INTERNATIONAL STANDARD

ISO/IEC 20243-1

First edition
2018-02

Information technology — Open Trusted Technology Provider™ Standard (O-TTPS) — Mitigating maliciously tainted and counterfeit products —

Part 1:
Requirements and recommendations

Technologies de l'information — Norme de fournisseur de technologie de confiance ouverte (O-TTPS) — Atténuation des produits contrefaits et malicieusement contaminés —

Partie 1: Exigences et recommandations

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

ISO/IEC 20243-1:2018
https://standards.iteh.ai/catalog/standards/iso/2dfef390-9093-4380-90d3-95ca6d389afb/iso-iec-20243-1-2018

COPYRIGHT PROTECTED DOCUMENT

Contents

List of Tables

List of Figures

Open Group Standard (2014)

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.

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. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by The Open Group and was adopted, under the PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

This first edition of ISO/IEC 20243-1 cancels and replaces ISO/IEC 20243:2015 of which it constitutes a minor revision to change the reference number from 20243 to 20243-1.

A list of all parts in the ISO 20243 series can be found on the ISO website.

Preface

The Open Group

The Open Group is a global consortium that enables the achievement of business objectives through IT standards. With more than 400 member organizations, The Open Group has a diverse membership that spans all sectors of the IT community – customers, systems and solutions suppliers, tool vendors, integrators, and consultants, as well as academics and researchers – to:

- Capture, understand, and address current and emerging requirements, and establish policies and share best practices

- Facilitate interoperability, develop consensus, and evolve and integrate specifications and open source technologies

- Offer a comprehensive set of services to enhance the operational efficiency of consortia

Further information on The Open Group is available at www.opengroup.org.

The Open Group publishes a wide range of technical documentation, most of which is focused on development of Open Group Standards and Guides, but which also includes white papers, technical studies, certification and testing documentation, and business titles. Full details and a catalog are available at www.opengroup.org/bookstore.

Readers should note that updates – in the form of Corrigenda – may apply to any publication. This information is published at www.opengroup.org/corrigenda.

This Document

The Open Group Trusted Technology Forum (OTTF or Forum) is a global initiative that invites industry, government, and other interested participants to work together to evolve this Standard and other OTTF deliverables.

This Standard is the Open Trusted Technology Provider Standard (O-TTPS). The Standard has been developed by the OTTF and approved by The Open Group, through The Open Group Company Review process. There are two distinct elements that should be understood with respect to this Standard: The O-TTPF (Framework) and the O-TTPS (Standard).

The O-TTPF (Framework): The Framework is an evolving compendium of organizational guidelines and best practices relating to the integrity of Commercial Off-the-Shelf (COTS) Information and Communication Technology (ICT) products and the security of the supply chain throughout the entire product life cycle. An early version of the Framework was published as a White Paper in February 2011 (see Referenced Documents). The Framework serves as the basis for this Standard, future updates, and additional standards. The content of the Framework is the result of industry collaboration and research as to those commonly used commercially reasonable practices that increase product integrity and supply chain security. The members of the OTTF will continue to collaborate with industry and governments and update the Framework as the threat landscape changes and industry practices evolve.

Open Group Standard (2014)

The O-TTPS (Standard): The O-TTPS is an open standard containing a set of guidelines that when properly adhered to have been shown to enhance the security of the global supply chain and the integrity of COTS ICT products. This part 1 of the Standard provides a set of guidelines, requirements, and recommendations that help assure against maliciously tainted and counterfeit products throughout the COTS ICT product life cycle encompassing the following phases: design, sourcing, build, fulfillment, distribution, sustainment, and disposal.

Part 2 of the O-TTPS Standard, Assessment Procedures for the O-TTPS and ISO/IEC 20243,, provides assessment procedures that may be used to demonstrate conformance with the requirements provided in Section 4 of this part of the Standard.

Using the guidelines documented in the Framework as a basis, the OTTF is taking a phased approach and staging O-TTPS releases over time. This staging will consist of standards that focus on mitigating specific COTS ICT risks from emerging threats. As threats change or market needs evolve, the OTTF intends to update the O-TTPS (Standard) by releasing addenda to address specific threats or market needs.

The Standard is aimed at enhancing the integrity of COTS ICT products and helping customers to manage sourcing risk. The authors of this Standard recognize the value that it can bring to governments and commercial customers worldwide, particularly those who adopt procurement and sourcing strategies that reward those vendors who follow the O-TTPS best practice requirements and recommendations.

Note: Any reference to "providers" is intended to refer to COTS ICT providers. The use of the word "component" is intended to refer to either hardware or software components.

Intended Audience

This Standard is intended for organizations interested in helping the industry evolve to meet the threats in the delivery of trustworthy COTS ICT products. It is intended to provide enough context and information on business drivers to enable its audience to understand the value in adopting the guidelines, requirements, and recommendations specified within. It also allows providers, suppliers, and integrators to begin planning how to implement the Standard in their organizations. Additionally, acquirers and customers can begin recommending the adoption of the Standard to their providers and integrators.

Trademarks

ArchiMate®, DirecNet®, Jericho Forum®, Making Standards Work®, OpenPegasus®, The Open Group®, TOGAF®, and UNIX® are registered trademarks and Boundaryless Information Flow™, Build with Integrity Buy with Confidence™, Dependability Through Assuredness™, FACE™, Open Platform 3.0™, Open Trusted Technology Provider™, and The Open Group Certification Mark™ are trademarks of The Open Group.

