

# P802.1X

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**Type of Project:** Revision to IEEE Standard 802.1X-2010

**PAR Request Date:** 20-Mar-2018

**PAR Approval Date:** 14-Jun-2018

**PAR Expiration Date:** 31-Dec-2022

**Status:** PAR for a Revision to an existing IEEE Standard

**Root Project:** 802.1X-2010

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**1.1 Project Number:** P802.1X

**1.2 Type of Document:** Standard

**1.3 Life Cycle:** Full Use

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**2.1 Title:** Standard for Local and metropolitan area networks--Port-Based Network Access Control

**Changes in title:** ~~IEEE~~ Standard for Local and metropolitan area networks--Port-Based Network Access Control

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**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/LAN/MAN Standards Committee (C/LM)

**Contact Information for Sponsor Chair**

**Name:** Paul Nikolich

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**4.1 Type of Ballot:** Individual

**4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot:** 04/2019

**4.3 Projected Completion Date for Submittal to RevCom**

**Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 02/2020**

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**5.1 Approximate number of people expected to be actively involved in the development of this project:** 12

**5.2 Scope:** For the purpose of providing compatible authentication, authorization, and cryptographic key agreement mechanisms to support secure communication between devices connected by IEEE 802(R) Local Area Networks (LANs), this standard:

a) Specifies a general method for provision of port-based network access control;

b) Specifies protocols that establish secure associations for IEEE Std 802.1AE(TM) MAC Security;

c) Facilitates the use of industry standard authentication and authorization protocols.

**Changes in scope:** For the purpose of providing compatible authentication, authorization, and cryptographic key agreement mechanisms to support secure communication between devices connected by IEEE 802(R) Local Area Networks (LANs), this standard: a) Specifies a general method for provision of port-based network access control-; b) Specifies protocols that establish secure associations for IEEE Std 802.1AE(TM) MAC Security-; c) Facilitates the use of industry standard authentication and authorization protocols.

**5.3 Is the completion of this standard dependent upon the completion of another standard:** Yes

**If yes please explain:** This maintenance project will incorporate IEEE P802.1Xck Port-Based Network Access Control - Amendment 2: YANG Data Model after that has been approved as a standard. IEEE P802.1Xck passed 802.1 WG ballot with 100% approval, no comments following recirculation, ballot closed 12/12/2017.

**5.4 Purpose:** IEEE 802 LANs are deployed in networks that convey or provide access to critical data, that support mission critical applications, or that charge for service. Protocols that configure, manage, and regulate access to these networks and network-based services and applications typically run over the networks themselves. Port-based network access control regulates access to the network, guarding against transmission and reception by unidentified or unauthorized parties, and consequent network disruption, theft of service, or data loss.

**5.5 Need for the Project:** This revision is needed to incorporate amendments IEEE Std 802.1Xbx and IEEE P802.1Xck. It will also address errors and omissions in the description of existing functionality.

**5.6 Stakeholders for the Standard:** Designers, implementers, manufacturers, distributors, and users of local area networking equipment.

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**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?:** Yes

**If yes please explain:** RAC review of previously approved text is appropriate to ensure terminology and descriptions of usage are correct. The existing standard allows the use of an assigned OUI as the initial octets of an identifier parameter. It references IEEE RA tutorials for MAC address/EUI-48 bit order and use, and the use of the OUI as specified in IEEE Std 802 and IEEE Std 802.1AE. The existing standard also contains a MIB identified as iso(1) iso-identified-organization(3) ieee(111) standards-association-numbered-series-standards(2) lan-man-stds(802) ieee802dot1(1) ieee802dot1mibs(1) 15. The YANG module makes use of a URN.

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

**7.2 Joint Development**

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

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**8.1 Additional Explanatory Notes:** #7.3 Adoption as an International Standard under the existing PSDO agreement. Refer to Jodi Haasz of IEEE Staff.

#5.4, #6.1 IEEE Std 802.1AE IEEE Standard for Local and metropolitan area networks MAC (Media Access Control) Security

#5.5 Revision to incorporate amendments:

IEEE Std 802.1Xbx--IEEE Standard for Local and metropolitan area networks--Port-Based Network Access Control - Amendment 1: MAC Security Key Agreement (MKA) Extensions

IEEE P802.1Xck--Draft Standard for Local and metropolitan area networks--Port-Based Network Access Control - Amendment 2: YANG Data Model

#6.1 802--IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture