22- VLAN Configuration Commands

22.1 VLAN Configuration Command Tree

Description

This chapter gives an overview of nodes that are handled by "VLAN Configuration Commands".

Command Tree

----configure
----vlan
- [no] broadcast-frames
- priority-policy

----vmac-address-format
- host-id

----[no] id
- **(vlanid)**
- [no] name
- mode
- [no] sntp-proxy
- [no] priority
- [no] vmac-translation
- [no] vmac-dnstr-filter
- [no] vmac-not-in-opt61
- [no] new-broadcast
- [no] protocol-filter
- [no] pppoe-relay-tag

X [no] dhcp-opt-82
- [no] dhcp-opt82-ext
- [no] dhcp-opt82-nni
- [no] dhcp-opt82-uplink
- [no] circuit-id-dhcp
- [no] remote-id-dhcp
- [no] relay-id-dhcp
- [no] dhcp-linerate
- [no] pppoe-linerate
- [no] dhcpv6-linerate
- [no] pppoe-l2-encaps
- [no] dhcp-l2-encaps
- [no] dhcpv6-l2-encaps
- [no] l2-encaps1
- [no] pppoer-vlanaware
- [no] dhcpr-vlanaware
- [no] dhcpv6r-vlanaware
- [no] drly-srv-usr-side
- [no] circuit-id-pppoe
- [no] remote-id-pppoe
- [no] new-secure-fwd
- [no] aging-time
- [no] l2cp-transparent
- [no] dhcpv6-itf-id
- [no] dhcpv6-remote-id
- [no] dhcpv6-relay-id
- [no] dhcpv6-trst-port

- [no] enterprise-number
- [no] icmpv6-sec-fltr
- [no] in-qos-prof-name
- [no] ipv4-mcast-ctrl
- [no] ipv6-mcast-ctrl
- [no] mac-mcast-ctrl
- [no] dis-proto-rip
- [no] proto-ntp
- [no] dis-ip-antispoof
- [no] unknown-unicast
- [no] pt2ptgem-flooding
- [no] mac-movement-ctrl
- [no] cvlan4095passthru
- [no] arp-snooping
- [no] arp-polling
- [no] arp-polling-ip
- [no] mac-unauth

----[no] unicast-mac

- **(unicast-mac)**
- **vlan-id**
- forward-port

----[no] vlan-port

- **(port)**
- **unicast-mac**

----[no] port-protocol

- **(port)**
- **protocol-group**
- vlan-id
- priority

----pbit-statistics

----[no] port

- **(vlan-port)**
- **min-dot1p**
- **max-dot1p**

----[no] priority-regen

- **(profile-idx)**
- profile-name
- [no] pbit0
- [no] pbit1
- [no] pbit2
- [no] pbit3
- [no] pbit4
- [no] pbit5
- [no] pbit6
- [no] pbit7

22.2 VLAN General Configuration Command

Command Description

This command allows the operator to specify VLAN parameters that are globally applicable to VLANs:

- broadcast-frames : applies to VLANs of type residential bridge.when configured,broadcasting of frames is configurable on a per vlan basis, when the parameter is configured as "no broadcast-frames", downstream broadcast is disabled globally for all vlans.

- priority-policy : applies to VLANs of type residential bridge, cross-connect and QoS-aware.Indicates if the priority of upstream frames is selected from the vlan (pvid) or port-default.This configuration is only applicable for untagged user traffic.

User Level

The command can be accessed by operators with vlan privileges, and executed by operators with vlan privileges.

Command Syntax

The command has the following syntax:

> configure vlan [[no] broadcast-frames] priority-policy <Vlan::PriorityMap>

Command Parameters

Table 22.2-2 "VLAN General Configuration Command" Command Parameters

Parameter	Type	Description
[no] broadcast-frames	Parameter type: boolean	*optional parameter* broadcasting of frames is configurable per vlan
priority-policy	Parameter type: <Vlan::PriorityMap> Format: (vlan-specific | port-default) Possible values: - vlan-specific : the priority of the vlan - port-default : the default priority of the port	*optional parameter* specifies how to deal with ethernet priority of the upstream frames

22.3 Virtual MAC Configuration Command

Command Description

This command allows the user to configure the format in which a virtual MAC address is defined.

User Level

The command can be accessed by operators with vlan privileges, and executed by operators with vlan privileges.

Command Syntax

The command has the following syntax:

> configure vlan vmac-address-format [host-id <Vlan::vmacUniqueHostID>]

Command Parameters

Table 22.3-2 "Virtual MAC Configuration Command" Command Parameters

Parameter	Type	Description
host-id	Parameter type: <Vlan::vmacUniqueHostID> Format: - A unique host Id within an EMAN connected to the same IP edges. Maximum supported value in GPON is 65535. - range: [1...524287]	*optional parameter* Value of vMac unique host ID.

22.4 VLAN Configuration Command

Command Description

This command allows the operator to specify a VLAN and its attributes.

The VLAN numbering space is the concatenation of a Service Provider VLAN, say S-VLAN-ID, and a Customer VLAN, say C-VLAN-ID. Remark that the S-VLAN-ID is assumed to be unique.

The VLAN-ID value "0" - which is not a valid VLAN-tag value - is used to indicate "not applicable". The value 4097 should not be used as a valid forwarding VLAN.

Following convention applies:

- S-VLAN is identified as (S-VLAN-ID, C-VLAN-ID=0)

- unstacked C-VLAN identified as (C-VLAN-ID>0)

- the S-VLAN is absent or not applicable

- C-VLAN-ID > 0. A constraint exists for VLAN 1: it is reserved as the VLAN-unaware bridge. This VLAN is managed as any other VLAN (i.e. it can be created, modified, removed) but it must be a residential bridged VLAN.

- stacked C-VLAN is identified as (S-VLAN-ID>1, C-VLAN-ID>1)

- RIP will be enabled automatically by default during the creation of VLAN.

The following combination is not allowed:pppoe-relay-tag=configurable, while circuit-id-pppoe and remote-id-pppoe are both disable or customer-id or physical-id.

The circuit-id-pppoe and remote-id-pppoe take effect when the pppoe-relay-tag is configurable.

The pppoe-l2-encaps take effect when the pppoe-relay-tag is true or configurable.

- relay-id-dhcp: This parameter is used to enable/disable relay-id for DHCPv4.

