



EPON Template Configuration

User Manual

C O N T E N T

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Chapter 1 Reference for Command-Lines of EPON Template Configurations

1.1 Command-line Switches of EPON Template Configurations

- **onu-profile**
- **no onu-profile**
- **active unique**
- **no active unique**
- **show onu-profile**

1.1.1 onu-profile

This command is used to enable the template configuration. By default, the template configuration is disabled. If the template configuration function is disabled, all other template configuration commands can not be used.

onu-profile

【Parameter Description】

Not available

【Command Mode】

Global Configuration Mode

【Default Setting】

By default, it is disabled.

【Configuration Example】

! Enable the template configuration.

```
OptiWay(config)#onu-profile
```

Turn on ONU profile successfully.

1.1.2 no onu-profile

This command is used to disable the template configuration. After disabled this function, all the configuration information is cleared.

no onu-profile

【Parameter Description】

Not Available

【Command Mode】

Global Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Disable the template configuration.

```
OptiWay(config)#no onu-profile
```

Turn off ONU profile successfully.

1.1.3 active unique

This command is used to enable a certain one onu unique configuration (it is mainly for special configuration) to make it compatible with all onu commands.

actinve unique

【Parameter Description】

Not Available

【Command Mode】

ONU Configuration Mode

【Default Setting】

By default, it is disabled.

【Configuration Example】

! Enable ONU unique configuration.

OptiWay(config)#onu 5/5/1

OptiWay(onu-5/5/1)#active unique

1.1.4 no active unique

This command is used to disabled the onu unique configuration.

no active unique

【Parameter Description】

Not Available

【Command Mode】

ONU Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Disabled an onu unique configuration.

OptiWay(config)#onu 5/5/1

OptiWay(onu-5/5/1)#no active unique

1.1.5 show onu-profile

This command is used to display the status of the template configuration.

show onu-profile

【Parameter Description】

Not Available

【Command Mode】

Global Configuration Mode

【Configuration Example】

! Display the status of the template configuration.

```
OptiWay(config)#show onu-profile
```

The ONU profile is opened.

1.2 Command Lines of EPON Template Configurations

- **deploy profile line**
- **clear profile line**
- **show profile line**
- **deploy profile onu**
- **clear profile onu**
- **show profile onu**
- **dba-bandwidth**
- **onu-port-eth**
- **ctc-vlan-mode**
- **ctc-rate-limit**
- **vlan-work-mode**

- **create vlan**
- **no vlan**
- **default vlan**
- **port**
- **port isolate vlan**

1.2.1 deploy profile line

This command is used to create a service configuration template and enter the service template configuration mode.

deploy profile line { *line-num* }

【Parameter Description】

line-num: number of service template

【Command Mode】

Global Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

```
! Configure service template 3
OptiWay(config)#deploy profile line 3
OptiWay(config-profile-line-3)#
```

1.2.2 clear profile line

This command is used to clear the service template configurations. This operation is not allowed if the service template is bound.

clear profile line { *line-num* | *all* }

【Parameter Description】

line-num: number of service template

all: all service template

【Command Mode】

Global Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Clear all service template configurations.

OptiWay(config)#clear profile line all

Are you sure you want to proceed with the line clear.(y/n)?[n]y

1.2.3 show profile line

This command is used to display the service template configuration information.

show profile line [*line-num*]

【Parameter Description】

line-num: number of service template

【Command Mode】

Global Configuration Mode.

【Default Setting】

The default service template number displays all deployed rule template information.

【Configuration Example】

! Display the configuration information of service template 3.

```
OptiWay(config)#show profile line 3
```

```
profile line-3
```

```
create vlan 3 pon ethernet 1,3-8
```

```
The line has been bound by rule.
```

```
Rule list :2
```

1.2.4 deploy profile onu

This command is used to create an ONU-based unique configuration template and enter the ONU configuration template mode.

deploy profile onu *onu-id*

【Parameter Description】

onu-id: ONU index

【Command Mode】

ONU Unique Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure ONU template 2/1/1.

```
OptiWay(config)#deploy profile onu 2/1/1
```

```
OptiWay(config-profile-onu-2/1/1)#
```

1.2.5 clear profile onu

This command is used to clear the ONU-based unique configuration template. When the template is activated, the command is not allowed to be cleared.

clear profile onu [*onu-id* | *all*]

【Parameter Description】

onu-id: ONU index

all: ONU unique configuration template

【Command Mode】

Global Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Clear the configurations of ONU template 2/1/1.

```
OptiWay(config)#clear profile onu 2/1/1
```

```
Are you sure you want to proceed with the line clear.(y/n)?[n]y
```

1.2.6 show profile onu

This command is used to display the ONU-based unique configuration template.

show profile onu [*onu-id*]

