

First edition  
2016-03-15

**AMENDMENT 2**  
2018-01

---

---

**Information technology —  
Telecommunications and information  
exchange between systems — Local  
and metropolitan area networks —  
Specific requirements —**

**Part 1Q:  
Bridges and bridged networks**

**AMENDMENT 2: Application virtual  
local area network (VLAN) type, length,  
value (TLV)**

*Technologies de l'information — Télécommunications et échange  
d'information entre systèmes — Réseaux locaux et métropolitains —  
Exigences spécifiques —  
Partie 1Q: Ponts et réseaux pontés*

*AMENDEMENT 2: Type, longueur, valeur (TLV) pour applications de  
réseaux locaux virtuels (VLAN)*



Reference number  
ISO/IEC/IEEE 8802-1Q:2016/Amd.2:2018(E)

© IEEE 2015

**iTeh Standards**  
**(<https://standards.iteh.ai>)**  
**Document Preview**

[ISO/IEC/IEEE 8802-1Q:2016/Amd 2:2018](https://standards.iteh.ai/catalog/standards/iso/b133567f-43e6-40c2-83f2-6048071c9a7b/iso-iec-ieee-8802-1q-2016-amd-2-2018)

<https://standards.iteh.ai/catalog/standards/iso/b133567f-43e6-40c2-83f2-6048071c9a7b/iso-iec-ieee-8802-1q-2016-amd-2-2018>



**COPYRIGHT PROTECTED DOCUMENT**

© IEEE 2015

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from ISO, IEC or IEEE at the respective address below.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
copyright@iso.org  
www.iso.org

Institute of Electrical and Electronics Engineers, Inc  
3 Park Avenue, New York  
NY 10016-5997, USA

stds.ipr@ieee.org  
www.ieee.org

Published in Switzerland

## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

IEEE Standards documents are developed within the IEEE Societies and the Standards Coordinating Committees of the IEEE Standards Association (IEEE-SA) Standards Board. The IEEE develops its standards through a consensus development process, approved by the American National Standards Institute, which brings together volunteers representing varied viewpoints and interests to achieve the final product. Volunteers are not necessarily members of the Institute and serve without compensation. While the IEEE administers the process and establishes rules to promote fairness in the consensus development process, the IEEE does not independently evaluate, test, or verify the accuracy of any of the information contained in its standards.

The main task of ISO/IEC JTC 1 is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is called to the possibility that implementation of this standard may require the use of subject matter covered by patent rights. By publication of this standard, no position is taken with respect to the existence or validity of any patent rights in connection therewith. ISO/IEEE is not responsible for identifying essential patents or patent claims for which a license may be required, for conducting inquiries into the legal validity or scope of patents or patent claims or determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance or a Patent Statement and Licensing Declaration Form, if any, or in any licensing agreements are reasonable or non-discriminatory. Users of this standard are expressly advised that determination of the validity of any patent rights, and the risk of infringement of such rights, is entirely their own responsibility. Further information may be obtained from ISO or the IEEE Standards Association.

ISO/IEC/IEEE 8802-1Q:2016/Amd.2 was prepared by the LAN/MAN of the IEEE Computer Society (as IEEE Std 802.1Qcd-2015). It was adopted by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*, in parallel with its approval by the ISO/IEC national bodies, under the “fast-track procedure” defined in the Partner Standards Development Organization cooperation agreement between ISO and IEEE. IEEE is responsible for the maintenance of this document with participation and input from ISO/IEC national bodies.



**IEEE Std 802.1Qcd™-2015**  
(Amendment to  
IEEE Std 802.1Q™-2014)

**IEEE Standard for  
Local and metropolitan area networks—**

**Bridges and Bridged Networks**

**Amendment 23: Application Virtual Local Area  
Network (VLAN) Type, Length, Value (TLV)**

**iTeh Standards**

Sponsor

**(<https://standards.iteh.ai>)**

**LAN/MAN Standards Committee  
of the  
IEEE Computer Society**

**Document Preview**

[ISO/IEC/IEEE 8802-1Q:2016/Amd 2:2018](https://standards.iteh.ai/catalog/standards/iso/b133567f-43e6-40c2-83f2-6048071c9a7b/iso-iec-ieee-8802-1q-2016-amd-2-2018)

[https://standards.iteh.ai/catalog/standards/iso/b133567f-43e6-40c2-83f2-6048071c9a7b/iso-iec-ieee-8802-1q-2016-amd-2-](https://standards.iteh.ai/catalog/standards/iso/b133567f-43e6-40c2-83f2-6048071c9a7b/iso-iec-ieee-8802-1q-2016-amd-2-2018)

Approved 16 February 2015

2018

**IEEE SA-Standards Board**

**Abstract:** Enhancements to the set of TLVs used by the Data Center Bridging eXchange protocol (DCBX) for the purpose of simplifying the management of networks utilizing Data Center Bridging (DCB) features are defined in this amendment to IEEE Std 802.1Q-2014.

