threshold configuration is
            needed to bind."
        INDEX     { zxAnEthIfAlmProfileName, zxAnEthIfPerfVariable }
        ::= { zxAnEthIfAlmProfileConfTable 1 }

    ZxAnEthIfAlmProfileConfEntry ::= SEQUENCE {
        zxAnEthIfAlmProfileName             DisplayString,
        zxAnEthIfPerfVariable               OBJECT IDENTIFIER,
        zxAnEthIfRiseAlmThresh              HCPerfCurrentCount,
        zxAnEthIfClrRiseAlmThresh           HCPerfCurrentCount,
        zxAnEthIfRiseWarnThresh             HCPerfCurrentCount,
        zxAnEthIfClrRiseWarnThresh          HCPerfCurrentCount,
        zxAnEthIfFallWarnThresh             HCPerfCurrentCount,
        zxAnEthIfClrFallWarnThresh          HCPerfCurrentCount,
        zxAnEthIfFallAlmThresh              HCPerfCurrentCount,
        zxAnEthIfClrFallAlmThresh           HCPerfCurrentCount,
        zxAnEthIfThreshUsed                 BITS,
        zxAnEthIfAlmProfileConfRowStatus      RowStatus
        }
```

12.6.7 Performance Alarm Profile Loading

OID Specification

zxAnEthIfAlmProfileApplyTable's OID is .1.3.6.1.4.1.3902.1015.3.12.2.7.

Index Specification

{ ifIndex } , Type 1 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-ETH-PERF-MIB.mib.

```
zxAnEthIfAlmProfileApplyTable      OBJECT-TYPE
            SYNTAX          SEQUENCE OF ZxAnEthIfAlmProfileApplyEntry
            MAX-ACCESS    not-accessible
            STATUS          current
            DESCRIPTION
                  "The performance alarm threshold profile configuration table of
                   the ethernet interfaces."
            ::= { zxAnEthIfPerfObjects 7 }

      zxAnEthIfAlmProfileApplyEntry      OBJECT-TYPE
            SYNTAX          ZxAnEthIfAlmProfileApplyEntry
            MAX-ACCESS    not-accessible
            STATUS          current
            DESCRIPTION
                 "The performance alarm threshold profile configuration entry of
                   the ethernet interfaces."
            INDEX      { ifIndex }
            ::= { zxAnEthIfAlmProfileApplyTable 1 }

      ZxAnEthIfAlmProfileApplyEntry ::= SEQUENCE {
            zxAnEthIfAlmPrf                        DisplayString,
            zxAnEthIfAlmPrfApplyRowStatus          RowStatus
            }
```

12.7VPORT Performance (V1.2.3)

12.7.1 Starting and Ending

OID Specification

zxGponVportCurrPerfTable's OID is .1.3.6.1.4.1.3902.1012.3.34.2.

Index Specification

{ zxGponMgmtPonOltId, zxGponMgmtPonOnuId, zxGponMgmtPonOnuBpIndex }, of them, zxGponMgmtPonOltId is PON Type 1 composite index, while others are regular index.

MIB Specification

Refer to zxGponVportCurrPerfTable defined in zxGponService.mib.

By default, the system won't perform VPORT performance statistics. If needed, you can start or end a certain VPORT performance statistics via operating zxGponVportCurrRowStatus.

```
zxGponVportCurrPerfTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF ZxGponVportCurrPerfEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "Enable/disable the interface GPON vport Statisic."
        ::= { zxAnGponVportPerfMgmt 2 }

    zxGponVportCurrPerfEntry OBJECT-TYPE
        SYNTAX      ZxGponVportCurrPerfEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "It is entry in the table zxGponVportCurrPerfTable."
        INDEX   { zxGponMgmtPonOltId, zxGponMgmtPonOnuId,
                  zxGponMgmtPonOnuBpIndex }
        ::= { zxGponVportCurrPerfTable 1 }

    ZxGponVportCurrPerfEntry ::=
    SEQUENCE {
        zxGponVportCurrRowStatus                RowStatus
        }
```

12.7.2 Real-time Performance

OID Specification

zxAnBrgIfCurrStatsTable's OID is .1.3.6.1.4.1.3902.1015.3.11.2.3.

Index Specification

{ ifIndex } , Type 4 or 10 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-STATS-MIB.mib.

```
zxAnBrgIfCurrStatsTable       OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnBrgIfCurrStatsEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "Current performance data table of bridge interfaces."
        ::= { zxAnIfPerfObjects 3 }


    zxAnBrgIfCurrStatsEntry       OBJECT-TYPE
        SYNTAX          ZxAnBrgIfCurrStatsEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "Current performance data entry of bridge interfaces."
        INDEX     { ifIndex}
        ::= { zxAnBrgIfCurrStatsTable 1 }

    ZxAnBrgIfCurrStatsEntry ::= SEQUENCE {
        zxAnBrgIfInOctets                   Counter64,
        zxAnBrgIfInUcastPkts                Counter64,
        zxAnBrgIfInMcastPkts                Counter64,
        zxAnBrgIfInBcastPkts                Counter64,
        zxAnBrgIfOutOctets                  Counter64,
        zxAnBrgIfOutUcastPkts               Counter64,
        zxAnBrgIfOutMcastPkts               Counter64,
        zxAnBrgIfOutBcastPkts               Counter64,
        zxAnBrgIfReset                      INTEGER
        }
```

12.7.3 15-Minute Real-time Performance

OID Specification

zxAnBrgIfCurr15MinPerfTable's OID is .1.3.6.1.4.1.3902.1015.3.13.2.2.

Index Specification

{ ifIndex } , Type 4 or 10 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-BRG-PERF-MIB.mib.


```
zxAnBrgIfCurr15MinPerfTable       OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnBrgIfCurr15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
             "The 15 minutes interval performance data table of the bridge
            interfaces."
        ::= { zxAnBrgIfPerfObjects 2 }

    zxAnBrgIfCurr15MinPerfEntry       OBJECT-TYPE
        SYNTAX          ZxAnBrgIfCurr15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 15 minutes interval performance data entry of the bridge
            interfaces."
        INDEX     { ifIndex}
        ::= { zxAnBrgIfCurr15MinPerfTable 1 }

    ZxAnBrgIfCurr15MinPerfEntry ::= SEQUENCE {
        zxAnBrgIfC15MTimeElapsed          Gauge32,
        zxAnBrgIfC15MInOctets             Counter64,
        zxAnBrgIfC15MInUcastPkts          Counter64,
        zxAnBrgIfC15MInMcastPkts          Counter64,
        zxAnBrgIfC15MInBcastPkts          Counter64,
        zxAnBrgIfC15MOutOctets            Counter64,
        zxAnBrgIfC15MOutUcastPkts         Counter64,
        zxAnBrgIfC15MOutMcastPkts         Counter64,
        zxAnBrgIfC15MOutBcastPkts         Counter64,
        zxAnBrgIfC15MReset                INTEGER
        }
```

12.7.4 24-Hour Real-time Performance

OID Specification

zxAnBrgIfCurr1DayPerfTable's OID is .1.3.6.1.4.1.3902.1015.3.13.2.2.

Index Specification

{ ifIndex } , Type 4 or 10 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-BRG-PERF-MIB.mib.

```
zxAnBrgIfCurr1DayPerfTable      OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnBrgIfCurr1DayPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
             "The 1 day interval performance data table of the bridge
            interfaces."
        ::= { zxAnBrgIfPerfObjects 3 }

    zxAnBrgIfCurr1DayPerfEntry      OBJECT-TYPE
        SYNTAX          ZxAnBrgIfCurr1DayPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 1 day interval performance data entry of the bridge
            interfaces."
        INDEX     { ifIndex}
        ::= { zxAnBrgIfCurr1DayPerfTable 1 }

    ZxAnBrgIfCurr1DayPerfEntry ::= SEQUENCE {
        zxAnBrgIfC1DTimeElapsed                 Gauge32,
        zxAnBrgIfC1DInOctets                    Counter64,
        zxAnBrgIfC1DInUcastPkts                 Counter64,
        zxAnBrgIfC1DInMcastPkts                 Counter64,
        zxAnBrgIfC1DInBcastPkts                 Counter64,
        zxAnBrgIfC1DOutOctets                   Counter64,
        zxAnBrgIfC1DOutUcastPkts                Counter64,
        zxAnBrgIfC1DOutMcastPkts                Counter64,
        zxAnBrgIfC1DOutBcastPkts                Counter64,
        zxAnBrgIfC1DReset                       INTEGER
        }
```

12.7.5 15-Minute Historical Performance

OID Specification

zxAnBrgIfHis15MinPerfTable's OID is .1.3.6.1.4.1.3902.1015.3.13.2.4.

Index Specification

{ ifIndex } , Type 4 or 10 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-BRG-PERF-MIB.mib.

```
zxAnBrgIfHis15MinPerfTable      OBJECT-TYPE
```



```
        SYNTAX          SEQUENCE OF ZxAnBrgIfHis15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
              "The 15 minutes interval history performance data table of the
            bridge interfaces."
        ::= { zxAnBrgIfPerfObjects 4 }

    zxAnBrgIfHis15MinPerfEntry       OBJECT-TYPE
        SYNTAX          ZxAnBrgIfHis15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 15 minutes interval performance data entry of the bridge
            interfaces."
        INDEX     { ifIndex,zxAnBrgIfH15MIntervalNo }
        ::= { zxAnBrgIfHis15MinPerfTable 1 }

    ZxAnBrgIfHis15MinPerfEntry ::= SEQUENCE {
        zxAnBrgIfH15MIntervalNo                 Integer32,
        zxAnBrgIfH15MIntervalValidData          TruthValue,
        zxAnBrgIfH15MDateTime                   DateAndTime,
        zxAnBrgIfH15MInOctets                   Counter64,
        zxAnBrgIfH15MInUcastPkts                Counter64,
        zxAnBrgIfH15MInMcastPkts                Counter64,
        zxAnBrgIfH15MInBcastPkts                Counter64,
        zxAnBrgIfH15MOutOctets                  Counter64,
        zxAnBrgIfH15MOutUcastPkts               Counter64,
        zxAnBrgIfH15MOutMcastPkts               Counter64,
        zxAnBrgIfH15MOutBcastPkts               Counter64
        }
```

12.7.6 24-Hour Historical Performance

OID Specification

zxAnBrgIfHis1DayPerfTable's OID is .1.3.6.1.4.1.3902.1015.3.13.2.5.

Index Specification

{ ifIndex } , Type 4 or 10 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-BRG-PERF-MIB.mib.

