31- PPPoX-Relay Configuration Commands

31.1 PPPoX-Relay Configuration Command Tree

Description

This chapter gives an overview of nodes that are handled by "PPPoX-Relay Configuration Commands".

Command Tree

----configure
----pppox-relay
----cross-connect
----global-session
- [no] pado-timeout
- [no] pads-timeout
- [no] max-pad-attempts
- [no] trans-max-age
- [no] cc-max-age

----[no] engine
- (vlan-id)
- [no] mac-addr-conc
- [no] dslf-iwf-tag
- [no] max-payload-tag
- [no] name
- [no] lock
- [no] service-name

----[no] monitor
----tca
- [no] enable
- [no] tran-ageout-15min
- [no] sess-ageout-15min
- [no] tran-ageout-1day
- [no] sess-ageout-1day

----[no] client-port
- (port)
- vlan-id
- default-priority
- [no] max-cc
- [no] qos-profile

----[no] monitor

31.2 PPPoX Cross-connect Global Configuration Command

Command Description

This command allows the operator to specify the system-wide configuration parameters applicable to all PPP sessions.

User Level

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

Command Syntax

The command has the following syntax:

> configure pppox-relay cross-connect global-session [no pado-timeout | pado-timeout <PPPoX::PadTimeOut>] [no pads-timeout | pads-timeout <PPPoX::PadTimeOut>] [no max-pad-attempts | max-pad-attempts <PPPoX::PadRRetrials>] [no trans-max-age | trans-max-age <PPPoX::TransactionMaxAge>] [no cc-max-age | cc-max-age <PPPoX::CcMaxAge>]

Command Parameters

Table 31.2-2 "PPPoX Cross-connect Global Configuration Command" Command Parameters

Parameter	Type	Description
[no] pado-timeout	Parameter type: <PPPoX::PadTimeOut> Format: - timeout for PAD-O PAD-S messages - unit: sec - range: [1...60]	*optional parameter with default value: 3* timeout for PAD-O message
[no] pads-timeout	Parameter type: <PPPoX::PadTimeOut> Format: - timeout for PAD-O PAD-S messages - unit: sec - range: [1...60]	*optional parameter with default value: 3* timeout for PAD-S message
[no] max-pad-attempts	Parameter type: <PPPoX::PadRRetrials> Format: - maximum number of PAD-R messages - range: [1...16]	*optional parameter with default value: 10* maximum number of PAD-R messages
[no] trans-max-age	Parameter type: <PPPoX::TransactionMaxAge> Format: - maximum age of PPP transaction - unit: sec - range: [1...300]	*optional parameter with default value: 300* maximum age of PPP transaction
[no] cc-max-age	Parameter type: <PPPoX::CcMaxAge> Format:	*optional parameter with default value: 300*

Parameter	Type	Description
	- maximum age of PPP cross-connection - unit: sec - range: [10...3000]	maximum age of PPP cross connection

31.3 PPPoX Cross-connect Engine Configuration Command

Command Description

This command allows the operator to configure the PPP cross-connect engine. The PPP cross-connect engine is identified by a VLAN ID. The name is the name used to identify the PPP cross-connect engine. The lock command locks or unlocks the PPP control plane. For example, if the control plane is unlocked, no new PPP cross-connections can be established, but the existing connections remain until they are released by the PPP server or client.

User Level

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

Command Syntax

The command has the following syntax:

> configure pppox-relay cross-connect (no engine (vlan-id)) | (engine (vlan-id) [[no] mac-addr-conc] [[no] dslf-iwf-tag] [no max-payload-tag | max-payload-tag <PPPoX::MaxPayLoadTag>] [no name | name <PPPoX::EngineName>] [[no] lock] [no service-name | service-name <PPPoX::EngineName>])

Command Parameters

Table 31.3-1 "PPPoX Cross-connect Engine Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(vlan-id)	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 identity

Table 31.3-2 "PPPoX Cross-connect Engine Configuration Command" Command Parameters

Parameter	Type	Description
[no] mac-addr-conc	Parameter type: boolean	*optional parameter*

Parameter	Type	Description
		The parameter is not visible during modification. enable MAC address concentration
[no] dslf-iwf-tag	Parameter type: boolean	*optional parameter* insert DSLF IWF Tag into PPPoE Discovery packets
[no] max-payload-tag	Parameter type: <PPPoX::MaxPayLoadTag> Format: (insert | no-insert) Possible values: - insert : add tag holding the MRU to PADI and PADR messages - no-insert : donot add tag holding the MRU to PADI and PADR messages	*optional parameter with default value: "no-insert"* insert:add tag holding the MRU to PADI and PADR messages
[no] name	Parameter type: <PPPoX::EngineName> Format: - Engine Name - length: 1<=x<=32	*optional parameter with default value: ""* name to identify the engine
[no] lock	Parameter type: boolean	*optional parameter* lock control plane engine
[no] service-name	Parameter type: <PPPoX::EngineName> Format: - Engine Name - length: 1<=x<=32	*optional parameter with default value: ""* service name issued by engine in PAD-I message

31.4 PPPoX Cross-connect Engine Monitoring Configuration Command

Command Description

This command allows the operator to configure the exception event counters for the PPP cross-connect engine.

User Level

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

Command Syntax

The command has the following syntax:

> configure pppox-relay cross-connect engine (vlan-id) (no monitor) | (monitor)

Command Parameters

Table 31.4-1 "PPPoX Cross-connect Engine Monitoring Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(vlan-id)	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 identity

31.5 PPPCC Engine TCA Threshold Configuration Command

Command Description

This command allows the operator to configure the Threshold Crossing Alert (TCA) thresholds. The configuration is specific per PPP CC Engine.

