

24- Bridge Configuration Commands

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24.1 Bridge Configuration Command Tree

Description

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

Command Tree

```
----configure
----bridge
  - [no] ageing-time
  ----[no] port
    - (port)
    - [no] pvid
    - [no] default-priority
    - [no] mac-learn-off
    - [no] max-unicast-mac
    - [no] qos-profile
    - [no] prio-regen-prof
    - [no] prio-regen-name
    - [no] max-committed-mac
    - [no] mirror-mode
    - [no] mirror-vlan
    - [no] outervlancapture
    - [no] direction
    - [no] pvid-tagging-flag
    - [no] ds-pbit-mode
    - [no] default-tpid
  ----[no] vlan-id
    - (index)
    - [no] tag
    X [no] network-vlan
    - [no] l2fwder-vlan
    - [no] vlan-scope
    - [no] qos
    - [no] qos-profile
    - [no] prior-best-effort
    - [no] prior-background
    - [no] prior-spare
    - [no] prior-exc-effort
    - [no] prior-ctrl-load
    - [no] prior-less-100ms
    - [no] prior-less-10ms
    - [no] prior-nw-ctrl
    - [no] in-qos-prof-name
    - [no] max-up-qos-policy
    - [no] max-ip-antispoof
    - [no] max-unicast-mac
    - [no] max-ipv6-antisfp
    - [no] mac-learn-ctrl
    - [no] min-cvlan-id
    - [no] max-cvlan-id
    - [no] ds-dedicated-q
```

- [no] tpid
- [no] inner-pbit-remark
- [no] groupid
- [no] usacceptframetype
- [no] oltheregenprofile
- static-user
 - [no] ip-address
 - (ipaddr)
 - [no] ipv6-address
 - (prefixandlength)