```
zxAnBrgIfHis1DayPerfTable       OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnBrgIfHis1DayPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
             "The 1 day interval history performance data table of the bridge
            interfaces."
        ::= { zxAnBrgIfPerfObjects 5 }

    zxAnBrgIfHis1DayPerfEntry       OBJECT-TYPE
        SYNTAX          ZxAnBrgIfHis1DayPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 1 day interval performance data entry of the bridge
            interfaces."
        INDEX     { ifIndex,zxAnBrgIfH1DIntervalNo }
        ::= { zxAnBrgIfHis1DayPerfTable 1 }

    ZxAnBrgIfHis1DayPerfEntry ::= SEQUENCE {
        zxAnBrgIfH1DIntervalNo                  Integer32,
        zxAnBrgIfH1DIntervalValidData           TruthValue,
        zxAnBrgIfH1DDateTime                    DateAndTime,
        zxAnBrgIfH1DInOctets                    Counter64,
        zxAnBrgIfH1DInUcastPkts                 Counter64,
        zxAnBrgIfH1DInMcastPkts                 Counter64,
        zxAnBrgIfH1DInBcastPkts                 Counter64,
        zxAnBrgIfH1DOutOctets                   Counter64,
        zxAnBrgIfH1DOutUcastPkts                Counter64,
        zxAnBrgIfH1DOutMcastPkts                Counter64,
        zxAnBrgIfH1DOutBcastPkts                Counter64
        }
```

12.7.7 Performance Threshold Alarm Profile

OID Specification

zxAnBrgIfAlmProfileTable's OID is .1.3.6.1.4.1.3902.1015.3.13.2.8.

zxAnBrgIfAlmProfileConfTable's OID is .1.3.6.1.4.1.3902.1015.3.13.2.6.

Index Specification

{ ifIndex } , Type 4 or 10 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-BRG-PERF-MIB.mib.

```
    zxAnBrgIfAlmProfileTable      OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnBrgIfAlmProfileEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
              "The performance alarm threshold profile table of the bridge
            interfaces. It can be used to delete all of the performance alarm
            threshold profiles which has the same name configured in
            'zxAnBrgIfAlmProfileConfTable'."
        ::= { zxAnBrgIfPerfObjects 8 }

    zxAnBrgIfAlmProfileEntry      OBJECT-TYPE
        SYNTAX          ZxAnBrgIfAlmProfileEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The performance alarm threshold profile entry of the bridge
            interfaces."
        INDEX      { zxAnBrgIfAlmProfileName}
        ::= { zxAnBrgIfAlmProfileTable 1 }

    ZxAnBrgIfAlmProfileEntry ::= SEQUENCE {
        zxAnBrgIfAlmProfileRowStatus      RowStatus
        }
zxAnBrgIfAlmProfileConfTable      OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnBrgIfAlmProfileConfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
              "The performance alarm threshold profile table of the bridge
            interfaces."
        ::= { zxAnBrgIfPerfObjects 6 }

    zxAnBrgIfAlmProfileConfEntry      OBJECT-TYPE
        SYNTAX          ZxAnBrgIfAlmProfileConfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The performance alarm threshold profile table of the bridge
            interfaces.These variables in the profile configuration is optional,
            if not configured, it means the correspongding alarm is not
            reported, but the alarm and clear alarm threshold configuration is
            needed to bind. "
```



```
        INDEX      { zxAnBrgIfAlmProfileName, zxAnBrgIfPerfVariable }
        ::= { zxAnBrgIfAlmProfileConfTable 1 }

    ZxAnBrgIfAlmProfileConfEntry ::= SEQUENCE {
        zxAnBrgIfAlmProfileName             DisplayString,
        zxAnBrgIfPerfVariable               OBJECT IDENTIFIER,
        zxAnBrgIfRiseAlmThresh              HCPerfCurrentCount,
        zxAnBrgIfClrRiseAlmThresh           HCPerfCurrentCount,
        zxAnBrgIfRiseWarnThresh             HCPerfCurrentCount,
        zxAnBrgIfClrRiseWarnThresh          HCPerfCurrentCount,
        zxAnBrgIfFallWarnThresh             HCPerfCurrentCount,
        zxAnBrgIfClrFallWarnThresh          HCPerfCurrentCount,
        zxAnBrgIfFallAlmThresh              HCPerfCurrentCount,
        zxAnBrgIfClrFallAlmThresh           HCPerfCurrentCount,
        zxAnBrgIfThreshUsed                 BITS,
        zxAnBrgIfAlmProfileConfRowStatus    RowStatus
        }
```

12.7.8 Performance Alarm Profile Loading

OID Specification

zxAnBrgIfAlmProfileApplyTable's OID is .1.3.6.1.4.1.3902.1015.3.13.2.7.

Index Specification

{ ifIndex } , Type 4 or 10 platform composite index.

MIB Specification

Refer to ZTE-AN-INTERFACE-BRG-PERF-MIB.mib.

```
zxAnBrgIfAlmProfileApplyTable     OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnBrgIfAlmProfileApplyEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The performance alarm threshold profile configuration table of
             the bridge interfaces."
        ::= { zxAnBrgIfPerfObjects 7 }

    zxAnBrgIfAlmProfileApplyEntry     OBJECT-TYPE
        SYNTAX          ZxAnBrgIfAlmProfileApplyEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The performance alarm threshold profile configuration entry of
```



```
            the bridge interfaces."
        INDEX     { ifIndex }
        ::= { zxAnBrgIfAlmProfileApplyTable 1 }

    ZxAnBrgIfAlmProfileApplyEntry ::= SEQUENCE {
        zxAnBrgIfAlmPrf                 DisplayString,
        zxAnBrgIfAlmPrfApplyRowStatus       RowStatus
        }
```

12.8 OLT Ethernet Performance (V1.2.3)

The performance is started by default.

12.8.1 Real-time Performance

OID Specification

zxAnPonOltIfCurrPerfTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.55.1.

Index Specification

{ zxAnXponOltIfIndex } , Type 1 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnPonOltIfCurrPerfTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnPonOltIfCurrPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The current interface performance data table of XPON OLT."
        ::= { zxAnPonOltPerfMgmt 1 }

    zxAnPonOltIfCurrPerfEntry OBJECT-TYPE
        SYNTAX          ZxAnPonOltIfCurrPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "An entry in the OLT current interface performance data table."
        INDEX     { zxAnXponOltIfIndex }
        ::= { zxAnPonOltIfCurrPerfTable 1 }

    ZxAnPonOltIfCurrPerfEntry ::=
```



```
SEQUENCE {
zxAnPonOltIfDropEvents                  Counter64,
zxAnPonOltIfRxOctets                    Counter64,
zxAnPonOltIfTxOctets                    Counter64,
zxAnPonOltIfRxPkts                      Counter64,
zxAnPonOltIfTxPkts                      Counter64,
zxAnPonOltIfRxBroadPkts                 Counter64,
zxAnPonOltIfTxBroadPkts                 Counter64,
zxAnPonOltIfRxMultiPkts                 Counter64,
zxAnPonOltIfTxMultiPkts                 Counter64,
zxAnPonOltIfRxCRCErrors                 Counter64,
zxAnPonOltIfTxCRCErrors                 Counter64,
zxAnPonOltIfRxUnderPkts                 Counter64,
zxAnPonOltIfTxUnderPkts                 Counter64,
zxAnPonOltIfRxOverPkts                  Counter64,
zxAnPonOltIfTxOverPkts                  Counter64,
zxAnPonOltIfRxFragments                 Counter64,
zxAnPonOltIfTxFragments                 Counter64,
zxAnPonOltIfRxJabbers                   Counter64,
zxAnPonOltIfTxJabbers                   Counter64,
zxAnPonOltIfCollisions                  Counter64,
zxAnPonOltIfRx64Octs                        Counter64,
zxAnPonOltIfRx65To127Octs                   Counter64,
zxAnPonOltIfRx128To255Octs                  Counter64,
zxAnPonOltIfRx256To511Octs                  Counter64,
zxAnPonOltIfRx512To1023Octs                 Counter64,
zxAnPonOltIfRx1024To1518Octs                Counter64,
zxAnPonOltIfTx64Octs                        Counter64,
zxAnPonOltIfTx65To127Octs                   Counter64,
zxAnPonOltIfTx128To255Octs                  Counter64,
zxAnPonOltIfTx256To511Octs                  Counter64,
zxAnPonOltIfTx512To1023Octs                 Counter64,
zxAnPonOltIfTx1024To1518Octs                Counter64,
zxAnPonOltIfCurrPerfReset                   INTEGER
}
```

12.8.2 15-Minute Real-time Performance

OID Specification

zxAnPonOltIfCurr15MinPerfTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.55.2.

Index Specification

{ zxAnXponOltIfIndex } , Type 1 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnPonOltIfCurr15MinPerfTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnPonOltIfCurr15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The current 15 minutes performance data table of XPON OLT."
        ::= { zxAnPonOltPerfMgmt 2 }

    zxAnPonOltIfCurr15MinPerfEntry OBJECT-TYPE
        SYNTAX          ZxAnPonOltIfCurr15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "An entry in the OLT current 15 minutes performance data table."
        INDEX     { zxAnXponOltIfIndex }
        ::= { zxAnPonOltIfCurr15MinPerfTable 1 }

