Getting Started With OLT Network

add inner-vlan

To configure VLAN stacking rule, use the **add inner-vlan** command in VLAN profile configuration mode. To delete the VLAN stacking rule, use the **no add inner-vlan** command.

add inner-vlan *inner-vlan-id* {*priority* | **outer-vlan** *outer-vlan-id* [*priority*]}

no add inner-vlan *inner-vlan-id* [*priority*]

Syntax Description

inner-vlan-id	The inner VLAN ID. The range is from 0 to 4094.
outer-vlan-id	The outer VLAN ID. The range is from 0 to 4094.
priority	The 802.1 priority value. The range is from 0 to 7.

Command Modes

VLAN profile configuration (deploy-profile-vlan)

Usage Guidelines

A VLAN profile type must be configured.

Modifying and activating the VLAN template will cause the ONT that references the template to go online again.

Examples

This example shows how to configure VLAN stacking rule.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile vlan
Device(deploy-profile-vlan)# aim 5
Device(deploy-profile-vlan-5)# add inner-vlan 2 3 outer-vlan 2 3
Device(deploy-profile-vlan-5)# active
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

aim

To create profile based aim. use the **aim** command in profile configuration mode.

For alarm, dba, line, downstream traffic, upstream traffic and VLAN profile configuration modes

aim {*index_number* | **name** *name*}

For rule and unique profile configuration modes

aim {*slot-num/pon-num/ont-num* | **name** *name*}

Syntax Description

index_number	The profile index number. The range is from 0 to 1023.
name	The profile name. The format is string. The string length range is from 1 to
slot-num/pon-num/ont-num	The ONT ID. • *slot-num*: The slot number. The value is 0. • *pon-num*: The PON number. The range is from 1 to • *ont-num*: The ONT number. The range is from 1 to

Command Modes

Profile configuration (deploy-profile)

Usage Guidelines

A profile type must be configured.

Examples

This example shows how to create a VLAN aim.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile vlan
Device(deploy-profile-vlan)# aim 5
Device(deploy-profile-vlan-5)#
```

Example

This example shows how to create a unique aim.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile unique
Device(deploy-profile-unique)# aim 0/1/1
Device(deploy-profile-unique-0/1/1)#
```

Related Commands

Command	Description
delete aim	Deletes profile based aim.

alarm ont register-record

To enable ONT register record alarm and set an alarm threshold, use the **alarm ont register-record** command in global configuration mode. To disable the alarm, use the **no alarm ont register-record** command.

alarm ont register-record [**threshold**]*threshold_value*

no alarm ont register-record [**threshold**]*threshold_value*

Syntax Description

threshold_value	The threshold value. The range is from 1 to 128. The default is 64.

Command Modes

Global configuration (config)

Usage Guidelines

You can limit the number of ONTs that can be registered on the PON port by setting a threshold value. If the number of ONTs on the PON port exceeds the threshold value, an alarm is generated. The alarm is cancelled once the number of ONTs is less than the threshold value.

Examples

This example shows how to set an ONT register record alarm threshold value.

```
Device> enable
Device# configure terminal
Device(config)# alarm ont register-record threshold 80
```

Related Commands

Command	Description
show alarm ont register-record	Displays information about register record alarm of an ONT

crypto key

To configure or remove a key, use the **crypto key** command in privileged EXEC mode.

crypto key {**generate rsa** | **refresh** | **zeroize rsa**}

Syntax Description

generate rsa	Configures a default key.
refresh	Activates the key.
zeroize rsa	Removes the key.

Command Modes

Privileged EXEC (#)

Usage Guidelines

SSH must be enabled on the device.

Examples

This example shows how to configure a default key.

```
Device> enable
Device# crypto key generate rsa
Generate default SSH key successfully.
```

This example shows how to activate the key.

```
Device> enable
Device# crypto key refresh
Refresh SSH key successfully.
```

Example

This example shows how to remove the key.

```
Device> enable
Device# crypto key zeroize rsa
Zeroize SSH key successfully.
```

Related Commands

Command	Description
ssh	Enables SSH on an OLT.

default vlan

To configure the VLAN tagging rule, use the **default vlan** command in VLAN profile configuration mode. To delete the VLAN tagging rule, use the **no default vlan** command.

default vlan *vlan_id* [*priority*]

Syntax Description

vlan_id	The VLAN ID. The range is from 1 to 4094.
priority	The 802.1 priority value. The range is from 0 to 7.

Command Modes

VLAN profile configuration (deploy-profile-vlan)

Usage Guidelines

A VLAN profile type must be configured.

Modifying and activating the VLAN template will cause the ONT that references the template to go online again.

Examples

This example shows how to configure the VLAN tagging rule.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile vlan
Device(deploy-profile-vlan)# aim 5
Device(deploy-profile-vlan-5)# default vlan 5 5
Device(deploy-profile-vlan-5)# active
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

delete aim

To delete profile based aim, use the **delete aim** command in profile configuration mode.

For alarm, dba, line, downstream traffic, upstream traffic and VLAN profile configuration modes

delete aim {*profile_list* | **name** *name*}

For rule and unique profile configuration modes

delete aim {*slot-num/pon-num/ont-num* | **name** *name*}

Syntax Description

index_number	The profile index number. The range is from 0 to 1023.
name	The profile name. The format is string. The string length range is fr
slot-num/pon-num/ont-num	The ONT ID. • *slot-num*: The slot number. The value is 0. • *pon-num*: The PON number. The range is fr • *ont-num*: The ONT number. The range is fr

Command Modes

Profile configuration (deploy-profile)

Usage Guidelines

A profile type and profile based aim must be created on the device.

Examples

This example show how to delete a VLAN aim configuration.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile vlan
Device(deploy-profile-vlan)# delete aim 5
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

deploy profile

To deploy a profile type, use the **deploy profile** command in global configuration mode.

deploy profile {**alarm** | **dba** | **ds-traffic** | **line** | **rule** | **unique** | **us-traffic** | **vlan**}

Syntax Description

alarm	The alarm profile.
dba	The DBA profile.
ds-traffic	The downstream traffic profile.
line	The line profile.
rule	The rule profile.
unique	The unqiue profile.
us-traffic	The upstream traffic profile.
vlan	The VLAN profile.

Command Modes

Global configuration (config)

Examples

This example shows how to deploy a line profile.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
```

Related Commands

Command	Description
aim	Creates aim based on the profile.

description

To configure an ONT description, use the **description** *ont_description* command in unique profile configuration mode. To delete an ONT description, use the **no description** *ont_description* command.

description *ont_description*

no description *ont_description*

Syntax Description

ont_description	The ONT description.

Command Modes

Unique profile configuration (deploy-profile-unique)

Usage Guidelines

A unique profile type must be configured.

Examples

This example shows how to configure an ONT description.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile unique
Device(deploy-profile-unique)# aim 0/1/1
Device(deploy-profile-unique-0/1/1)# description cisco
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

device type

To configure a device type, use the **device type** *type* command in line profile configuration mode.

device type *type*

Syntax Description

type	The ONT device type name. The name of the ONT device type should conform Specification formulated.

Command Modes

Line profile configuration (deploy-profile-line)

Usage Guidelines

A line profile type must be configured.

Modifying and activating the line traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to configure a device type.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# device type c40-100
Device(deploy-profile-line-5)# active
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

ds car bandwidth

To configure committed access rate (CAR) downlink of a GEM port, use the **ds car bandwidth** command in downlink traffic profile configuration mode.

ds car bandwidth *bandwidth_rate*

Syntax Description

bandwidth_rate	The downstream bandwidth in kbps. The value range is from 64 to 2608832.

Command Modes

Downlink traffic profile (deploy-profile-ds-traffic)

Usage Guidelines

A downlink profile type must be configured.

Modifying and activating the downlink traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to configure a GEM port