24.2 Bridge General Configuration Command

Command Description

This command allows the operator to specify the aging time for dynamically learned MAC addresses in the filtering database. The setting is applicable to the entire 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 bridge [ no ageing-time | ageing-time <Vlan::AgingTime> ]
```

Command Parameters

Table 24.2-2 "Bridge General Configuration Command" Command Parameters

Parameter	Type	Description
[no] ageing-time	Parameter type: <Vlan::AgingTime> Format: - ageing time - unit: sec - range: [10...1000000]	<i>optional parameter with default value: 300</i> ageing timeout for dynamic mac entries

24.3 Bridge Port Configuration Command

Command Description

This command allows the operator to specify various parameters applicable to a specific bridge port. These parameters determine the handling of frames on the bridge port.

Priority Regeneration Profile: these profiles are predetermined. Following profiles are available:

- *Profile 1: Trusted Port*
- *Profile 2: Best Effort*
- *Profile 3: Controlled Load, all priority 3 traffic*
- *Profile 4: Controlled Load, all priority 4 traffic*
- *Profile 5: Background*
- *Profile 6: Best Effort, Controlled Load, Voice*
- *Profile 7: Best Effort, Controlled Load, Voice according 802.1d Annex G*
- *Profile 8: Best Effort, Voice*
- *Profile 9: L2 VPN with 3 traffic classes*
- *Profile 10: L2 VPN with 4 traffic classes*

Details on these profiles can be obtained using a show command.

The parameter 'acceptable-frame-type' controls the format of frames received from the users. The parameter can take either of three values,

single-tagged: *This configuration allows the user to send single tagged frames. The VLAN-id of tagged frames will be verified against the configured port-vlan associations. Untagged frames and priority tagged frames will be discarded (in absence of configuration on how to handle untagged and priority tagged frames). Double tagged frames will be discarded. The configuration of this value should be completed with the configuration of:*

- *one or more port-vlan associations.*

*The configuration of this value should **not** be combined with the configuration of:*

- *a port default vlan, or*
- *a port-protocol default vlan for PPPoE, or*
- *a terminated PPPoE interface, or*
- *a port-protocol default vlan for IPoE, or*
- *a terminated IPoE interface.*

untagged: *This configuration allows the user to send untagged frames and on some types of HW also priority tagged frames. Processing untagged / priority tagged frames requires additional configuration. Such frames will be discarded in absence of such additional configuration. The configuration of the acceptable-Frame-Type to this value results also in the autonomous creation by the system of an 'IGMP channel' and of an '802.1x Port' associated to this Bridge Port. These objects are created with default values such that the corresponding function is 'disabled'. The configuration this value should be completed with the creation of:*

- *one or more port-vlan associations and*
- *a port default vlan, and/or*
- *a port-protocol default vlan for PPPoE, and/or*
- *a port-protocol default vlan for IPoE,*

or instead of a port-protocol default vlan for PPPoE.

- *a terminated PPPoE interface, or*

or instead of a port-protocol default vlan for IPoE.

- *a terminated IPoE interface.*

*However, note that this value is **not always strictly forced on all HW**. E.g. some type of LSMs will accept and*

forward single tagged frames when the VLAN-id matches a configured port-vlan association. Other type of LSMs will always discard single tagged frame.

Note that for the multivlan feature, tagged user traffic will be sent but the "acceptable frame types" must be set to "untagged".

mixed-untagged: This value allows the user to send single tagged frames, untagged frames, and on some types of HW also priority tagged frames. The VLAN-id of single tagged frames will be verified against the configured port-vlan associations. Untagged / priority tagged frames will be processed according additional configuration. Such frames will be discarded in absence of such additional configuration. The configuration of this value should be completed with the configuration of:

- one or more port-vlan associations, **and**
- a port default vlan, and/or
- a port-protocol default vlan for PPPoE, and/or
- a port-protocol default vlan for IPoE.

default-priority: The selection of the port default-priority can apply provided the priority-policy at node level is port-default.

mac-learn-off : The configuration value has no effect in case the bridge port is used for IpoA CC and EPON boards: the system accepts all values but no mac learning will be done.

max-unicast-mac: The value 65535 indicates that there is not max mac control on vlan port.

Remark: Please note that in case the RADIUS server returns a VLAN for 802.1x authenticated ports, it is recommended to not configure a port default VLAN ID (PVID) on that user port. In any case, the VLAN ID returned by the RADIUS server may not equal the pre- configured PVID on the user port. In addition, the returned VLAN ID by the RADIUS server may not be configured as the PVID on the user port after successful 802.1x authentication.

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 bridge ( no port (port) ) | ( port (port) [ no pvid | pvid <Network::StackedVlan> ] [ no default-priority |
default-priority <Vlan::Priority> ] [ [ no ] mac-learn-off ] [ no max-unicast-mac | max-unicast-mac
<Vlan::MaxMac> ] [ no qos-profile | qos-profile <Qos::QosSessionProfileName> ] [ no prio-regen-prof |
prio-regen-prof <Vlan::PrioRegenProfile> ] [ no prio-regen-name | prio-regen-name
<Vlan::PrioRegenProfileName> ] [ no max-committed-mac | max-committed-mac <Vlan::ComitMaxMac> ] [ no
mirror-mode | mirror-mode <Vlan::MirrorMode> ] [ no mirror-vlan | mirror-vlan <Vlan::MirrorVlan> ] [ no
outervlancapture | outervlancapture <Vlan::OuterVlan> ] [ no direction | direction
<Vlan::outerVlanCaptureDirection> ] [ no pvid-tagging-flag | pvid-tagging-flag <Vlan::PvidTaggingFlag> ] [ no
ds-pbit-mode | ds-pbit-mode <Vlan::DSPbitMode> ] [ no default-tpid | default-tpid <Vlan::Tpid> ] )
```

Command Parameters

Table 24.3-1 "Bridge Port Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(port)	Format: (<Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : <Eqpt::Vpild> : <Eqpt::Vcild> <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> /	identity of a port(e.g. uplink port, atm pvc, efm port, eth port, la group ...)