The circuit-id-dhcp, remote-id-dhcp, relay-id-dhcp, dhcp-linerate and dhcp-l2-encaps take effect when the dhcp-opt-82 is true or dhcp-opt82-ext or dhcp-opt82-nni or dhcp-opt82-uplink is enable or add-or-replace or add-or-forward.

- pppoe-l2-encaps: This controls insertion of access loop encapsulation sub-options part of PPPoE relay tag - Refer to (R-164 in TR101) - Datalink byte: ATM or Ethernet autogenerated according to actual encapsulation - Encaps 1 byte : configurable (see further down) - Encaps 2 byte : fixed as NA

- dhcp-l2-encaps: This controls insertion of access loop encapsulation sub-options part of DHCP option 82 - Refer to (R-164 in TR101) - Datalink byte: ATM or Ethernet autogenerated according to actual encapsulation - Encaps 1 byte : configurable (see further down) - Encaps 2 byte : fixed as NA

- dhcpv6-l2-encaps: This controls insertion of access loop encapsulation sub-options part of DHCPv6 relay tag - Refer to (R-164 in TR101) - Datalink byte: ATM or Ethernet autogenerated according to actual encapsulation - Encaps 1 byte : configurable (see further down) - Encaps 2 byte : fixed as NA

- l2-encaps1: This specifies the value of access loop encapsulation sub-options value 1 for DHCPv4, DHCPv6 and PPPoE protocol relay tags

- new-broadcast: applies to VLANs of type residential bridge.The configured value of this parameter has no meaning when broadcast-frames is not enabled at node level, meaning globally for all VLANs

- priority: The selection of the VLAN-based priority can apply provided the priority-policy at node-level is vlan-specific.

- vmac-translation: this configuration value has no effect in case MAC learning is disabled (mac-learn-off).

- Note that vmac-translation, vmac-dnstr-filter and vmac-not-in-opt61 parameters can be enabled only at S-VLAN

level in case of S+C-VLAN CC mode.

- ipv6-mcast-ctrl: This parameter is used in the following cases: - on the NGLT-A GPON line card, ipv6-mcast-ctrl parameter is used to allow or disallow upstream and downstream IPv6 multicast traffic - for all other line cards, in case no DHCPv6 protocol processing is performed on the line card (i.e. new-secure-fwd,dhcpv6-itf-id,dhcpv6-remote-id and dhcpv6-relay-id are all disabled), the ipv6-mcast-ctrl parameter is used to control upstream and downstream DHCPv6 multicast traffic

- drly-srv-usr-side: This parameter is to enable/disable DHCP(v4/v6) server transparency at the user side when DHCP(v4/v6) relay is enabled. This parameter can be enabled only when Secure forwarding and vMaC translation are both disabled.This parameter is supported only on CC forwarder.

- dhcpv6-relay-id: This parameter is used to enable/disable relay-id for DHCPv6

- pppoer-vlanaware: This parameter is to configure the number of VLAN tags on the user side upto which PPPoE protocol awareness should be enabled. This configuration is applicable only for S+C CC forwarder.

- dhcpr-vlanaware: This parameter is to configure the number of VLAN tags on the user side upto which DHCPv4 protocol awareness should be enabled. This configuration is applicable only for S+C CC forwarder.

- dhcpv6r-vlanaware: This parameter is to configure the number of VLAN tags on the user side upto which DHCPv6 protocol awareness should be enabled. This configuration is applicable only for S+C CC forwarder.

User Level

The command can be accessed by operators with vlan privileges, and executed by operators with vlan privileges.

Command Syntax

The command has the following syntax:

> configure vlan (no id (vlanid)) | (id (vlanid) [no name | name <Vlan::AdminString>] mode <Vlan::SystemMode> [[no] sntp-proxy] [no priority | priority <Vlan::Priority>] [[no] vmac-translation] [[no] vmac-dnstr-filter] [[no] vmac-not-in-opt61] [no new-broadcast | new-broadcast <Vlan::NewStaticBrdcastControl>] [no protocol-filter | protocol-filter <Vlan::ProtGroup>] [no pppoe-relay-tag | pppoe-relay-tag <Vlan::PppoeRelayEnableR3.1>] [[no] dhcp-opt-82] [no dhcp-opt82-ext | dhcp-opt82-ext <Vlan::DhcpOption82Ext>] [no dhcp-opt82-nni | dhcp-opt82-nni <Vlan::Option82Nni>] [no dhcp-opt82-uplink | dhcp-opt82-uplink <Vlan::Option82Uplink>] [no circuit-id-dhcp | circuit-id-dhcp <Vlan::CircuitIdDhcp>] [no remote-id-dhcp | remote-id-dhcp <Vlan::RemoteIdDhcp>] [no relay-id-dhcp | relay-id-dhcp <Vlan::RelayIdDhcp>] [no dhcp-linerate | dhcp-linerate <Vlan::Dhcp-linerate>] [no pppoe-linerate | pppoe-linerate <Vlan::Pppoe-linerate>] [no dhcpv6-linerate | dhcpv6-linerate <Vlan::Dhcpv6-linerate>] [no pppoe-l2-encaps | pppoe-l2-encaps <Vlan::PppoeAccessEncap>] [no dhcp-l2-encaps | dhcp-l2-encaps <Vlan::DhcpAccessEncap>] [no dhcpv6-l2-encaps | dhcpv6-l2-encaps <Vlan::Dhcpv6AccessEncap>] [no l2-encaps1 | l2-encaps1 <Vlan::AccessLoopEncaps1>] [no pppoer-vlanaware | pppoer-vlanaware <Vlan::PppoeRelayVlanAware>] [no dhcpr-vlanaware | dhcpr-vlanaware <Vlan::DhcpRelayVlanAware>] [no dhcpv6r-vlanaware | dhcpv6r-vlanaware <Vlan::Dhcpv6RelayVlanAware>] [no drly-srv-usr-side | drly-srv-usr-side <Vlan::DRlySrvAtUsrSide>] [no circuit-id-pppoe | circuit-id-pppoe <Vlan::CircuitIdPppoe>] [no remote-id-pppoe | remote-id-pppoe <Vlan::RemoteIdPppoe>] [no new-secure-fwd | new-secure-fwd <Vlan::NewSecureForward>] [no aging-time | aging-time <Vlan::MacAgingTime>] [[no] l2cp-transparent] [no dhcpv6-itf-id | dhcpv6-itf-id <Vlan::Dhcpv6InterfaceId>] [no dhcpv6-remote-id | dhcpv6-remote-id <Vlan::Dhcpv6RemoteId>] [no dhcpv6-relay-id | dhcpv6-relay-id <Vlan::Dhcpv6RelayId>] [no dhcpv6-trst-port | dhcpv6-trst-port <Vlan::Dhcpv6TrstPort>] [no enterprise-number | enterprise-number <Vlan::Enterprisenumber>] [[no] icmpv6-sec-fltr] [no in-qos-prof-name | in-qos-prof-name <Qos::QosIngressProfileName>] [[no] ipv4-mcast-ctrl] [[no] ipv6-mcast-ctrl] [[no] mac-mcast-ctrl] [[no] dis-proto-rip] [[no] proto-ntp] [[no] dis-ip-antispoof] [[no] unknown-unicast] [[no] pt2ptgem-flooding] [[no] mac-movement-ctrl] [no cvlan4095passthru | cvlan4095passthru <Vlan::cvlan4095Passthru>] [[no] arp-snooping] [[no] arp-polling] [no arp-polling-ip | arp-polling-ip <Ip::V4Address>] [[no] mac-unauth])