```
Device> enable
Device# configure terminal
Device(config)# deploy profile ds-traffic
Device(deploy-profile-ds-traffic)# aim 5
Device(deploy-profile-ds-traffic-5)# ds car bandwidth 1024
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

flow port default

To create a default flow rule, use the **flow** *flow_id* **port** {**eth** *port-id* | **veip** | **iphost**} **default** command. To delete a default VLAN flow rule, use the **no** form of this command.

flow *flow_id* **port** {**eth** *port-id* | **veip** | **iphost**} **default vlan** *destination_vlan_id* [*priority*]

no flow *flow_id*

Syntax Description

flow_id	The flow index. The range is from 0 to 63.
port-id	The ONT Ethernet port ID. The range is from 1 to 24.
default	Specifies the default configuration.
destination_vlan_id	The destination VLAN ID The range is from 1 to 4094.
priority	The VLAN priority. The range is from 0 to 7.

Command Modes

Line profile configuration (deploy-profile-line)

Usage Guidelines

A line profile type must be configured.

Modifying and activating the line traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to create a default VLAN flow rule.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# flow 2 port eth 3 default vlan 3 3
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

flow port etype

To create a flow rule based on ethernet frame type, use the **flow** *flow_id* **port** {**eth** *port-id* | **veip** | **iphost**} **etype** command. command. To delete a flow rule based on ethernet frame type, use the **no** form of this command.

flow *flow_id* **port** {**eth** *port-id* | **veip** | **iphost**} **etype** {**arp** | **ipoe** | **pppoe**} {**default vlan** *source_vlan_id priority* | **transparent** | **vlan** *source_vlan_id* {*priority* | **add vlan** *destination_vlan_id* [*priority*] | **keep** | **translate vlan** *destination_vlan_id* [*priority*]}}

no flow *flow_id*

Syntax Description

flow_id	The flow index. The range is from 0 to 63.
port-id	The ONT Ethernet port ID. The range is from 1 to 24.
default	Specifies the default configuration.
destination_vlan_id	The destination VLAN ID The range is from 1 to 4094.
priority	The VLAN priority. The range is from 0 to 7.
etype	Specifies user ethernet frame type a
arp	Specifies ARP as the filter type.
ipoe	Specifies IPoE as the filter type.
pppoe	Specifies PPPOE as the filter type.
source_vlan_id	The source VLAN ID The range is from 1 to 4094.
transparent	Specifies the service type as transpa
add	Adds outer service VLAN
keep	Adds trunk as the service type.
translate	Add translate as the service type.

Command Modes

Line profile configuration (deploy-profile-line)

Usage Guidelines

A line profile type must be configured.

Modifying and activating the line traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to create a translate flow rule based on ethernet frame type.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# flow 2 port iphost etype arp vlan 3 translate vlan 4 1
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

flow port transparent

To create a transparent flow rule, use the **flow** *flow_id* **port** {**eth** *port-id* | **veip** | **iphost**} **transparent** command. To delete a transparent flow rule, use the **no** form of this command.

flow *flow_id* **port** {**eth** *port-id* | **veip** | **iphost**}**transparent**

no flow *flow_id*

Syntax Description

flow_id	The flow index. The range is from 0 to 63.
port-id	The ONT Ethernet port ID. The range is from 1 to 24.
transparent	Specifies the service type as transpa

Command Modes

Line profile configuration (deploy-profile-line)

Usage Guidelines

A line profile type must be configured.

Modifying and activating the line traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to create a transparent flow rule.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# flow 2 port eth 3 transparent
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

flow port vlan

To create a VLAN flow rule, use the **flow** *flow_id* **port** {**eth** *port-id* | **veip** | **iphost**} **vlan** command. To delete a VLAN flow rule, use the **no** form of this command.

flow *flow_id* **port** {**eth** *port-id* | **veip** | **iphost**} **vlan** *source_vlan_id* {*priority* | **add vlan** *destination_vlan_id* [*priority*] | **keep** | **translate vlan** *destination_vlan_id* [*priority*]}

no flow *flow_id*

Syntax Description

flow_id	The flow index. The range is from 0 to 63.
port-id	The ONT Ethernet port ID. The range is from 1 to 24.
destination_vlan_id	The destination VLAN ID The range is from 1 to 4094.
priority	The VLAN priority. The range is from 0 to 7.
source_vlan_id	The source VLAN ID The range is from 1 to 4094.
add	Adds outer service VLAN
keep	Adds trunk as the service type.
translate	Add translate as the service type.

Command Modes

Line profile configuration (deploy-profile-line)

Usage Guidelines

A line profile type must be configured.

Modifying and activating the line traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to create a VLAN keep flow rule.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# flow 2 port eth 3 vlan 2 keep
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

gemport

To create a GEM port and configure the parameters, use the **gemport** *gem_index* **tcont** *tcont_id* command in line profile configuration mode.

For line profile configuration mode

gemport *gem_index* **tcont** *tcont_id* { **encrypt** | **vlan-profile** | **us-traffic-profile** | **ds-traffic-profile** } { *index_number* | **name** *name* }

For unique profile configuration mode.

gemport *gem_index* {**vlan-profile** | **us-traffic-profile** | **ds-traffic-profile**} {*index_number* | **name** *name*}

Syntax Description

gem_index	The GEM port index number. The range is from 1 to 1024. Curren ports can be created in each line profile.
tcont_id	The T-CONT ID to bind to the GEM port. The range is from 1 to
encrypt	Enables Advanced Encryption Standard (AES) encryption
vlan-profile	The VLAN profile.
us-traffic-profile	The upstream traffic profile.
ds-traffic-profile	The downstream traffic profile.
index_number	The index of the template. The range is from 0 to M, where M is th of ONUs supported by the whole machine.
name	The name of the template.

Command Modes

Line profile configuration (deploy-profile-line)

Usage Guidelines

A line profile type must be configured.

Modifying and activating the line traffic profile causes the ONT that references the template to go online again.

Examples

This example shows how to create a gemport and configure a T-CONT to the gemport.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
GPON(deploy-profile-line-5)# device type n40-100-1
GPON(deploy-profile-line-5)# tcont 2 profile dba 1
Device(deploy-profile-line-5)# gemport traffic-mode car
Device(deploy-profile-line-5)# gemport 2 tcont 2 vlan-profile 1
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.
gemport traffic-mode	Configures the GEM traffic mode

gemport traffic-mode

To configure the GEM traffic mode, use the **gemport traffic-mode** command in line profile configuration mode.

gemport traffic-mode {**car** | **queue**}

Syntax Description

car	Specifies committed access rate (CAR) as GEM traffic mo
queue	Specifies priority scheduling queue as GEM traffic mode.

Command Modes

Line profile configuration (deploy-profile-line)

Usage Guidelines

A line profile type must be configured.

Modifying and activating the line traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to configure the GEM port traffic mode based on queue.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# gemport traffic-mode queue
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

load keyfile

To download the key from the external key server, use the **load keyfile** command in privileged EXEC mode.