Resource Identifier	Type	Description
	<p> <code><Eqpt::PortId></code> <code> <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> /</code> <code><Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::OntSlotId> /</code> <code><Eqpt::OntPortId></code> <code> <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> /</code> <code><Eqpt::PonId> / <Eqpt::OntId> / voip</code> <code> <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> /</code> <code><Eqpt::PonId> / <Eqpt::OntId> / vuni</code> <code> <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> /</code> <code><Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::LLId></code> <code> ng2 : <Eqpt::ChannelGroupId> /</code> <code><Eqpt::SubChannelGroupId> / <Ng2::OntId> /</code> <code><Eqpt::Ng2OntSlotId> / <Eqpt::Ng2OntPortId></code> <code> ng2 : <Eqpt::ChannelGroupId> /</code> <code><Eqpt::SubChannelGroupId> / <Ng2::OntId> / vuni)</code> </p> <p>Possible values:</p> <ul style="list-style-type: none"> - ng2 : ngpon2 style identification <p>Field type <code><Eqpt::RackId></code></p> <ul style="list-style-type: none"> - the rack number <p>Field type <code><Eqpt::ShelfId></code></p> <ul style="list-style-type: none"> - the shelf number <p>Field type <code><Eqpt::SlotId></code></p> <ul style="list-style-type: none"> - the LT slot number <p>Field type <code><Eqpt::PortId></code></p> <ul style="list-style-type: none"> - the port number <p>Field type <code><Eqpt::VpiId></code></p> <ul style="list-style-type: none"> - atm VPI <p>Field type <code><Eqpt::VciId></code></p> <ul style="list-style-type: none"> - atm VCI <p>Field type <code><Eqpt::PonId></code></p> <ul style="list-style-type: none"> - the PON identifier <p>Field type <code><Eqpt::ChannelGroupId></code></p> <ul style="list-style-type: none"> - the channel group identifier <p>Field type <code><Eqpt::SubChannelGroupId></code></p> <ul style="list-style-type: none"> - the subchannel group identifier <p>Field type <code><Eqpt::OntId></code></p> <ul style="list-style-type: none"> - the ONT identifier <p>Field type <code><Ng2::OntId></code></p> <ul style="list-style-type: none"> - the ONT identifier <p>Possible values:</p> <ul style="list-style-type: none"> - voip : virtual uni identifier obsolete alternative replaced by vuni - vuni : virtual uni identifier <p>Possible values:</p> <ul style="list-style-type: none"> - vuni : virtual NGPON2 uni identifier <p>Field type <code><Eqpt::OntSlotId></code></p> <ul style="list-style-type: none"> - the ONT SLOT identifier <p>Field type <code><Eqpt::OntPortId></code></p> <ul style="list-style-type: none"> - the ONT PORT identifier <p>Field type <code><Eqpt::Ng2OntSlotId></code></p> <ul style="list-style-type: none"> - the NGPON2 ONT SLOT identifier <p>Field type <code><Eqpt::Ng2OntPortId></code></p> <ul style="list-style-type: none"> - the NGPON2 ONT PORT identifier <p>Field type <code><Eqpt::LLId></code></p> <ul style="list-style-type: none"> - the LLID identifier, range 1 for EPON, range 1-8 for DPOE 	

Table 24.3-2 "Bridge Port Configuration Command" Command Parameters

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Parameter	Type	Description
[no] pvid	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]	<i>optional parameter with default value: "stacked : 0 : 4097"</i> <i>The parameter is not visible during creation.</i> default vlan id for untagged frames
[no] default-priority	Parameter type: <Vlan::Priority> Format: - priority of ethernet frames - range: [0...7]	<i>optional parameter with default value: 0</i> priority to be set in upstream frames
[no] mac-learn-off	Parameter type: boolean	<i>optional parameter</i> disable self learning of mac address
[no] max-unicast-mac	Parameter type: <Vlan::MaxMac> Format: - number of unicast mac addresses - range: [1...65535]	<i>optional parameter with default value: "1"</i> max uncommitted unicast mac addresses
[no] qos-profile	Parameter type: <Qos::QosSessionProfileName> Format: (none name : <Qos::IgnoredQosProfileName>) Possible values: - none : no profile name to associate - 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.	<i>optional parameter with default value: "none"</i> qos profile name
[no] prio-regen-prof	Parameter type: <Vlan::PrioRegenProfile> Format: (none trusted-port best-effort cl-all-prio-3 cl-all-prio-4 background be-cl-voice be-cl-1d-voice be-voice l2-vpn-3 l2-vpn-4 11 12 13 14 15 16	<i>optional parameter with default value: "none"</i> priority regeneration profile

Parameter	Type	Description
	17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32) Possible values: - none : default value - trusted-port : trusted port - best-effort : best effort - cl-all-prio-3 : controlled load, all priority 3 traffic - cl-all-prio-4 : controlled load, all priority 4 traffic - background : background - be-cl-voice : best effort, controlled load, voice - be-cl-ld-voice : best effort, controlled load, 802.IId Annex G voice - be-voice : best effort voice - l2-vpn-3 : L2 VPN with 3 traffic classes - l2-vpn-4 : L2 VPN with 4 traffic classes - 11 : operator-defined profile - 12 : operator-defined profile - 13 : operator-defined profile - 14 : operator-defined profile - 15 : operator-defined profile - 16 : operator-defined profile - 17 : operator-defined profile - 18 : operator-defined profile - 19 : operator-defined profile - 20 : operator-defined profile - 21 : operator-defined profile - 22 : operator-defined profile - 23 : operator-defined profile - 24 : operator-defined profile - 25 : operator-defined profile - 26 : operator-defined profile - 27 : operator-defined profile - 28 : operator-defined profile - 29 : operator-defined profile - 30 : operator-defined profile - 31 : operator-defined profile - 32 : operator-defined profile	
[no] prio-regen-name	Parameter type: <Vlan::PrioRegenProfileName> Format: (none name : <Vlan::IgnoredVlanProfileName>) Possible values: - none : no profile name to associate	<i>optional parameter with default value: "none"</i> priority regeneration profile name