Command Parameters

Table 22.4-1 "VLAN Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(vlanid)	Format: (<Network::UVlanIndex> | stacked : <Network::SVlanIndex> : <Network::CVlanIndex>) Possible values: - stacked : stacked vlan identity Field type <Network::UVlanIndex> - unstacked vlan identity - range: [1...4093] Field type <Network::SVlanIndex> - service vlan identity - range: [2...4093] Field type <Network::CVlanIndex> - customer vlan identity - range: [0...4093]	VLAN id

Table 22.4-2 "VLAN Configuration Command" Command Parameters

Parameter	Type	Description
[no] name	Parameter type: <Vlan::AdminString> Format: - char string - length: x<=80	*optional parameter with default value: ""* VLAN name
mode	Parameter type: <Vlan::SystemMode> Format: (cross-connect | residential-bridge | qos-aware | layer2-terminated | mirror) Possible values: - cross-connect : crossconnect vlan - residential-bridge : residential bridge vlan - qos-aware : qos aware vlan - layer2-terminated : layer2 terminated vlan - mirror : mirror vlan	*mandatory parameter* VLAN mode
[no] sntp-proxy	Parameter type: boolean	*optional parameter* enable SNTP proxy
[no] priority	Parameter type: <Vlan::Priority> Format: - priority of ethernet frames - range: [0...7]	*optional parameter with default value: 0* default frame priority
[no] vmac-translation	Parameter type: boolean	*optional parameter* *The parameter is not visible during creation.* enable virtual Mac address translation
[no] vmac-dnstr-filter	Parameter type: boolean	*optional parameter* *The parameter is not visible during creation.* enable virtual Mac source address downstream blocking
[no] vmac-not-in-opt61	Parameter type: boolean	*optional parameter*

Parameter	Type	Description
		skip vmac translation in dhcp option 61 even when vmac is enabled
[no] new-broadcast	Parameter type: <Vlan::NewStaticBrdcastControl> Format: (inherit | enable | disable) Possible values: - inherit : for S+C VLAN: inherit from S VLAN level if existing; for S or C VLAN: inherit from default fixed system value (which is disable) - enable : new switch broadcast frames - disable : new disable broadcast frames	*optional parameter with default value: "inherit"* switch downstream broadcast frames (On GPON and L2+ LT boards, broadcast control for S+C L2 Forwarders can only be controlled at S-VLAN level, not individually at S+C-VLAN level.)
[no] protocol-filter	Parameter type: <Vlan::ProtGroup> Format: (pass-all | pass-pppoe | pass-ipoe | pass-pppoe-ipoe | pass-ipv6oe | pass-pppoe-ipv6oe | pass-ipoe-ipv6oe | pass-pppoe-ipoe-ipv6oe) Possible values: - pass-all : pass all traffic - pass-pppoe : pass traffic of PPPoE protocol group - pass-ipoe : pass traffic of IPv4oE protocol group - pass-pppoe-ipoe : pass PPPoE and IPv4oE protocol groups - pass-ipv6oe : pass traffic of IPv6oE protocol group - pass-pppoe-ipv6oe : pass PPPoE and IPv6oE protocol groups - pass-ipoe-ipv6oe : pass IPv4oE and IPv6oE protocol groups - pass-pppoe-ipoe-ipv6oe: pass PPPoE, IPv4oE and IPv6oE protocol groups	*optional parameter with default value: "pass-all"* control protocol group filters
[no] pppoe-relay-tag	Parameter type: <Vlan::PppoeRelayEnableR3.1> Format: (true | false | configurable) Possible values: - true : pppoe tag with the current fixed format - false : no pppoe tag - configurable : circuit-id-pppoe and remote-id-pppoe controlling format	*optional parameter with default value: "false"* configure the format of the PPPoE relay tag
[no] dhcp-opt-82	Parameter type: boolean	*obsolete parameter replaced by parameter "dhcp-opt82-ext"* *The parameter is not visible during creation.* enable dhcp option 82 (relay)
[no] dhcp-opt82-ext	Parameter type: <Vlan::DhcpOption82Ext> Format: (enable | disable | transparent | add-or-replace	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* control of DHCP option 82