    ZxAnPonOltIfCurr15MinPerfEntry ::=
        SEQUENCE {
        zxAnPonOltIfC15MTimeElapsed                Gauge32,
        zxAnPonOltIfC15MDropEvents                 Counter64,
        zxAnPonOltIfC15MRxOctets                   Counter64,
        zxAnPonOltIfC15MTxOctets                   Counter64,
        zxAnPonOltIfC15MRxPkts                     Counter64,
        zxAnPonOltIfC15MTxPkts                     Counter64,
        zxAnPonOltIfC15MRxBroadPkts                Counter64,
        zxAnPonOltIfC15MTxBroadPkts                Counter64,
        zxAnPonOltIfC15MRxMultiPkts                Counter64,
        zxAnPonOltIfC15MTxMultiPkts                Counter64,
        zxAnPonOltIfC15MRxCRCErrors                Counter64,
        zxAnPonOltIfC15MTxCRCErrors                Counter64,
        zxAnPonOltIfC15MRxUnderPkts                Counter64,
        zxAnPonOltIfC15MTxUnderPkts                Counter64,
        zxAnPonOltIfC15MRxOverPkts                 Counter64,
        zxAnPonOltIfC15MTxOverPkts                 Counter64,
        zxAnPonOltIfC15MRxFragments                Counter64,
        zxAnPonOltIfC15MTxFragments                Counter64,
        zxAnPonOltIfC15MRxJabbers                  Counter64,
        zxAnPonOltIfC15MTxJabbers                  Counter64,
```


zxAnPonOltIfC15MCollisions Counter64,
zxAnPonOltIfC15MRx64Octs Counter64,
zxAnPonOltIfC15MRx65To127Octs Counter64,
zxAnPonOltIfC15MRx128To255Octs Counter64,
zxAnPonOltIfC15MRx256To511Octs Counter64,
zxAnPonOltIfC15MRx512To1023Octs Counter64,
zxAnPonOltIfC15MRx1024To1518Octs Counter64,
zxAnPonOltIfC15MTx64Octs Counter64,
zxAnPonOltIfC15MTx65To127Octs Counter64,
zxAnPonOltIfC15MTx128To255Octs Counter64,
zxAnPonOltIfC15MTx256To511Octs Counter64,
zxAnPonOltIfC15MTx512To1023Octs Counter64,
zxAnPonOltIfC15MTx1024To1518Octs Counter64,
zxAnPonOltIfC15MPerfReset INTEGER
}

12.8.3 24-Minute Real-time Performance

OID Specification

zxAnPonOltIfCurr1DayPerfTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.55.3.

Index Specification

{ zxAnXponOltIfIndex } , Type 1 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnPonOltIfCurr1DayPerfTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF ZxAnPonOltIfCurr1DayPerfEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The current 1 day performance data table of XPON OLT."
        ::= { zxAnPonOltPerfMgmt 3 }

    zxAnPonOltIfCurr1DayPerfEntry OBJECT-TYPE
        SYNTAX      ZxAnPonOltIfCurr1DayPerfEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "An entry in the OLT current 1 day performance data table."
        INDEX   { zxAnXponOltIfIndex }
        ::= { zxAnPonOltIfCurr1DayPerfTable 1 }
```

```
ZxAnPonOltIfCurr1DayPerfEntry ::=
    SEQUENCE {
    zxAnPonOltIfC1DTimeElapsed          Gauge32,
    zxAnPonOltIfC1DDropEvents           Counter64,
    zxAnPonOltIfC1DRxOctets             Counter64,
    zxAnPonOltIfC1DTxOctets             Counter64,
    zxAnPonOltIfC1DRxPkts               Counter64,
    zxAnPonOltIfC1DTxPkts               Counter64,
    zxAnPonOltIfC1DRxBroadPkts          Counter64,
    zxAnPonOltIfC1DTxBroadPkts          Counter64,
    zxAnPonOltIfC1DRxMultiPkts          Counter64,
    zxAnPonOltIfC1DTxMultiPkts          Counter64,
    zxAnPonOltIfC1DRxCRCErrors          Counter64,
    zxAnPonOltIfC1DTxCRCErrors          Counter64,
    zxAnPonOltIfC1DRxUnderPkts          Counter64,
    zxAnPonOltIfC1DTxUnderPkts          Counter64,
    zxAnPonOltIfC1DRxOverPkts           Counter64,
    zxAnPonOltIfC1DTxOverPkts           Counter64,
    zxAnPonOltIfC1DRxFragments          Counter64,
    zxAnPonOltIfC1DTxFragments          Counter64,
    zxAnPonOltIfC1DRxJabbers            Counter64,
    zxAnPonOltIfC1DTxJabbers            Counter64,
    zxAnPonOltIfC1DCollisions           Counter64,
    zxAnPonOltIfC1DRx64Octs             Counter64,
    zxAnPonOltIfC1DRx65To127Octs        Counter64,
    zxAnPonOltIfC1DRx128To255Octs       Counter64,
    zxAnPonOltIfC1DRx256To511Octs       Counter64,
    zxAnPonOltIfC1DRx512To1023Octs      Counter64,
    zxAnPonOltIfC1DRx1024To1518Octs     Counter64,
    zxAnPonOltIfC1DTx64Octs             Counter64,
    zxAnPonOltIfC1DTx65To127Octs        Counter64,
    zxAnPonOltIfC1DTx128To255Octs       Counter64,
    zxAnPonOltIfC1DTx256To511Octs       Counter64,
    zxAnPonOltIfC1DTx512To1023Octs      Counter64,
    zxAnPonOltIfC1DTx1024To1518Octs     Counter64,
    zxAnPonOltIfC1DPerfReset            INTEGER
    }
```

12.8.4 15-Minute Historical Performance

OID Specification

zxAnPonOltIfHis15MinPerfTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.55.4.

Index Specification

{ zxAnXponOltIfIndex } , Type 1 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnPonOltIfHis15MinPerfTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnPonOltIfHis15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 15 minutes interval performance data table of XPON OLT."
        ::= { zxAnPonOltPerfMgmt 4 }

    zxAnPonOltIfHis15MinPerfEntry OBJECT-TYPE
        SYNTAX          ZxAnPonOltIfHis15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "An entry in the OLT 15 minutes interval performance data table."
        INDEX     { zxAnXponOltIfIndex,zxAnPonOltIfH15MIntervalNumber }
        ::= { zxAnPonOltIfHis15MinPerfTable 1 }

    ZxAnPonOltIfHis15MinPerfEntry ::=
        SEQUENCE {
        zxAnPonOltIfH15MIntervalNumber          Integer32,
        zxAnPonOltIfH15MDateAndTime              DateAndTime,
        zxAnPonOltIfH15MDropEvents               Counter64,
        zxAnPonOltIfH15MRxOctets                 Counter64,
        zxAnPonOltIfH15MTxOctets                 Counter64,
        zxAnPonOltIfH15MRxPkts                   Counter64,
        zxAnPonOltIfH15MTxPkts                   Counter64,
        zxAnPonOltIfH15MRxBroadPkts              Counter64,
        zxAnPonOltIfH15MTxBroadPkts              Counter64,
        zxAnPonOltIfH15MRxMultiPkts              Counter64,
        zxAnPonOltIfH15MTxMultiPkts              Counter64,
        zxAnPonOltIfH15MRxCRCErrors              Counter64,
        zxAnPonOltIfH15MTxCRCErrors              Counter64,
        zxAnPonOltIfH15MRxUnderPkts              Counter64,
        zxAnPonOltIfH15MTxUnderPkts              Counter64,
        zxAnPonOltIfH15MRxOverPkts               Counter64,
        zxAnPonOltIfH15MTxOverPkts               Counter64,
        zxAnPonOltIfH15MRxFragments              Counter64,
```

```
zxAnPonOltIfH15MTxFragments          Counter64,
zxAnPonOltIfH15MRxJabbers            Counter64,
zxAnPonOltIfH15MTxJabbers            Counter64,
zxAnPonOltIfH15MCollisions           Counter64,
zxAnPonOltIfH15MRx64Octs             Counter64,
zxAnPonOltIfH15MRx65To127Octs        Counter64,
zxAnPonOltIfH15MRx128To255Octs       Counter64,
zxAnPonOltIfH15MRx256To511Octs       Counter64,
zxAnPonOltIfH15MRx512To1023Octs      Counter64,
zxAnPonOltIfH15MRx1024To1518Octs     Counter64,
zxAnPonOltIfH15MTx64Octs             Counter64,
zxAnPonOltIfH15MTx65To127Octs        Counter64,
zxAnPonOltIfH15MTx128To255Octs       Counter64,
zxAnPonOltIfH15MTx256To511Octs       Counter64,
zxAnPonOltIfH15MTx512To1023Octs      Counter64,
zxAnPonOltIfH15MTx1024To1518Octs     Counter64,
zxAnPonOltIfH15MValidData            TruthValue
}
```

12.8.5 24-Hour Historical Performance

OID Specification

zxAnPonOltIfHis1DayPerfTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.55.5.

Index Specification

{ zxAnXponOltIfIndex } , Type 1 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnPonOltIfHis1DayPerfTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnPonOltIfHis1DayPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 1 day interval performance data table of XPON OLT."
        ::= { zxAnPonOltPerfMgmt 5 }

    zxAnPonOltIfHis1DayPerfEntry OBJECT-TYPE
        SYNTAX          ZxAnPonOltIfHis1DayPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
```



```
        "The 1 day interval performance data entry of interfaces."
    INDEX     { zxAnXponOltIfIndex,zxAnPonOltIfH1DIntervalNumber }
    ::= { zxAnPonOltIfHis1DayPerfTable 1 }

ZxAnPonOltIfHis1DayPerfEntry ::=
    SEQUENCE {
    zxAnPonOltIfH1DIntervalNumber          Integer32,
    zxAnPonOltIfH1DDateAndTime              DateAndTime,
    zxAnPonOltIfH1DDropEvents               Counter64,
    zxAnPonOltIfH1DRxOctets                 Counter64,
    zxAnPonOltIfH1DTxOctets                 Counter64,
    zxAnPonOltIfH1DRxPkts                   Counter64,
    zxAnPonOltIfH1DTxPkts                   Counter64,
    zxAnPonOltIfH1DRxBroadPkts              Counter64,
    zxAnPonOltIfH1DTxBroadPkts              Counter64,
    zxAnPonOltIfH1DRxMultiPkts              Counter64,
    zxAnPonOltIfH1DTxMultiPkts              Counter64,
    zxAnPonOltIfH1DRxCRCErrors              Counter64,
    zxAnPonOltIfH1DTxCRCErrors              Counter64,
    zxAnPonOltIfH1DRxUnderPkts              Counter64,
    zxAnPonOltIfH1DTxUnderPkts              Counter64,
    zxAnPonOltIfH1DRxOverPkts               Counter64,
    zxAnPonOltIfH1DTxOverPkts               Counter64,
    zxAnPonOltIfH1DRxFragments              Counter64,
    zxAnPonOltIfH1DTxFragments              Counter64,
    zxAnPonOltIfH1DRxJabbers                Counter64,
    zxAnPonOltIfH1DTxJabbers                Counter64,
    zxAnPonOltIfH1DCollisions               Counter64,
    zxAnPonOltIfH1DRx64Octs                 Counter64,
    zxAnPonOltIfH1DRx65To127Octs            Counter64,
    zxAnPonOltIfH1DRx128To255Octs           Counter64,
    zxAnPonOltIfH1DRx256To511Octs           Counter64,
    zxAnPonOltIfH1DRx512To1023Octs          Counter64,
    zxAnPonOltIfH1DRx1024To1518Octs         Counter64,
    zxAnPonOltIfH1DTx64Octs                 Counter64,
    zxAnPonOltIfH1DTx65To127Octs            Counter64,
    zxAnPonOltIfH1DTx128To255Octs           Counter64,
    zxAnPonOltIfH1DTx256To511Octs           Counter64,
    zxAnPonOltIfH1DTx512To1023Octs          Counter64,
    zxAnPonOltIfH1DTx1024To1518Octs         Counter64,
    zxAnPonOltIfH1DValidData                TruthValue
    }
```

12.9 ONU Ethernet Performance (V1.2.3)

The performance is started by default.

12.9.1 Real-time Performance

OID Specification

zxAnPonOnuIfCurrPerfTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.56.1.

