Suggested 1AX Definitions

Mick Seaman

This note shows the proposed cumulative effects of my comments on P802.1AX-Rev D0.3. The comments themselves provide detailed rationale for all the changes. The source for this proposed text is Framemaker, which may help in subsequent editing.

_____

3. Definitions

For the purposes of this document, the following terms and definitions apply. The *IEEE Standards Dictionary Online* should be consulted for terms not defined in this clause.[6,7]

This standard makes use of the following terms defined in IEEE Std 802:

— agent

— end station

— Media Access Control (MAC)

— Management Information Base (MIB)

— station

This standard makes use of the following terms defined in IEEE Std 802.1AC:

— client

— frame

— Internal Sublayer Service (ISS)

— port

NOTE—The reader of this standard to review IEEE Std 802.1AC's description of the basic architectural concepts and terms used in this standard.

This standard makes use of the following terms defined in IEEE Std 802.1Q:

— bridge

The following terms are specific to this standard:

Actor: The local entity in a Link Aggregation Control Protocol exchange.

Aggregation Key: A parameter of each Aggregation Port and Aggregator in an Aggregation System, prohibiting their participation in the same Link Aggregation Group if their Aggregation Keys differ.

Aggregation Link: A LAN connecting two Aggregation Systems.

Aggregation Port: A port in an Aggregation System that provides access to a single Aggregation Link.

Aggregation System: A system that includes one or more Aggregators, capable of using one or more Aggregation Ports to provide service to an Aggregator Client.

Aggregator: A multiplexing/demultiplexing entity that is capable of providing service at an Aggregation Port using the service provided by one or more Aggregation Ports.

Aggregator Client: A protocol entity that makes use of the service provided by an Aggregator.

Aggregator Port: A port that provides access to the service provided by a single Aggregator.

---

[6]*IEEE Standards Dictionary Online* subscription is available at
https://www.ieee.org/publications_standards/publications/subscriptions/prod/standards_dictionary.html
[7]Information on other references can be found in Clause 2.

conversation: A set of frames transmitted from one end station to another, with the assumption that the communicating end stations require intermediate systems to maintain the ordering of those frames.

Conversation ID: An integer in the range 0 through 4095, each value identifying one or more conversations.

Distributed Relay: Transmission and reception by an Aggregator Port in a Portal System using one or more Aggregation Ports in either of the Portal's Systems.

Distributed Resilient Network Interconnect (DRNI): The use of a Portal comprising two Aggregation Systems to connect one network to another, while appearing to the other network as a single Aggregation System.

Down frame: A frame transmitted by an Aggregator Client.

DR-component: A part of the Distributed Relay functionality that resides within a single Portal System.

Intra-Portal Link (IPL): A logical or physical link connecting the Aggregation Systems composing a single Portal.

Intra-Portal Port: The service interface provided by an Intra-Portal Link within a Portal System.

Key: *See:* **Aggregation Key**.

Link Aggregation Control Protocol (LACP): A protocol used to control the use of Aggregation Links and defined in this standard.

LACPDU: A frame transmitted by a protocol entity as part of LACP operation.

link: *See:* **Aggregation Link**.

Link Aggregation Group (LAG): A group of links that appear to an Aggregator Client as a single link.

Link Number: An Aggregation Link Identifier that is unique within a Link Aggregation Group, with an operational value common to both Actor and Partner Systems.

Long LACPDU: A version 2 or higher Link Aggregation Control Protocol Data Unit (LACPDU) of a frame size that is larger 128 octets.

Partner: The remote entity in a Link Aggregation Control Protocol exchange.

Port Conversation: A subset of all possible frames such that all the Ports of a given System or Portal that participate in a given LAG associate any possible frame with one and only one Port Conversation ID.

Port Conversation ID: An integer in the range 0 through 4095 used to identify a subset of all possible frames.

Portal: Two Aggregation Systems connected by Intra-Portal Link, aggregating some or all of their Aggregation Links and using LACP to make the Portal appear as a single system to a Partner attached to those links.

Portal System: A System that is part of a Portal.

Portal System Number: An integer, taking the value 1 or 2, identifying a Portal System within its Portal.

selection algorithm: An algorithm used to assign frames to Conversation IDs and Conversation IDs to Aggregation Ports.

Service Identifier (Service ID): A value extracted from the header of a frame (VID, I-SID, etc.) that identifies the service instance with which that frames is associated.

NOTE—This standard makes use of service identifiers specified in IEEE Std 802.1Q.

System: When used in this standard and not preceded by "Aggregation" or "Portal", "System" means an Aggregation System.

Type/Length/Value (TLV): A variable length encoding of an information element consisting of sequential type, length, and value fields where the type field identifies the type of information, the length field indicates the length of the TLV (including the type, length, and information fields) in octets, and the value field contains the information itself. The type value is locally defined and unique within the defined protocol.

Up frame: A frame that has entered an Aggregation System or Portal through an Aggregation Port.