Parameter	Type	Description
	| add-or-forward) Possible values: - enable : enable dhcp option 82 (relay) - disable : disable dhcp option 82 (relay) - transparent : pass dhcp option 82 transparently if sent by client (relay) - add-or-replace : add dhcp option 82 if not present or replace the dhcp option 82 if present (relay) - add-or-forward : add dhcp option 82 if not present or forward the dhcp option 82 transparently if sent by client (relay)	
[no] dhcp-opt82-nni	Parameter type: <Vlan::Option82Nni> Format: (enable | disable | transparent | add-or-replace | add-or-forward) Possible values: - enable : enable dhcp option 82 on NNI Interface(relay) - disable : disable dhcp option 82 on NNI Interface(relay) - transparent : pass dhcp option 82 transparently if sent by client on NNI Interface(relay) - add-or-replace : add dhcp option 82 if not present or replace the dhcp option 82 if present on NNI Interface(relay) - add-or-forward : add dhcp option 82 if not present or forward the dhcp option 82 transparently if sent by client on NNI Interface(relay)	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* control of DHCP option 82 on NNI Interface
[no] dhcp-opt82-uplink	Parameter type: <Vlan::Option82Uplink> Format: (enable | disable | transparent | add-or-replace | add-or-forward) Possible values: - enable : enable dhcp option 82 on UPLINK Interface(relay) - disable : disable dhcp option 82 on UPLINK Interface(relay) - transparent : pass dhcp option 82 transparently if sent by client on UPLINK Interface(relay) - add-or-replace : add dhcp option 82 if not present or replace the dhcp option 82 if present on UPLINK Interface(relay) - add-or-forward : add dhcp option 82 if not present or forward the dhcp option 82 transparently if sent by client on UPLINK Interface(relay)	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* control of DHCP option 82 on UPLINK Interface
[no] circuit-id-dhcp	Parameter type: <Vlan::CircuitIdDhcp> Format: (customer-id | physical-id | ccsa-format | disable) Possible values: - customer-id : customer identity as circuit id - physical-id : physical line identity as circuit id	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* configure the circuit id sub-option for DHCP option-82

Parameter	Type	Description
	- ccsa-format : circuit id in ccsa format - disable : no circuit id	
[no] remote-id-dhcp	Parameter type: <Vlan::RemoteIdDhcp> Format: (customer-id | disable | physical-id) Possible values: - customer-id : customer identity as remote id - disable : no remote id - physical-id : physical line identity as remote id	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* configure the remote id sub-option for DHCP option-82
[no] relay-id-dhcp	Parameter type: <Vlan::RelayIdDhcp> Format: (relay-id | disable) Possible values: - relay-id : System MAC + Physical Id as relay id - disable : no relay id	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* configure the relay id sub-option for DHCP option-82
[no] dhcp-linerate	Parameter type: <Vlan::Dhcp-linerate> Format: (notadd | addactuallinerate | addalllineparameters) Possible values: - notadd : not add DSL linerate for DHCP - addactuallinerate : add DSL actual line up and down rate for DHCP - addalllineparameters : add all DSL line parameters for DHCP	*optional parameter with default value: "notadd"* *The parameter is not visible during creation.* configure insertion of the linerate for DHCP protocol
[no] pppoe-linerate	Parameter type: <Vlan::Pppoe-linerate> Format: (notadd | addactuallinerate | addalllineparameters) Possible values: - notadd : not add DSL linerate for PPPoE - addactuallinerate : add DSL actual line up and down rate for PPPoE - addalllineparameters : add all DSL line parameters for PPPoE	*optional parameter with default value: "notadd"* *The parameter is not visible during creation.* configure insertion of the linerate for PPPoE protocol (Only applicable on DSL LT boards, not on GPON LT boards. In case both GPON ports and DSL ports are configured in one VLAN, the pppoe-linerate parameter will only be applied on DSL LT boards.)
[no] dhcpv6-linerate	Parameter type: <Vlan::Dhcpv6-linerate> Format: (notadd | addactuallinerate | addalllineparameters) Possible values: - notadd : not add DSL linerate for DHCPv6 - addactuallinerate : add DSL actual line up and down rate for DHCPv6 - addalllineparameters : add all DSL line parameters for DHCPv6	*optional parameter with default value: "notadd"* *The parameter is not visible during creation.* configure insertion of the linerate for DHCPv6 protocol
[no] pppoe-l2-encaps	Parameter type: <Vlan::PppoeAccessEncap> Format: (notadd | add)	*optional parameter with default value: "notadd"* *The parameter is not visible during creation.*

Parameter	Type	Description
	Possible values: - notadd : not add access loop encapsulation for PPPoE - add : add access loop encapsulation for PPPoE	configure insertion of access loop encapsulation sub-option for PPPoE relay tag (Only applicable on DSL and ETH LT boards, not on GPON LT boards. In case both GPON ports and DSL/ETH ports are configured in one VLAN, the pppoe-l2-encaps parameter will only be applied on DSL and ETH LT boards.)
[no] dhcp-l2-encaps	Parameter type: <Vlan::DhcpAccessEncap> Format: (notadd | add) Possible values: - notadd : not add access loop encapsulation for DHCP - add : add access loop encapsulation for DHCP	*optional parameter with default value: "notadd"* *The parameter is not visible during creation.* configure insertion of access loop encapsulation sub-option for DHCP option 82 (Only applicable on DSL and ETH LT boards, not on GPON LT boards. In case both GPON ports and DSL/ETH ports are configured in one VLAN, the dhcp-l2-encaps parameter will only be applied on DSL and ETH LT boards.)
[no] dhcpv6-l2-encaps	Parameter type: <Vlan::Dhcpv6AccessEncap> Format: (notadd | add) Possible values: - notadd : not add access loop encapsulation for DHCPv6 - add : add access loop encapsulation for DHCPv6	*optional parameter with default value: "notadd"* *The parameter is not visible during creation.* configure insertion of access loop encapsulation sub-option for DHCPv6 (Only applicable on DSL and ETH LT boards, not on GPON LT boards. In case both GPON ports and DSL/ETH ports are configured in one VLAN, the dhcpv6-l2-encaps parameter will only be applied on DSL and ETH LT boards.)
[no] l2-encaps1	Parameter type: <Vlan::AccessLoopEncaps1> Format: (not-applicable | untagged | single-tagged | dual-tagged) Possible values: - not-applicable : not applicable - untagged : set untag as encapsulation1 value - single-tagged : set single-tag as encapsulation1 value - dual-tagged : set dual-tag as encapsulation1 value	*optional parameter with default value: "not-applicable"* *The parameter is not visible during creation.* configure the encapsulation 1 value of the access loop encapsulation sub-option for DHCP option 82, DHCPv6 relay tag and PPPoE relay tag
[no] pppoer-vlanaware	Parameter type: <Vlan::PppoeRelayVlanAware> Format: (upto-1-uservlan | upto-2-uservlans | upto-untag-uservlan | system-default) Possible values: - upto-1-uservlan : user VLAN awareness for untagged and	*optional parameter with default value: "system-default"* *The parameter is not visible during creation.* configure the number of user VLANs that the PPPoE relay functionality should be aware of