Download from a TFTP server

load keyfile {**public** | **private**} **tftp** {**inet** | **inet6**}*server_ip filename*

Download from a FTP server

load keyfile {**public** | **private**} **ftp** {**inet** | **inet6**}*server_ip filename username password*

Syntax Description

public	The public SSH key file
private	The private SSH key file
tftp	Loads the file from the TFTP server.
ftp	Loads the file from FTP server.
inet	The IPv4 address family.
inet6	The IPv6 address family
server_ip	The server IP address
filename	The key filename.
username	The FTP username
password	The FTP password.

Command Modes

Privileged EXEC (#)

Usage Guidelines

SSH must be enabled on the device.

Examples

This example shows how to download the public key from the FTP server

```
Device> enable
Device# load keyfile public ftp inet 100.100.100.11 mykey admin 123456
```

Related Commands

Command	Description
ssh	Enables SSH on an OLT.
upload keyfile	Uploads the local key to the key server.

mapping

To create GEM port mapping, use the **mapping** *index_number* in line profile configuration mode. To disable GEM port mapping, use the **no mapping** *index_number* command.

mapping *index_number* {**port** {**eth** *port_id* | **veip** | **iphost**} | **priority** *priority_value* | **vlan** *vlan_id* }**gemport** *gemport_index*

no mapping *index_number*

Syntax Description

index_number	The mapping index number. The value range is from 0 to 47.
port_id	The ONT Ethernet port ID. The range is from 1 to 24.
eth	The ONT Ethernet interface. Optional for SFU
veip	The ONT WAN interface. Optional for HGU
iphost	The ONT voice IP interface.
gemport_index	The GEM Port index number. The ranges is from 1 to 1024. Currently, only 24 GEM Ports ca line profile.
priority	The 802.1P. The range is from 0 to 7.
vlan_id	The VLAN ID The range is from 1 to 4094.

Command Modes

Line profile configuration (deploy-profile-line)

Usage Guidelines

A line profile type must be configured.

Modifying and activating the line traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to create GEM port mapping using ethernet port.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# mapping 2 port eth 3 gemport 3
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

mapping mode

To configure the GEM port mapping mode, use the **mapping mode** command in line profile configuration mode.

mapping mode {**port** | **port-priority** | **port-vlan** | **port-vlan-priority** | **priority** | **vlan** | **vlan-priority**}

Syntax Description

port	Configures port as the mapping mode.
port-priority	Configures port and 802.1p priority as the mapping
port-vlan	Configures port and VLAN as the mapping mode
port-vlan-priority	Configures port, VLAN and 802.1p priority as the r
priority	Configures 802.1p priority as the mapping mode
vlan	Configures VLAN as the mapping mode
vlan-priority	Configures VLAN and 802.1p priority as the mappi

Command Modes

Line profile configuration (deploy-profile-line)

Usage Guidelines

A line profile type must be configured.

Modifying and activating the line traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to configure the GEM port mapping mode as VLAN

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# mapping mode vlan
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

no shutdown

To enable a shutdown port, use the **no shutdown** command in interface configuration mode. To disable a port use the **shutdown** command.

no shutdown

shutdown

Command Modes

Interface configuration (config-if)

Examples

This example shows how to enable a shutdown port.

```
Device> enable
Device# configure terminal
Device(config)# interface ethernet 1/1
Device(config-if-ethernet-1/1)# no shutdown
```

ont-find distance

To configure the ONT logical distance, use the **ont-find distance** command to global configuration mode. To disable the logical distance, use the **no ont-find distance** command.

ont-find distance min *minimum_distance* **max** *maximum_distance* **interface gpon** {*slot-number/port-number* | **all**}

no ont-find distance interface gpon {*slot-number/port-number* | **all**}

Syntax Description

min *minimum_distance*	The minimum distance. The range is from 0 to 40. The defau
max *maximum_distance*	The maximum distance. The distance range is from 0 to 60. T
slot-number/port-number	*slot-number/port-number* : The port • *slot-number*: • GPON: The value is 0. • GE Ethernet: The value is • 10GE Ethernet: The value • *port-number*: • GPON: The range is from • GE Ethernet: The range is • 10GE Ethernet: The range
all	All ports.

Command Modes

Global configuration (config)

Examples

This example shows how to configure the ONT logical distance.

```
Device> enable
Device# configure terminal
Device(config)# ont-find distance min 10 max 30 interface gpon 0/1
Change the logic distance will reset the PON port, are you sure(y/n)?[n]y
Config success: 1, failed: 0.
```

Related Commands

Command	Description
ont-find interface gpon	Enables auto-discover configuration.
ont-find interval-time	Configures the auto-discover interval time.

Command	Description
ont-find list-age	Configures the auto-discover aging time.
show ont-find config	Displays information about ONT auto find configuration and other related parameters.
show ont-find list	Displays information about ONT find list.

ont-find interface gpon

To enable auto-discover configuration, use the **ont-find interface gpon** command in global configuration mode. To disable the logical distance, use the **no ont-find interface gpon** command.

ont-find interface gpon {*slot-number/port-number* | **all**}

no ont-find interface gpon {*slot-number/port-number* | **all**}

Syntax Description

slot-number/port-number	*slot-number/port-number* : The port • *slot-number*: • GPON: The value is 0. • GE Ethernet: The value is • 10GE Ethernet: The value • *port-number*: • GPON: The range is from • GE Ethernet: The range is • 10GE Ethernet: The range
all	All ports.

Command Modes

Global configuration (config)

Examples

This example shows how to enable auto-discover configuration.

```
Device> enable
Device# configure terminal
Device(config)# ont-find interface gpon 0/1
```

Related Commands

Command	Description
ont-find distance	Configures the ONT logical distance.
ont-find interval-time	Configures the auto-discover interval time.
ont-find list-age	Configures the auto-discover aging time.
show ont-find config	Displays information about ONT auto find configuration and other related parameters.
show ont-find list	Displays information about ONT find list.

ont-find interval-time

To configure the auto-discover interval time, use the **ont-find interval-time** command in global configuration mode. To disable the auto-discover interval time, use the **no ont-find interval-time** command.

ont-find interval-time *interval_time* **interface gpon** {*slot-number/port-number* | **all**}

no ont-find interface gpon {*slot-number/port-number* | **all**}

Syntax Description

interval_time	The interval time. The range is from 3 to 30. Th
all	All ports.
slot-number/port-number	*slot-number/port-number* : The port ID. • *slot-number*: • GPON: The value is 0. • GE Ethernet: The value is 1. • 10GE Ethernet: The value is 2. • *port-number*: • GPON: The range is from 1 to 8. • GE Ethernet: The range is from 1 to 4 • 10GE Ethernet: The range is from 1 t

Command Modes

Global configuration (config)

Examples

This example shows how to configure the ONT auto-discover interval time.

```
Device> enable
Device# configure terminal
Device(config)# ont-find interval-time 20 interface gpon 0/1
Config success: 1, failed: 0.
```

Related Commands

Command	Description
ont-find interface gpon	Enables auto-discover configuration.
ont-find distance	Configures the ONT logical distance.
ont-find list-age	Configures the auto-discover aging time.
show ont-find config	Displays information about ONT auto find configuration and other related parameters.
show ont-find list	Displays information about ONT find list.

ont-find list-age

To configure the auto-discover aging time, use the **ont-find list-age time** command in global configuration mode. Use the **no ont-find list-age time** command.

ont-find list-age time *aging_time* **interface gpon** {*slot-number/port-number* | **all**}

no ont-find list-age interface gpon {*slot-number/port-number* | **all**}

Syntax Description

aging_time	The discovery mode timeout time. The unit is hour. The valu 168.
slot-number/port-number	*slot-number/port-number* : The port ID. • *slot-number*: • GPON: The value is 0. • GE Ethernet: The value is 1. • 10GE Ethernet: The value is 2. • *port-number*: • GPON: The range is from 1 to 8. • GE Ethernet: The range is from 1 to 4. • 10GE Ethernet: The range is from 1 to 2.
all	All ports.

