

# International Standard

ISO/IEC/IEEE 8802-1Q

Telecommunications and exchange between information technology systems — Requirements for local and metropolitan area networks —

Part 1Q:

Bridges and bridged networks

AMENDMENT 37: Automatic Attachment to Provider Backbone Bridging (PBB) Services

Télécommunications et échange entre systèmes informatiques — Exigences pour les réseaux locaux et métropolitains —

Partie 1Q: Ponts et réseaux pontés

AMENDEMENT 37: Attachement automatique aux services PBB (Provider Backbone Bridging)

Third edition 2024-08

AMENDMENT 37 2025-03

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

ISO/IEC/IEEE 8802-10:2024/Amd 37:2025

https://standards.iteh.ai/catalog/standards/iso/c09b870e-3931-4c96-aab8-20ef60345ea4/iso-iec-ieee-8802-1q-2024-amd-37 2025



# COPYRIGHT PROTECTED DOCUMENT

© IEEE 2023

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from IEEE at the address below.

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

Email: stds.ipr@ieee.org Website: 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted.

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.

ISO and IEC draw attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO and IEC take no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO and IEC had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <a href="www.iso.org/patents">www.iso.org/patents</a> and <a href="https://patents.iec.ch">https://patents.iec.ch</a>. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not mid-37-constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see <a href="www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>. In the IEC, see <a href="www.iec.ch/understanding-standards">www.iec.ch/understanding-standards</a>.

ISO/IEC/IEEE 8802-1Q:2024/Amd.37 was prepared by the LAN/MAN of the IEEE Computer Society (as IEEE 802.1Qcj-2023) and drafted in accordance with its editorial rules. It was adopted, under the "fast-track procedure" defined in the Partner Standards Development Organization cooperation agreement between ISO and IEEE, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

A list of all parts in the ISO/IEC/IEEE 8802 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a> and <a href="https://www.iec.ch/national-committees">www.iec.ch/national-committees</a>.

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

ISO/IEC/IEEE 8802-10:2024/Amd 37:2025

https://standards.iteh.ai/catalog/standards/iso/c09b870e-3931-4c96-aab8-20ef60345ea4/iso-iec-ieee-8802-1q-2024-amd-37 2025

# IEEE Std 802.1Qcj™-2023

(Amendment to IEEE Std 802.1Q™-2022 as amended by IEEE Std 802.1Qcz™-2023 and IEEE Std 802.1Qcw™-2023)

IEEE Standard for Local and Metropolitan Area Networks—
Bridges and Bridged Networks
Amendment 37:
Automatic Attachment to Provider

Automatic Attachment to Provider Backbone Bridging (PBB) Services

(https://standards.iteh.ai)
Document Preview

Developed by the

**LAN/MAN Standards Committee** 

of the ISO/IEC/IEEE 8802-10:2024/Amd 37:2025

IEEE Computer Society./iso/c09b870e-3931-4c96-aab8-20ef60345ea4/iso-iec-ieee-8802-1q-2024-amd-37-

2025

Approved 21 September 2023

**IEEE SA Standards Board** 

**Abstract:** This amendment to IEEE Std 802.1Q-2022 as amended by IEEE Std 802.1Qcz-2023 and IEEE Std 802.1Qcw-2023 specifies protocols, procedures, and management objects for auto attachment of network devices to Provider Backbone service instances using Type, Length, Value (TLVs) within the Link Layer Discovery Protocol (LLDP).

**Keywords:** AAB, AAD, AAP, amendment, Auto Attach, Auto Attach Backbone Edge Bridge, Auto Attach Device, Auto Attach Protocol, Bridged Network, IEEE 802.1Q<sup>™</sup>, IEEE 802.1Qcj<sup>™</sup>, LAN, local area network, MAC Bridge, metropolitan area network, MSTP, Multiple Spanning Tree Protocol, PBBN, Provider Backbone Bridged Network, Provider Bridged Network, Rapid Spanning Tree Protocol, RSTP, Shortest Path Bridging Protocol, SPB Protocol, Time-Sensitive Networking, TSN, Virtual Bridged Network, virtual LAN, VLAN Bridge

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

ISO/IEC/IEEE 8802-1Q:2024/Amd 37:2025

ttps://standards.iteh.ai/catalog/standards/iso/c09b870e-3931-4c96-aab8-20ef60345ea4/iso-iec-ieee-8802-1q-2024-amd-37

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

Copyright © 2023 by the Institute of Electrical and Electronics Engineers, Inc. All rights reserved. Published 17 November 2023. 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.