Parameter	Type	Description
	single-tagged packets - upto-2-uservlans : user VLAN awareness for untagged, single-tagged and dual-tagged packets - upto-untag-uservlan : user VLAN awareness for only untagged packets - system-default : default user VLAN awareness depends on the forwarder type and board type	
[no] dhcpr-vlanaware	Parameter type: <Vlan::DhcpRelayVlanAware> Format: (upto-1-uservlan | upto-2-uservlans | upto-untag-uservlan | system-default) Possible values: - upto-1-uservlan : user VLAN awareness for untagged and single-tagged packets - upto-2-uservlans : user VLAN awareness for untagged, single-tagged and dual-tagged packets - upto-untag-uservlan : user VLAN awareness for only untagged packets - system-default : default user VLAN awareness depends on the forwarder type and board type	*optional parameter with default value: "system-default"* *The parameter is not visible during creation.* configure the number of user VLANs that the DHCP relay functionality should be aware of
[no] dhcpv6r-vlanaware	Parameter type: <Vlan::Dhcpv6RelayVlanAware> Format: (upto-1-uservlan | upto-2-uservlans | upto-untag-uservlan | system-default) Possible values: - upto-1-uservlan : user VLAN awareness for untagged and single-tagged packets - upto-2-uservlans : user VLAN awareness for untagged, single-tagged and dual-tagged packets - upto-untag-uservlan : user VLAN awareness for only untagged packets - system-default : default user VLAN awareness depends on the forwarder type and board type	*optional parameter with default value: "system-default"* *The parameter is not visible during creation.* configure the number of user VLANs that the DHCPv6 relay functionality should be aware of
[no] drly-srv-usr-side	Parameter type: <Vlan::DRlySrvAtUsrSide> Format: (enable | disable) Possible values: - enable : enable DHCP(v4/v6) server transparency at the user side when DHCP(v4/v6) relay is enabled. - disable : disable DHCP(v4/v6) server transparency at the user side when DHCP(v4/v6) relay is enabled.	*optional parameter with default value: "disable"* enable DHCP(v4/v6) server transparency at the user side when DHCP(v4/v6) relay is enabled.Only applicable for CC forwarder
[no] circuit-id-pppoe	Parameter type: <Vlan::CircuitIdPppoe> Format: (disable | customer-id | physical-id | ccsa-format) Possible values: - disable : no circuit id - customer-id : customer identity as circuit id - physical-id : physical line identity as circuit id - ccsa-format : circuit id in ccsa format	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* configure the circuit id sub-option for PPPoE relay tag

Parameter	Type	Description
[no] remote-id-pppoe	Parameter type: <Vlan::RemoteIdPppoe> Format: (disable | customer-id | physical-id) Possible values: - disable : no remote id - customer-id : customer identity as remote id - physical-id : physical line identity as remote id	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* configure the remote id sub-option for PPPoE relay tag
[no] new-secure-fwd	Parameter type: <Vlan::NewSecureForward> Format: (inherit | disable | enable) Possible values: - inherit : inherit new-secure-forwarding - disable : disable new-secure-forwarding - enable : enable new-secure-forwarding	*optional parameter with default value: "inherit"* enable secure forwarding for the VLAN (On GPON and L2+ LT boards, secure forwarding for S+C L2 Forwarders can only be controlled at S-VLAN level, not individually at S+C-VLAN level.)
[no] aging-time	Parameter type: <Vlan::MacAgingTime> Format: - mac aging time in seconds - unit: sec - range: [-1,10...1000000]	*optional parameter with default value: -1* configure MAC aging time in seconds; in case of default,the system-level value is applicable.
[no] l2cp-transparent	Parameter type: boolean	*optional parameter* enable l2cp-transparent
[no] dhcpv6-itf-id	Parameter type: <Vlan::Dhcpv6InterfaceId> Format: (disable | customer-id | physical-id | ccsa-format) Possible values: - disable : no interface id - customer-id : customer identity as interface id - physical-id : physical line identity as interface id - ccsa-format : interface id in ccsa format	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* DHCPv6 interface id control
[no] dhcpv6-remote-id	Parameter type: <Vlan::Dhcpv6RemoteId> Format: (disable | customer-id | physical-id) Possible values: - disable : no interface id - customer-id : customer identity as interface id - physical-id : physical line identity as interface id	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* DHCPv6 remote id control
[no] dhcpv6-relay-id	Parameter type: <Vlan::Dhcpv6RelayId> Format: (disable | duid-ll) Possible values: - disable : no dhcpv6 relay-id - duid-ll : two octet network hardware type code, followed by the link-layer address	*optional parameter with default value: "disable"* *The parameter is not visible during creation.* DHCPv6 relay id control
[no] dhcpv6-trst-port	Parameter type: <Vlan::Dhcpv6TrstPort> Format: (trusted | untrusted)	*optional parameter with default value: "untrusted"* *The parameter is not visible during creation.*

Parameter	Type	Description
	Possible values: - trusted : trusted port - untrusted : untrusted port	DHCPv6 trusted port control
[no] enterprise-number	Parameter type: <Vlan::Enterprisenumber> Format: - enterprise number - range: [1...4294967295]	*optional parameter with default value: "3561"* *The parameter is not visible during creation.* configure enterprise number for DHCPv6 protocol
[no] icmpv6-sec-fltr	Parameter type: boolean	*optional parameter* *The parameter is not visible during creation.* enable icmpv6 secure filter
[no] in-qos-prof-name	Parameter type: <Qos::QosIngressProfileName> Format: (default | name : <Qos::IgnoredQosProfileName>) Possible values: - default : default profile name - name : enter profile name to be associated Data driven field type Possible values are depending on the actual configuration and software. The currently allowed values can be shown with online-help.	*optional parameter with default value: "default"* QoS ingress profile name
[no] ipv4-mcast-ctrl	Parameter type: boolean	*optional parameter* enable ipv4 multicast control: forward ipv4 multicast frames in this vlan
[no] ipv6-mcast-ctrl	Parameter type: boolean	*optional parameter* enable ipv6 multicast control: forward ipv6 multicast frames in this vlan
[no] mac-mcast-ctrl	Parameter type: boolean	*optional parameter* enable mac multicast control: forward mac multicast frames in this vlan
[no] dis-proto-rip	Parameter type: boolean	*optional parameter* disable RIP-IPv4 protocol
[no] proto-ntp	Parameter type: boolean	*optional parameter* enable ntp protocol
[no] dis-ip-antispoof	Parameter type: boolean	*optional parameter* disable IP anti-spoofing
[no] unknown-unicast	Parameter type: boolean	*optional parameter* enable unknown unicast flooding
[no] pt2ptgem-flooding	Parameter type: boolean	*optional parameter* enable flooding on unicast GEM port
[no] mac-movement-ctrl	Parameter type: boolean	*optional parameter* enable mac movement in this vlan
[no] cvlan4095passthru	Parameter type: <Vlan::cvlan4095Passthru> Format: (passthru | not-applicable) Possible values: - passthru : Allow passthru of cvlan 4095 - applicable only for SVLANCC	*optional parameter with default value: "not-applicable"* enable C-VLAN 4095 tunneling behavior. Only applicable for S-VLAN CC forwarder