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Parameter	Type	Description
	<ul style="list-style-type: none"> - 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.	
[no] max-committed-mac	Parameter type: <Vlan::ComitMaxMac> Format: <ul style="list-style-type: none"> - number of unicast mac addresses - range: [0...128,65535] 	<i>optional parameter with default value: "65535"</i> max committed unicast mac addresses. 65535 means the committed value is the same as max-unicast-mac
[no] mirror-mode	Parameter type: <Vlan::MirrorMode> Format: (disable overwrite-outer-vlan insert-mirror-vlan) Possible values: <ul style="list-style-type: none"> - disable : disable mirror vlan tag - overwrite-outer-vlan : overwrite outer vlan tag with mirror vlan tag - insert-mirror-vlan : prepend mirror vlan tag to outer vlan tag 	<i>optional parameter with default value: "disable"</i> flow mirroring mode of the bridge port
[no] mirror-vlan	Parameter type: <Vlan::MirrorVlan> Format: <ul style="list-style-type: none"> - mirroring vlan id - range: [0...4093] 	<i>optional parameter with default value: 0</i> vlan-id to be inserted into mirrored packets. This configuration value has no effect in case mirroring mode of the bridgeport is disabled (mirror-mode).
[no] outervlancapture	Parameter type: <Vlan::OuterVlan> Format: <ul style="list-style-type: none"> - outer vlan id - range: [0...4093] 	<i>optional parameter with default value: 0</i> specify outer VLAN which has to be matched for mirroring the packets received on bridge port.
[no] direction	Parameter type: <Vlan::outerVlanCaptureDirection> Format: (ingress egress bidirection) Possible values: <ul style="list-style-type: none"> - ingress : enable mirroring in ingress - egress : enable mirroring in egress - bidirection : enable mirroring in both directions 	<i>optional parameter with default value: "bidirection"</i> The direction on which the packets has to be captured and mirrored.
[no] pvid-tagging-flag	Parameter type: <Vlan::PvidTaggingFlag> Format: (onu olt) Possible values: <ul style="list-style-type: none"> - onu : pvid is handled in ONU. - olt : pvid is handled in OLT. 	<i>optional parameter with default value: "onu"</i> pvid will be tagged in ONU or in OLT.
[no] ds-pbit-mode	Parameter type: <Vlan::DSPbitMode> Format: (auto translated transparency filtervlanandpbit)	<i>optional parameter with default value: "auto"</i> downstream p-bits mode

Parameter	Type	Description
	Possible values: - auto : transparency for DSL and translated for GPON - translated : for known p-bits the inverse translation is performed in downstream; unknown p-bits are forwarded unchanged in downstream - transparency : all p-bits are forwarded unchanged in downstream - filtervlanandpbit : for matched vlan and p-bit the inverse translation is performed in downstream; unmatched are discarded in downstream	
[no] default-tpid	Parameter type: <Vlan::Tpid> Format: - vlan tpid hex string(example : 8100), scope is 600-ffff - range: [a-fA-F0-9] - length: 1<=x<=4	<i>optional parameter with default value: "8100"</i> configure default outer tpid

24.4 Bridge Port to VLAN Association Configuration Command

Command Description

This command allows the operator to associate a VLAN to a bridge port and to define VLAN attributes on this port. The parameters that allow to configure the priority bits (prior-best-effort till prior-nw-ctrl) only apply in case of a qos-aware VLAN.