PDF: ISBN 979-8-8557-0268-2 STD26585 Print: ISBN 979-8-8557-0269-9 STDPD26585

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 Standards documents are made available for use subject to important notices and legal disclaimers. These notices and disclaimers, or a reference to this page (<a href="https://standards.ieee.org/ipr/disclaimers.html">https://standards.ieee.org/ipr/disclaimers.html</a>), appear in all standards and may be found under the heading "Important Notices and Disclaimers Concerning IEEE Standards Documents."

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

IEEE Standards documents are developed within IEEE Societies and subcommittees of IEEE Standards Association (IEEE SA) Board of Governors. IEEE develops its standards through an accredited consensus development process, which brings together volunteers representing varied viewpoints and interests to achieve the final product. IEEE standards are documents developed by volunteers with scientific, academic, and industry-based expertise in technical working groups. Volunteers are not necessarily members of IEEE or IEEE SA 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 makes no warranties or representations concerning its standards, and expressly disclaims all warranties, express or implied, concerning this standard, including but not limited to the warranties of merchantability, fitness for a particular purpose and non-infringement. IEEE Standards documents do not guarantee safety, security, health, or environmental protection, or guarantee against interference with or from other devices or networks. In addition, IEEE does not warrant or represent that the use of the material contained in its standards is free from patent infringement. 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 their 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: THE NEED TO PROCURE 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.

#### **Translations**

The IEEE consensus balloting process involves the review of documents in English only. In the event that an IEEE standard is translated, only the English version published by IEEE is the approved IEEE standard.

#### Official statements

A statement, written or oral, that is not processed in accordance with the IEEE SA Standards Board Operations Manual shall not be considered or inferred to be the official position of IEEE or any of its committees and shall not be considered to be, nor be relied upon as, a formal position of IEEE. At lectures, symposia, seminars, or educational courses, an individual presenting information on IEEE standards shall make it clear that the presenter's views should be considered the personal views of that individual rather than the formal position of IEEE, IEEE SA, the Standards Committee, or the Working Group. Statements made by volunteers may not represent the formal position of their employer(s) or affiliation(s).

#### Comments on standards

Comments for revision of IEEE Standards documents are welcome from any interested party, regardless of membership affiliation with IEEE or IEEE SA. However, **IEEE does not provide interpretations, consulting information, or advice pertaining to IEEE Standards documents**.

Suggestions for changes in documents should be in the form of a proposed change of text, together with appropriate supporting comments. Since IEEE standards represent a consensus of concerned interests, it is important that any responses to comments and questions also receive the concurrence of a balance of interests. For this reason, IEEE and the members of its Societies and subcommittees of the IEEE SA Board of Governors are not able to provide an instant response to comments, or questions except in those cases where the matter has previously been addressed. For the same reason, IEEE does not respond to interpretation requests. Any person who would like to participate in evaluating comments or in revisions to an IEEE standard is welcome to join the relevant IEEE working group. You can indicate interest in a working group using the Interests tab in the Manage Profile & Interests area of the IEEE SA myProject system. An IEEE Account is needed to access the application.

Comments on standards should be submitted using the Contact Us form.<sup>2</sup>

#### Laws and regulations

Users of IEEE Standards documents should consult all applicable laws and regulations. Compliance with the provisions of any IEEE Standards document does not constitute compliance to any applicable regulatory requirements. Implementers of the standard are responsible for observing or referring to the applicable regulatory requirements. IEEE does not, by the publication of its standards, intend to urge action that is not in compliance with applicable laws, and these documents may not be construed as doing so.

#### **Data privacy**

Users of IEEE Standards documents should evaluate the standards for considerations of data privacy and data ownership in the context of assessing and using the standards in compliance with applicable laws and regulations.