User Level

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

Command Syntax

The command has the following syntax:

> configure pppox-relay cross-connect engine (vlan-id) tca [[no] enable] [no tran-ageout-15min | tran-ageout-15min <PPPoX::TcaThreshold>] [no sess-ageout-15min | sess-ageout-15min <PPPoX::TcaThreshold>] [no tran-ageout-1day | tran-ageout-1day <PPPoX::TcaThreshold>] [no sess-ageout-1day | sess-ageout-1day <PPPoX::TcaThreshold>]

Command Parameters

Table 31.5-1 "PPPCC Engine TCA Threshold Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(vlan-id)	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 identity

Table 31.5-2 "PPPCC Engine TCA Threshold Configuration Command" Command Parameters

Parameter	Type	Description
[no] enable	Parameter type: boolean	*optional parameter* enable the reporting of TCA's for this pppcc engine

Parameter	Type	Description
[no] tran-ageout-15min	Parameter type: <PPPoX::TcaThreshold> Format: - value of the tca threshold for the pppcc engine - range: [0...65535]	*optional parameter with default value: 0* configurable threshold for the transaction ageout 15min counter
[no] sess-ageout-15min	Parameter type: <PPPoX::TcaThreshold> Format: - value of the tca threshold for the pppcc engine - range: [0...65535]	*optional parameter with default value: 0* configurable threshold for the session ageout 15min counter
[no] tran-ageout-1day	Parameter type: <PPPoX::TcaThreshold> Format: - value of the tca threshold for the pppcc engine - range: [0...65535]	*optional parameter with default value: 0* configurable threshold for the transaction ageout 1day counter
[no] sess-ageout-1day	Parameter type: <PPPoX::TcaThreshold> Format: - value of the tca threshold for the pppcc engine - range: [0...65535]	*optional parameter with default value: 0* configurable threshold for the session ageout 1day counter

31.6 PPPoX Cross-connect Client Port Configuration Command

Command Description

This command allows the operator to specify the PPP cross-connect client port. When creating a client port on a vlan port, only a Cvlan may be used.

User Level

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

Command Syntax

The command has the following syntax:

> configure pppox-relay cross-connect (no client-port (port)) | (client-port (port) vlan-id <Network::StackedVlanSigned> default-priority <PPPoX::DefaultPriority> [no max-cc | max-cc <PPPoX::MaxNumPppCc>] [no qos-profile | qos-profile <PPPoX::QosProfileName>])

Command Parameters

Table 31.6-1 "PPPoX Cross-connect Client Port 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> | 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> /	client port identification

Resource Identifier	Type	Description
	<Eqpt::OntSlotId> / <Eqpt::OntPortId> : <Eqpt::UnstackedVlan> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::OntSlotId> / <Eqpt::OntPortId> | 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> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / voip | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / vuni | 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> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::LLId>) Possible values: - vlan-port : 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 Possible values: - voip : virtual uni identifier obsolete alternative replaced by vuni - vuni : virtual uni identifier Field type <Eqpt::OntSlotId> - the ONT SLOT identifier Field type <Eqpt::OntPortId> - the ONT PORT identifier Field type <Eqpt::LLId> - the LLID identifier,range 1 for EPON,range 1-8 for DPOE	

Resource Identifier	Type	Description
	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	

Table 31.6-2 "PPPoX Cross-connect Client Port Configuration Command" Command Parameters

Parameter	Type	Description
vlan-id	Parameter type: <Network::StackedVlanSigned> 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]	*mandatory parameter* *The parameter is not visible during modification.* associates client port to cc-engine
default-priority	Parameter type: <PPPoX::DefaultPriority> Format: - indicates the p-bit for the client port - range: [0...7]	*mandatory parameter* indicates the p-bit for the client port
[no] max-cc	Parameter type: <PPPoX::MaxNumPppCc> Format: - max no. of PPP cross connection on a port - range: [1...64], [9...64] = 8 with MAC concentration.	*optional parameter with default value: 64* max no. of PPP cross connection on a port
[no] qos-profile	Parameter type: <PPPoX::QosProfileName> Format: (none | name : <PPPoX::IgnoredQosProfileName>) Possible values: - none : no profile name to associate - name : enter profile name to be associated Field type <PPPoX::IgnoredQosProfileName> - name of the QoS profile - length: 1<=x<=32	*optional parameter with default value: "none"* qos profile name associated with client port

31.7 PPPoX Cross-connect Client Port Monitoring Configuration Command

Command Description

This command allows the operator to configure the exception event counters for the PPP cross-connect client port.

User Level

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

Command Syntax

The command has the following syntax:

> configure pppox-relay cross-connect client-port (port) (no monitor) | (monitor)

Command Parameters

Table 31.7-1 "PPPoX Cross-connect Client Port Monitoring 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> | 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>	client port identification

Resource Identifier	Type	Description
	| <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::OntSlotId> / <Eqpt::OntPortId> | 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> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / voip | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / vuni | 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> | <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PonId> / <Eqpt::OntId> / <Eqpt::LLId>) Possible values: - vlan-port : 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 Possible values: - voip : virtual uni identifier obsolete alternative replaced by vuni - vuni : virtual uni identifier Field type <Eqpt::OntSlotId> - the ONT SLOT identifier Field type <Eqpt::OntPortId> - the 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	

Resource Identifier	Type	Description
	Field type <Eqpt::UnstackedVlan> - unstacked vlan id Field type <Eqpt::SVlan> - service vlan id Field type <Eqpt::CVlan> - customer vlan id	