

EasyPath-EPON

Product and common command introduction

- EasyPath-EPON
- **EasyPath-EPON Common command**
 - Open command
 - OLT Common inspection command
 - OLT Common configuration commands**
 - ONU Common maintenance commands
 - ONU Common configuration commands

Common configuration commands

- Create VLAN
- **Interface vlan <vlannname> <1-4094>**
- GFA8000(config)#interface vlan v1000 1000
- GFA8000(vlan-v1000)#
- Delete VLAN
- **Undo interface vlan <vlannname>**
- GFA8000(config)#undo interface vlan v1000
- GFA8000(config)#show interface vlan v1000
- % VLAN v1000 does not exist.

Common configuration commands

- Join port VLAN
- **Add port <portlist> {tagged|untagged}**
- GFA8000(vlan-v1000)#add port 1/1 tagged
- GFA8000(vlan-v1000)#
- One port to untagged can only join one VLAN;
- Tagged can be join multiple VLAN

- VLAN delete:
- **Delete port <portlist> {tagged|untagged}**
- GFA8000(vlan-v1000)#delete port 1/1 tagged
- GFA8000(vlan-v1000)#

Common configuration commands

- VLAN Batch creation
- GFA8000(config)#vlan 100-200
- Batch creation 100 – 200 vlan number

- Add a port in bulk to a lot in vlan:
- GFA8000(if-eth1/1)#vlan join 100-200 tagged
- Join1/1 After port use vlan join 100-200 tagged command can be achieved

- ONU 5/1/1
- Pty
- Username Admin Password greenway
- Enable (config) #onu

Common configuration commands

- On ONU speed limit:
- `port fc 1 1` \\ Start the flow control function.
- `port ingress_rate 1 0 8000 pause 12k` \\ Use ONU 1 the port entry direction speed limit is 8M flow control
- `port ingress_rate 1 0 8000` \\ Use ONU 1 Port speed limit is 8M discard method.
- `port egress_rate 1 8000` \\ Use ONU 1 The speed limit of the exit of the port is 8M the way

Common configuration commands

- Set the upstream bandwidth of the ONU based on the PON port:
- Command: `bandwidth class 2 delay low fixed-bw <0-1000000> assured-bw <64-1000000> up <onuid_list(1-64)>`
- Example:
- `GFA8000(epon-pon6/2)#bandwidth class 2 delay low assured-bw 15000 best-effort-bw 100000 up 1`
- `GFA8000(epon-pon5/1)#undo bandwidth up 1 Cancel command (216 release version)`
- `GFA8000(epon-pon6/2)#show bandwidth logical-link 1`
- `onu 6/2/1 bandwidth Information(unit:kbit/s)`
- Uplink: class: 1 fixed bw: 20000
- assured bw: 30000 best-effort bw: 50000
- Downlink: class: -- delay: --
- assured bw:No policer best-efort bw: --

Common configuration commands

- Add a default bandwidth configuration for the bandwidth OLT
- `onu default-bandwidth uplink <64-1000000> <64-1000000> {downlink [0 | <64-1000000>] [0 | <64-1000000>]}*1`
- After using this command, all ONUs on the network will be assigned the bandwidth configured above by default.

Common configuration commands

- Set the ONU to learn the number of MAC addresses.
- Manner 1: When you need to set the number of MAC addresses learned by the ONU under the PON port in batches, you can enter the PON port and type the command `onu max-mac <1-8192> <1-64>`, and you can use `show ONU max-mac < 1-64>` Command View the number of MAC addresses that the current ONU can learn.

Example:

- `GFA8000(config)#pon 6/1`
- `GFA8000(epon-pon6/1)#onu max-mac 555 1-3`
- `GFA8000(epon-pon6/1)#show onu max-mac 1-64`
- `onu6/1/1 max-mac supported---555`

- Manner 2: If you only need to set the number of MAC addresses that can be learned on a single ONU, you can enter the ONU node to set the number of MAC addresses that can be learned. The command is the same as above.
- `GFA8000(config)#onu 6/1/1`
- `GFA8000(epon-onu6/1/1)#onu max-mac 500`
- `GFA8000(epon-onu6/1/1)#show onu max-mac`
- `onu6/1/1 supported max-mac number is 500`

Common configuration commands

- About the use of pre-configuration files
- The first step is to create a pre-configuration file:
- GFA8000(config)#config onu-profile test -----test Pre-config file name
- Step 2 Associate one or more ONUs
- GFA8000(config)#onu-profile associate 5/2 2 test ---- Association 5/2/2ONU

- Batch pre-configuration introduction
- Step 1: Create a pre-configuration file
- `vlan dot1q_add onu_range <slot/port/onuid> <slot/port/onuid> <2-4094> [1|2] {<port_list>}*1`

Example:

```
onu-profile(test)#vlan dot1q_add onu_range 5/2/1 5/2/64 vlan-range 101 164 1 2
```

ONU range is 5/2/1 – 5/2/64 vlan range is 101 164 where ONU corresponds to vlan101 and so on. All ports of each ONU are added in untagged form.

