802.1 / 802.11 Formal Interface

Date: 2014-01-23

Authors:

Name	Affiliations	Address	Phone	email
Norman Finn	Cisco Systems	170 W Tasman Dr. San José CA 95134 USA	+1.408.526.4495	nfinn@cisco.com

Abstract

IEEE P802.1Qbz and P802.1AC-REV require a reference to a formal MAC Service Interface, to reside in a particular clause in IEEE P802.11ak. (See also 11-13/0938.)

Infrastructure 802.1AC Convergence

- (ISS) - (ISS) - (ISS) - (ISS) - ... (ISS) - (ISS) -

- All of the ports associated with a given AP (or BSS, in the sense of a logical function) go through a single instance of the convergence function.
- For .requests: The convergence function turns some number of .requests presented "simultaneously" on some number of its upper SAPs into a single .request and a vector indicating on which SAPs it was presented.
- For .indications: The convergence function presents the frame on the SAP(s) indicated by the vector. (It so happens that this is always just one port.)
 - (Infrastructure SAP with port vector)

P802.11ak Non-AP station access

(Non-AP station SAP with port vector)

- For .requests: The frame has only Destination and Source addresses. The port vector simply indicates whether the frame is or is not encrypted. The outer Destination and Receiver addresses are the AP, the Source/Transmitter address the non-AP station. The A-MSDU does not carry any subset encoding.
- For .indications: Whether or not the frame was encrypted determines the single-bit vector passed up with the frame.

Two possibilities

- 1. Leave the request/indication primitives alone, and present an array of SAPs to the bridge.
 - We then have to describe the use in terms of presenting the same (or similar) data to some number of the SAPs at the same time.
- 2. Add a port vector to the request/indication primitives.
 - We then have to refer to an additional set of primitives in the rest of 802.11.

Request primitive

5.2.2.2 Semantics of the service primitive

The parameters of the primitive are as follows:

MA-UNITDATA.request (

source address,

destination address,

routing information,

port vector,

data,

priority,

service class

Indication primitive

5.2.3.2 Semantics of the service primitive

The parameters of the primitive are as follows:

MA-UNITDATA.indication (

source address,

destination address,

routing information,

port vector,

data,

reception status,

priority,

service class