Command Modes

Global configuration (config)

Examples

This example shows how to configure the auto-discover aging time.

```
Device> enable
Device# configure terminal
Device(config)# ont-find list-age time 600 interface gpon 0/1
Config success: 1, failed: 0.
```

Related Commands

Command	Description
ont-find interface gpon	Enables auto-discover configuration.
ont-find distance	Configures the ONT logical distance.
ont-find interval-time	Configures the auto-discover interval time.
show ont-find config	Displays information about ONT auto find configuration and other related parameters.

Command	Description
show ont-find list	Displays information about ONT find list.

ont-silent auth-fail

To enable the ONT auth-fail silent configuration, use the **ont-silent auth-fail** command in global configuration mode. To disable the ONT auth-fail silent configuration, use the **no ont-silent auth-fail** command.

ont-silent auth-fail {**time** *silence_period* | **interface gpon** {*slot-number/port-number* | **all**}}

no ont-silent auth-fail interface gpon {*slot-number/port-number* | **all**}

Syntax Description

silence_period	The silent period after a failed authentication. The unit in seconds. The range is from 1 to 86400. The d
slot-number/port-number	*slot-number/port-number* : The port ID. • *slot-number*: • GPON: The value is 0. • GE Ethernet: The value is 1. • 10GE Ethernet: The value is 2. • *port-number*: • GPON: The range is from 1 to 8. • GE Ethernet: The range is from 1 to 4. • 10GE Ethernet: The range is from 1 to 2.
all	All ports.

Command Modes

Global configuration (config)

Examples

This example shows how to enable the ONT auth-fail silent configuration.

```
Device> enable
Device# configure terminal
Device(config)# ont-silent auth-fail time 40 interface gpon 0/1
Config success: 1, failed: 0.
```

Related Commands

Command	Description
ont-silent offline	Enables auto-discover configuration.

ont-silent offline

To enable the ONT offline silent configuration, use the **ont-silent offline** command in global configuration mode. To disable the ONT offline silent configuration, use the **no ont-silent offline** command.

ont-silent offline {**time** *silence_period* | **interface gpon** {*slot-number/port-number* | **all**}}

no ont-silent offline interface gpon {*slot-number/port-number* | **all**}

Syntax Description

silence_period	The silent period after a failed authentication. The unit in seconds. The range is from 1 to 86400. T
slot-number/port-number	*slot-number/port-number* : The port ID. • *slot-number*: • GPON: The value is 0. • GE Ethernet: The value is 1. • 10GE Ethernet: The value is 2. • *port-number*: • GPON: The range is from 1 to 8. • GE Ethernet: The range is from 1 to 4. • 10GE Ethernet: The range is from 1 to 2.
all	All ports.

Command Modes

Global configuration (config)

Examples

This example shows how to enable the ONT offline silent configuration.

```
Device> enable
Device# configure terminal
Device(config)# ont-silent offline time 40 interface gpon 0/1
Config success: 1, failed: 0.
```

Related Commands

Command	Description
ont-silent auth-fail	Enables ONT auth-fail silent configuration

ont auto-config

To enable ONT auto-configuration, use the **ont auto-config** command in global configuration mode. To disable ONT auto-configuration, use the **no ont auto-config** command.

ont auto-config [*index_number* **name** *name* | **name** *name*] {**all-ont** | **device-type** *device_type*}

no ont auto-config [*index_number* **name** *name* | **name** *name*] {**all-ont** | **device-type** *device_type*}

Syntax Description

index_number	The index of the template. The range is from 0 to M, where number of ONUs supported by the whole machine.
name	The name of the template.
all-ont	All ONTs.
device-type *device_type*	The device identifier. The format is in string. The range is

Command Modes

Global configuration (config)

Examples

This example shows how to enable auto-configuration.

```
Device> enable
Device# configure terminal
Device(config)# ont auto-config
Device(config)# ont auto-config 1 device-type n40-428-1h line 1
```

permit loid-lopw

To creates a logical ONT ID and logical ONT ID password permit profile, use the **permit loid-lopw** command in rule profile configuration mode.

permit loid-lopw *lopw loid* **line** {*profile_line_list* | **name** *name*} {**default line** {*index_number* | **name** *name*} | **once-on** {**no-aging** | **aging-time** *time*}}

Syntax Description

lopw	The logical ONT ID password.
loid	The logical ONT ID.
profile_line_list	The profile line list number.
index_number	The profile index number. The range is from 0 to 1023.
name	The profile name. The format is string. The string len
no-aging	Configures no timeout for discover
aging-time *time*	Configures timeout for discovery r The unit is hour. The range is from

Command Modes

Rule profile configuration (deploy-profile-rule)

Usage Guidelines

A rule profile type must be configured.

Examples

This example shows how to create a logical ONT ID permit profile and logical ONT ID password permit profile.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile rule
Device(deploy-profile-rule)# aim 0/1/1
Device(deploy-profile-rule-0/1/1)# permit loid-lopw logical1 password1 line 1 default line
 1 once-on no-aging
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

permit loid

To create a logical ONT ID permit profile, use the **permit loid** command in rule profile configuration mode.

permit loid *loid* **line** {*profile_line_list* | **name** *name*} {**default line** {*index_number* | **name** *name*} | **once-on** {**no-aging** | **aging-time** *time*}}

Syntax Description

loid	The logical ONT ID.
profile_line_list	The profile line list number.
index_number	The profile index number. The range is from 0 to 1023.
name	The profile name. The format is string. The string length
no-aging	Configures no timeout for discovery m
aging-time *time*	Configures timeout for discovery mod The unit is hour. The range is from 1 t

Command Modes

Rule profile configuration (deploy-profile-rule)

Usage Guidelines

A rule profile type must be configured.

Examples

This example shows how to create a logical ONT ID permit profile.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile rule
Device(deploy-profile-rule)# aim 0/1/1
Device(deploy-profile-rule-0/1/1)# permit loid logical1 line 1 default line 1 once-on
no-aging
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

permit lopw

To create a logical ONT ID password permit profile, use the **permit lopw** command in rule profile configuration mode.

permit lopw *lopw* **line** {*profile_line_list* | **name** *name*} {**default line** {*index_number* | **name** *name*} | **once-on** {**no-aging** | **aging-time** *time*}}

Syntax Description

lopw	The logical ONT ID password.
profile_line_list	The profile line list number.
index_number	The profile index number. The range is from 0 to 1023.
name	The profile name. The format is string. The string len
no-aging	Configures no timeout for discover
aging-time *time*	Configures timeout for discovery r The unit is hour. The range is from

Command Modes

Rule profile configuration (deploy-profile-rule)

