IEEE P802.11
Wireless LANs

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| Proposed text for clarification of bridgeable |
| Date: 2024-03-12 |
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Abstract

This document address a comment made in response to the 802REVc D1.1 recirculation ballot, CID 4 in [**1-23/0022r0**](https://mentor.ieee.org/802.1/dcn/23/1-23-0022-00-Mntg-p802-revc-d1-1-comments-pdis.ods).

**Background:**

This document proposes a resolution to the following comment on 802REVc D1.2:

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| **CiD** | **Commenter** | **Category** | **Page** | **Sub-clause** | **Line #** | **Comment** | **Proposed Change** |
| 4 | Mark Hamilton | Technical | 21 | 3.1 | 8 | Why does a bridge have to connect specifically/only IEEE 802 networks (in fact we note later that some non-802 networks are also bridgeable)? "Bridge" is a generic term, and is further specified as IEEE Std 802.1Q Bridge when it is specifically following IEEE 802 protocols and uses. | P21.8, delete "IEEE 802". Same thing at P26.25. P35.4, replace "bridged IEEE 802 network" with "bridged network". Same thing at P35.6. P35.19, delete "IEEE 802.1Q". P39.3, delete "IEEE 802". Same thing at P39.7 and P39.10. |

To address CID 4, and the discussion that has ensued around the use of the term “bridgeable”, the following changes (redlined) are proposed. This is based on the understanding that the general direction/agreement of the P802REVc comment resolution group is that we can (and should) clarify that within the document, the term “bridge” and various derivations of it, should be limited to IEEE 802’s specification of “bridge”, which is to say, as defined in IEEE Std 802.1Q and based on 802.1AC’s ISS. Thus, a sentence is added to clarify that this is the scope for the term, and then all uses of “bridge” and derived words are described assuming this specific/narrow scope.

We start with the concept of “bridge” in the most broad sense, as described in 5.3.2 of D1.2:

Bridges are stations that interconnect multiple access domains.

This concept should be mentioned as “the definition” of a bridge, but then immediately describe that for purposes of this document, we will henceforth only discuss such devices as they apply to IEEE Std 802.1Q defined bridges.

So, the proposal below clarifies this duality of viewpoints in both the Definitions, and in clause 5.3.2.

The proposal below also adds the term “bridgeable network” to be applicable specifically to IEEE 802 networks.

Beyond these introductory locations, no other changes to the use of “bridge” (and derived forms) is needed.

**Proposed Changes (against D1.2):**

**3.1 Definitions**

**bridge:** In the general sense, a functional unit that interconnects two or more access domains. In the context of this standard, this is narrowed to interconnecting two or more bridgeable IEEE 802® networks that use the same data link layer (DLL) protocols above the medium access control (MAC) sublayer, but can use different MAC protocols. Forwarding and filtering decisions are made on the basis of layer 2 information.

**bridgeable network:** A communication resource that provides the MAC service specified in IEEE Std 802.1AC, between two or more MSAPs, supporting the MAC Internal Sublayer Service.

**5.3.2.1 Bridges and bridged IEEE 802 networks**

Bridges, in the general sense, are stations that interconnect multiple access domains. In this standard, the term bridge is restricted to a functional unit that provides IEEE Std 802.1Q specification for bridge interworking among bridgeable IEEE 802 networks. A bridged IEEE 802 network consists of one or more bridges together with the complete set of access domains that they interconnect. A bridged IEEE 802 network provides end stations belonging to any of its access domains with the connectivity of a network that contains the whole set of attached end stations.

**Proposed Resolution:**

**Revised.**

**Incorporate the changes shown in 11-24/0598r0, under “Proposed Changes”.**

**References:**