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 bridge port (port) ( no vlan-id (index) ) | ( vlan-id (index) [ no tag | tag <Vlan::PortUntagStatus> ] [ no
network-vlan | network-vlan <Network::StackedVlan> ] [ no l2fwder-vlan | l2fwder-vlan <Network::StackedVlan>
] [ no vlan-scope | vlan-scope <Vlan::VlanScope> ] [ no qos | qos <Vlan::QosPolicy> ] [ no qos-profile | qos-profile
<Qos::QosSessionProfileName> ] [ [ no ] prior-best-effort ] [ [ no ] prior-background ] [ [ no ] prior-spare ] [ [ no ]
prior-exc-effort ] [ [ no ] prior-ctrl-load ] [ [ no ] prior-less-100ms ] [ [ no ] prior-less-10ms ] [ [ no ] prior-nw-ctrl ]
[ no in-qos-prof-name | in-qos-prof-name <Qos::QosIngressProfileNameForVlan> ] [ no max-up-qos-policy |
max-up-qos-policy <Vlan::MaxUpQoSPolicy> ] [ no max-ip-antispoof | max-ip-antispoof
<Vlan::MaxIpAntispoof> ] [ no max-unicast-mac | max-unicast-mac <Vlan::BridgeMaxMac> ] [ no
max-ipv6-antispf | max-ipv6-antispf <Vlan::MaxIpAntispoof> ] [ no mac-learn-ctrl | mac-learn-ctrl
<Vlan::MacLearnCtrl> ] [ no min-cvlan-id | min-cvlan-id <Vlan::MinCVlanId> ] [ no max-cvlan-id | max-cvlan-id
<Vlan::MaxCVlanId> ] [ no ds-dedicated-q | ds-dedicated-q <Vlan::DsDedicatedQueue> ] [ no tpid | tpid
<Vlan::Tpid> ] [ no inner-pbit-remark | inner-pbit-remark <Vlan::InnerPbitRemark> ] [ no groupid | groupid
<Vlan::GroupId> ] [ no usacceptframetype | usacceptframetype <Vlan::USAcceptFrameType> ] [ no
oltregenprofile | oltregenprofile <Vlan::OltRegenProfile> ] )
```

Command Parameters

Table 24.4-1 "Bridge Port to VLAN Association 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> / <Eqpt::OntPortId> <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / voip <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> /	identity of a port(e.g. uplink port, atm pvc, efm port, eth port, la group ...)

Resource Identifier	Type	Description
	<p> <code><Eqpt::PonId> / <Eqpt::OntId> / vuni</code> <code> <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> /</code> <code><Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::LLId></code> <code> ng2 : <Eqpt::ChannelGroupId> /</code> <code><Eqpt::SubChannelGroupId> / <Ng2::OntId> /</code> <code><Eqpt::Ng2OntSlotId> / <Eqpt::Ng2OntPortId></code> <code> ng2 : <Eqpt::ChannelGroupId> /</code> <code><Eqpt::SubChannelGroupId> / <Ng2::OntId> / vuni)</code> </p> <p>Possible values:</p> <ul style="list-style-type: none"> - ng2 : ngpon2 style identification <p>Field type <Eqpt::RackId></p> <ul style="list-style-type: none"> - the rack number <p>Field type <Eqpt::ShelfId></p> <ul style="list-style-type: none"> - the shelf number <p>Field type <Eqpt::SlotId></p> <ul style="list-style-type: none"> - the LT slot number <p>Field type <Eqpt::PortId></p> <ul style="list-style-type: none"> - the port number <p>Field type <Eqpt::VpId></p> <ul style="list-style-type: none"> - atm VPI <p>Field type <Eqpt::VciId></p> <ul style="list-style-type: none"> - atm VCI <p>Field type <Eqpt::PonId></p> <ul style="list-style-type: none"> - the PON identifier <p>Field type <Eqpt::ChannelGroupId></p> <ul style="list-style-type: none"> - the channel group identifier <p>Field type <Eqpt::SubChannelGroupId></p> <ul style="list-style-type: none"> - the subchannel group identifier <p>Field type <Eqpt::OntId></p> <ul style="list-style-type: none"> - the ONT identifier <p>Field type <Ng2::OntId></p> <ul style="list-style-type: none"> - the ONT identifier <p>Possible values:</p> <ul style="list-style-type: none"> - voip : virtual uni identifier <p>obsolete alternative replaced by vuni</p> <ul style="list-style-type: none"> - vuni : virtual uni identifier <p>Possible values:</p> <ul style="list-style-type: none"> - vuni : virtual NGPON2 uni identifier <p>Field type <Eqpt::OntSlotId></p> <ul style="list-style-type: none"> - the ONT SLOT identifier <p>Field type <Eqpt::OntPortId></p> <ul style="list-style-type: none"> - the ONT PORT identifier <p>Field type <Eqpt::Ng2OntSlotId></p> <ul style="list-style-type: none"> - the NGPON2 ONT SLOT identifier <p>Field type <Eqpt::Ng2OntPortId></p> <ul style="list-style-type: none"> - the NGPON2 ONT PORT identifier <p>Field type <Eqpt::LLId></p> <ul style="list-style-type: none"> - the LLID identifier, range 1 for EPON, range 1-8 for DPOE 	
(index)	<p>Format:</p> <p> <code>(<Vlan::UVlanIndex></code> <code> stacked : <Vlan::SVlanIndexStacked> :</code> <code><Vlan::CVlanIndex>)</code> </p> <p>Possible values:</p> <ul style="list-style-type: none"> - stacked : stacked vlan identity <p>Field type <Vlan::UVlanIndex></p> <ul style="list-style-type: none"> - unstacked vlan identity <p>- range: [1...4093,4096]</p>	vlan id

Resource Identifier	Type	Description
	Field type <Vlan::SVlanIndexStacked> - service vlan identity - range: [1...4093] Field type <Vlan::CVlanIndex> - customer vlan identity - range: [0...4093]	

Table 24.4-2 "Bridge Port to VLAN Association Configuration Command" Command Parameters

Parameter	Type	Description
[no] tag	Parameter type: <Vlan::PortUntagStatus> Format: (untagged single-tagged priority-tagged) Possible values: - untagged : untagged outgoing frames - single-tagged : singletagged outgoing frames - priority-tagged : prioritytagged outgoing frames	<i>optional parameter with default value: "untagged"</i> tag control for egress port