Examples

This example shows how to create a logical ONT ID password permit profile.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile rule
Device(deploy-profile-rule)# aim 0/1/1
Device(deploy-profile-rule-0/1/1)# permit lopw password1 line 1 default line 1 once-on
no-aging
```

permit pw

To create a password permit profile, use the **permit pw** command in rule profile configuration mode.

permit pw {**string** *string_password* | **hex** *hex_password*}**line** {*profile_line_list* | **name** *name*} {**default line** {*index_number* | **name** *name*} | **once-on** {**no-aging** | **aging-time** *time*}}

Syntax Description

string_password	The ONT password in Hex.
hex_password	The ONT password in string.
profile_line_list	The profile line list number.
index_number	The profile index number. The range is from 0 to 1023.
name	The profile name. The format is string. The string length
no-aging	Configures no timeout for discovery m
aging-time *time*	Configures timeout for discovery mod The unit is hour. The range is from 1 t

Command Modes

Rule profile configuration (deploy-profile-rule)

Usage Guidelines

A rule profile type must be configured.

Examples

This example shows how to create a password permit profile.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile rule
Device(deploy-profile-rule)# aim 0/1/1
Device(deploy-profile-rule-0/1/1)# permit pw string password1 line 1 default line 1
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

permit sn-pw

To create a serial number and password permit profile, use the **permit sn-pw** command in rule profile configuration mode.

permit sn-pw {**string-hex** *string_serial_number* | **hex** *hex_serial_number*} {**string** *string_password* | **hex** *hex_password*}**line** {*profile_line_list* | **name** *name*}**default line** {*index_number* | **name** *name*}

Syntax Description

hex_serial_number	The ONT serial number in Hex.
string_serial_number	The ONT serial number in string.
string_password	The ONT password in Hex.
hex_password	The ONT password in string.
profile_line_list	The profile line list number.
index_number	The profile index number. The range is from 0 to 1023.
name	The profile name. The format is string. The string leng

Command Modes

Rule profile configuration (deploy-profile-rule)

Usage Guidelines

A rule profile type must be configured.

Examples

This example shows how to create a serial number and password permit profile.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile rule
Device(deploy-profile-rule)# aim 0/1/1
Device(deploy-profile-rule-0/1/1)# permit sn-pw string-hex GPON-1790032e string password1
line 1 default line 1
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

permit sn

To create a serial number permit profile, use the **permit sn** command in rule profile configuration mode.

permit sn {**string-hex** *string_serial_number* | **hex** *hex_serial_number*}**line** {*profile_line_list* | **name** *name*}**default line** {*index_number* | **name** *name*}

Syntax Description

hex_serial_number	The ONT serial number in Hex.
string_serial_number	The ONT serial number in string.
profile_line_list	The profile line list number.
index_number	The profile index number. The range is from 0 to 1023.
name	The profile name. The format is string. The string length

Command Modes

Rule profile configuration (deploy-profile-rule)

Usage Guidelines

A rule profile type must be configured.

Examples

This example shows how to create a ONT serial number permit profile.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile rule
Device(deploy-profile-rule)# aim 0/1/1
Device(deploy-profile-rule-0/1/1)# permit sn string-hex GPON-1790032e line 1 default line
1
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

show alarm ont register-record

To display information about register record alarm of an ONT, use the **show alarm ont register-record** command in privileged EXEC or global configuration mode.

show alarm ont register-record

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view information about register record alarm of an ONT

```
Device> enable
Device# configure terminal
Device(config)# show alarm ont register-record
register ont record threshold alarm status : enable
register ont record threshold value        : 64
register ont record current value          :
gpon port 0/1 : 1(normal)
gpon port 0/2 : 0(normal)
gpon port 0/3 : 0(normal)
gpon port 0/4 : 0(normal)
gpon port 0/5 : 0(normal)
gpon port 0/6 : 0(normal)
gpon port 0/7 : 0(normal)
gpon port 0/8 : 0(normal)
```

show keyfile

To display the key file information, use the **show keyfile** command in privileged EXEC or global configuration mode.

show keyfile {**public** | **private**}

Syntax Description

public	The SSH public key file.
private	The SSH private key file.

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view the key file information

```
Device> enable
Device# show keyfile public
```

show ont-find config

To display information about ONT auto find configuration, use the **show ont-find config** command in privileged EXEC or global configuration mode.

show ont-find config interface gpon {*port_list* | **all**}

Syntax Description

port_list	The GPON port.
all	All ports.

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view information about ONT auto find configuration.

```
Device> enable
Device# configure terminal
Device(config)# show ont-find config interface gpon 0/1
Port  Find    Find-interval  Age     Aging-time  D-min  D-max
g0/1  enable  10             enable  600         0      20
```

show ont-find list

To display information about ONT find list, use the **show ont-find list** command in privileged EXEC or global configuration mode.

show ont-find list {**interface gpon** {*slot-number/port-number* | **all**} | **sn** {**string-hex** *string_serial_number* | **hex** *hex_serial_number*}}

Syntax Description

slot-number/port-number	The port ID. • *slot-number*: • GPON: The value is 0. • GE Ethernet: The value is 1. • 10GE Ethernet: The value is • *port-number*: • GPON: The range is from 1 t • GE Ethernet: The range is fro • 10GE Ethernet: The range is
all	All ports.
hex_serial_number	The ONT serial number in Hex.
string_serial_number	The ONT serial number in string.

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view information about ONT find list

```
Device> enable
Device# configure terminal
Device(config)# show ont-find list interface gpon 0/1
```

show ont-silent config

To display information about ONT silent function, use the **show ont-silent config** command in privileged EXEC or global configuration mode.

show ont-silent config interface gpon {*port_list* | **all**}

Syntax Description

port_list	The GPON port.
all	All ports.

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view the information about ONT silent function.

```
Device> enable
Device# configure terminal
Device(config)# show ont-silent config interface gpon 0/1
Port  Auth-fail  time  Offline  time
g0/1  enable     40    disable  -
```

show ont-silent list

To display information about silent ONT, use the **show ont-silent list** command in privileged EXEC or global configuration mode.

show ont-silent list {**interface gpon** {*slot-number/port-number* | **all**} | **sn** {**string-hex** *string_serial_number* | **hex** *hex_serial_number*}}

Syntax Description

slot-number/port-number	The port ID. • *slot-number*: • GPON: The value is 0. • GE Ethernet: The value is 1. • 10GE Ethernet: The value is • *port-number*: • GPON: The range is from 1 t • GE Ethernet: The range is fro • 10GE Ethernet: The range is
all	All ports.
hex_serial_number	The ONT serial number in Hex.
string_serial_number	The ONT serial number in string.

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view the information about silent ONT.

```
Device> enable
Device# configure terminal
Device(config)# show ont-silent list interface gpon 0/1
```

show ont brief count

To display brief information about an ONT interface, use the **show ont brief count** command in privileged EXEC or global configuration mode.

show ont brief count interface interface gpon {*slot-number/port-number* | **all**}

Syntax Description

slot-number/port-number	The port ID. • *slot-number*: • GPON: The value is 0. • GE Ethernet: The value is 1. • 10GE Ethernet: The value is 2 • *port-number*: • GPON: The range is from 1 to • GE Ethernet: The range is fro • 10GE Ethernet: The range is f
all	All ports.

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view the brief information about an ONT interface.

