IEEE P802.11
Wireless LANs

|  |
| --- |
| Proposed Resolution to REVmc CID 2455 |
| Date: 2014-03-19 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Mark Hamilton | Spectralink, Corp | 2560 55th StBoulder, CO 80301 USA | +1-303-441-7553 | mark.hamilton@spectralink.com |
|  |  |  |  |  |

Abstract

This document presents some brief text to capture thoughts about the 802.11 infrastructure architectural concepts of DS and Portal, to further 802.1 collaboration discussions in TGak.

What the DS does:

* A simple, flat, global (across the ESS) one-way lookup table, mapping all associated non-AP STAs (by MAC Address) to AP (by undefined identifier)
* Transfers “MSDU bundles” (see below) between APs and between APs and Portal.
	+ When presented with an MSDU bundle, performs the lookup on the DA MAC Address. If entry found, deliver the MSDU bundle to the identified AP. If not entry found, deliver the MSDU bundle to the Portal

An “MSDU bundle” is:

* Source Address (MAC Address, EUI-48)
* Destination Address (MAC Address, EUI-48)
* Data payload (opaque, but specified to be SNAP encoded)
* Priority
* Service class ???

What a Portal does:

* Provides integration between the DS and a non-802.11 network
* Presented with an MSDU bundle from the DS:
	+ Translate the source and destination address to whatever is appropriate for the non-802.11 network, if necessary
	+ Convert the format of the Data payload if/as necessary (including Snap to L/T, for example, if the non-802.11 network is some other 802)
	+ Priority and Service Class ???
	+ Invoke the data delivery service of the non-802.11 network to deliver the MSDU
* Presented with an MSDU from the non-802.11 network
	+ Create an MSDU bundle, converting addresses as needed, and payload format into SNAP (from L/T, for example)
	+ Priority and Service Class ???
	+ Invoke the DSS to deliver the MSDU bundle

What a DS and Portal are not/do not (but a bridge could be):

* Detection of loops or parallel paths
* Support/understanding of VLANs
* Flow classification and metering