[no] network-vlan	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]	<i>obsolete parameter replaced by parameter "l2fwder-vlan"</i> network vlan id
[no] l2fwder-vlan	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]	<i>optional parameter with default value: "stacked : 0 : 4097"</i> layer2 forwarder vlan id
[no] vlan-scope	Parameter type: <Vlan::VlanScope> Format: (network l2fwder local) Possible values: - network : network wide scope	<i>optional parameter with default value: "l2fwder"</i> the vlan scope

Parameter	Type	Description
	obsolete alternative replaced by l2fwder - l2fwder : l2 forwarder scope - local : local scope	
[no] qos	Parameter type: <Vlan::QosPolicy> Format: (priority : <Vlan::Priority> profile : none profile : trusted-port profile : best-effort profile : cl-all-prio-3 profile : cl-all-prio-4 profile : background profile : be-cl-voice profile : be-cl-ld-voice profile : be-voice profile : l2-vpn-3 profile : l2-vpn-4 profile : 11 profile : 12 profile : 13 profile : 14 profile : 15 profile : 16 profile : 17 profile : 18 profile : 19 profile : 20 profile : 21 profile : 22 profile : 23 profile : 24 profile : 25 profile : 26 profile : 27 profile : 28 profile : 29 profile : 30 profile : 31 profile : 32 prio-regen-name : none prio-regen-name : name : <Vlan::IgnoredVlanProfileName>) Possible values: - priority : fixed priority identify - profile : regeneration profile identify - prio-regen-name : priority regeneration profile name Field type <Vlan::Priority> - priority of ethernet frames - range: [0...7] Possible values: - none : default value - trusted-port : trusted port - best-effort : best effort - cl-all-prio-3 : controlled load, all priority 3 traffic - cl-all-prio-4 : controlled load, all priority 4 traffic - background : background - be-cl-voice : best effort, controlled load, voice	<i>optional parameter with default value: "profile : none"</i> the qos policy

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Parameter	Type	Description
	<ul style="list-style-type: none"> - be-cl-ld-voice : best effort, controlled load, 802.IId Annex G voice - be-voice : best effort voice - l2-vpn-3 : L2 VPN with 3 traffic classes - l2-vpn-4 : L2 VPN with 4 traffic classes - 11 : operator-defined profile - 12 : operator-defined profile - 13 : operator-defined profile - 14 : operator-defined profile - 15 : operator-defined profile - 16 : operator-defined profile - 17 : operator-defined profile - 18 : operator-defined profile - 19 : operator-defined profile - 20 : operator-defined profile - 21 : operator-defined profile - 22 : operator-defined profile - 23 : operator-defined profile - 24 : operator-defined profile - 25 : operator-defined profile - 26 : operator-defined profile - 27 : operator-defined profile - 28 : operator-defined profile - 29 : operator-defined profile - 30 : operator-defined profile - 31 : operator-defined profile - 32 : operator-defined profile <p>Possible values:</p> <ul style="list-style-type: none"> - none : no profile name to associate - name : enter profile name to be associated <p>Data driven field type</p> <p>Possible values are depending on the actual configuration and software.</p> <p>The currently allowed values can be shown with online-help.</p>	
[no] qos-profile	<p>Parameter type: <Qos::QosSessionProfileName></p> <p>Format:</p> <p>(none name : <Qos::IgnoredQosProfileName>)</p> <p>Possible values:</p> <ul style="list-style-type: none"> - none : no profile name to associate - name : enter profile name to be associated <p>Data driven field type</p> <p>Possible values are depending on the actual configuration and software.</p> <p>The currently allowed values can be shown with online-help.</p>	<p><i>optional parameter with default value: "none"</i></p> <p>qos profile name</p>
[no] prior-best-effort	Parameter type: boolean	<p><i>optional parameter</i></p> <p>enable best effort priority (value 0)</p>
[no] prior-background	Parameter type: boolean	<p><i>optional parameter</i></p> <p>enable background priority (value 1)</p>
[no] prior-spare	Parameter type: boolean	<p><i>optional parameter</i></p> <p>enable spare priority (value 2)</p>
[no] prior-exc-effort	Parameter type: boolean	<p><i>optional parameter</i></p> <p>enable the excellent effort priority (value 3)</p>
[no] prior-ctrl-load	Parameter type: boolean	<i>optional parameter</i>

Parameter	Type	Description
		enable the controlled load priority (value 4)
[no] prior-less-100ms	Parameter type: boolean	<i>optional parameter</i> enable video <100ms latency and jitter priority (value 5)
[no] prior-less-10ms	Parameter type: boolean	<i>optional parameter</i> enable video <10ms latency and jitter priority (value 6)
[no] prior-nw-ctrl	Parameter type: boolean	<i>optional parameter</i> enable the network controlled priority (value 7)
[no] in-qos-prof-name	Parameter type: <Qos::QosIngressProfileNameForVlan> 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.	<i>optional parameter with default value: "name : Default_TC0"</i> <i>The parameter is not visible during modification.</i> a pointer to the Qos Profile that maps pbits to TCs on a VLAN port basis
