

P802.1AR

Submitter Email: tony@jeffree.co.uk
Type of Project: Modify Existing Approved PAR
PAR Request Date: 20-Jul-2009
PAR Approval Date: 11-Sep-2009
PAR Expiration Date: 31-Dec-2009
Status: Modification to a Previously Approved PAR
Root PAR: P802.1AR **Approved on:** 22-Sep-2005
Project Record: 802.1AR

1.1 Project Number: P802.1AR
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: Standard for Local and Metropolitan Area Networks - Secure Device Identity

3.1 Working Group: Higher Layer LAN Protocols Working Group (C/LM/WG802.1)

Contact Information for Working Group Chair

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3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks (C/LM)

Contact Information for Sponsor Chair

Name: Paul Nikolich
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Contact Information for Standards Representative

None

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 12/2009

4.3 Projected Completion Date for Submittal to RevCom: 03/2011

5.1 Approximate number of people expected to be actively involved in the development of this project: 20

5.2 Scope: This standard specifies unique per-device identifiers (DevID) and the management and cryptographic binding of a device to its identifiers, the relationship between an initially installed identity and subsequent locally significant identities, and interfaces and methods for use of DevIDs with existing and new provisioning and authentication protocols.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: This standard defines a standard identifier for IEEE 802 devices that is cryptographically bound to that device, and defines a standard mechanism to authenticate a device's identity. A verifiable unique device identity allows establishment of the trustworthiness of devices. This facilitates secure device provisioning.

Old Purpose: There is presently no standard identifier for IEEE 802 devices that is cryptographically bound to that device, nor is there a standard mechanism to authenticate a device's identity. A verifiable unique device identity allows establishment of the trustworthiness of devices. This facilitates secure device provisioning.

5.5 Need for the Project: It is desirable to authenticate entities attached to a network in a secure fashion; e.g., by means of the mechanisms defined in IEEE Std 802.1X. A standardized device identity facilitates interoperable secure device authentication. User organizations have identified this as a desirable capability to simplify and standardize security management in their networks. The IETF has identified DevID or an equivalent capability as an enabling component of a solution to security issues in several of their protocols, e.g. ARP. DevID is specifically conceived to address this need. This standard will be of benefit to manufacturers of conformant LAN equipment, their customers, and users of LANs or LAN services that are based on such equipment.

5.6 Stakeholders for the Standard: Manufacturers, distributors, and users of network-attached devices.

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No

7.2 International Activities

a. Adoption

Is there potential for this standard (in part or in whole) to be adopted by another national, regional or international organization?: No

b. Joint Development

Is it the intent to develop this document jointly with another organization?: No

c. Harmonization

Are you aware of another organization that may be interested in portions of this document in their standardization development efforts?: No

8.1 Additional Explanatory Notes (Item Number and Explanation): The changes requested here are:

(1) to revise the wording of the Purpose, as the original wording was inappropriate to be inserted in the final standard, and
(2) to extend the project to allow sufficient time to complete Sponsor balloting. The working group has developed a number of drafts of this standard, and is currently conducting a Working Group ballot on the latest draft. Although the project will result in a relatively small standard, the security technology involved in the standard is a developing area of work and the process of determining which technologies to use has been time consuming. While it is expected that Sponsor balloting of the project will commence before the end of 2009, there is no certainty that Sponsor balloting will complete before the end date of the PAR (December 2009).