<sup>&</sup>lt;sup>1</sup> Available at: <a href="https://development.standards.ieee.org/myproject-web/public/view.html#landing.">https://development.standards.ieee.org/myproject-web/public/view.html#landing.</a>

<sup>&</sup>lt;sup>2</sup> Available at: <a href="https://standards.ieee.org/content/ieee-standards/en/about/contact/index.html">https://standards.ieee.org/content/ieee-standards/en/about/contact/index.html</a>.

### Copyrights

IEEE draft and approved standards are copyrighted by IEEE under U.S. and international copyright laws. They are made available by IEEE and are adopted for a wide variety of both public and private uses. These include both use, by reference, in laws and regulations, and use in private self-regulation, standardization, and the promotion of engineering practices and methods. By making these documents available for use and adoption by public authorities and private users, neither IEEE nor its licensors waive any rights in copyright to the documents.

#### **Photocopies**

Subject to payment of the appropriate licensing fees, IEEE will grant users a limited, non-exclusive license to photocopy portions of any individual standard for company or organizational internal use or individual, non-commercial use only. To arrange for payment of licensing fees, please contact Copyright Clearance Center, Customer Service, 222 Rosewood Drive, Danvers, MA 01923 USA; +1 978 750 8400; <a href="https://www.copyright.com/">https://www.copyright.com/</a>. Permission to photocopy portions of any individual standard for educational classroom use can also be obtained through the Copyright Clearance Center.

### **Updating of IEEE Standards documents**

Users of IEEE Standards documents should be aware that these documents may be superseded at any time by the issuance of new editions or may be amended from time to time through the issuance of amendments, corrigenda, or errata. An official IEEE document at any point in time consists of the current edition of the document together with any amendments, corrigenda, or errata then in effect.

Every IEEE standard is subjected to review at least every 10 years. When a document is more than 10 years old and has not undergone a revision process, it is reasonable to conclude that its contents, although still of some value, do not wholly reflect the present state of the art. Users are cautioned to check to determine that they have the latest edition of any IEEE standard.

In order to determine whether a given document is the current edition and whether it has been amended through the issuance of amendments, corrigenda, or errata, visit <u>IEEE Xplore</u> or <u>contact IEEE</u>.<sup>3</sup> For more information about the IEEE SA or IEEE's standards development process, visit the IEEE SA Website.

### **Errata**

Errata, if any, for all IEEE standards can be accessed on the <u>IEEE SA Website</u>. Search for standard number and year of approval to access the web page of the published standard. Errata links are located under the Additional Resources Details section. Errata are also available in <u>IEEE Xplore</u>. Users are encouraged to periodically check for errata.

#### **Patents**

IEEE standards are developed in compliance with the IEEE SA Patent Policy. 5

Attention is called to the possibility that implementation of this standard may require use of subject matter covered by patent rights. By publication of this standard, no position is taken by the IEEE with respect to the existence or validity of any patent rights in connection therewith. If a patent holder or patent applicant has

<sup>&</sup>lt;sup>3</sup> Available at: <a href="https://ieeexplore.ieee.org/browse/standards/collection/ieee">https://ieeexplore.ieee.org/browse/standards/collection/ieee</a>.

<sup>&</sup>lt;sup>4</sup> Available at: <a href="https://standards.ieee.org/standard/index.html">https://standards.ieee.org/standard/index.html</a>.

<sup>&</sup>lt;sup>5</sup> Available at: https://standards.ieee.org/about/sasb/patcom/materials.html.

filed a statement of assurance via an Accepted Letter of Assurance, then the statement is listed on the IEEE SA Website at <a href="https://standards.ieee.org/about/sasb/patcom/patents.html">https://standards.ieee.org/about/sasb/patcom/patents.html</a>. Letters of Assurance may indicate whether the Submitter is willing or unwilling to grant licenses under patent rights without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination to applicants desiring to obtain such licenses.

Essential Patent Claims may exist for which a Letter of Assurance has not been received. The IEEE is not responsible for identifying Essential Patent Claims for which a license may be required, for conducting inquiries into the legal validity or scope of Patents Claims, or determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, 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 the IEEE Standards Association.

