

8803-3/802.3 Project Request

Date: 18 March 2004
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Requested Revision:

Standard: IEEE Std. 802.3-2002
Clause Number: 3
Clause Title: Media access control frame structure

Proposed Revision Work:

Increase 802.3's frame size to support 802.1ad, Provider Bridges, and 802.1AE, MACSec.

Currently an additional 64 to 128 octets are required to support the above 802.1 standards, but future work in these standards could expose the need for a few more octets.

802.1 is requesting 802.3 to start a project to define a larger 802.3 maximum frame size with the new size being in the range of 1650 to 2048 octets. 802.1 further requests 802.3 to investigate and define what the largest feasible maximum frame size increase should be with minimal impact to existing networks and standards.

The frame would be extended by:

1. Allowing a tag prefix between the Source MAC Address and the MAC Client Length/Type field of length 0 or 2-to-n octets, where the first two octets must be an Ethertype. (The QTag is the only currently-defined tag prefix.)
2. Allowing a postfix between the MAC Client Data and the FCS of 0-to-m octets. The format and length of any postfix is defined by an associated tag prefix.
3. $n + m + 1518$ must be less than or equal to the new maximum frame size.
4. The size of the MAC Client data portion of the frame (46-1500 octets) is not to be changed.

Rational For Revision:

Current work in 802.1 requires a larger frame size. The rational of increasing the size to beyond what is currently needed is to prevent the need for 802.1 from asking for another frame size increase in the near future.

Impact on Existing Networks:

Needs to be determined by the work being done in 802.3.

Please attach supporting material, if any Submit to: Bob Grow, Chair IEEE 802.3 E-mail: Bob.Grow@intel.com
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