【Parameter Description】

onu-id: ONU index

【Command Mode】

Global Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Display the configurations of ONU template 2/1/1.

```
OptiWay(config)#show profile onu 2/1/1
```

```
profile onu-2/1/1
```

```
ctc-vlan-mode tag vlan 2401 ethernet 1
```

```
ctc-vlan-mode tag vlan 11 ethernet 2-4
```

```
active
```

1.2.7 dba-bandwidth

This command is used to configure the DBA bandwidth of the service template.

```
dba-bandwidth { upstream / downstream } fir { fir-value } cir { cir-value }  
pir { pir-value }
```

【Parameter Description】

fir-value: it refers to fixed bandwidth value, and you can only enter 0.

cir-value: assured bandwidth, with a range of <1 ~ 1000000>

pir-value: best effort bandwidth, with a range of <1 ~ 1000000>

Moreover, you should make sure that *pir-value* > *cir-value* > *fir-value*

【Command Mode】

Service Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure the onu uplink bandwidth of service template 1.

```
OptiWay(config)#deploy profile line 1
```

```
OptiWay(config-profile-line-1)#dba-bandwidth upstream fir 0 cir 1000 pir  
200000
```

1.2.8 onu-port-eth

This command is used to configure the number of Ethernet ports in the service template that support incremental vlan configurations.

onu-port-eth *num-value*

【Parameter Description】

num-value: number of ports

【Command Mode】

Service Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure service template 1, and then specify that the number of Ethernet ports supported by onu to be 4 ports.

```
OptiWay(config)#deploy profile line 1
```

```
OptiWay(config-profile-line-1)#onu-port-eth 4
```

1.2.9 ctc-vlan-mode

This command is used to configure the CTC VLAN mode of the service template.

ctc-vlan-mode transparent [**ethernet** *port-list*]

ctc-vlan-mode tag base vlan *base-vlanid*

ctc-vlan-mode tag step vlan *step-vlanid* [**ethernet** *port-list*]

ctc-vlan-mode tag vlan *vlanid* [**ethernet** *port-list*]

ctc-vlan-mode translate vlan *vlanid* **entry** *in-vlanid* *out-vlanid* [**ethernet** *port-list*]

ctc-vlan-mode trunk vlan *vlanid* **entry** *allow-vlanid* [**ethernet** *port-list*]

【Parameter Description】

port-list: port list, for example, 1,3,5-10

vlanid: VLAN ID, with the range of 1~4094

base-vlanid: VLAN base id, with the range of 1~4094

step-vlanid: VLAN incremental step, with the range of 1~10

in-vlanid: ingress VLAN, with the range of 1~4094.

out-vlanid: egress VLAN, with the range of 1~4094.

allow-vlanid: VLAN lists that allowed to pass, for example, 1, 3, 4090-4094.

【Command Mode】

Service Template Configuration Mode

【Default Setting】

When it is the default ethernet port parameter, it refers to configure all Ethernet ports of the ONU.

【Configuration Example】

! Configure the service template 2, and then specify onu all ports as the ctc transparent mode.

OptiWay(config)#deploy profile line 2

```
OptiWay(config-profile-line-2)#ctc-vlan-mode transparent
```

! Configure the service template 3 and then specify the onu port as ctc tag mode

```
OptiWay(config)#deploy profile line 3
```

```
OptiWay(config-profile-line-3)#ctc-vlan-mode tag vlan 3 ethernet 1-6
```

! Configure the service template 3. Specify the onu port as ctc tag mode, and set the port to be increment mode.

```
OptiWay(config)#deploy profile line 3
```

```
OptiWay(config-profile-line-3)# onu-port-eth 4
```

```
OptiWay(config-profile-line-3)#ctc-vlan-mode tag base vlan 3000
```

```
OptiWay(config-profile-line-3)#ctc-vlan-mode tag step vlan 1 ethernet 2-4
```

1.2.10 ctc-rate-limit

This command is used to configure the speed limit function of the onu port in the service template.

```
ctc-rate-limit ingress cir cir-value cbs cbs-value ebs ebs-value [ ethernet port-list ]
```

```
ctc-rate-limit egress cir cir-value pir pir-value [ ethernet port-list ]
```

【Parameter Description】

port-list: port list, for example, 1,3,5-10.

cir-value: fixed bandwidth rate of egress or ingress, with the range of 64 - 1024000 kbps

cbs-value: depth of the token bucket algorithm

ebs-value: extra battle size

pir-value: peak information rate, with the range of 64 - 1024000 kbps

【Command Mode】

Service Template Configuration Mode

【Default Setting】

It is disable.