#### **IMPORTANT NOTICE**

Technologies, application of technologies, and recommended procedures in various industries evolve over time. The IEEE standards development process allows participants to review developments in industries, technologies, and practices, and to determine what, if any, updates should be made to the IEEE standard. During this evolution, the technologies and recommendations in IEEE standards may be implemented in ways not foreseen during the standard's development. IEEE standards development activities consider research and information presented to the standards development group in developing any safety recommendations. Other information about safety practices, changes in technology or technology implementation, or impact by peripheral systems also may be pertinent to safety considerations during implementation of the standard. Implementers and users of IEEE Standards documents are responsible for determining and complying with all appropriate safety, security, environmental, health, and interference protection practices and all applicable laws and regulations.

<u> 180/1EC/1EEE 8802-1Q:2024/Amd 37:2025</u>

https://standards.iteh.ai/catalog/standards/iso/c09b870e-3931-4c96-aab8-20ef60345ea4/iso-iec-ieee-8802-1q-2024-amd-37 2025

# **Participants**

At the time this standard was submitted to the IEEE SA Standards Board for approval, the IEEE 802.1 Working Group had the following membership:

#### Glenn Parsons, Chair

Jessy V. Rouyer, Vice Chair

János Farkas, Chair, Time-Sensitive Networking Task Group Craig Gunther, Vice Chair, Time-Sensitive Networking Task Group

#### Paul Bottorff, Editor

Maximilian Riegel Katsuyuki Akizuki Marc Holness Daniel Hopf Konstantinos Alexandris Craig Rodine Venkat Arunarthi Woojung Huh Silvana Rodrigues Satoko Itaya Ralf Assmann Atsushi Sato Yoshihiro Ito Huajie Bao Frank Schewe Michael Karl Rudy Belliardi Michael Seaman Stephan Kehrer Maik Seewald Jeremias Blendin Marcel Kiessling Christian Boiger Ramesh Sivakolundu Gavin Lai Radhakrishna Canchi Johannes Specht Yizhou Li Nemanja Stamenic Feng Chen Joao Lopes Abhijit Choudhury Marius Stanica Lily Lyu Paul Congdon Guenter Steindl Christophe Mangin Rodney Cummings Karim Traore Scott Mansfield Josef Dorr Max Turner Olaf Mater Hesham Elbakoury Balazs Varga David McCall Ganesh Venkatesan Anna Engelmann Larry McMillan Tongtong Wang Thomas Enzinger Martin Mittelberger Donald Fedyk Karl Weber Hiroki Nakano Norman Finn Leon Wessels Takumi Nomura Geoffrey Garner Ludwig Winkel Dragan Obradovic Marina Gutiérrez Jordon Woods Donald R. Pannell Stephen Haddock Dieter Proell Takahiro Yamaura Mark Hantel Nader Zein Karen Randall

The following members of the individual balloting committee voted on this standard. Balloters may have voted for approval, disapproval, or abstention.

Thomas Alexander Pranav Jha Dieter Proell Amelia Andersdotter Lokesh Kabra R. K. Rannow **Butch Anton** Piotr Karocki Maximilian Riegel Christian Boiger Stuart Kerry Jessy V. Rouyer Paul Bottorff Yongbum Kim Michael Seaman William Byrd Hyeong Ho Lee Veselin Skendzic Paul Cardinal James Lepp Walter Struppler Jose Castro Greg Luri Max Turner Pin Chang Christophe Mangin John Vergis Aditya Chaudhuri Scott Mansfield James Weaver Paul Congdon Jonathon McLendon Stephen Webb János Farkas Ronald Murias Karl Weber Donald Fedyk Rajesh Murthy Scott Willy Avraham Freedman Satoshi Obara Andreas Wolf Chong Han Glenn Parsons Yu Yuan Marco Hernandez Bansi Patel Werner Hoelzl Arumugam Paventhan Oren Yuen Yasuhiro Hyakutake Clinton Powell Qiyue Zou

When the IEEE SA Standards Board approved this standard on 21 September 2023, it had the following membership:

David J. Law, Chair Ted Burse, Vice Chair Gary Hoffman, Past Chair Konstantinos Karachalios, Secretary