Index Specification

{ zxAnXponOnuIfIndex },Type 3 or 9 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnPonOnuIfCurrPerfTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnPonOnuIfCurrPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The current interface performance data table of XPON ONU."
        ::= { zxAnPonOnuPerfMgmt 1 }

    zxAnPonOnuIfCurrPerfEntry OBJECT-TYPE
        SYNTAX          ZxAnPonOnuIfCurrPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "An entry in the ONU current interface performance data table."
        INDEX     { zxAnXponOnuIfIndex }
        ::= { zxAnPonOnuIfCurrPerfTable 1 }

    ZxAnPonOnuIfCurrPerfEntry ::=
        SEQUENCE {
        zxAnPonOnuIfDropEvents                  Counter64,
        zxAnPonOnuIfRxOctets                    Counter64,
        zxAnPonOnuIfTxOctets                    Counter64,
        zxAnPonOnuIfRxPkts                      Counter64,
        zxAnPonOnuIfTxPkts                      Counter64,
        zxAnPonOnuIfRxBroadPkts                 Counter64,
        zxAnPonOnuIfTxBroadPkts                 Counter64,
        zxAnPonOnuIfRxMultiPkts                 Counter64,
        zxAnPonOnuIfTxMultiPkts                 Counter64,
```

```
zxAnPonOnuIfRxCRCErrors                Counter64,
zxAnPonOnuIfTxCRCErrors                Counter64,
zxAnPonOnuIfRxUnderPkts                Counter64,
zxAnPonOnuIfTxUnderPkts                Counter64,
zxAnPonOnuIfRxOverPkts                 Counter64,
zxAnPonOnuIfTxOverPkts                 Counter64,
zxAnPonOnuIfRxFragments                Counter64,
zxAnPonOnuIfTxFragments                Counter64,
zxAnPonOnuIfRxJabbers                  Counter64,
zxAnPonOnuIfTxJabbers                  Counter64,
zxAnPonOnuIfCollisions                 Counter64,
zxAnPonOnuIfRx64Octs                       Counter64,
zxAnPonOnuIfRx65To127Octs                  Counter64,
zxAnPonOnuIfRx128To255Octs                 Counter64,
zxAnPonOnuIfRx256To511Octs                 Counter64,
zxAnPonOnuIfRx512To1023Octs                Counter64,
zxAnPonOnuIfRx1024To1518Octs               Counter64,
zxAnPonOnuIfTx64Octs                       Counter64,
zxAnPonOnuIfTx65To127Octs                  Counter64,
zxAnPonOnuIfTx128To255Octs                 Counter64,
zxAnPonOnuIfTx256To511Octs                 Counter64,
zxAnPonOnuIfTx512To1023Octs                Counter64,
zxAnPonOnuIfTx1024To1518Octs               Counter64,
zxAnPonOnuIfCurrPerfReset                  INTEGER
}
```

12.9.2 15-Minute Real-time Performance

OID Specification

zxAnPonOnuIfCurr15MinPerfTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.56.2.

Index Specification

{ zxAnXponOnuIfIndex },Type 3 or 9 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnPonOnuIfCurr15MinPerfTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnPonOnuIfCurr15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The current 15 minutes performance data table of XPON ONU."
        ::= { zxAnPonOnuPerfMgmt 2 }
```



```
zxAnPonOnuIfCurr15MinPerfEntry OBJECT-TYPE
    SYNTAX          ZxAnPonOnuIfCurr15MinPerfEntry
    MAX-ACCESS    not-accessible
    STATUS          current
    DESCRIPTION
        "An entry in the ONU current 15 minutes performance data table."
    INDEX     { zxAnXponOnuIfIndex }
    ::= { zxAnPonOnuIfCurr15MinPerfTable 1 }

ZxAnPonOnuIfCurr15MinPerfEntry ::=
    SEQUENCE {
    zxAnPonOnuIfC15MTimeElapsed                Gauge32,
    zxAnPonOnuIfC15MDropEvents                 Counter64,
    zxAnPonOnuIfC15MRxOctets                   Counter64,
    zxAnPonOnuIfC15MTxOctets                   Counter64,
    zxAnPonOnuIfC15MRxPkts                     Counter64,
    zxAnPonOnuIfC15MTxPkts                     Counter64,
    zxAnPonOnuIfC15MRxBroadPkts                Counter64,
    zxAnPonOnuIfC15MTxBroadPkts                Counter64,
    zxAnPonOnuIfC15MRxMultiPkts                Counter64,
    zxAnPonOnuIfC15MTxMultiPkts                Counter64,
    zxAnPonOnuIfC15MRxCRCErrors                Counter64,
    zxAnPonOnuIfC15MTxCRCErrors                Counter64,
    zxAnPonOnuIfC15MRxUnderPkts                Counter64,
    zxAnPonOnuIfC15MTxUnderPkts                Counter64,
    zxAnPonOnuIfC15MRxOverPkts                 Counter64,
    zxAnPonOnuIfC15MTxOverPkts                 Counter64,
    zxAnPonOnuIfC15MRxFragments                Counter64,
    zxAnPonOnuIfC15MTxFragments                Counter64,
    zxAnPonOnuIfC15MRxJabbers                  Counter64,
    zxAnPonOnuIfC15MTxJabbers                  Counter64,
    zxAnPonOnuIfC15MCollisions                 Counter64,
    zxAnPonOnuIfC15MRx64Octs                   Counter64,
    zxAnPonOnuIfC15MRx65To127Octs              Counter64,
    zxAnPonOnuIfC15MRx128To255Octs             Counter64,
    zxAnPonOnuIfC15MRx256To511Octs             Counter64,
    zxAnPonOnuIfC15MRx512To1023Octs            Counter64,
    zxAnPonOnuIfC15MRx1024To1518Octs           Counter64,
    zxAnPonOnuIfC15MTx64Octs                   Counter64,
    zxAnPonOnuIfC15MTx65To127Octs              Counter64,
    zxAnPonOnuIfC15MTx128To255Octs             Counter64,
    zxAnPonOnuIfC15MTx256To511Octs             Counter64,
    zxAnPonOnuIfC15MTx512To1023Octs            Counter64,
```

```
zxAnPonOnuIfC15MTx1024To1518Octs        Counter64,
zxAnPonOnuIfC15MPerfReset               INTEGER
}
```

12.9.3 24-Minute Real-time Performance

OID Specification

.zxAnPonOnuIfCurr1DayPerfTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.56.3.

Index Specification

{ zxAnXponOnuIfIndex },Type 3 or 9 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnPonOnuIfCurr1DayPerfTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF ZxAnPonOnuIfCurr1DayPerfEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The current 1 day performance data table of XPON ONU."
        ::= { zxAnPonOnuPerfMgmt 3 }

    zxAnPonOnuIfCurr1DayPerfEntry OBJECT-TYPE
        SYNTAX      ZxAnPonOnuIfCurr1DayPerfEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "An entry in the ONU current 1 day performance data table."
        INDEX   { zxAnXponOnuIfIndex }
        ::= { zxAnPonOnuIfCurr1DayPerfTable 1 }

    ZxAnPonOnuIfCurr1DayPerfEntry ::=
        SEQUENCE {
        zxAnPonOnuIfC1DTimeElapsed          Gauge32,
        zxAnPonOnuIfC1DDropEvents           Counter64,
        zxAnPonOnuIfC1DRxOctets             Counter64,
        zxAnPonOnuIfC1DTxOctets             Counter64,
        zxAnPonOnuIfC1DRxPkts               Counter64,
        zxAnPonOnuIfC1DTxPkts               Counter64,
        zxAnPonOnuIfC1DRxBroadPkts          Counter64,
        zxAnPonOnuIfC1DTxBroadPkts          Counter64,
        zxAnPonOnuIfC1DRxMultiPkts          Counter64,
```

```
zxAnPonOnuIfC1DTxMultiPkts                Counter64,
zxAnPonOnuIfC1DRxCRCErrors                Counter64,
zxAnPonOnuIfC1DTxCRCErrors                Counter64,
zxAnPonOnuIfC1DRxUnderPkts                Counter64,
zxAnPonOnuIfC1DTxUnderPkts                Counter64,
zxAnPonOnuIfC1DRxOverPkts                 Counter64,
zxAnPonOnuIfC1DTxOverPkts                 Counter64,
zxAnPonOnuIfC1DRxFragments                Counter64,
zxAnPonOnuIfC1DTxFragments                Counter64,
zxAnPonOnuIfC1DRxJabbers                  Counter64,
zxAnPonOnuIfC1DTxJabbers                  Counter64,
zxAnPonOnuIfC1DCollisions                 Counter64,
zxAnPonOnuIfC1DRx64Octs                   Counter64,
zxAnPonOnuIfC1DRx65To127Octs              Counter64,
zxAnPonOnuIfC1DRx128To255Octs             Counter64,
zxAnPonOnuIfC1DRx256To511Octs             Counter64,
zxAnPonOnuIfC1DRx512To1023Octs            Counter64,
zxAnPonOnuIfC1DRx1024To1518Octs           Counter64,
zxAnPonOnuIfC1DTx64Octs                   Counter64,
zxAnPonOnuIfC1DTx65To127Octs              Counter64,
zxAnPonOnuIfC1DTx128To255Octs             Counter64,
zxAnPonOnuIfC1DTx256To511Octs             Counter64,
zxAnPonOnuIfC1DTx512To1023Octs            Counter64,
zxAnPonOnuIfC1DTx1024To1518Octs           Counter64,
zxAnPonOnuIfC1DPerfReset                  INTEGER
}
```

12.9.4 15-Minute Historical Performance

OID Specification

zxAnPonOnuIfHis15MinPerfTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.56.4.

Index Specification

{ zxAnXponOnuIfIndex },Type 3 or 9 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnPonOnuIfHis15MinPerfTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnPonOnuIfHis15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 15 minutes interval performance data table of XPON ONU."
```



```
        ::= { zxAnPonOnuPerfMgmt 4 }

zxAnPonOnuIfHis15MinPerfEntry OBJECT-TYPE
        SYNTAX          ZxAnPonOnuIfHis15MinPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "An entry in the ONU 15 minutes interval performance data table."
        INDEX     { zxAnXponOnuIfIndex, zxAnPonOnuIfH15MIntervalNumber}
        ::= { zxAnPonOnuIfHis15MinPerfTable 1 }

ZxAnPonOnuIfHis15MinPerfEntry ::=
        SEQUENCE {
        zxAnPonOnuIfH15MIntervalNumber              Integer32,
        zxAnPonOnuIfH15MDateAndTime                 DateAndTime,
        zxAnPonOnuIfH15MDropEvents                  Counter64,
        zxAnPonOnuIfH15MRxOctets                    Counter64,
        zxAnPonOnuIfH15MTxOctets                    Counter64,
        zxAnPonOnuIfH15MRxPkts                      Counter64,
        zxAnPonOnuIfH15MTxPkts                      Counter64,
        zxAnPonOnuIfH15MRxBroadPkts                 Counter64,
        zxAnPonOnuIfH15MTxBroadPkts                 Counter64,
        zxAnPonOnuIfH15MRxMultiPkts                 Counter64,
        zxAnPonOnuIfH15MTxMultiPkts                 Counter64,
        zxAnPonOnuIfH15MRxCRCErrors                 Counter64,
        zxAnPonOnuIfH15MTxCRCErrors                 Counter64,
        zxAnPonOnuIfH15MRxUnderPkts                 Counter64,
        zxAnPonOnuIfH15MTxUnderPkts                 Counter64,
        zxAnPonOnuIfH15MRxOverPkts                  Counter64,
        zxAnPonOnuIfH15MTxOverPkts                  Counter64,
        zxAnPonOnuIfH15MRxFragments                 Counter64,
        zxAnPonOnuIfH15MTxFragments                 Counter64,
        zxAnPonOnuIfH15MRxJabbers                   Counter64,
        zxAnPonOnuIfH15MTxJabbers                   Counter64,
        zxAnPonOnuIfH15MCollisions                  Counter64,
        zxAnPonOnuIfH15MRx64Octs                    Counter64,
        zxAnPonOnuIfH15MRx65To127Octs               Counter64,
        zxAnPonOnuIfH15MRx128To255Octs              Counter64,
        zxAnPonOnuIfH15MRx256To511Octs              Counter64,
        zxAnPonOnuIfH15MRx512To1023Octs             Counter64,
        zxAnPonOnuIfH15MRx1024To1518Octs            Counter64,
        zxAnPonOnuIfH15MTx64Octs                    Counter64,
        zxAnPonOnuIfH15MTx65To127Octs               Counter64,
        zxAnPonOnuIfH15MTx128To255Octs              Counter64,
```

```
zxAnPonOnuIfH15MTx256To511Octs          Counter64,
zxAnPonOnuIfH15MTx512To1023Octs         Counter64,
zxAnPonOnuIfH15MTx1024To1518Octs        Counter64,
zxAnPonOnuIfH15MValidData               TruthValue}
```

12.9.5 24-Hour Historical Performance

OID Specification

zxAnPonOnuIfHis1DayPerfTable's OID is .1.3.6.1.4.1.3902.1015.1010.5.56.5.