```
Device> enable
Device# configure terminal
Device(config)# show ont brief count interface gpon 0/1
Port  Online-num  Offline-num  Total
g0/1  1           4            5
Total entries: 1.
```

show ont description

To display the description of an ONT, use the **show ont description** command in privileged EXEC or global configuration mode.

show ont description {*slot-num/pon-num/ont-num* | **interface gpon** *slot-number/port-number* }

Syntax Description

slot-num/pon-num/ont-num	The ONT ID. • *slot-num*: The slot number. The value is 0. • *pon-num*: The PON number. The range is from 1 to • *ont-num*: The ONT number. The range is from 1 to

slot-number/port-number	The port ID.
	• *slot-number*:
	  • GPON: The value is 0.
	  • GE Ethernet: The value is 1.
	  • 10GE Ethernet: The value is 2.
	• *port-number*:
	  • GPON: The range is from 1 to 8.
	  • GE Ethernet: The range is from 1 to 4.
	  • 10GE Ethernet: The range is from 1 to 2.

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view the description of an ONT

```
Device> enable
Device# configure terminal
Device(config)# show ont description interface gpon 0/1
```

show ont info

To display detailed information about an ONT, use the **show ont info** command in privileged EXEC or global configuration mode.

show ont info *slot-num/pon-num/ont-num*

Syntax Description

slot-num/pon-num/ont-num	The ONT ID. • *slot-num*: The slot number. The value is 0. • *pon-num*: The PON number. The range is fron • *ont-num*: The ONT number. The range is from

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view detailed information about an ONT

```
Device> enable
Device# configure terminal
Device(config)# show ont info 0/1/5
ONT                              :   0/1/5
Description                      :   -
TYPE                             :   -
Status                           :   online
Distance(m)                      :   3
Vendor ID                        :   CSCO
Software Version                 :   1.1.2.5/1.1.2.6
Firmware Version                 :   N40-428-1
Equipment ID                     :   4GE-POE-2POTS-CATV
SN                               :   GPON-5aa7012a
Password                         :   123456
LOID                             :   000a5aa7012a
LOID Password                    :   a7012a
Uplink PON ports                 :   1
ETH/POTS/TDM/MOCA ports          :   4/2/0/0
CATV ANI/UNI ports               :   0/1
T-CONTs/GEM ports                :   31/127
Traffic Schedulers               :   31
PQs in T-CONT 1-8                :   8/8/8/8/8/8/8/8
DBA method                       :   NSR
IP configuration                 :   not support
Type of flow control             :   GEMPORT CAR and PQ SCHEDULED
TX power cut off                 :   Not Support
Online/Offline time              :   05:04:03   2001/12/08
Up/Down time                     :   1 day(s) 17 hour(s) 34 minute(s)
```

show ssh

To display SSH configuration, use the **show ssh** command in privileged EXEC or global configuration mode.

show ssh

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view the SSH configuration

```
Device> enable
Device# show ssh
ssh version  : 2.0
ssh state    : on
ssh key file : available
```

show ssh limit

To display the maximum number of the users, use the **show ssh limit** command in privileged EXEC or global configuration mode.

show ssh limit

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to view the maximum number of the users.

```
Device> enable
Device# show ssh limit
SSH user limit is 5, current is 0.
```

show telnet

To display the telnet information, use the **show telnet** command in privileged EXEC or global configuration mode.

show telnet

Command Modes

Privileged EXEC (#)

Global configuration (config)

Examples

This example shows how to display the telnet information.

```
Device> enable
Device# configure terminal
Device(config)# show telnet
Telnet service port is 23, using port is 23, user limit is 5, current is 1.
```

sip agent

To configure the SIP proxy server, use the **sip agent proxy-server** command in unique profile configuration mode. To disable the SIP proxy server, use the **no sip agent proxy-server** command.

sip agent proxy-server *proxy_server_uri* {**outbound-proxy** | **registrar-server** | **signal-port** }*proxy_server_uri*

no sip agent

Syntax Description

proxy_server_uri	The proxy server URI.
outbound-proxy	The outbound proxy.
registrar-server	The registrar server.
signal-port	The signal port.

Command Modes

Unique profile configuration (deploy-profile-unique)

Usage Guidelines

A unique profile type must be configured.

Examples

This example shows how to configure the SIP proxy server.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile unique
Device(deploy-profile-unique)# aim 0/1/1
Device(deploy-profile-unique-0/1/1)# sip agent proxy-server 2
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

sip digitmap

To configure the SIP digit map, use the **sip digitmap** command in unique profile configuration mode.

sip digitmap dial-plan-id *dial_plan_id* **dial-plan-token** *token*

Syntax Description

dial_plan_id	The digit map index The range is from 1 to 10.
token	The token

Command Modes

Unique profile configuration (deploy-profile-unique)

Usage Guidelines

A unique profile type must be configured.

Examples

This example shows how to configure the SIP digit map.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile unique
Device(deploy-profile-unique)# aim 0/1/1
Device(deploy-profile-unique-0/1/1)# sip digitmap dial-plan-id 3 dial-plan-token token1
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

sip user

To configure the SIP users, use the **sip user** *user_id* command in unique profile configuration mode. To disable SIP users, use the **no sip user** *user_id* command.

sip user *pots_number* {**name** *username* **password** *password* | **telno** *telephone_number*}

no sip user *pots_number*

Syntax Description

pots_number	The ONT POTS port number. The value range is from 1 to 2
username	The SIP username. The username length is from 1 to 25.
password	The SIP password. The password length is from 1 to 25
telephone_number	The ONT local phone number. The digit length is from 1 to 25.

Command Modes

Unique profile configuration (deploy-profile-unique)

Usage Guidelines

A unique profile type must be configured.

Examples

This example shows how to configure the SIP users

```
Device> enable
Device# configure terminal
Device(config)# deploy profile unique
Device(deploy-profile-unique)# aim 0/1/1
Device(deploy-profile-unique-0/1/1)# sip user 2 name user 1 password 123
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

sip user mode

To configure a SIP inteface, use the **sip user mode** command in unique profile configuration mode. To disable a SIP interface, use the **no sip user mode** command.

sip user mode { **static ip-address** *ip_address* **mask** *mask* **gateway** *gateway_address* **primary-dns** *primary_dns_address* **secondary-dns** *secondary_dns_address* | **dhcp** } **vlan** *vlan_id* *priority* **host** *host_number*

no sip user mode

Syntax Description

ip-address *ip_address*	The IP addr
mask *mask*	The IP netw
gateway *gateway_address*	The gatewa
primary-dns *primary_dns_address*	The primary
secondary-dns *secondary_dns_address*	The seconda
vlan *vlan_id*	The VLAN The range is
priority	The priority The range is
host *host_number*	The host nu The host nu host.

Command Modes

Unique profile configuration (deploy-profile-unique)

Usage Guidelines

A unique profile type must be configured.

Examples

This example shows how to configure an SIP inteface

```
Device> enable
Device# configure terminal
Device(config)# deploy profile unique
Device(deploy-profile-unique)# aim 0/1/1
Device(deploy-profile-unique-0/1/1)# sip user mode dhcp vlan 2 4 host 1
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

snmp-server

To enable the snmp server to send traps or disable the snmp server, use the **snmp-server** command in global configuration mode.

snmp-server {**enable** | **disable**}

Syntax Description

enable	Enables the snmp server to send traps.
disable	Disables the snp server.

Command Modes

Global configuration (config)

Examples

This example shows how to disable the snmp server.

```
Device> enable
Device# configure terminal
Device(config)# snmp-server disable
```

ssh

To enable SSH, use the **ssh** command in global configuration mode. To disable SSH, use the **no ssh** command.

ssh

no ssh

Command Modes

Global configuration (config)

Examples

This example shows how to enable SSH.