Parameter	Type	Description
	- not-applicable : Legacy behavior	
[no] arp-snooping	Parameter type: boolean	*optional parameter* enable arp snooping
[no] arp-polling	Parameter type: boolean	*optional parameter* enable arp polling
[no] arp-polling-ip	Parameter type: <Ip::V4Address> Format: - IPv4-address	*optional parameter with default value: "0.0.0.0"* configure ARP polling ip address
[no] mac-unauth	Parameter type: boolean	*optional parameter* enable mac unauthorized default: forward the frame to this vlan if authorization failed

22.5 VLAN Filtering Database Configuration Command

Command Description

This command allows the operator to specify entries in the Layer 2 filtering database for a specific VLAN and unicast MAC address.

This information is used by the bridge in determining how to propagate a received frame.

Use of this command is disencouraged because it will be obsoleted and replaced in the future by the VLAN Port Filtering Database Configuration command.

User Level

The command can be accessed by operators with vlan privileges, and executed by operators with vlan privileges.

Command Syntax

The command has the following syntax:

> configure vlan (no unicast-mac (unicast-mac) vlan-id <Network::StackedVlan>) | (unicast-mac (unicast-mac) vlan-id <Network::StackedVlan> forward-port <Itf::UserPortItf>)

Command Parameters

Table 22.5-1 "VLAN Filtering Database Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(unicast-mac)	Format: - mac address (aa:bb:cc:a1:02:03) - unit: Byte - length: 6	unicast mac address
vlan-id	Parameter type: <Network::StackedVlan> Format: (<Network::UVlanIndex> | stacked : <Network::SVlanIndex> : <Network::CVlanIndex>) Possible values: - stacked : stacked vlan identity Field type <Network::UVlanIndex> - unstacked vlan identity - range: [1...4093] Field type <Network::SVlanIndex> - service vlan identity - range: [2...4093] Field type <Network::CVlanIndex> - customer vlan identity - range: [0...4093]	network vlan id

Table 22.5-2 "VLAN Filtering Database Configuration Command" Command Parameters

Parameter	Type	Description
forward-port	Parameter type: <Itf::UserPortItf> Format: (<Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : <Eqpt::VpiId> : <Eqpt::VciId> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::OntSlotId> / <Eqpt::OntPortId> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / voip | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / vuni | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::LLId> | ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Eqpt::Ng2OntId> / <Eqpt::Ng2OntSlotId> / <Eqpt::Ng2OntPortId> | ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Eqpt::Ng2OntId> / vuni) Possible values: - ng2 : ngpon2 style identification Field type <Eqpt::RackId> - the rack number Field type <Eqpt::ShelfId> - the shelf number Field type <Eqpt::SlotId> - the LT slot number Field type <Eqpt::PortId> - the port number Field type <Eqpt::VpiId> - atm VPI Field type <Eqpt::VciId> - atm VCI Field type <Eqpt::ChannelGroupId> - the channel group identifier Field type <Eqpt::SubChannelGroupId> - the subchannel group identifier Field type <Eqpt::PonId> - the PON identifier Field type <Eqpt::OntId> - the ONT identifier Field type <Eqpt::Ng2OntId> - the NG2 ONT identifier Possible values: - voip : virtual uni identifier obsolete alternative replaced by vuni - vuni : virtual uni identifier Possible values: - vuni : virtual NGPON2 uni identifier Field type <Eqpt::OntSlotId> - the ONT SLOT identifier Field type <Eqpt::OntPortId> - the ONT PORT identifier Field type <Eqpt::Ng2OntSlotId>	*mandatory parameter* forward bridge port

Parameter	Type	Description
	- the NGPON2 ONT SLOT identifier Field type <Eqpt::Ng2OntPortId> - the NGPON2 ONT PORT identifier Field type <Eqpt::LLId> - the LLID identifier,range 1 for EPON,range 1-8 for DPOE	

22.6 VLAN Port Filtering Database Configuration Command

Command Description

This command allows the operator to specify entries in the Layer 2 filtering database for a specific VLAN Port and unicast MAC address.

This information is used by the bridge in determining how to propagate a received frame.

This command will in time obsolete and replace the VLAN Filtering Database Configuration command. Already now, it must be used in case multiple vlan ports are configured on the same bridge port and attached to the same I-Bridge.

User Level

The command can be accessed by operators with vlan privileges, and executed by operators with vlan privileges.

Command Syntax

The command has the following syntax:

> configure vlan (no vlan-port (port) unicast-mac <Vlan::MacAddr>) | (vlan-port (port) unicast-mac <Vlan::MacAddr>)

Command Parameters

Table 22.6-1 "VLAN Port Filtering Database Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(port)	Format: (vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : <Eqpt::VpiId> : <Eqpt::VciId> : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : <Eqpt::VpiId> : <Eqpt::VciId> : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::OntSlotId> / <Eqpt::OntPortId> : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::OntSlotId> / <Eqpt::OntPortId> :	vlan port

Resource Identifier	Type	Description
	<Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / voip : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / vuni : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / voip : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / vuni : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::LLId> : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::LLId> : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port:ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Ng2::OntId> / <Eqpt::Ng2OntSlotId> / <Eqpt::Ng2OntPortId> : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port:ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Ng2::OntId> / <Eqpt::Ng2OntSlotId> / <Eqpt::Ng2OntPortId> : <Eqpt::UnstackedVlan> | vlan-port:ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Ng2::OntId> / vuni : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port:ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Ng2::OntId> / vuni : <Eqpt::UnstackedVlan>) Possible values: - vlan-port : vlan port - vlan-port:ng2 : ngpon2 vlan port Field type <Eqpt::RackId> - the rack number Field type <Eqpt::ShelfId> - the shelf number Field type <Eqpt::SlotId> - the LT slot number Field type <Eqpt::PortId> - the port number Field type <Eqpt::VpiId> - atm VPI Field type <Eqpt::VciId> - atm VCI Field type <Eqpt::PonId> - the PON identifier Field type <Eqpt::OntId> - the ONT identifier Field type <Eqpt::ChannelGroupId> - the channel group identifier Field type <Eqpt::SubChannelGroupId> - the subchannel group identifier Field type <Ng2::OntId>	