[no] max-up-qos-policy	Parameter type: <Vlan::MaxUpQoSPolicy> Format: - the max number of Qos Policy numbers (ACL and CCL) on a VLAN port basis - range: [0...8]	<i>optional parameter with default value: "0"</i> the max number of Qos Policy numbers (ACL and CCL) on a VLAN port basis
[no] max-ip-antispoof	Parameter type: <Vlan::MaxIpAntispoof> Format: - the max number of IP Antispoofing on a VLAN port basis - range: [0...32,65535]	<i>optional parameter with default value: "65535"</i> the max number of IP address number in IP antispoofing and/or ARP relay
[no] max-unicast-mac	Parameter type: <Vlan::BridgeMaxMac> Format: - number of unicast mac addresses - range: [0...65535,65535]	<i>optional parameter with default value: "65535"</i> max uncommitted unicast mac addresses
[no] max-ipv6-antispf	Parameter type: <Vlan::MaxIpAntispoof> Format: - the max number of IP Antispoofing on a VLAN port basis - range: [0...32,65535]	<i>optional parameter with default value: "65535"</i> the max number of IPV6 address number in IP antispoofing and/or ARP relay
[no] mac-learn-ctrl	Parameter type: <Vlan::MacLearnCtrl> Format: - MAC addresses shall be learned 1: mac-learn is enabled 2: mac-learn is disabled 3: mac-learn is inherited from bridge port - range: [1...3]	<i>optional parameter with default value: "3"</i> MAC address learned control up(1), down(2), inherit from bridgedPort(3)
[no] min-cvlan-id	Parameter type: <Vlan::MinCVlanId> Format: - Lower boundary of CVLAN range for protocol awareness - range: [1...4095]	<i>optional parameter with default value: "1"</i> This object configures the lower boundary of CVLAN range for protocol awareness for S-VLAN cross-connect(Tunnel)
[no] max-cvlan-id	Parameter type: <Vlan::MaxCVlanId> Format: - Upper boundary of CVLAN range for protocol awareness - range: [1...4095]	<i>optional parameter with default value: "4095"</i> This object configures the upper boundary of CVLAN range for

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Parameter	Type	Description
		protocol awareness for S-VLAN cross-connect(Tunnel)
[no] ds-dedicated-q	Parameter type: <Vlan::DsDedicatedQueue> Format: (enable disable) Possible values: - enable : enable use of downstream dedicated Q - disable : disable use of downstream dedicated Q	<i>optional parameter with default value: "disable"</i> Packets use dedicated downstream PON level queue
[no] tpid	Parameter type: <Vlan::Tpid> Format: - vlan tpid hex string(example : 8100), scope is 600-ffff - range: [a-fA-F0-9] - length: 1<=x<=4	<i>optional parameter with default value: "0"</i> This object configures vlan port tpid
[no] inner-pbit-remark	Parameter type: <Vlan::InnerPbitRemark> Format: (untouched remark) Possible values: - untouched : disable use of pbit remark in tunnel mode - remark : enable use of pbit remark in tunnel mode	<i>optional parameter with default value: "untouched"</i> Set pbit remark in tunnel mode, untouched(1), remark(2)
[no] groupid	Parameter type: <Vlan::GroupID> Format: - vlan group id to share the policer instance - range: [0...8192]	<i>optional parameter with default value: "0"</i> This object configures vlan group id to share the policer instance, 0 means no group or not sharing policer instance
[no] usacceptframetype	Parameter type: <Vlan::USAcceptFrameType> Format: (all untagandpriority untagged) Possible values: - all : the upstream rule should allow all types of Ethernet frames which received from the UNI port to pass - untagandpriority : the upstream rule should only allow untag and priority tagged Ethernet frames which received from the UNI port to pass - untagged : the upstream rule should only allow untag Ethernet frames which received from the UNI port to pass	<i>optional parameter with default value: "all"</i> This object specifies the frame types that should be forwarded or not in upstream.
[no] oltregenprofile	Parameter type: <Vlan::OltRegenProfile> Format: (disabled enabled) Possible values: - disabled : ONU will do regeneration profile in S+C tunnel mode,not on OLT side - enabled : OLT will do regeneration profile in S+C tunnel mode,not on ONU side	<i>optional parameter with default value: "disabled"</i> Set pbit regeneration profile on OLT in S+C tunnel mode, enabled(1), disabled(0)

Command Output

Table 24.4-3 "Bridge Port to VLAN Association Configuration Command" Display parameters

Specific Information		
name	Type	Description
prio-regen-name	Parameter type: <Vlan::PrioRegenProfileName>	priority regeneration profile name

name	Type	Description
	(none name : <Vlan::IgnoredVlanProfileName>) Possible values: - none : no profile name to associate - 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.	<i>This element is only shown in detail mode.</i>

24.5 L2 Static User Ip Address Configuration Command

Command Description

This command allows the operator to configure the IP-address for a user interface(vlan-port) of a L2 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 bridge port (port) vlan-id (index) static-user ( no ip-address (ipaddr) ) | ( ip-address (ipaddr) )
```