【Configuration Example】

! Limit the rate of onu ingress 1 and 3-4 of the service template 5

```
OptiWay(config)#deploy profile line 5
```

```
OptiWay(config-profile-line-5)# ctc-rate-limit ingress cir 2000 cbs 2000 ebs  
123 ethernet 1,3-4
```

! Limit the rate of onu egress of the service template 5

```
OptiWay(config)#deploy profile line 5
```

```
OptiWay(config-profile-line-5)# ctc-rate-limit egress cir 3000 pir 4000
```

1.2.11 vlan-work-mode

This command is used to configure the vlan working mode of the specific onu in the service template.

```
vlan-work-mode { 802.1q | ctc }
```

【Parameter Description】

802.1q: Specify that onu works in 802.1q standard vlan mode.

ctc: Specify that onu works in ctc mode

【Command Mode】

Service Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure the service template 5 to specify the onu vlan work mode as the ctc mode.

```
OptiWay(config)#deploy profile line 5
```

```
OptiWay(config-profile-line-5)#vlan-work-mode ctc
```

1.2.12 create vlan

This command is used to configure the vlan lists in the service template.

create vlan { *vlanid-list* } { **all** | **pon** | **ethernet** *port-list* }

【Parameter Description】

vlanid-list: VLAN list, for example, 1, 3, 4090-4094

port-list: port list, for example, 1,3,5-10

【Command Mode】

Service Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure the service template 6: create the vlan 3-10, which contain the pon ports and specific Ethernet ports; create the vlan 100, which contain all ports.

```
OptiWay(config)#deploy profile line 6
```

```
OptiWay(config-profile-line-6)#create vlan 3-10 pon ethernet 2,4-6
```

OptiWay(config-profile-line-6)#create vlan 100 all

1.2.13 no vlan

This command is used to configure the service template to delete the created vlans. Non-existent vlans are not processed.

no vlan { *vlanid-list* | **all** }

【Parameter Description】

vlanid-list: VLAN list, for example, 1, 3, 4090-4094

【Command Mode】

Service Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure the service template 6 to delete the vlan 7-13.

OptiWay(config-profile-line-6)#no vlan 7-13

1.2.14 default vlan

This command is used to configure the pvid of the service template.

default vlan { *pvid* } { **all** | **pon** | **ethernet** *port-list* }

【Parameter Description】

pvid: port vlan id, for example, 1, 3, 4090-4094

port-list: ethernet port list, for example, 1,3,5-10

【Command Mode】

Service Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure the service template 6 to modify the pvid of all ports to be 10.
OptiWay(config-profile-line-6)#default vlan 10 all

1.2.15 port

This command is used to configure the tag attributes of the port in the service template.

port { tag | untag | unmodify } { all | pon | ethernet *port-list* }

【Parameter Description】

port-list: ethernet port list, for example, 1,3,5-10

【Command Mode】

Service Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure the service template 6, set pon port as tag attribute, Ethernet ports 2-5 as unmodify attribute
OptiWay(config-profile-line-6)#port tag pon
OptiWay(config-profile-line-6)#port unmodify ethernet 2-5

1.2.16 port isolate vlan

This command is used to configure the isolation vlan of the port in the service template.

port isolate vlan { *vlan-id* } { **all** | **ethernet** { *port-list* } }

【Parameter Description】

vlan-id: vlan id of port isolation

port-list: ethernet port list, for example, 1,3,5-10

【Command Mode】

Service Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure the service template 6, Ethernet ports 1-5 isolate vlan 18, Ethernet port 8 isolates vlan 10.

OptiWay(config-profile-line-6)#port isolate vlan 18 ethernet 1-5

OptiWay(config-profile-line-6)#port isolate vlan 10 ethernet 8

1.2.17 no port isolate vlan

This command is used to remove the isolation vlan of the configuration port of the service template.

no port isolate vlan { *vlan-id* } { **all** | **ethernet** { *port-list* } }

【Parameter Description】

vlan-id: the vlan ID of port isolation

port-list: ethernet port list, for example, 1,3,5-10

【Command Mode】

Service Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure the service template 6 to remove the isolation of vlan 9 of all Ethernet ports.

OptiWay(config-profile-line-6)#no port isolate vlan 9 all

1.3 Configuration Commands of EPON Template Rule

- **deploy profile rule**
- **clear profile rule**
- **show profile rule**
- **match**
- **active**
- **no active**
- **bind line**
- **no bind line**

1.3.1 deploy profile rule

This command is used to create a rule template and enter the rule template configuration mode.

deploy profile rule { *rule-num* }

【Parameter Description】

rule-num: rule template number

【Command Mode】

Global Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Configure the service template 3.
OptiWay(config)#deploy profile rule 3
OptiWay(config-profile-rule-3)#

1.3.2 clear profile rule

This command is used to clear the rule template configurations. Moreover, this operation is not allowed when the rule is in the active state.

clear profile rule { *rule-num* | *all* }

【Parameter Description】

rule-num: rule template number
all: all rules

【Command Mode】

Global Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Clear all rule template configurations.
OptiWay(config)#clear profile rule all
Are you sure you want to proceed with the rule clear.(y/n)?[n]
! Clear the configuration of rule template 3.

```
OptiWay(config)#clear profile rule 3
```

```
Are you sure you want to proceed with the rule clear.(y/n)?[n]n
```

1.3.3 show profile rule

This command is used to display the information of rule template configuration.

```
show profile rule [ rule-num ]
```

【Parameter Description】

rule-num: rule template number

【Command Mode】

Global Configuration Mode

【Default Setting】

The default rule template number displays all deployed rule template information.