Resource Identifier	Type	Description
	- the ONT identifier Possible values: - voip : virtual uni identifier obsolete alternative replaced by vuni - vuni : virtual uni identifier Possible values: - vuni : virtual NGPON2 uni identifier Field type <Eqpt::OntSlotId> - the ONT SLOT identifier Field type <Eqpt::OntPortId> - the ONT PORT identifier Field type <Eqpt::Ng2OntSlotId> - the NGPON2 ONT SLOT identifier Field type <Eqpt::Ng2OntPortId> - the NGPON2 ONT PORT identifier Field type <Eqpt::LLId> - the LLID identifier,range 1 for EPON,range 1-8 for DPOE Possible values: - stacked : stacked vlan identity Field type <Eqpt::UnstackedVlan> - unstacked vlan id Field type <Eqpt::SVlan> - service vlan id Field type <Eqpt::CVlan> - customer vlan id	
unicast-mac	Parameter type: <Vlan::MacAddr> Format: - mac address (aa:bb:cc:a1:02:03) - unit: Byte - length: 6	unicast mac address

22.7 VLAN Protocol-based Configuration Command

Command Description

For protocol-based VLANs, this command allows the operator to specify how incoming traffic on a port is allocated to a particular VLAN and priority.

For Ethernet frames, the mapping to either the PPPoE or IPoE protocol is:
- *protocol value 0x8863: PPPoE*
- *protocol value 0x8864: PPPoE*
- *protocol value 0x0800: IPoE*
- *protocol value 0x0806: IPoE*
- *protocol value 0x8035: IPoE*

For RFC_1042 frames the mapping to either PPPoE or IPoE protocol is:
- *protocol value 0x8863: PPPoE*
- *protocol value 0x8864: PPPoE*
- *protocol value 0x0800: IPoE*
- *protocol value 0x0806: IPoE*
- *protocol value 0x8035: IPoE*

priority: The selection of the priority for upstream frames, in case of a protocol based vlan, is not dependent on the configuration of the priority-policy configured at node level.

User Level

The command can be accessed by operators with vlan privileges, and executed by operators with vlan privileges.

Command Syntax

The command has the following syntax:

> configure vlan (no port-protocol (port) protocol-group <Vlan::GroupId>) | (port-protocol (port) protocol-group <Vlan::GroupId> vlan-id <Vlan::StackedVlan> priority <Vlan::Priority>)

Command Parameters

Table 22.7-1 "VLAN Protocol-based Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(port)	Format: (<Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : <Eqpt::VpiId> : <Eqpt::VciId> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::OntSlotId> /	identity of a port(e.g. uplink port, atm pvc, efm port, eth port, la group ...)

Resource Identifier	Type	Description
	<Eqpt::OntPortId> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / voip | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / vuni | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::LLId> | ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Ng2::OntId> / <Eqpt::Ng2OntSlotId> / <Eqpt::Ng2OntPortId> | ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Ng2::OntId> / vuni) Possible values: - ng2 : ngpon2 style identification Field type <Eqpt::RackId> - the rack number Field type <Eqpt::ShelfId> - the shelf number Field type <Eqpt::SlotId> - the LT slot number Field type <Eqpt::PortId> - the port number Field type <Eqpt::VpiId> - atm VPI Field type <Eqpt::VciId> - atm VCI Field type <Eqpt::PonId> - the PON identifier Field type <Eqpt::ChannelGroupId> - the channel group identifier Field type <Eqpt::SubChannelGroupId> - the subchannel group identifier Field type <Eqpt::OntId> - the ONT identifier Field type <Ng2::OntId> - the ONT identifier Possible values: - voip : virtual uni identifier obsolete alternative replaced by vuni - vuni : virtual uni identifier Possible values: - vuni : virtual NGPON2 uni identifier Field type <Eqpt::OntSlotId> - the ONT SLOT identifier Field type <Eqpt::OntPortId> - the ONT PORT identifier Field type <Eqpt::Ng2OntSlotId> - the NGPON2 ONT SLOT identifier Field type <Eqpt::Ng2OntPortId> - the NGPON2 ONT PORT identifier Field type <Eqpt::LLId> - the LLID identifier,range 1 for EPON,range 1-8 for DPOE	
protocol-group	Parameter type: <Vlan::GroupId> Format: (pppoe | ipoe | ipv6oe)	protocol group

Resource Identifier	Type	Description
	Possible values: - pppoe : PPPoE - ipoe : IPv4oE - ipv6oe : IPv6oE	

Table 22.7-2 "VLAN Protocol-based Configuration Command" Command Parameters

Parameter	Type	Description
vlan-id	Parameter type: <Vlan::StackedVlan> Format: (<Vlan::UVlanIndex> | stacked : <Vlan::SVlanIndex> : <Vlan::CVlanIndex>) Possible values: - stacked : stacked vlan identity Field type <Vlan::UVlanIndex> - unstacked vlan identity - range: [1...4093,4096] Field type <Vlan::SVlanIndex> - service vlan identity - range: [2...4093] Field type <Vlan::CVlanIndex> - customer vlan identity - range: [0...4093]	*mandatory parameter* protocol group vlan id
priority	Parameter type: <Vlan::Priority> Format: - priority of ethernet frames - range: [0...7]	*mandatory parameter* priority of protocol based vlan

22.8 Vlan Pbit Traffic Counter Configuration Command

Command Description

This command allows the operator to configure the p-bit traffic counter.

User Level

The command can be accessed by operators with vlan privileges, and executed by operators with vlan privileges.

