39- L2CP Configuration Commands

39.1 L2CP Configuration Command Tree

Description

This chapter gives an overview of nodes that are handled by "L2CP Configuration Commands".

Command Tree

----configure
----l2cp
- [no] partition-type

----[no] session
- **(index)**
- bras-ip-address
- [no] gsmp-version
- [no] gsmp-sub-version
- [no] encap-type
- [no] topo-discovery
- [no] layer2-oam
- [no] alive-timer
- [no] port-reprt-shaper
- [no] aggr-reprt-shaper
- [no] tcp-retry-time
- [no] gsmp-retry-time
- [no] dslam-name
- [no] partition-id
- [no] window-size
- [no] tcp-port
- [no] router-instance
- [no] sig-partition-id

----[no] user-port
- **(user-port)**
- **partition-id**

39.2 L2CP Configuration Command

Command Description

This command allows the operator to configure the L2CP parameters.

User Level

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

Command Syntax

The command has the following syntax:

> configure l2cp [no partition-type | partition-type <L2cp::PartitionType>]

Command Parameters

Table 39.2-2 "L2CP Configuration Command" Command Parameters

Parameter	Type	Description
[no] partition-type	Parameter type: <L2cp::PartitionType> Format: (no-partition | fixed-assigned) Possible values: - no-partition : no partitioning is supported - fixed-assigned : partitioning is supported	*optional parameter with default value: "no-partition"* partition type

39.3 L2CP Session Configuration Command

Command Description

This command allows the operator to configure the L2CP session parameters for a given session id.

In current version, ISAM supports L2CP only on top of TCP/IP; as result of this command, ISAM shall start a TCP connection to a BRAS identified by a configured IP address. Then depending on the setting of the GSMP Retry Timer, the ISAM shall start the GSMP Adjacency Protocol to setup a L2CP session with that BRAS.

This means:

- *if TCP Retry Timer is zero, ISAM shall not start the TCP connection. If TCP Retry Timer is not zero, ISAM shall start the setup of a TCP connection to a BRAS whose IP address must be configured too. In no way the ISAM accepts that a (unknown) BRAS tries to start a TCP connection*
- *if GSMP Retry Timer is zero, ISAM shall not start the GSMP Adjacency Protocol but instead be prepared to handle GSMP Adjacency Protocol messages from that BRAS. If GSMP Retry Timer is not zero, ISAM shall start the GSMP Adjacency Protocol in addition to being prepared to handle GSMP Adjacency Protocol messages from that BRAS*

User Level

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

Command Syntax

The command has the following syntax:

> configure l2cp (no session (index)) | (session (index) bras-ip-address <L2cp::InetAddress> [no gsmp-version | gsmp-version <L2cp::Version>] [no gsmp-sub-version | gsmp-sub-version <L2cp::SubVersion>] [no encap-type | encap-type <L2cp::EncapType>] [no topo-discovery | topo-discovery <L2cp::AccessTopologyDiscovery>] [no layer2-oam | layer2-oam <L2cp::Layer2OAM>] [no alive-timer | alive-timer <L2cp::AliveTimer>] [no port-reprt-shaper | port-reprt-shaper <L2cp::ReportShaper>] [no aggr-reprt-shaper | aggr-reprt-shaper <L2cp::AggrReportShaper>] [no tcp-retry-time | tcp-retry-time <L2cp::TcpRetryTimer>] [no gsmp-retry-time | gsmp-retry-time <L2cp::GsmpRetryTimer>] [no dslam-name | dslam-name <L2cp::DslamName>] [no partition-id | partition-id <L2cp::PartitionId2>] [no window-size | window-size <L2cp::WindowSize>] [no tcp-port | tcp-port <L2cp::InetPortNumber>] [no router-instance | router-instance <Ihub::RouterVplsMgnt>] [[no] sig-partition-id])

Command Parameters

Table 39.3-1 "L2CP Session Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(index)	Format: - identity of the l2cp session - range: [1...255]	index to the l2cp session table