Command Parameters

Table 24.5-1 "L2 Static User Ip Address 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> / <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>	identity of a port(e.g. uplink port, atm pvc, efm port, eth port, la group ...)

Resource Identifier	Type	Description
	<ul style="list-style-type: none"> - 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 	
(index)	<p>Format:</p> <pre>(<Vlan::UVlanIndex> stacked : <Vlan::SVlanIndexStacked> : <Vlan::CVlanIndex>)</pre> <p>Possible values:</p> <ul style="list-style-type: none"> - stacked : stacked vlan identity <p>Field type <Vlan::UVlanIndex></p> <ul style="list-style-type: none"> - unstacked vlan identity - range: [1...4093,4096] <p>Field type <Vlan::SVlanIndexStacked></p> <ul style="list-style-type: none"> - service vlan identity - range: [1...4093] <p>Field type <Vlan::CVlanIndex></p> <ul style="list-style-type: none"> - customer vlan identity - range: [0...4093] 	vlan id
(ipaddr)	<p>Format:</p> <pre><Ip::V4Address> / <Ip::PrefixLengthArpRelay></pre> <p>Field type <Ip::V4Address></p> <ul style="list-style-type: none"> - IPv4-address <p>Field type <Ip::PrefixLengthArpRelay></p> <ul style="list-style-type: none"> - IP address prefix length [23.....32] for dsl - range: [8...32] 	inetaddress

24.6 L2 Static User Ipv6 Address Configuration Command

Command Description

This command allows the operator to configure the IPv6-address for a user interface(vlan-port) of a L2 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 bridge port (port) vlan-id (index) static-user ( no ipv6-address (prefixandlength) ) | ( ipv6-address (prefixandlength) )
```

Command Parameters

Table 24.6-1 "L2 Static User Ipv6 Address Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(port)	Format: (<Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> : <Eqpt::VpId> : <Eqpt::VcId> <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> / <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	identity of a port(e.g. uplink port, atm pvc, efm port, eth port, la group ...)

Resource Identifier	Type	Description
	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	
(index)	Format: (<Vlan::UVlanIndex> stacked : <Vlan::SVlanIndexStacked> : <Vlan::CVlanIndex>) Possible values: - stacked : stacked vlan identity Field type <Vlan::UVlanIndex> - unstacked vlan identity - range: [1...4093,4096] Field type <Vlan::SVlanIndexStacked> - service vlan identity - range: [1...4093] Field type <Vlan::CVlanIndex> - customer vlan identity - range: [0...4093]	vlan id
(prefixandlength)	Format: <ipv6::Prefix> / <ipv6::PrefixLengthLimited> Field type <ipv6::Prefix> - IPv6-address Field type <ipv6::PrefixLengthLimited> - length of IPv6 address or prefix - range: [49...64,128]	ipv6 address prefix