Second step: Associate batch pre-configuration files

```
GFA8000(config)#onu-profile associate 5/2 1-64 test
```

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ONU Common maintenance commands

```
GFA8000(config)#onu 4/1/1
```

```
GFA8000(epon-onu4/1/1)#port link_show
```

Port	Status
1	UP
2	UP
3	UP
4	UP

Check the ON/DOWN status of the Ethernet port on the ONU.

```
GFA8000(epon-onu4/1/1)#port en 2 1
```

2 is the port number 1 is enabled 0 is off

ONU Common maintenance commands

- GFA8000(epon-onu4/1/1)#port mode_show 1
- Port 1 : AutoNegotiation enabled Max speed 100 M, current speed 100 M, Duplex full.
- Physical status is up, Administrator status is up
- Check the working mode of the ONU's Ethernet port.

ONUCommon maintenance commands

- GFA8000(config)#onu 4/1/3
- GFA8000(epon-onu4/1/3)#atu show

no	mac	portlist	static	vid	priority
1	00-0f-e9-00-4a-c0	5	0	1	0
2	00-0f-e9-03-48-06	5	1	1	0
3	00-0f-e9-05-16-70	5	1	1	0
4	00-30-88-15-2c-da	5	0	1	0
5	01-00-5e-00-00-01	1,2,3,4,5	1	1	0
6	d8-5d-4c-32-e3-3d	2	0	1	0
7	ff-ff-ff-ff-ff-ff	1,2,3,4,5	1	1	0

- Total number of ATU table is 7.
- View the MAC address table of the switch chip of the ONU.

ONU Common maintenance commands

- GFA8000(epon-onu4/1/3)#vlan dot1q_show
- Interface VLAN default is up.
- Physical status is up, administrator status is up.
- MTU 1600 bytes.
- IP address:
 - 192.4.1.21/24
- IP binding disabled.
- Multicast Flood Mode is 2.
- Vlan id is 1.
- Port member list:
 - eth1/1(u) eth1/2(u) eth1/3(u) eth1/4(u)
 - eth1/5(u)
- Trunk member list:
 -
- View the VLAN information of the ONU.

ONU Common maintenance commands

- GFA8000(epon-onu4/1/3)#**event show**
- Log information
- -----
- Oct 7 15:31:18 EMERG : PON : No uplink traffic for 30 second.
- Oct 7 15:30:37 EMERG : PON : No uplink traffic for 30 second.
- Oct 7 15:29:57 EMERG : PON : No uplink traffic for 30 second.
- Oct 7 15:29:25 WARNING : TRAP : Interface eth1/2 changed state to up
- -----
- View the alarm information of the ONU.

ONU Common maintenance commands

- GFA8000(epon-onu4/1/3)#**show device information**
- onu 4/1/3 Device Information list:
 - device Type:GT811_A device desc:Easypath GT811_A - 4FE
 - Mac addr:000f.e905.1670
 - Vendor Info:GW Technologies Co.,Ltd
 - ponchip version: PAS6301
 - device SN:GT811T1004100125
 - product Date:2010-04-08
 - Oam version:3 OAM standard according to 802.3ah Standard 3.0
- onu name:GT811_A
- onu description:GT811_A Version 1.2(Build 084 on Dec 15 2009, 19:43:21)
- onu location:DefaultsysLocation

ONU Common maintenance commands

- Boot Ver:V1.0.0 Software Ver:V1R02B084
- Hardware Ver:V9.5B2 Firmware Ver:V1.4.2.4
- ONU version information
- opStatus: up encrypt started:not started
- Range:5504m Encrypt direction:none
- on-line time:0001:17:55:14 Encrypt Keytime:120(s)
- Start time: 2011-10-07, 15:29:25 onu traffic
service:enable
- Up-Bandwidth:15000(kbit/s) Dn-Bandwidth:No
policer
- Up-fixed:0(kbit/s)

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Common configuration commands

- **Add VLAN on the ONU**
- command: `vlan dot1q_add <2-4094>`
- `vlan dot1q_del <2-4094>`
- `vlan dot1q_port_add <2-4094> <port_list> [1|2]`
- `vlan dot1q_port_del <2-4094> <port_list>`
- `vlan dot1q_show <1-4094>`

Example:

```
GFA8000(config)#onu 6/2/1          Enter the ONU node
GFA8000(epon-onu6/2/1)#vlan dot1q_add
<2-4094> Please input the Vlan Vid(2-4094)
GFA8000(epon-onu6/2/1)#vlan dot1q_add 212 Create VLAN-212
GFA8000(epon-onu6/2/1)#vlan dot1q_port_add 212
GFA8000(epon-onu6/2/1)#vlan dot1q_port_add 212 1-4
  1 Tagged
  2 Untagged
GFA8000(epon-onu6/2/1)#vlan dot1q_port_add 212 1-4 2
Add ports 1-4 to VLAN 212 in untagged mode.
```

ONU common configuration commands

- Name the device through the command line configuration
- command: device name <onu-name>
- The ONU device name can be viewed on the ONU node show device information or on the OLT configuration node show onu-list.
- Example:
- GFA8000(epon-onu6/2/1)#device name test
- Mgt config save
- GFA8000(epon-onu6/2/1)#show device information
- onu 6/2/1 Device Information list:
- <onu name:test>

- GFA8000(config)#show onu-list
- [TOTAL ONU COUNTER = 1]
- Idx Mac addr type status Lastedtime userName
- -----
- Pon(slot6)/port2 [Onu counter = 1]
- 1 000f.e903.7167 GT811_A up 0000:03:14:44 test