Index Specification

{ zxAnXponOnuIfIndex },Type 3 or 9 PON composite index.

MIB Specification

Refer to zxAnXpon.mib.

```
zxAnPonOnuIfHis1DayPerfTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxAnPonOnuIfHis1DayPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 1 day interval performance data table of XPON ONU."
        ::= { zxAnPonOnuPerfMgmt 5 }

    zxAnPonOnuIfHis1DayPerfEntry OBJECT-TYPE
        SYNTAX          ZxAnPonOnuIfHis1DayPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 1 day interval performance data entry of interfaces."
        INDEX     { zxAnXponOnuIfIndex,zxAnPonOnuIfH1DIntervalNumber }
        ::= { zxAnPonOnuIfHis1DayPerfTable 1 }

    ZxAnPonOnuIfHis1DayPerfEntry ::=
        SEQUENCE {
        zxAnPonOnuIfH1DIntervalNumber           Integer32,
        zxAnPonOnuIfH1DDateAndTime               DateAndTime,
        zxAnPonOnuIfH1DDropEvents                Counter64,
        zxAnPonOnuIfH1DRxOctets                  Counter64,
        zxAnPonOnuIfH1DTxOctets                  Counter64,
        zxAnPonOnuIfH1DRxPkts                    Counter64,
        zxAnPonOnuIfH1DTxPkts                    Counter64,
        zxAnPonOnuIfH1DRxBroadPkts               Counter64,
        zxAnPonOnuIfH1DTxBroadPkts               Counter64,
```

zxAnPonOnuIfH1DRxMultiPkts Counter64,
zxAnPonOnuIfH1DTxMultiPkts Counter64,
zxAnPonOnuIfH1DRxCRCErrors Counter64,
zxAnPonOnuIfH1DTxCRCErrors Counter64,
zxAnPonOnuIfH1DRxUnderPkts Counter64,
zxAnPonOnuIfH1DTxUnderPkts Counter64,
zxAnPonOnuIfH1DRxOverPkts Counter64,
zxAnPonOnuIfH1DTxOverPkts Counter64,
zxAnPonOnuIfH1DRxFragments Counter64,
zxAnPonOnuIfH1DTxFragments Counter64,
zxAnPonOnuIfH1DRxJabbers Counter64,
zxAnPonOnuIfH1DTxJabbers Counter64,
zxAnPonOnuIfH1DCollisions Counter64,
zxAnPonOnuIfH1DRx64Octs Counter64,
zxAnPonOnuIfH1DRx65To127Octs Counter64,
zxAnPonOnuIfH1DRx128To255Octs Counter64,
zxAnPonOnuIfH1DRx256To511Octs Counter64,
zxAnPonOnuIfH1DRx512To1023Octs Counter64,
zxAnPonOnuIfH1DRx1024To1518Octs Counter64,
zxAnPonOnuIfH1DTx64Octs Counter64,
zxAnPonOnuIfH1DTx65To127Octs Counter64,
zxAnPonOnuIfH1DTx128To255Octs Counter64,
zxAnPonOnuIfH1DTx256To511Octs Counter64,
zxAnPonOnuIfH1DTx512To1023Octs Counter64,
zxAnPonOnuIfH1DTx1024To1518Octs Counter64,
zxAnPonOnuIfH1DValidData TruthValue
}

12.10 GPON OLT PON-Layer Performance (V1.2.3)

12.10.1 Real-time Performance

OID Specification

zxGponOltCurrPerfTable's OID is .1.3.6.1.4.1.3902.1012.3.31.1.

Index Specification

zxGponMgmtPonOltId , Type 1 PON composite index.

MIB Specification

Refer to zxGponService.mib.

zxGponOltCurrPerfTable OBJECT-TYPE
SYNTAX SEQUENCE OF ZxGponOltCurrPerfEntry


```
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "The current performance data table of GPON OLT."
        ::= { zxAnGponOltPerfMgmt 1 }

    zxGponOltCurrPerfEntry OBJECT-TYPE
        SYNTAX        ZxGponOltCurrPerfEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "An entry in the OLT current performance data table."
        INDEX     { zxGponMgmtPonOltId }
        ::= { zxGponOltCurrPerfTable 1 }

    ZxGponOltCurrPerfEntry ::=
        SEQUENCE {
        zxGponOltCorrNonIdleGemFrmUp      Counter64,
        zxGponOltCorrIdleGemFrmUp      Counter64,
        zxGponOltErroredGemFrmUp      Counter64,
        zxGponOltGemPayloadBytesUp      Counter64,
        zxGponOltCorrEtherFrmUp      Counter64,
        zxGponOltErroredEtherFrmUp      Counter64,
        zxGponOltPerfErr      Counter64,
        zxGponOltPerfRei      Counter64,
        zxGponOltValidEtherPktDown      Counter64,
        zxGponOltPloamDown      Counter64,
        zxGponOltErroredPloamUp      Counter64,
        zxGponOltPloamUp      Counter64,
        zxGponOltFecCorrBytes      Counter64,
        zxGponOltFecCorrWords      Counter64,
        zxGponOltFecUnCorrWords      Counter64,
        zxGponOltFecTotalRxWords      Counter64,
        zxGponOltBipCorrBits      Counter64,
        zxGponOltCrcErrPkts      Counter64,
        zxGponOltCurrReset      INTEGER
        }
```

12.10.2 15-Minute Real-time Performance

OID Specification

zxGponOltCurrPerf15MinTable's OID is .1.3.6.1.4.1.3902.1012.3.31.2.

Index Specification

zxGponMgmtPonOltId , Type 1 PON composite index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOltCurrPerf15MinTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxGponOltCurrPerf15MinEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The current 15 minutes performance data table of GPON OLT."
        ::= { zxAnGponOltPerfMgmt 2 }

    zxGponOltCurrPerf15MinEntry OBJECT-TYPE
        SYNTAX          ZxGponOltCurrPerf15MinEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "An entry in the OLT current 15 minutes performance data table."
        INDEX     { zxGponMgmtPonOltId }
        ::= { zxGponOltCurrPerf15MinTable 1 }

    ZxGponOltCurrPerf15MinEntry ::=
        SEQUENCE {
        zxGponOltC15MTimeElapsed                Gauge32,
        zxGponOltC15MCorrNonIdleGemFrmUp        Counter64,
        zxGponOltC15MCorrIdleGemFrmUp       Counter64,
        zxGponOltC15MErroredGemFrmUp            Counter64,
        zxGponOltC15MGemPayloadBytesUp          Counter64,
        zxGponOltC15MCorrEtherFrmUp         Counter64,
        zxGponOltC15MErroredEtherFrmUp          Counter64,
        zxGponOltC15MErr                        Counter64,
        zxGponOltC15MRei                        Counter64,
        zxGponOltC15MValidEtherPktDown          Counter64,
        zxGponOltC15MPloamDown                  Counter64,
        zxGponOltC15MErroredPloamUp             Counter64,
        zxGponOltC15MPloamUp                    Counter64,
        zxGponOltC15MFecCorrBytes           Counter64,
        zxGponOltC15MFecCorrWords           Counter64,
        zxGponOltC15MFecUnCorrWords         Counter64,
        zxGponOltC15MFecTotalRxWords            Counter64,
        zxGponOltC15MBipCorrBits            Counter64,
        zxGponOltC15MCrcErrPkts                 Counter64,
```

```
zxGponOltC15MReset                    INTEGER
}
```

12.10.3 24-Hour Real-time Performance

OID Specification

zxGponOltCurrPerf1DayTable's OID is .1.3.6.1.4.1.3902.1012.3.31.3.

Index Specification

zxGponMgmtPonOltId , Type 1 PON composite index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOltCurrPerf1DayTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxGponOltCurrPerf1DayEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The current 1 day performance data table of GPON OLT."
        ::= { zxAnGponOltPerfMgmt 3 }

    zxGponOltCurrPerf1DayEntry OBJECT-TYPE
        SYNTAX          ZxGponOltCurrPerf1DayEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "An entry in the OLT current 1 day performance data table."
        INDEX     { zxGponMgmtPonOltId }
        ::= { zxGponOltCurrPerf1DayTable 1 }

    ZxGponOltCurrPerf1DayEntry ::=
        SEQUENCE {
        zxGponOltC1DTimeElapsed                 Gauge32,
        zxGponOltC1DCorrNonIdleGemFrmUp      Counter64,
        zxGponOltC1DCorrIdleGemFrmUp      Counter64,
        zxGponOltC1DErroredGemFrmUp           Counter64,
        zxGponOltC1DGemPayloadBytesUp        Counter64,
        zxGponOltC1DCorrEtherFrmUp          Counter64,
        zxGponOltC1DErroredEtherFrmUp        Counter64,
        zxGponOltC1DErr                          Counter64,
        zxGponOltC1DRei                          Counter64,
        zxGponOltC1DValidEtherPktDown        Counter64,
```

```
zxGponOltC1DPloamDown                Counter64,
zxGponOltC1DErroredPloamUp           Counter64,
zxGponOltC1DPloamUp                  Counter64,
zxGponOltC1DFecCorrBytes             Counter64,
zxGponOltC1DFecCorrWords             Counter64,
zxGponOltC1DFecUnCorrWords           Counter64,
zxGponOltC1DFecTotalRxWords          Counter64,
zxGponOltC1DBipCorrBits              Counter64,
zxGponOltC1DCrcErrPkts               Counter64,
zxGponOltC1DReset                    INTEGER
}
```

12.10.4 15-Minute Historical Performance

OID Specification

zxGponOltPerf15MinIntervalTable's OID is .1.3.6.1.4.1.3902.1012.3.31.4.