All other brands, company, and product names are used for identification purposes only and may be trademarks that are the sole property of their respective owners.

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

ISO/IEC 20243-1:2018
https://standards.iteh.ai/catalog/standards/iso/2dfef390-9093-4380-90d3-95ca6d389afb/iso-iec-20243-1-2018

Open Group Standard (2014)

Acknowledgements

The Open Group acknowledges the contribution of the following people and organizations in the development of this Standard (presented in alphabetical order).

In particular, we would like to provide a special thank you and acknowledgement to the Chair and Vice Chair of the OTTF: Andras Szakal, IBM (Chair) and Edna Conway, Cisco Systems (Vice Chair).

The contributing members of The Open Group Trusted Technology Forum (OTTF):

Contributors	Organization
Jon Amis	Dell, Inc.
Paul Aschwald	Hewlett-Packard Company
Nadya Bartol	(formerly of) Booz Allen Hamilton
James Bean	Juniper Networks
Kristen Baldwin	US DoD AT&L
Terry Blevins	MITRE
Joshua Brickman	CA Technologies
Stan Brown	CA Technologies
Ben Calloni	Lockheed Martin
Suresh Cheruserri	(formerly of) Tata Consultancy Services
YouHong (Robert) Chu	Kingdee Software
Erv Comer	Motorola Solutions
Erin Connor	Electronic Warfare Associates (EWA) – Canada Ltd.
Tammy Compton	(formerly of) SAIC
Edna Conway	Cisco Systems Inc. OTTF Vice-Chair
Don Davidson	DOD-CIO
Mary Ann Davidson	Oracle Corporation
Charles Dekle	(formerly of) US DoD AT&L
Terrie Diaz	Cisco Systems Inc.
Robert Dix	Juniper Networks
Holly Dunlap	Raytheon Company
Bob Ellison	SEI
Marcus Fedeli	(formerly of) NASA
Luke Forsyth	CA Technologies
Susan Fultz	Hewlett-Packard Company

Contributors	Organization
Steve Goldberg	(formerly of) Motorola Solutions
Tim Hahn	IBM Corporation
Wes Higaki	Apex Assurance Group
Ken Hong Fong	(formerly of) US DoD AT&L
Helmut Kurth	atsec information security
Mike Lai	Microsoft Corporation
David Ling	Hewlett-Packard Company
Steve Lipner	Microsoft Corporation O-TTPF Work Stream Co-Chair
Dr. David McQueeney	IBM Corporation
Jim Mann	Hewlett-Packard Company
Al Marshall	NASA
Michele Moss	Booz-Allen Hamilton
Shawn Mullen	IBM Corporation
Fiona Pattinson	atsec information security
Brendan Peter	CA Technologies
Glenn Pittaway	Microsoft Corporation
Andy Purdy	Huawei Technologies
Dan Reddy	EMC Corporation
Karen Richter	IDA
Jim Robinson	Hewlett-Packard Company
Hart Rossman	(formerly of) SAIC
Mark Schiller	(formerly of) Hewlett-Packard Company
Thomas Stickels	MITRE
Andras R. Szakal	IBM Corporation OTTF Chair and O-TTPF Work Stream Co-Chair
Steve Whitlock	The Boeing Company
Jim Whitmore	IBM Corporation
Robert Williamson	SAIC
Eric Winterton	Booz Allen Hamilton
Joanne Woytek	NASA
Chee Wai Foong	Cisco Systems Inc.

The individuals providing early contributions to this work:

Open Group Standard (2014)

Contributor	Name
Randy Barr	Qualys
Rance DeLong	LynuxWorks
Chris Fagan	(formerly of) Microsoft Corporation
Rob Hoffman	High Assurance Systems, Inc.
Dave McDermitt	(formerly of) SAIC
Terry Morgan	(formerly of) Cisco Systems Inc.
Paul Nicholas	Microsoft Corporation
Kerri Patterson	(formerly of) Cisco Systems Inc.
Steve Venema	The Boeing Company
Larry Wagoner	NSA

The Open Group staff:

Name	Role
James Andrews	The Open Group Conformance Quality Manager
Joe Bergmann	Open Group Government Relations, Director, RT&ES
James de Raeve	VP Certification
Cathy Fox	Technical Editor
Jim Hietala	VP Security
Andrew Josey	Director, Standards
Sally Long	Director, The Open Group Trusted Technology Forum (OTTF)
Dave Lounsbury	Chief Technical Officer

Referenced Documents

The following documents are referenced in this Standard:

- 2007 Defense Science Board Task Force on Mission Impact of Foreign Influence on DoD Software, September 2007; findings and recommendations located at: www.acq.osd.mil/dsb/reports/ADA486949.pdf.

- Electronic Industry Citizenship Coalition (EICC) Code of Conduct; refer to: www.eicc.info.

- ISO/IEC 15408: Information Technology – Security Techniques – Evaluation Criteria for IT Security (Common Criteria).

- ISO/IEC 27000:2009: Information Technology – Security Techniques – Information Security Management Systems – Overview and Vocabulary.

- ISO/IEC Directives, Part 2: Rules for the Structure and Drafting of International Standards.

- NIST 800-12: An Introduction to Computer Security: The NIST Handbook.

- White Paper: Open Trusted Technology Provider Framework (O-TTPF), W113, published by The Open Group, February 2011; refer to: www.opengroup.org/bookstore/catalog/w113.htm.

Open Group Standard (2014)