**Keywords:** Bridged Networks, Data Center Bridging (DCB), Data Center Bridging eXchange protocol (DCBX), IEEE 802<sup>®</sup>, IEEE 802.1Q<sup>™</sup>, IEEE 802.1Qcd<sup>™</sup>, local area networks (LANs), MAC Bridges, metropolitan area networks, Virtual Bridged Networks (virtual LANs), VLAN Bridges

iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

[ISO/IEC/IEEE 8802-1Q:2016/Amd 2:2018](https://standards.iteh.ai/catalog/standards/iso/b133567f-43e6-40c2-83f2-6048071c9a7b/iso-iec-ieee-8802-1q-2016-amd-2-2018)

<https://standards.iteh.ai/catalog/standards/iso/b133567f-43e6-40c2-83f2-6048071c9a7b/iso-iec-ieee-8802-1q-2016-amd-2-2018>

---

The Institute of Electrical and Electronics Engineers, Inc.  
3 Park Avenue, New York, NY 10016-5997, USA

Copyright © 2015 by The Institute of Electrical and Electronics Engineers, Inc.  
All rights reserved. Published 13 March 2015. Printed in the United States of America.

IEEE and 802 are registered trademarks in the U.S. Patent & Trademark Office, owned by The Institute of Electrical and Electronics Engineers, Incorporated.

Print: ISBN 978-0-7381-9565-0 STD20128  
PDF: ISBN 978-0-7381-9566-7 STDPD20128

*IEEE prohibits discrimination, harassment, and bullying.*

For more information, visit <http://www.ieee.org/web/aboutus/whatis/policies/p9-26.html>.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

## Important Notices and Disclaimers Concerning IEEE Standards Documents

IEEE documents are made available for use subject to important notices and legal disclaimers. These notices and disclaimers, or a reference to this page, appear in all standards and may be found under the heading “Important Notice” or “Important Notices and Disclaimers Concerning IEEE Standards Documents.”

## Notice and Disclaimer of Liability Concerning the Use of IEEE Standards Documents

IEEE Standards documents (standards, recommended practices, and guides), both full-use and trial-use, are developed within IEEE Societies and the Standards Coordinating Committees of the IEEE Standards Association (“IEEE-SA”) Standards Board. IEEE (“the Institute”) develops its standards through a consensus development process, approved by the American National Standards Institute (“ANSI”), which brings together volunteers representing varied viewpoints and interests to achieve the final product. Volunteers are not necessarily members of the Institute and participate without compensation from IEEE. While IEEE administers the process and establishes rules to promote fairness in the consensus development process, IEEE does not independently evaluate, test, or verify the accuracy of any of the information or the soundness of any judgments contained in its standards.

IEEE does not warrant or represent the accuracy or content of the material contained in its standards, and expressly disclaims all warranties (express, implied and statutory) not included in this or any other document relating to the standard, including, but not limited to, the warranties of: merchantability; fitness for a particular purpose; non-infringement; and quality, accuracy, effectiveness, currency, or completeness of material. In addition, IEEE disclaims any and all conditions relating to: results; and workmanlike effort. IEEE standards documents are supplied “AS IS” and “WITH ALL FAULTS.”

Use of an IEEE standard is wholly voluntary. The existence of an IEEE standard does not imply that there are no other ways to produce, test, measure, purchase, market, or provide other goods and services related to the scope of the IEEE standard. Furthermore, the viewpoint expressed at the time a standard is approved and issued is subject to change brought about through developments in the state of the art and comments received from users of the standard.

In publishing and making its standards available, IEEE is not suggesting or rendering professional or other services for, or on behalf of, any person or entity nor is IEEE undertaking to perform any duty owed by any other person or entity to another. Any person utilizing any IEEE Standards document, should rely upon his or her own independent judgment in the exercise of reasonable care in any given circumstances or, as appropriate, seek the advice of a competent professional in determining the appropriateness of a given IEEE standard.

IN NO EVENT SHALL IEEE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO: PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE PUBLICATION, USE OF, OR RELIANCE UPON ANY STANDARD, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE AND REGARDLESS OF WHETHER SUCH DAMAGE WAS FORESEEABLE.