Index Specification

zxGponMgmtPonOltId , Type 1 PON composite index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOltPerf15MinIntervalTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxGponOltPerf15MinIntervalEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            "The 15 minutes interval performance data table of GPON OLT."
        ::= { zxAnGponOltPerfMgmt 4 }

    zxGponOltPerf15MinIntervalEntry OBJECT-TYPE
        SYNTAX          ZxGponOltPerf15MinIntervalEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
            "An entry in the OLT 15 minutes interval performance data table."
        INDEX     { zxGponMgmtPonOltId, zxGponOltH15MIntervalNumber    }
        ::= { zxGponOltPerf15MinIntervalTable 1 }

    ZxGponOltPerf15MinIntervalEntry ::=
        SEQUENCE {
        zxGponOltH15MIntervalNumber          Integer32,
```



```
zxGponOltH15MDateAndTime                DateAndTime,
zxGponOltH15MCorrNonIdleGemFrmUp        Counter64,
zxGponOltH15MCorrIdleGemFrmUp           Counter64,
zxGponOltH15MErroredGemFrmUp            Counter64,
zxGponOltH15MGemPayloadBytesUp          Counter64,
zxGponOltH15MCorrEtherFrmUp             Counter64,
zxGponOltH15MErroredEtherFrmUp          Counter64,
zxGponOltH15MErr                        Counter64,
zxGponOltH15MRei                        Counter64,
zxGponOltH15MValidEtherPktDown          Counter64,
zxGponOltH15MPloamDown                  Counter64,
zxGponOltH15MErroredPloamUp             Counter64,
zxGponOltH15MPloamUp                    Counter64,
zxGponOltH15MFecCorrBytes               Counter64,
zxGponOltH15MFecCorrWords               Counter64,
zxGponOltH15MFecUnCorrWords             Counter64,
zxGponOltH15MFecTotalRxWords            Counter64,
zxGponOltH15MBipCorrBits                Counter64,
zxGponOltH15MCrcErrPkts                 Counter64,
zxGponOltH15MValidData                  TruthValue
}
```

12.10.5 24-Hour Historical Performance

OID Specification

zxGponOltPerf1DayIntervalTable's OID is .1.3.6.1.4.1.3902.1012.3.31.5.

Index Specification

zxGponMgmtPonOltId , Type 1 PON composite index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOltPerf1DayIntervalTable      OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxGponOltPerf1DayIntervalEntry
        MAX-ACCESS      not-accessible
        STATUS          current
        DESCRIPTION
                "The 1 day interval performance data table of interfaces."
        ::= { zxAnGponOltPerfMgmt 5 }

    zxGponOltPerf1DayIntervalEntry      OBJECT-TYPE
        SYNTAX          ZxGponOltPerf1DayIntervalEntry
```



```
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "The 1 day interval performance data entry of interfaces."
        INDEX      { zxGponMgmtPonOltId, zxGponOltH1DIntervalNumber }
        ::= { zxGponOltPerf1DayIntervalTable 1 }

    ZxGponOltPerf1DayIntervalEntry ::=
        SEQUENCE {
        zxGponOltH1DIntervalNumber          Integer32,
        zxGponOltH1DDateAndTime             DateAndTime,
        zxGponOltH1DCorrNonIdleGemFrmUp     Counter64,
        zxGponOltH1DCorrIdleGemFrmUp        Counter64,
        zxGponOltH1DErroredGemFrmUp         Counter64,
        zxGponOltH1DGemPayloadBytesUp       Counter64,
        zxGponOltH1DCorrEtherFrmUp          Counter64,
        zxGponOltH1DErroredEtherFrmUp       Counter64,
        zxGponOltH1DErr                     Counter64,
        zxGponOltH1DRei                     Counter64,
        zxGponOltH1DValidEtherPktDown       Counter64,
        zxGponOltH1DPloamDown               Counter64,
        zxGponOltH1DErroredPloamUp          Counter64,
        zxGponOltH1DPloamUp                 Counter64,
        zxGponOltH1DFecCorrBytes        Counter64,
        zxGponOltH1DFecCorrWords        Counter64,
        zxGponOltH1DFecUnCorrWords      Counter64,
        zxGponOltH1DFecTotalRxWords     Counter64,
        zxGponOltH1DBipCorrBits         Counter64,
        zxGponOltH1DCrcErrPkts          Counter64,
        zxGponOltH1DValidData           TruthValue
        }
```

12.11 GPON ONU PON-Layer Performance (V1.2.3)

12.11.1 Real-time Performance

OID Specification

zxGponOntCurrPerfTable's OID is .1.3.6.1.4.1.3902.1012.3.32.1.

Index Specification

{ zxGponMgmtPonOltId, zxGponMgmtPonOnuId }, of them, zxGponMgmtPonOltId is PON Type 1 composite index, while others are regular index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOntCurrPerfTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxGponOntCurrPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The GPON ONU current performance data table"
        ::= { zxAnGponOntPerfMgmt 1 }

    zxGponOntCurrPerfEntry OBJECT-TYPE
        SYNTAX          ZxGponOntCurrPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The entry in the ONU current performance data table."
        INDEX     { zxGponMgmtPonOltId, zxGponMgmtPonOnuId }
        ::= { zxGponOntCurrPerfTable 1 }

    ZxGponOntCurrPerfEntry ::=
    SEQUENCE {
        zxGponOntCorrNonIdleGemFrmUp                Counter64,
        zxGponOntGemPayloadBytesUp                  Counter64,
        zxGponOntCorrEtherFrmUp                     Counter64,
        zxGponOntErroredEtherFrmUp                  Counter64,
        zxGponOntTotlOmciFrmUp                      Counter64,
        zxGponOntErri                               Counter64,
        zxGponOntReii                               Counter64,
        zxGponOntUnrxBurstsUp                       Counter64,
        zxGponOntBipErrorUp                         Counter64,
        zxGponOntCorrBitsUp                         Counter64,
        zxGponOntNotCorrWordsUp                     Counter64,
        zxGponOntCorrNonIdleGemFrmDn                Counter64,
        zxGponOntTxOmciFrames                       Counter64,
        zxGponOntTxPloamFrames                      Counter64,
        zxGponOntRxPloamFrames                      Counter64,
        zxGponOntLofiAlms                           Counter64,
        zxGponOntFecCorrBytes                       Counter64,
        zxGponOntFecCorrWords                       Counter64,
        zxGponOntFecUnCorrWords                     Counter64,
        zxGponOntFecTotalRxWords                    Counter64,
        zxGponOntCrcErrPkts                         Counter64,
```

zxGponOntCurrReset INTEGER
}

12.11.2 15-Minute Real-time Performance

OID Specification

zxGponOntCurrPerf15MinTable's OID is .1.3.6.1.4.1.3902.1012.3.32.1.

Index Specification

{ zxGponMgmtPonOltId, zxGponMgmtPonOnuId }, of them, zxGponMgmtPonOltId is PON Type 1 composite index, while others are regular index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOntCurrPerf15MinTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF ZxGponOntCurrPerf15MinEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The current 15 minutes performance
            data table of GPON ONU."
        ::= { zxAnGponOntPerfMgmt 2 }

    zxGponOntCurrPerf15MinEntry OBJECT-TYPE
        SYNTAX      ZxGponOntCurrPerf15MinEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "An entry in the ONU current 15 minutes
            performance data table."
        INDEX   { zxGponMgmtPonOltId, zxGponMgmtPonOnuId  }
        ::= { zxGponOntCurrPerf15MinTable 1 }

    ZxGponOntCurrPerf15MinEntry ::=
        SEQUENCE {
        zxGponOntC15MTimeElapsed                    Gauge32,
        zxGponOntC15MCorrNonIdleGemFrmUp            Counter64,
        zxGponOntC15MGemPayloadBytesUp              Counter64,
        zxGponOntC15MCorrEtherFrmUp                 Counter64,
        zxGponOntC15MErroredEtherFrmUp              Counter64,
        zxGponOntC15MTotlOmciFrmUp                  Counter64,
        zxGponOntC15MErri                           Counter64,
        zxGponOntC15MReii                           Counter64,
```



```
zxGponOntC15MUnrxBurstsUp                    Counter64,
zxGponOntC15MBipErrorUp                      Counter64,
zxGponOntC15MCorrBitsUp                      Counter64,
zxGponOntC15MNotCorrWordsUp                  Counter64,
zxGponOntC15MCorrNonIdleGemFrmDn             Counter64,
zxGponOntC15MTxOmciFrms                      Counter64,
zxGponOntC15MTxPloamFrms                     Counter64,
zxGponOntC15MRxPloamFrms                     Counter64,
zxGponOntC15MLofiAlarms                      Counter64,
zxGponOntC15MFecCorrBytes                    Counter64,
zxGponOntC15MFecCorrWords                    Counter64,
zxGponOntC15MFecUnCorrWords                  Counter64,
zxGponOntC15MFecTotalRxWords                 Counter64,
zxGponOntC15MCrcErrPkts                      Counter64,
zxGponOntC15MReset                           INTEGER
}
```

12.11.3 24-Hour Real-time Performance

OID Specification

zxGponOntCurrPerf1DayTable's OID is .1.3.6.1.4.1.3902.1012.3.32.3.

Index Specification

{ zxGponMgmtPonOltId, zxGponMgmtPonOnuId }, of them, zxGponMgmtPonOltId is PON Type 1 composite index, while others are regular index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOntCurrPerf1DayTable OBJECT-TYPE
        SYNTAX          SEQUENCE OF ZxGponOntCurrPerf1DayEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The current 1 day performance
            data table of GPON ONU."
        ::= { zxAnGponOntPerfMgmt 3 }

    zxGponOntCurrPerf1DayEntry OBJECT-TYPE
        SYNTAX          ZxGponOntCurrPerf1DayEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "An entry in the ONU current 1 day
```



```
            performance data table."
        INDEX      { zxGponMgmtPonOltId, zxGponMgmtPonOnuId    }
        ::= { zxGponOntCurrPerf1DayTable 1 }