```
Device> enable
Device# configure terminal
Device(config)# ssh
Config SSH state successfully.
```

Related Commands

Command	Description
ssh limit *value*	Limits the number of user logins on SSH.
stop vty {*vty_list* |**all**}	Removes logged in users.
crypto key	Configures or removes a key.
upload keyfile	Uploads the local key to the key server
load keyfile	Downloads the key from the external key server

ssh limit

To limit the number of user logins on SSH, use the **ssh limit** command in global configuration mode.

ssh limit *value*

Syntax Description

value	The user login limit value. The range is 0-5.

Command Modes

Global configuration (config)

Usage Guidelines

SSH must be enabled on the device.

Examples

This example shows how to limit the number of user logins on SSH.

```
Device> enable
Device# configure terminal
Device(config)# ssh limit 5
```

Related Commands

Command	Description
aim	Creates .

stop telnet client

To remove logged in Telnet clients, use the **stop telnet client** command in privileged EXEC mode.

stop telnet client {*terminal_id* | **all**}

Syntax Description

terminal_id	Telnet clients logged in through a particular termin
all	All Telnet clients.

Command Modes

Privileged EXEC (#)

Usage Guidelines

Use this command on the OLT configured as the Telnet server.

Examples

This example shows how to remove logged in Telnet clients

```
Device> enable
Device# stop telnet client all
Stop all telnet clients successfully.
```

Related Commands

Command	Description
telnet enable	Enables Telnet on a OLT and configures the OLT as the Telnet server.

stop vty

To remove logged in users, use the **stop vty** command in privileged EXEC mode.

stop vty {*vty_list* | **all**}

Syntax Description

vty_list	Users on the vty list only
all	All logged in users.

Command Modes

Privileged EXEC (#)

Usage Guidelines

SSH must be enabled on the device.

Examples

This example shows how to remove logged in users.

```
Device> enable
Device# stop vty 3
```

Related Commands

Command	Description
ssh	Enables SSH on an OLT.

tcont *tcont_id*

To create a transmission container (T-CONT), use the **tcont** *tcont_id* command in line profile configuration mode. To delete a T-CONT, use the **no tcont** *tcont_id* command.

tcont *tcont_id* **profile dba** {*index_number* | **name** *name*}

no tcont *tcont_id*

Syntax Description

tcont_id	The T-CONT ID. The range is from 1 to 8.
index_number	The index of the template. The range is from 0 to M, where M supported by the whole machine.
name	The name of the template.

Command Modes

Line profile configuration (deploy-profile-line)

Usage Guidelines

A line profile type must be configured.

Modifying and activating the line traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to create a T-CONT.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile line
Device(deploy-profile-line)# aim 5
Device(deploy-profile-line-5)# tcont 6 profile dba 100
Device(deploy-profile-line-5)# active
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

telnet disable

To disable Telnet on an OLT, use the **telnet disable** command in global configuration mode.

telnet disable

Command Modes

Global configuration (config)

Usage Guidelines

Use this command on the OLT configured as the Telnet server.

Examples

This example shows how to disable Telnet on an OLT.

```
Device> enable
Device# configure terminal
Device(config)# telnet disable
```

Related Commands

Command	Description
telnet enable	Enables Telnet on a OLT and configures the OLT as the Telnet server.

telnet enable

To enable Telnet on an OLT and configures the OLT as the Telnet server , use the **telnet enable** command in global configuration mode.

telnet enable

Command Modes

Global configuration (config)

Examples

This example shows how to enable Telnet on an OLT

```
Device> enable
Device# configure terminal
Device(config)# telnet enable
```

Related Commands

Command	Description
telnet disable	Disables Telnet on an OLT.
telnet limit *value*	Limits the number of users that can login to the Telnet server.
timeout *value*	Enables the client timeout and configures the timeout value.
stop telnet client {*terminal_id* |**all**}	Removes logged in Telnet clients.

telnet limit

To limit the number of users that can login to the Telnet server, use the **telnet limit** command in global configuration mode.

telnet limit *value*

Syntax Description

value	The limit of the number of users. The range is 0-5.

Command Modes

Global configuration (config)

Usage Guidelines

Use this command on the OLT configured as the Telnet server.

Examples

This example shows how to limit the number of users that can login to the Telnet server.

```
Device> enable
Device# configure terminal
Device(config)# telnet limit 3
```

Related Commands

Command	Description
telnet enable	Enables Telnet on a OLT and configures the OLT as the Telnet server.

telnet *server-ip*

To login to the Telnet server, use the **telnet** *server-ip* command in Privileged EXEC mode.

telnet *server-ip* {*port-number* | **/localecho**}

Syntax Description

server-ip	The Telnet server IP address
port-number	The port number.
/localecho	

Command Modes

Privileged EXEC (#)

Examples

This example shows how to login to the Telnet server.

```
Device> enable
Device# telnet 100.100.100.1
```

Related Commands

Command	Description
telnetclient timeout *value*	Enables client timeout and configures the timeout interval.

telnetclient timeout

To enable client timeout , use the **telnetclient timeout** command in global configuration mode. To disable client timeout, use the **no telnetclient timeout** command.

telnetclient timeout [*value*]

no telnetclient timeout

Syntax Description

value	The system idle timeout value. The unit is minutes. The range is from 1 to 480.

Command Modes

Global configuration (config)

Usage Guidelines

Use this command on the OLT configured as the Telnet client. To enable client timeout, use the **telnetclient** command in global configuration mode. To configure the timeout interval, use the **telnetclient** *value* command.

Examples

This example shows how to enable client timeout.

```
Device> enable
Device# configure terminal
Device(config)# telnetclient timeout
```

Related Commands

Command	Description
telnet *server-ip*	Logins to the Telnet server

timeout

To enable the client timeout, use the **timeout** command in privileged EXEC mode. To disable the client timeout function, use the **no timeout** command.

timeout *value*

no timeout

Syntax Description

value	The system idle timeout value. The unit is minutes. The range is from 1 to 480.

Command Modes

Privileged EXEC (#)

Usage Guidelines

Use this command on the OLT configured as the Telnet server. To enable the client timeout, use the **timeout** command. To configure the client timeout value, use the **timeout** *value* command.

Examples

This example shows how to configure a client timeout interval of 30 minutes.

```
Device> enable
Device# timeout 30
```

Related Commands

Command	Description
telnet enable	Enables Telnet on a OLT and configures the OLT as the Telnet server.

translate old-vlan

To configure the VLAN translate rule, use the **translate old-vlan** command in VLAN profile configuration mode. To disable the **no translate old-vlan** command.

translate old-vlan *vlan_id* {*priority* | **new-vlan** *vlan_id* [*priority*]}

no translate old-vlan *vlan_id* [*priority*]

Syntax Description

priority	The priority value. The range is from 0 to 7.
vlan_id	The VLAN ID The range is from 1 to 4094.

Command Modes

VLAN profile configuration (deploy-profile-vlan)

Usage Guidelines

A VLAN profile type must be configured.

Modifying and activating the VLAN template will cause the ONT that references the template to go online again.

Examples

This example shows how to configure the VLAN translate rule

```
Device> enable
Device# configure terminal
Device(config)# deploy profile vlan
Device(deploy-profile-vlan)# aim 5
Device(deploy-profile-vlan-5)# translate old-vlan 2 2 new-vlan 10 5
Device(deploy-profile-vlan-5)# active
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

type 1 fix

To configure only a fixed bandwidth, use the **type 1 fix** *fixed_bandwidth* command in DBA profile configuration mode.

type 1 fix *fixed_bandwidth*

Syntax Description

fixed_bandwidth	The fixed bandwidth in kbps. The range is fro The fixed bandwidth must be divisible by 64 k

Command Modes

DBA profile configuration (deploy-profile-dba)

Usage Guidelines

Type 1 T-CONT is preferred for services that are sensitive to the data forwarding delay. For example, VoIP services.

