IEEE P802.11
Wireless LANs

New PAR proposals by other WGs

IEEE Standards
PROJECT AUTHORIZATION REQUEST (PAR)

1. Date of Request: 14 March 1996

2. Assigned Project#: 802.1Q

3. Does this PAR revise a previously approved PAR: NO


5. Project Title:
   Standard for Virtual Bridged Local Area Networks

6. Scope of Proposed Standard:

   To develop an architecture and bridge (-1-) protocols for the
   logical partitioning of a Bridged Local Area Network (-1-, -2-, -3-)
   that provides separate instances of the MAC service (-4-) to
   administratively defined groups of users, independent of physical
   location. The architecture and protocols will be compatible and
   interoperable with existing Bridged Local Area Network equipment and
   will support a range of implementations.

   To define basic management of the groups.

   This project will not include explicit consideration or development
   of multiple active paths within a VLAN, enhanced quality of service,
   or security facilities. However it will not preclude their eventual
   development except as restricted by (-1-).

   -1- ISO/IEC 10038, ANSI/IEEE Std. 802.1D.
   -2- ANSI/IEEE Std. 802.1D Annex C.
   -3- P802.1G
   -4- ISO/IEC 15802-1, ISO/IEC 10039.

   Note: See Attachment: Interpretations

7. Purpose of Proposed Standard:

   The set of technologies known as Virtual LANs provide the equivalent
   of separate LANs over a single bridged LAN. Despite user demand
   there is currently no interoperability between different vendors,
   nor a coherent management framework for different techniques. This
   Standard will provide an architecture, protocols, and mappings for
   bridges to provide that interoperability and consistent management.
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8. SPONSOR: LMSC

9. Name of group that will write the standard:
   IEEE Project 802.1 Working Group

10. Target Completion Date: May 1998

11. Proposed Coordination: Method of Coordination:
   SCC10 (IEEE Dictionary) Circulation of Drafts
   ISO/IEC JTC1 SC6 Circulation of Drafts
   Liaison Membership
   IETF Circulation of Drafts

12. Are you aware of any patent, copyright, or trademark issues?
    Yes. There is currently a patent from Ascom-Timeplex that may
    claim to relate in some way to 802.1Q work.

    Are you aware of any standards or projects with a similar scope?
    No.

13. Copyright Agreement for IEEE Standards

    I hereby acknowledge my appointment as Official Reporter to the
    IEEE Project 802.1 Committee to write/revise a Standards
    Publication (entitled or to be entitled)
    IEEE Std. 802.1Q
    Standard for Virtual Bridged Local Area Networks

    In consideration of my appointment and the publication of the
    Standards Publication identifying me, at my option, as an Official
    Reporter, I agree to avoid *knowingly* incorporating any
    copyrighted or proprietary material of another without such
    other's consent and acknowledge that the Standards Publication
    shall constitute a "work made for hire" as defined by the
    Copyright Act, and, that as to any work not so defined, I agree
    and do hereby transfer any right or interest I may have in the
    copyright to said Standards Publication to IEEE.

    Name  W. P. Lidinsky________________________
          (signature of chair of working group)

    Title  Chair, IEEE Project 802.1 Working Group

    Date  March 14, 1996
14. Person delegated to receive communications and conduct liaison with interested bodies:
(This is normally the chair of the working group. If not, please indicate IEEE position.)

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Date: March 1996
Attachment: Interpretations

In Scope -

"Users" includes the notion of different protocols in the same endstation using different VLANs.

"Administratively defined" includes a wide range of user administrative choices from equipment purchase, through policy setting, static configuration, in-band and out of band management, and automatic configuration guided by policy choice.

Logical partitioning of a Bridged Local Area Network by VLAN mechanisms may be an appropriate element in a comprehensive system of user security. However, an explicit orientation of VLAN to security may conflict with primary goals of ease of use, and would be a significant addition to the scope of this project. Further work in this area may take place under a separate PAR at an appropriate time.

Consideration and accommodation of bridging techniques based on 802.1D (e.g., 802.5r Annex K) is within the scope of this PAR.

"Compatible and interoperable" includes the idea that new bridges implementing 802.1Q can be intermixed with existing 802.1D bridges in configurations with require the latter to forward but not interpret VLAN information.

"Multiple active paths within a VLAN" means multiple active paths between the same two users.