Table 39.3-2 "L2CP Session Configuration Command" Command Parameters

Parameter	Type	Description
bras-ip-address	Parameter type: <L2cp::InetAddress> Format: - IPv4-address	*mandatory parameter* *The parameter is not visible during modification.* IPv4 address used for the L2cp session peer
[no] gsmp-version	Parameter type: <L2cp::Version> Format: - version of the GSMP protocol - range: [3]	*optional parameter with default value: 3* *The parameter is not visible during modification.* version of gsmp protocol
[no] gsmp-sub-version	Parameter type: <L2cp::SubVersion> Format: - sub version of the GSMP protocol - range: [1...2]	*optional parameter with default value: 1* *The parameter is not visible during modification.* sub version of gsmp protocol
[no] encap-type	Parameter type: <L2cp::EncapType> Format: tcp Possible values: - tcp : tcp encapsulation type	*optional parameter with default value: "tcp"* *The parameter is not visible during modification.* encapsulation type
[no] topo-discovery	Parameter type: <L2cp::AccessTopologyDiscovery> Format: (disabled | enabled) Possible values: - disabled : no topology discovery - enabled : topology discovery	*optional parameter with default value: "enabled"* *The parameter is not visible during modification.* topology discovery capability
[no] layer2-oam	Parameter type: <L2cp::Layer2OAM> Format: (disabled | enabled) Possible values: - disabled : no layer2 oam - enabled : layer2 oam	*optional parameter with default value: "enabled"* *The parameter is not visible during modification.* layer2 OAM is supported
[no] alive-timer	Parameter type: <L2cp::AliveTimer> Format: - adjacency protocol watchdog alive time - unit: 100 msec - range: [1...255]	*optional parameter with default value: 250* adjacency protocol watchdog alive time.
[no] port-reprt-shaper	Parameter type: <L2cp::ReportShaper> Format: - time between two EventReport msgs related to same port, should be >= aggr-reprt-shaper - unit: 100 msec - range: [1...255]	*optional parameter with default value: 10* *The parameter is not visible during modification.* time between 2 EventReport msgs on the same port, should be >= aggr-reprt-shaper
[no] aggr-reprt-shaper	Parameter type: <L2cp::AggrReportShaper> Format: - time between two EventReport msgs related to any port - unit: 10 msec - range: [1...2550]	*optional parameter with default value: 10* *The parameter is not visible during modification.* time between 2 EventReport msgs on any port
[no] tcp-retry-time	Parameter type: <L2cp::TcpRetryTimer> Format: - time between 2 TCP connection setup attempts. - unit: 100 msec - range: [0...255]	*optional parameter with default value: 10* time between 2 TCP connection setup attempts

Parameter	Type	Description
[no] gsmp-retry-time	Parameter type: <L2cp::GsmpRetryTimer> Format: - time between 2 GSMP/L2CP connection setup attempts. - unit: 100 msec - range: [0...255]	*optional parameter with default value: 10* time between 2 GSMP/L2CP connection setup attempts
[no] dslam-name	Parameter type: <L2cp::DslamName> Format: - a mac-address (example : 01:02:03:04:05:06) - length: 6	*optional parameter with default value: "00 : 00 : 00 : 00 : 00 : 00"* *The parameter is not visible during modification.* l2cp name of the DSLAM
[no] partition-id	Parameter type: <L2cp::PartitionId2> Format: - partition id - range: [0...127]	*optional parameter with default value: 0* *The parameter is not visible during modification.* identity for this session's specific DSLAM partition
[no] window-size	Parameter type: <L2cp::WindowSize> Format: - max no.of unacknow req msgs to be transmtted in a window - range: [10]	*optional parameter with default value: 10* *The parameter is not visible during modification.* max no.of unacknow req msgs to be transmitted in a window
[no] tcp-port	Parameter type: <L2cp::InetPortNumber> Format: - tcp port number - range: [0...65535]	*optional parameter with default value: 6068* *The parameter is not visible during modification.* tcp port number of the session established to the peer.
[no] router-instance	Parameter type: <Ihub::RouterVplsMgnt> Format: (base | vpls-management | <Ihub::L2cpRouter>) Possible values: - base : base router - vpls-management : vpls-management router Field type <Ihub::L2cpRouter> - vprn service-id - range: [1...2147483646]	*optional parameter with default value: "base"* *The parameter is not visible during modification.* router-instance to be used to obtain connectivity to the peer.
[no] sig-partition-id	Parameter type: boolean	*optional parameter* *The parameter is not visible during modification.* indicates if partition ID is signalled

39.4 L2CP User Port Partition Configuration Command

Command Description

This command allows the operator to configure the partition id for the given user-port.

User Level

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

Command Syntax

The command has the following syntax:

> configure l2cp (no user-port (user-port) partition-id <L2cp::PartitionId>) | (user-port (user-port) partition-id <L2cp::PartitionId>)

Command Parameters

Table 39.4-1 "L2CP User Port Partition Configuration Command" Resource Parameters

Resource Identifier	Type	Description
(user-port)	Format: <Eqpt::RackId> / <Eqpt::ShelfId> / <Eqpt::SlotId> / <Eqpt::PortId> 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	interface index of the DSL port
partition-id	Parameter type: <L2cp::PartitionId> Format: - partition id - range: [1...127]	partition id