A DBA profile type must be configured.

Modifying and activating the DBA profile will cause the ONT that references the template to go online again.

Examples

This example shows how to configure type 1 T-CONT.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile dba
Device(deploy-profile-dba)# aim 5
Device(deploy-profile-dba-5)# type 1 fix 1024
Device(deploy-profile-dba-5)# active
```

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

type 2

To configure only the assured bandwidth, use the **type 2 assured** *assured_bandwidth* command in DBA profile configuration mode.

type 2 assured *assured_bandwidth*

Syntax Description

assured_bandwidth	The assured bandwidth in kbps. The rang The assured bandwidth must be divisible

Command Modes

DBA profile configuration (deploy-profile-dba)

Usage Guidelines

Type 2 T-CONT is preferred for services without strict delay and jitter requirements. For example, IPTV multicast services.

A DBA profile type must be configured.

Modifying and activating the DBA profile will cause the ONT that references the template to go online again.

Examples

This example shows how to configure type 2 T-CONT.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile dba
Device(deploy-profile-dba)# aim 5
Device(deploy-profile-dba-5)# type 2 assured 1024
Device(deploy-profile-dba-5)# active
```

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

type 3

To configure both assured bandwidth and non-assured bandwidth, use the **type 3 assured** *assured_bandwidth* **max** *max_bandwidth* command in DBA profile configuration mode.

type 3 assured *assured_bandwidth* **max** *max_bandwidth*

Syntax Description

assured_bandwidth	The assured bandwidth in kbps. The range is The assured bandwidth must be divisible by
max_bandwidth	The maximum bandwidth in kbps. The range The maximum bandwidth must be divisible

Command Modes

DBA profile configuration (deploy-profile-dba)

Usage Guidelines

Type 3 T-CONT is preferred for services with variable-rate burst traffic.

A DBA profile type must be configured.

Modifying and activating the DBA profile will cause the ONT that references the template to go online again.

Examples

This example show how to configure both assured bandwidth and non-assured bandwidth.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile dba
Device(deploy-profile-dba)# aim 5
Device(deploy-profile-dba-5)# type 3 assured 1024 max 2500
Device(deploy-profile-dba-5)# active
```

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

type 4

To configure the optimum bandwidth, use the **type 4 max** *max_bandwidth* command in DBA profile configuration mode.

type 4 max *max_bandwidth*

Syntax Description

max_bandwidth	The maximum bandwidth in kbps. The range The maximum bandwidth must be divisible b

Command Modes

DBA profile configuration (deploy-profile-dba)

Usage Guidelines

Type 4 T-CONT is preferred for services with variable-rate burst traffic which does not exhibit delay sensitivity. For example, internet data services.

A DBA profile type must be configured.

Modifying and activating the DBA profile will cause the ONT that references the template to go online again.

Examples

This example show how to configure the optimum bandwidth.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile dba
Device(deploy-profile-dba)# aim 5
Device(deploy-profile-dba-5)# type 4 max 1024
Device(deploy-profile-dba-5)# active
```

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

type 5

To configure a combination of fixed, assured and best-effort bandwidth, use the **type 5 fix** *fixed_bandwidth* **assured** *assured_bandwidth* **max** *max_bandwidth* command in DBA profile configuration mode.

type 5 fix *fixed_bandwidth* **assured** *assured_bandwidth* **max** *max_bandwidth*

Syntax Description

fixed_bandwidth	The fixed bandwidth in kbps. The range The fixed bandwidth must be divisible b
assured_bandwidth	The assured bandwidth in kbps. The ran The assured bandwidth must be divisible
max_bandwidth	The maximum bandwidth in kbps. The r The maximum bandwidth must be divis kbps.

Command Modes

DBA profile configuration (deploy-profile-dba)

Usage Guidelines

Type 5 T-CONT is preferred for services with general traffic.

A DBA profile type must be configured.

Modifying and activating the DBA profile will cause the ONT that references the template to go online again.

Examples

This example show how to configure a combination of fixed, assured and best-effort bandwidth

```
Device> enable
Device# configure terminal
Device(config)# deploy profile dba
Device(deploy-profile-dba)# aim 5
Device(deploy-profile-dba-5)# type 5 fix 1024 assured 1024 max 2048
Device(deploy-profile-dba-5)# active
```

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

upload keyfile

To upload the local key to the key server, use the **upload keyfile** command in privileged EXEC mode.

Upload to a TFTP server

upload keyfile {**public** | **private**} **tftp** {**inet** | **inet6**} *server_ip filename*

Upload to a FTP server

upload keyfile {**public** | **private**} **ftp** {**inet** | **inet6**}*server_ip filename*

Syntax Description

public	The public SSH key file
private	The private SSH key file
tftp	Loads the file from the TFTP server.
ftp	Loads the file from FTP server.
inet	The IPv4 address family.
inet6	The IPv6 address family
server_ip	The server IP address
filename	The key filena,e.

Command Modes

Privileged EXEC (#)

Usage Guidelines

SSH must be enabled on the device.

Examples

This example shows how to upload the local key to the FTP server

```
Device> enable
Device# upload keyfile public ftp inet 100.100.100.1 mykey  admin 123456
```

Related Commands

Command	Description
ssh	Enables SSH on an OLT.
load keyfile	Downloads the key from the external key server

us car

To configures GEM port traffic control, use the **us car cir** *cir* **cbs** *cbs* **pir** *pir* **pbs** *pbs* command in uplink traffic profile configuration mode.

us car cir *cir* **cbs** *cbs* **pir** *pir* **pbs** *pbs*

Syntax Description

cir *cir*	The committed information rate in k The range is from 64 to 800000
cbs *cbs*	The committed burst size in KB. The range is from 2 to 25000.
pir *pir*	The peak information rate in kbps. The range is from 64 to 1024000.
pbs *pbs*	The peak burst size in KB. The range is from 2 to 25000.

Command Modes

Uplink traffic profile (deploy-profile-us-traffic)

Usage Guidelines

An uplink profile type must be configured.

The peak information rate requirement is greater than or equal to committed information rate.

Modifying and activating the uplink traffic profile will cause the ONT that references the template to go online again.

Examples

This example shows how to configures GEM port traffic control.

```
Device> enable
Device# configure terminal
Device(config)# deploy profile us-traffic
Device(deploy-profile-us-traffic)# aim 5
Device(deploy-profile-us-traffic-5)# us queue 1
Device(deploy-profile-us-traffic-5)# us car cir 128 cbs 1024 pir 128 pbs 24
Device(deploy-profile-us-traffic-5)# active
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

us queue

To configure GEM port queue priority, use the **us queue** command in uplink traffic profile configuration mode.

us queue *priority_queue*

Syntax Description

priority_queue	The priority queue. The range is from 0 to 7.

Command Modes

Uplink traffic profile (deploy-profile-us-traffic)

Usage Guidelines

An uplink profile type must be configured.

Examples

This example shows how to configure GEM port queue priority

```
Device> enable
Device# configure terminal
Device(config)# deploy profile us-traffic
Device(deploy-profile-us-traffic)# aim 5
Device(deploy-profile-us-traffic-5)# us queue 1
```

Related Commands

Command	Description
deploy profile	Deploys a profile type
aim	Creates aim based on the profile.

us queue