    ZxGponOntCurrPerf1DayEntry ::=
        SEQUENCE {
        zxGponOntC1DTimeElapsed                    Gauge32,
        zxGponOntC1DCorrNonIdleGemFrmUp                Counter64,
        zxGponOntC1DGemPayloadBytesUp                Counter64,
        zxGponOntC1DCorrEtherFrmUp                Counter64,
        zxGponOntC1DErroredEtherFrmUp                Counter64,
        zxGponOntC1DTotlOmciFrmUp                Counter64,
        zxGponOntC1DErri                    Counter64,
        zxGponOntC1DReii                    Counter64,
        zxGponOntC1DUnrxBurstsUp                Counter64,
        zxGponOntC1DBipErrorUp                Counter64,
        zxGponOntC1DCorrBitsUp                Counter64,
        zxGponOntC1DNotCorrWordsUp                Counter64,
        zxGponOntC1DCorrNonIdleGemFrmDn                Counter64,
        zxGponOntC1DTxOmciFrms                Counter64,
        zxGponOntC1DTxPloamFrms                Counter64,
        zxGponOntC1DRxPloamFrms                Counter64,
        zxGponOntC1DLofiAlarms                Counter64,
        zxGponOntC1DFecCorrBytes            Counter64,
        zxGponOntC1DFecCorrWords            Counter64,
        zxGponOntC1DFecUnCorrWords                Counter64,
        zxGponOntC1DFecTotalRxWords                Counter64,
        zxGponOntC1DCrcErrPkts                Counter64,
        zxGponOntC1DReset                    INTEGER
        }
```

12.11.4 15-Minute Historical Performance

OID Specification

zxGponOntPerf15MinIntervalTable's OID is .1.3.6.1.4.1.3902.1012.3.32.4.

Index Specification

{ zxGponMgmtPonOltId, zxGponMgmtPonOnuId }, of them, zxGponMgmtPonOltId is PON Type 1 composite index, while others are regular index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOntPerf15MinIntervalTable OBJECT-TYPE
```



```
        SYNTAX          SEQUENCE OF ZxGponOntPerf15MinIntervalEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The 15 minutes interval performance data table of GPON ONT."
        ::= { zxAnGponOntPerfMgmt 4 }

    zxGponOntPerf15MinIntervalEntry OBJECT-TYPE
        SYNTAX          ZxGponOntPerf15MinIntervalEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The entry in the ONU 15 minutes interval
            performance data table."
        INDEX                { zxGponMgmtPonOltId, zxGponMgmtPonOnuId,
zxGponOntH15MIntervalNumber    }
        ::= { zxGponOntPerf15MinIntervalTable 1 }

    ZxGponOntPerf15MinIntervalEntry ::=
        SEQUENCE {
        zxGponOntH15MIntervalNumber                    Integer32,
        zxGponOntH15MDateAndTime                       DateAndTime,
        zxGponOntH15MCorrNonIdleGemFrmUp                    Counter64,
        zxGponOntH15MGemPayloadBytesUp                 Counter64,
        zxGponOntH15MCorrEtherFrmUp                    Counter64,
        zxGponOntH15MErroredEtherFrmUp                 Counter64,
        zxGponOntH15MTotlOmciFrmUp                     Counter64,
        zxGponOntH15MErri                              Counter64,
        zxGponOntH15MReii                              Counter64,
        zxGponOntH15MUnrxBurstsUp                      Counter64,
        zxGponOntH15MBipErrorUp                        Counter64,
        zxGponOntH15MCorrBitsUp                        Counter64,
        zxGponOntH15MNotCorrWordsUp                    Counter64,
        zxGponOntH15MCorrNonIdleGemFrmDn                    Counter64,
        zxGponOntH15MTxOmciFrms                        Counter64,
        zxGponOntH15MTxPloamFrms                       Counter64,
        zxGponOntH15MRxPloamFrms                       Counter64,
        zxGponOntH15MLofiAlarms                        Counter64,
        zxGponOntH15MFecCorrBytes                  Counter64,
        zxGponOntH15MFecCorrWords                  Counter64,
        zxGponOntH15MFecUnCorrWords                    Counter64,
        zxGponOntH15MFecTotalRxWords                   Counter64,
        zxGponOntH15MCrcErrPkts                        Counter64,
        zxGponOntH15MValidData                         TruthValue
```


}

12.11.5 24-Hour Historical Performance

OID Specification

zxGponOntPerf1DayIntervalTable's OID is .1.3.6.1.4.1.3902.1012.3.32.5.

Index Specification

{ zxGponMgmtPonOltId, zxGponMgmtPonOnuId }, of them, zxGponMgmtPonOltId is PON Type 1 composite index, while others are regular index.

MIB Specification

Refer to zxGponService.mib.

```
zxGponOntPerf1DayIntervalTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF ZxGponOntPerf1DayIntervalEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The 1 day interval performance data table of GPON ONT."
        ::= { zxAnGponOntPerfMgmt 5 }

    zxGponOntPerf1DayIntervalEntry OBJECT-TYPE
        SYNTAX      ZxGponOntPerf1DayIntervalEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The entry in the ONU 1 day interval
            performance data table."
        INDEX       { zxGponMgmtPonOltId, zxGponMgmtPonOnuId,
zxGponOntH1DIntervalNumber }
        ::= { zxGponOntPerf1DayIntervalTable 1 }

    ZxGponOntPerf1DayIntervalEntry ::=
        SEQUENCE {
        zxGponOntH1DIntervalNumber                  Integer32,
        zxGponOntH1DDateAndTime                     DateAndTime,
        zxGponOntH1DCorrNonIdleGemFrmUp             Counter64,
        zxGponOntH1DGemPayloadBytesUp               Counter64,
        zxGponOntH1DCorrEtherFrmUp                  Counter64,
        zxGponOntH1DErroredEtherFrmUp               Counter64,
        zxGponOntH1DTotlOmciFrmUp                   Counter64,
        zxGponOntH1DErri                            Counter64,
        zxGponOntH1DReii                            Counter64,
```



```
zxGponOntH1DUnrxBurstsUp                    Counter64,
zxGponOntH1DBipErrorUp                      Counter64,
zxGponOntH1DCorrBitsUp                      Counter64,
zxGponOntH1DNotCorrWordsUp                  Counter64,
zxGponOntH1DCorrNonIdleGemFrmDn             Counter64,
zxGponOntH1DTxOmciFrms                      Counter64,
zxGponOntH1DTxPloamFrms                     Counter64,
zxGponOntH1DRxPloamFrms                     Counter64,
zxGponOntH1DLofiAlarms                      Counter64,
zxGponOntH1DFecCorrBytes                    Counter64,
zxGponOntH1DFecCorrWords                    Counter64,
zxGponOntH1DFecUnCorrWords                  Counter64,
zxGponOntH1DFecTotalRxWords                 Counter64,
zxGponOntH1DCrcErrPkts                      Counter64,
zxGponOntH1DValidData                       TruthValue
}
```

12.12 GPON GEMPORT Real-time Statistics (V1.2.3)

12.12.1 Real-time Performance

OID Specification

zxAnGponGemportPerfMgmt's OID is .1.3.6.1.4.1.3902.1012.3.33.2.

Index Specification

{ zxGponMgmtPonOltId, zxGponMgmtPonOnuId, zxGponGemPortIdx }, of them, zxGponMgmtPonOltId is PON Type 1 composite index, while others are regular index.

MIB Specification

Refer to zxGponService.mib.

By default, the system won't perform Gemport performance statistics. If needed, you need to create the performance point first via operating zxGponGemPortCurrRowStatus.

```
zxGponGemPortCurrPerfTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF ZxGponGemPortCurrPerfEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The GPON GEM port current performance data table"
        ::= { zxAnGponGemportPerfMgmt 2 }

    zxGponGemPortCurrPerfEntry OBJECT-TYPE
```



```
        SYNTAX          ZxGponGemPortCurrPerfEntry
        MAX-ACCESS    not-accessible
        STATUS          current
        DESCRIPTION
            "The entry in the GEM port current performance data table."
        INDEX     { zxGponMgmtPonOltId, zxGponMgmtPonOnuId, zxGponGemPortIdx }
        ::= { zxGponGemPortCurrPerfTable 1 }

ZxGponGemPortCurrPerfEntry ::=
SEQUENCE {
        zxGponGemPortRxOctets                   Counter64,
        zxGponGemPortRxUcastPkts                Counter64,
        zxGponGemPortRxBroadcastPkts            Counter64,
        zxGponGemPortRxMulticastPkts            Counter64,
        zxGponGemPortRxDiscards                 Counter64,
        zxGponGemPortTxOctets                   Counter64,
        zxGponGemPortTxUcastPkts                Counter64,
        zxGponGemPortTxBroadcastPkts            Counter64,
        zxGponGemPortTxMulticastPkts            Counter64,
        zxGponGemPortTxDiscards                 Counter64,
        zxGponGemPortCurrReset                  INTEGER,
        zxGponGemPortCurrRowStatus              RowStatus
        }
```

13 System Control Alarms & Notifications

ZTE-AN-EQUIP-MIB.mib

13.1 Notification of System Cold Starting

TripOID	.1.3.6.1.6.3.1.1.5.1	Notification
Variable Carried	Null	

13.2 Notification of Active / Standby Changeover

TripOID	.1.3.6.1.4.1.3902.1015.2.2.1.2		Notification
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.5	zxAnCardOperStatus	The card is in running status

13.3 Notification of Failing to Synchronize Active / Standby Data

TripOID	.1.3.6.1.4.1.3902.1015.2.2.1.3		Notification
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.5	zxAnCardOperStatus	The card is in running status

13.4 Alarms that the Card Works Abnormally

13.4.1 Alarms

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.2		Major Alarm
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.2	zxAnCardCfgMainType	Configured card type
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.3	zxAnCardActMainType	Actual card type
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.4	zxAnCardActType	Card name

	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.6	zxAnCardAdminStatus	Administration status of the card
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.5	zxAnCardOperStatus	Running status of the card

Note: Of them, for the structure coding rules inside ifIndex, refer to *ZTE EPON Equipment Composite Index Definitions*.

The running status values of the card (.1.3.6.1.4.1.3902.1015.2.1.1.3.1.5):

1: The card is working normally

2: The card can not be used

3: The card's software isn't running

4: The card is off-line

5: The card is being configured

6: Configuration of the card failed

7: Card types aren't matched

8: The card isn't activated

9: The card is working abnormally

10: The card can not be used

13.4.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.1		Alarm Recovery
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.2	zxAnCardCfgMainType	Configured card type
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.3	zxAnCardActMainType	Actual card type
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.4	zxAnCardActType	Card name
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.6	zxAnCardAdminStatus	Administration status of the card
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.5	zxAnCardOperStatus	Running status of the card

13.5 Alarm of Failing to Detect / Scan Cards

13.5.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.3		Minor Alarm
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.3	zxAnCardActMainType	Actual card type
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.4	zxAnCardActType	Card name

	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.13	zxAnCardStandbyStatus	Active / standby status of the card

13.5.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.4		Alarm Recovery
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.3	zxAnCardActMainType	Actual card type
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.4	zxAnCardActType	Card name
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.13	zxAnCardStandbyStatus	Active / standby status of the card

13.6 Alarm of Wrong Communication of Card Services

13.6.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.12		Minor Alarm
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.2	zxAnCardCfgMainType	Configured card type
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.3	zxAnCardActMainType	Actual card type
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.4	zxAnCardActType	Card name
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.6	zxAnCardAdminStatus	Administration status of the card
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.5	zxAnCardOperStatus	Running status of the card

13.6.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.13		Alarm Recovery
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.2	zxAnCardCfgMainType	Configured card type
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.3	zxAnCardActMainType	Actual card type

	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.4	zxAnCardActType	Card name
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.6	zxAnCardAdminStatus	Administration status of the card
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.5	zxAnCardOperStatus	Running status of the card

13.7 Alarm of Memory Overloading

13.7.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.3		Minor Alarm
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.11	zxAnCardMemUsage	Memory usage rate
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.12	zxAnCardMemUsageThreshold	Memory usage threshold

13.7.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.8		Alarm Recovery
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.11	zxAnCardMemUsage	Memory usage rate
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.12	zxAnCardMemUsageThreshold	Memory usage threshold

13.8 Alarm of CPU Overloading

13.8.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.6		Minor Alarm
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.9	zxAnCardCpuLoad	Current CPU utilization rate

	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.109	zxAnCardCpuLoadThreshold	CPU utilization rate threshold

13.8.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.7		Alarm Recovery
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.9	zxAnCardCpuLoad	Current CPU utilization rate
	.1.3.6.1.4.1.3902.1015.2.1.1.3.1.109	zxAnCardCpuLoadThreshold	CPU utilization rate threshold