【Configuration Example】

! Display the configuration information of rule template 3.

```
OptiWay(config)# show profile rule 6
```

```
Rule TYPE StartMACAddress EndMACAddress Slot Port Linelist ActiveStatus
6 2080 - - 4 - 1,3 inactive
```

```
Total entries: 1 .
```

1.3.4 match

This command is used to set various attributes of the rule template.

```
match [type onu-type] [mac start-mac end-man] [slot slotid] [pon ponid]
```

```
bind line line-list
```

【Parameter Description】

onu-type: ONU type, with 3~4 bytes

start-mac: start value of ONU mac address

end-mac: end value of ONU mac address

slotid: slot number of the OLT device

ponid: PON port number of the OLT device

line-list: the list of service templates which requires to bind, such as 1, 3, 7-10

【Command Mode】

Rule Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Bind service template 1 and 3 of rule template 6 according to type and slot.

```
OptiWay(config)#deploy profile rule 6
```

```
OptiWay(config-profile-rule-6)#match type 2080 slot 4 bind line 1,3
```

1.3.5 active

This command is used to activate the rule template due to the inactive rule can not be used.

active

【Parameter Description】

Not Available

【Command Mode】

【Default Setting】

Not Available

【Configuration Example】

! Activate rule template 5.

OptiWay(config)#deploy profile rule 5

OptiWay(config-profile-rule-5)#active

1.3.6 no active

This command is used to deactivate the rule template. Moreover, only the rule templates that are deactivated can be configured.

no active

【Parameter Description】

Not Available

【Command Mode】

Rule Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! Deactivate rule template 5.

OptiWay(config)#deploy profile rule 5

OptiWay(config-profile-rule-5)#no active

1.3.7 bind line

This command is used to bind the service template to the rule template.

bind line { *line-list* }

【Parameter Description】

line-list: the list of service templates which requires to bind, such as 1, 3, 7-10

【Command Mode】

Rule Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! In the template 6 of configuration rule, bind the service template 5
OptiWay(config)#deploy profile rule 6
OptiWay(config-profile-rule-6)#bind line 5

1.3.8 no bind line

This command is used to unbind the service template from the rule template. Only the service template without the binding relationship can be configured.

no bind line { *line-list* }

【Parameter Description】

line-list: the list of service templates which requires to unbind, such as 1, 3, 7-10

【Command Mode】

Rule Template Configuration Mode

【Default Setting】

Not Available

【Configuration Example】

! In the template 6 of configuration rule, unbind the service template 3 and 5

```
OptiWay(config)#deploy profile rule 6
```

```
OptiWay(config-profile-rule-6)#no bind line 3,5
```

1.4 Other Commands of EPON Templates

- **show profile-relation**
- **reactivate**

1.4.1 show profile-relation

This command is used to display the online onu matching rule information.

```
show profile-relation [ { slot slotid [ pon ponid ] } | { onu onuid } ]
```

【Parameter Description】

slotid: slot number of the OLT device

ponid: PON port number of the OLT device

onuid: ONU index

【Command Mode】

All Modes

【Default Setting】

It shows all online onu matching relationships.

【Configuration Example】

! Display the rules of online onu matching relationship.

OptiWay(config-profile-rule-6)#show profile-relation

Onu ID Previous Rule Current Rule Line list Active Status

5/5/1 - Rule-2 1 active

5/5/2 Rule-2 Rule-5 2-3 inactive

Total entries: 2 .

! Display the rule matching relationship for online onu 5/5/1.

OptiWay(config-profile-rule-6)#show profile-relation onu 5/5/1

Onu ID Previous Rule Current Rule Line list Active Status

5/5/1 - Rule-2 1 active

Total entries: 1 .

1.4.2 reactivate

This command is used to reactivate onu to complete a matching operation for rule templates.

reactivate { { slot slotid [pon ponid] } | { onu onuid } }

【Parameter Description】

slotid: slot number of the OLT device

ponid: PON port number of the OLT device

onuid: ONU index

【Command Mode】

Global Configuration Mode

【Default Setting】

Not Available



【Configuration Example】

! Reactivate onu 5/5/1.

OptiWay(config)#reactivate onu 5/5/1