Command Syntax

The command has the following syntax:

> configure vlan pbit-statistics (no port (vlan-port) min-dot1p <Vlan::Dot1pMin> max-dot1p <Vlan::Dot1pMax>) | (port (vlan-port) min-dot1p <Vlan::Dot1pMin> max-dot1p <Vlan::Dot1pMax>)

Command Parameters

Table 22.8-1 "Vlan Pbit Traffic Counter Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(vlan-port)	Format: (vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : <Eqpt::VpiId> : <Eqpt::VciId> : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : <Eqpt::VpiId> : <Eqpt::VciId> : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::OntSlotId> / <Eqpt::OntPortId> : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::OntSlotId> / <Eqpt::OntPortId> : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / voip : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / vuni :	vlan port

Resource Identifier	Type	Description
	stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / voip : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / vuni : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::LLId> : <Eqpt::UnstackedVlan> | vlan-port : <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::LLId> : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port:ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Ng2::OntId> / <Eqpt::Ng2OntSlotId> / <Eqpt::Ng2OntPortId> : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port:ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Ng2::OntId> / <Eqpt::Ng2OntSlotId> / <Eqpt::Ng2OntPortId> : <Eqpt::UnstackedVlan> | vlan-port:ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Ng2::OntId> / vuni : stacked : <Eqpt::SVlan> : <Eqpt::CVlan> | vlan-port:ng2 : <Eqpt::ChannelGroupId> / <Eqpt::SubChannelGroupId> / <Ng2::OntId> / vuni : <Eqpt::UnstackedVlan>) Possible values: - vlan-port : vlan port - vlan-port:ng2 : ngpon2 vlan port Field type <Eqpt::RackId> - the rack number Field type <Eqpt::ShelfId> - the shelf number Field type <Eqpt::SlotId> - the LT slot number Field type <Eqpt::PortId> - the port number Field type <Eqpt::VpiId> - atm VPI Field type <Eqpt::VciId> - atm VCI Field type <Eqpt::PonId> - the PON identifier Field type <Eqpt::OntId> - the ONT identifier Field type <Eqpt::ChannelGroupId> - the channel group identifier Field type <Eqpt::SubChannelGroupId> - the subchannel group identifier Field type <Ng2::OntId> - the ONT identifier Possible values: - voip : virtual uni identifier obsolete alternative replaced by vuni - vuni : virtual uni identifier Possible values:	

Resource Identifier	Type	Description
	- vuni : virtual NGPON2 uni identifier Field type <Eqpt::OntSlotId> - the ONT SLOT identifier Field type <Eqpt::OntPortId> - the ONT PORT identifier Field type <Eqpt::Ng2OntSlotId> - the NGPON2 ONT SLOT identifier Field type <Eqpt::Ng2OntPortId> - the NGPON2 ONT PORT identifier Field type <Eqpt::LLId> - the LLID identifier,range 1 for EPON,range 1-8 for DPOE Possible values: - stacked : stacked vlan identity Field type <Eqpt::UnstackedVlan> - unstacked vlan id Field type <Eqpt::SVlan> - service vlan id Field type <Eqpt::CVlan> - customer vlan id	
min-dot1p	Parameter type: <Vlan::Dot1pMin> Format: - dot1p value range - range: [0...7]	min p-bit value
max-dot1p	Parameter type: <Vlan::Dot1pMax> Format: - dot1p value range - range: [0...7]	max p-bit value

22.9 Vlan Priority Regeneration Profile Configuration Command

Command Description

This command allows the operator to configure a custom priority regeneration profile instead of one of the 10 hard-coded profiles. The priority regeneration profile table stores the p-bit mapping rules that can be used by a L2 Forwarder in the upstream and downstream direction.

User Level

The command can be accessed by operators with vlan privileges, and executed by operators with vlan privileges.

Command Syntax

The command has the following syntax:

> configure vlan (no priority-regen (profile-idx)) | (priority-regen (profile-idx) profile-name <AsamProfileName> [no pbit0 | pbit0 <Vlan::NibbleMaskRestricted_0>] [no pbit1 | pbit1 <Vlan::NibbleMaskRestricted_1>] [no pbit2 | pbit2 <Vlan::NibbleMaskRestricted_2>] [no pbit3 | pbit3 <Vlan::NibbleMaskRestricted_3>] [no pbit4 | pbit4 <Vlan::NibbleMaskRestricted_4>] [no pbit5 | pbit5 <Vlan::NibbleMaskRestricted_5>] [no pbit6 | pbit6 <Vlan::NibbleMaskRestricted_6>] [no pbit7 | pbit7 <Vlan::NibbleMaskRestricted_7>])

Command Parameters

Table 22.9-1 "Vlan Priority Regeneration Profile Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(profile-idx)	Format: - a unique index value for the priority regeneration profile - range: [11...32]	A unique profile index

Table 22.9-2 "Vlan Priority Regeneration Profile Configuration Command" Command Parameters

Parameter	Type	Description
profile-name	Parameter type: <AsamProfileName> Format: - a profile name - range: [a-zA-Z0-9-_.] - length: 1<=x<=32	*mandatory parameter* A unique profile name
[no] pbit0	Parameter type: <Vlan::NibbleMaskRestricted_0> Format: - nibble mask - range: [0...8]	*optional parameter with default value: 8* pbit mapping corresponding to pbit0
[no] pbit1	Parameter type: <Vlan::NibbleMaskRestricted_1> Format: - nibble mask - range: [0...8]	*optional parameter with default value: 8* pbit mapping corresponding to pbit1
[no] pbit2	Parameter type: <Vlan::NibbleMaskRestricted_2>	*optional parameter with default*

Parameter	Type	Description
	Format: - nibble mask - range: [0...8]	*value: 8* pbit mapping corresponding to pbit2
[no] pbit3	Parameter type: <Vlan::NibbleMaskRestricted_3> Format: - nibble mask - range: [0...8]	*optional parameter with default value: 8* pbit mapping corresponding to pbit3
[no] pbit4	Parameter type: <Vlan::NibbleMaskRestricted_4> Format: - nibble mask - range: [0...8]	*optional parameter with default value: 8* pbit mapping corresponding to pbit4
[no] pbit5	Parameter type: <Vlan::NibbleMaskRestricted_5> Format: - nibble mask - range: [0...8]	*optional parameter with default value: 8* pbit mapping corresponding to pbit5
[no] pbit6	Parameter type: <Vlan::NibbleMaskRestricted_6> Format: - nibble mask - range: [0...8]	*optional parameter with default value: 8* pbit mapping corresponding to pbit6
[no] pbit7	Parameter type: <Vlan::NibbleMaskRestricted_7> Format: - nibble mask - range: [0...8]	*optional parameter with default value: 8* pbit mapping corresponding to pbit7