Sara R. Biyabani Joseph S. Levy Paul Nikolich Doug Edwards Howard Li Annette D. Reilly Ramy Ahmed Fathy Johnny Daozhuang Lin Robby Robson Guido R. Hiertz Gui Lin Lei Wang F. Keith Waters Yousef Kimiagar Xiaohui Liu Joseph L. Koepfinger\* Kevin W. Lu Karl Weber Thomas Koshy Daleep C. Mohla Philip B. Winston John D. Kulick Andrew Myles Don Wright

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

ISO/IEC/IEEE 8802-10:2024/Amd 37:2025

https://standards.iteh.ai/catalog/standards/iso/c09b870e-3931-4c96-aab8-20ef60345ea4/iso-iec-ieee-8802-1q-2024-amd-37 2025

<sup>\*</sup>Member Emeritus

### Introduction

This introduction is not part of IEEE Std 802.1Qcj<sup>TM</sup>-2023, IEEE Standard for Local and Metropolitan Area Networks—Bridges and Bridged Networks—Amendment 37: Automatic Attachment to Provider Backbone Bridging (PBB) Services.

IEEE Std 802.1Qcj<sup>TM</sup>-2023: Automatic Attachment to Provider Backbone Bridging (PBB) Services specifies protocols, procedures, and management objects for auto attachment of network devices to Provider Backbone service instances using Type, Length, Value (TLVs) within the Link Layer Discovery Protocol (LLDP).

This standard contains state-of-the-art material. The area covered by this standard is undergoing evolution. Revisions are anticipated within the next few years to clarify existing material, to correct possible errors, and to incorporate new related material. Information on the current revision state of this and other IEEE 802 standards may be obtained from:

Secretary, IEEE SA Standards Board 445 Hoes Lane Piscataway, NJ 08854-4141 USA

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

ISO/IEC/IEEE 8802-10:2024/Amd 37:2025

nttps://standards.iteh.ai/catalog/standards/iso/c09b870e-3931-4c96-aab8-20ef60345ea4/iso-iec-ieee-8802-1q-2024-amd-37 2025

# Contents

1.	Overview		16
	1.3	Introduction	16
3.	Definitions		17
4.	Abbreviations		18
5.	Conformance		19
	5.9	C-VLAN Bridge conformance.	19
		5.9.2 C-VLAN Bridge requirements for PBBN Auto Attach (optional)	
	5.10	Provider Bridge conformance	
		5.10.3 S-VLAN Bridge requirements for PBBN Auto Attach (optional)	
	5.12	Backbone Edge Bridge (BEB) conformance	
		5.12.2 Backbone Edge Bridge requirements for PBBN Auto Attach (optional)	19
	5.14	MAC Bridge conformance	20
		5.14.2 MAC Bridge requirements for PBBN Auto Attach (optional)	20
	5.33	End station requirements for PBBN Auto Attach (optional)	20
12.	Bridge Management		21
	12.34	Managed objects for PBBN Auto Attach	21
		12.34.1 PBBN Auto Attach System objects	
		12.34.2 PBBN Auto Attach port table	
		12.34.3 PBBN Discovered Auto Attach Systems table	
		12.34.4 PBBN Auto Attach assignment table	
		12.34.5 PBBN Auto Attach statistics table	25
17.	Mana	gement Information Base (MIB)	26
		Structure of the MIB	26
	17.2 catalo	Structure of the MIB	-880 <mark>26</mark> 1q-2024-amd-37-
	17.3	MIB module relationships	
	17.3	17.3.26 Relationship of the IEEE8021-PBBN-AA-MIB to other MIB modules	
	17.4	Security considerations	
	1 / . 4	17.4.26 Security considerations of the IEEE8021-PBBN-AA-MIB	
	17.7	MIB modules	
	17.7	17.7.26 Definitions for the IEEE8021-PBBN-AA-MIB module	
48.	YANG Data Models		39
	48.6	YANG modules	39
	10.0	48.6.2 The ieee802-dot1q-types YANG module	
50.	PBBN Auto Attach		56
	50.1	Overview	56
	50.2	Service interfaces	
		50.2.1 S-tagged service interface	
		50.2.2. C tagged service interface	58