13.9 Alarm that the Card Fails to Update Version

13.9.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.10		Common Alarm
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.2.5.1.2	zxAnVerUpdateStatus	Version update status
	.1.3.6.1.4.1.3902.1015.2.1.2.5.1.3	zxAnVerUpdateReason	Version update reason

13.9.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.11		Alarm Recovery
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.2.5.1.2	zxAnVerUpdateStatus	Version update status
	.1.3.6.1.4.1.3902.1015.2.1.2.5.1.3	zxAnVerUpdateReason	Version update reason

13.10 Alarm of Abnormal Power Supply

13.10.1 Alarm

TripOID	**.1.3.6.1.4.1.3902.1015.2.2.3.12**		**Common Alarm**
Variable Carried	**.1.3.6.1.4.1.3902.1015.2.1.3.9.2.1.2**	**zxAnPowerSupplyOperState**	**Operation state**

13.10.2 Alarm Recovery

TripOID	**.1.3.6.1.4.1.3902.1015.2.2.3.13**		**Alarm Recovery**
Variable Carried	**.1.3.6.1.4.1.3902.1015.2.1.3.9.2.1.2**	**zxAnPowerSupplyOperState**	**Operation state**

13.11 High Temperature Alarm

13.11.1 Alarm

TripOID	**.1.3.6.1.4.1.3902.1015.2.2.3.1**		**Common Alarm**
Variable Carried	**.1.3.6.1.4.1.3902.1015.2.1.3.2**	**zxAnEnvTemperature**	**Actual Temperature**
	.1.3.6.1.4.1.3902.1015.2.1.3.3	**zxAnEnvTemperatureAlarmThreshold**	**Threshold Temperature**

13.11.2 Alarm Recovery

TripOID	**.1.3.6.1.4.1.3902.1015.2.2.3.2**		**Alarm Recovery**
Variable Carried	**.1.3.6.1.4.1.3902.1015.2.1.3.2**	**zxAnEnvTemperature**	**Actual Temperature**
	.1.3.6.1.4.1.3902.1015.2.1.3.3	**zxAnEnvTemperatureAlarmThreshold**	**Threshold Temperature**

13.12 Alarm that the Fan is Off-line

13.12.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.2.2.3.5		Common Alarm
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.3.10.10.10.1.6	zxAnEnvFanOnlineStatus	Fan status

13.12.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.3.6		Alarm Recovery
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.3.10.10.10.1.6	zxAnEnvFanOnlineStatus	Fan status

13.13 Alarm that the Fan Operates Abnormally

13.13.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.8		Common Alarm
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.3.10.10.10.1.5	zxAnEnvFanOperStatus	Fan operation status up(1), down(2), unknown(3)

13.13.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.9		Alarm Recovery
Variable Carried	.1.3.6.1.4.1.3902.1015.2.1.3.10.10.10.1.5	zxAnEnvFanOperStatus	Fan operation status up(1), down(2), unknown(3)

13.14 Alarm of Abnormal Dust Cover

13.14.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.2.2.3.10		Common Alarm
Variable Carried	Null		

13.14.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.3.11		Alarm Recovery
Variable Carried	Null		

13.15 Notification of Damaged Sensor

TripOID	.1.3.6.1.4.1.3902.1015.2.2.3.7		Notification
Variable Carried	Null		

13.16 Alarm of Link Down of Environment Monitoring Interface

13.16.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.2.2.3.3		Common Alarm
Variable Carried	Null		

13.16.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.3.4	Alarm

			Recovery
Variable Carried	**Null**		

14 Platform Alarms & Notifications

14.1 LinkDown Alarm of Uplink Port

14.1.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.3.2.2		Major Alarm
Variable Carried	.1.3.6.1.2.1.2.2.1.7	ifAdminStatus	Administration status
	.1.3.6.1.2.1.2.2.1.8	ifOperStatus	Operation status
	.1.3.6.1.2.1.2.2.1.3	ifType	Interface type

14.1.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.3.2.1		Alarm Recovery
Variable Carried	.1.3.6.1.2.1.2.2.1.7	ifAdminStatus	Administration status
	.1.3.6.1.2.1.2.2.1.8	ifOperStatus	Operation status
	.1.3.6.1.2.1.2.2.1.3	ifType	Interface type

14.2 Dos Attack Alarm

14.2.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.11.2.1		Common Alarm
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	IfIndex
	.1.3.6.1.4.1.3902.1015.11.1.1.1.6	zxAnServiceAntiDosSourceMac	Source MAC address
	.1.3.6.1.4.1.3902.1015.11.1.1.1.7	zxAnServiceAntiDosPortVlan	Port VLAN

14.2.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.4		Alarm Recovery
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	IfIndex
	.1.3.6.1.4.1.3902.1015.11.1.1.1.6	zxAnServiceAntiDosSourceMac	Source MAC address
	.1.3.6.1.4.1.3902.1015.11.1.1.1.7	zxAnServiceAntiDosPortVlan	Port VLAN

14.3LinkUp Notification of User Port

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.9		Notification
Variable Carried	.1.3.6.1.2.1.2.2.1.7	ifAdminStatus	Administration status
	.1.3.6.1.2.1.2.2.1.8	ifOperStatus	Operation state
	.1.3.6.1.2.1.2.2.1.3	ifType	Interface type

14.4LinkDown Notification of User Port

TripOID	.1.3.6.1.4.1.3902.1015.2.2.2.4		Notification
Variable Carried	.1.3.6.1.2.1.2.2.1.7	ifAdminStatus	Administration status
	.1.3.6.1.2.1.2.2.1.8	ifOperStatus	Operation state
	.1.3.6.1.2.1.2.2.1.3	ifType	Interface type

14.5Notification of Logging on Serial Port or Administration Port

TripOID	.1.3.6.1.4.1.3902.1015.1.2.6.1		Notification
Variable Carried	.1.3.6.1.4.1.3902.1015.1.1.3.4	zxAnSysLatestLogonCrftTerminalType	Logon type

14.6Notification of Logging out Serial Port or Administration Port

TripOID	.1.3.6.1.4.1.3902.1015.1.2.6.2		Notification
Variable Carried	.1.3.6.1.4.1.3902.1015.1.1.3.4	zxAnSysLatestLogonCrftTerminalType	Logon type

15 EPON Alarms & Notifications

ZXEPON-TRAP-MIB.mib

15.1Notification of PON Port Resetting

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.3.2		Notification
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.2Notification that Unknown ONUs are Online

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.3.9		Notification
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex
	.1.3.6.1.4.1.3902.1015.1010.1.10.3.1	zxAnEponTrapEventString	Additional information

15.3Notification of Refusing Registration of Unknown ONUs

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.3.8		Notification
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.4Notification of Failing to Find Extended OAM

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.3.5		Notification
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex
	.1.3.6.1.4.1.3902.1015.1010.1.10.3.1	zxAnEponTrapEventString	Additional information

15.5Notification that Unknown ONUs are Offline

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.3.7**		**Notification**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**
	.1.3.6.1.4.1.3902.1015.1010.1.10.3.1	**zxAnEponTrapEventString**	**Additional information**

15.6Notification of Power-down of ONUs

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.3.12**		**Notification**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**

15.7ONU Offline Alarm

15.7.1 Alarm

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.15**		**Major Alarm**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**
	.1.3.6.1.4.1.3902.1015.1010.1.10.2.8	**zxAnEponTrapOnuOffLineReason**	**Offline reason**

15.7.2 Alarm Recovery

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.16**		**Alarm Recovery**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**
	.1.3.6.1.4.1.3902.1015.1010.1.10.2.8	**zxAnEponTrapOnuOffLineReason**	**Offline reason**

15.8 Alarm of Losing PON Port Signals

15.8.1 Alarm

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.13**		**Major Alarm**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**
	.1.3.6.1.4.1.3902.1015.1010.1.10.2.7	**zxAnEponTrapPonLosReason**	**Alarm reason**

Values of LOS reasons (.1.3.6.1.4.1.3902.1015.1010.1.10.2.7):

1- The fiber is disconnected.

2 - Unknown reasons.

3 - The ONU is powered down.

4 - The ONU has never been online.

15.8.2 Alarm Recovery

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.14**		**Alarm Recovery**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**
	.1.3.6.1.4.1.3902.1015.1010.1.10.2.7	**zxAnEponTrapPonLosReason**	**Alarm reason**

15.9 Alarm of PON Port Bit Error Rate

15.9.1 Alarm

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.11**		**Major Alarm**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**

15.9.2 Alarm Recovery

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.12**		**Alarm Recovery**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**

15.10 Alarm of Exceeding Threshold of ONU Optical Power

15.10.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.1.1		Major Alarm
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex
	.1.3.6.1.4.1.3902.1015.1010.1.10.3.1	zxAnEponTrapEventString	Threshold information

15.10.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.1.2		Alarm Recovery
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex
	.1.3.6.1.4.1.3902.1015.1010.1.10.3.1	zxAnEponTrapEventString	Threshold information

15.11 Alarm of Interval Event of ONU's Error Symbols

15.11.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.1.17		Major Alarm
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.11.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.1.18		Alarm Recovery
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.11.3 ONU Error Frame Event

15.11.4 Alarm

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.19**		**Major Alarm**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**

15.11.5 Alarm Recovery

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.20**		**Alarm Recovery**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**

15.12 Alarm of Interval Event of ONU's Error Frames

15.12.1 Alarm

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.21**		**Major Alarm**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**

15.12.2 Alarm Recovery

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.22**		**Alarm Recovery**
Variable Carried	**.1.3.6.1.2.1.2.2.1.1**	**ifIndex**	**ifIndex**

15.13 Alarm of Total Number of Seconds Event of ONU's Error Frames

15.13.1 Alarm

TripOID	**.1.3.6.1.4.1.3902.1015.1010.1.10.1.23**	**Major Alarm**

Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.13.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.1.24		Alarm Recovery
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.14 Alarm of ONU Uplink's Link Bit Error

15.14.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.1.25		Major Alarm
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.14.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.1.26		Alarm Recovery
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.15 Alarm of ONU Uplink's Link Frame Error

15.15.1 Alarm

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.1.27		Major Alarm
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.15.2 Alarm Recovery

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.1.28		Alarm Recovery
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.16 Notification of Failing to Configure Local ONUs

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.3.6		Notification
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex

15.17 Notification of Extended OAM Event

TripOID	.1.3.6.1.4.1.3902.1015.1010.1.10.3.11		Notification
Variable Carried	.1.3.6.1.2.1.2.2.1.1	ifIndex	ifIndex
	.1.3.6.1.4.1.3902.1015.1010.1.10.3.1	zxAnEponTrapEventString	OAM information

16 GPON Alarms & Notifications

{"zxGponOltSDi" , "1.3.6.1.4.1.3902.1012.3.45.109"} ,
{"zxGponOltSDiRestore" , "1.3.6.1.4.1.3902.1012.3.45.110"} ,
{"zxGponOltTxPowerAbnormalInform", "1.3.6.1.4.1.3902.1012.3.45.181"} ,

{"zxGponOnuOMCITrap" , "1.3.6.1.4.1.3902.1012.3.50.7.1"} ,