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*Boundaryless
Information Flow™*

*Open Trusted Technology Provider™ Standard (O-TTPS)
(technically equivalent to ISO/IEC 20243)*



The Requirements

Initial Requirements:

- **U.S. Government concerns**
 - Increased use of Commercial Off-The-Shelf (COTS) Information Communication Technology (ICT)
 - Need to confidently identify trusted COTS ICT products & providers
- **U.S. Government-Industry roundtable - 2009**
 - Initiated by U.S. Government under Secretary of Defense
- **U.S. Government recommendation**
 - Establish consensus on best of breed practices based on industry experience to create a standard to which all providers can conform when building products

Additional Requirements:

- **Need to address critical infrastructure**
 - Banking
 - Telecommunications
 - Industrial Control Systems
 - Utilities
- **Needs of other governments and markets**
- **Grow skills and experience – certify the workforce**

O-TTPS: Mitigating Maliciously Tainted & Counterfeit Products Applies to and Mitigates Threats across Entire Product Life Cycle

Scope of O-TTPS is overarching:

Applies to procurement management, info and IP protection, secure design, and supply chain traceability



Scope is flexible, from entire organization to one product; Looks at processes

Technology Development – *mostly* under the provider’s in-house supervision

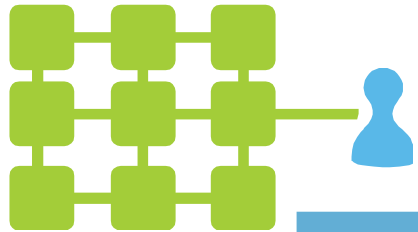
- Secure Development/Engineering (5 attribute categories; 19 total requirements)
- Product Development/Engineering (6 attribute categories; 20 total requirements)

Supply Chain activities – *mostly* where provider interacts with third parties who contribute their piece in the product’s life cycle

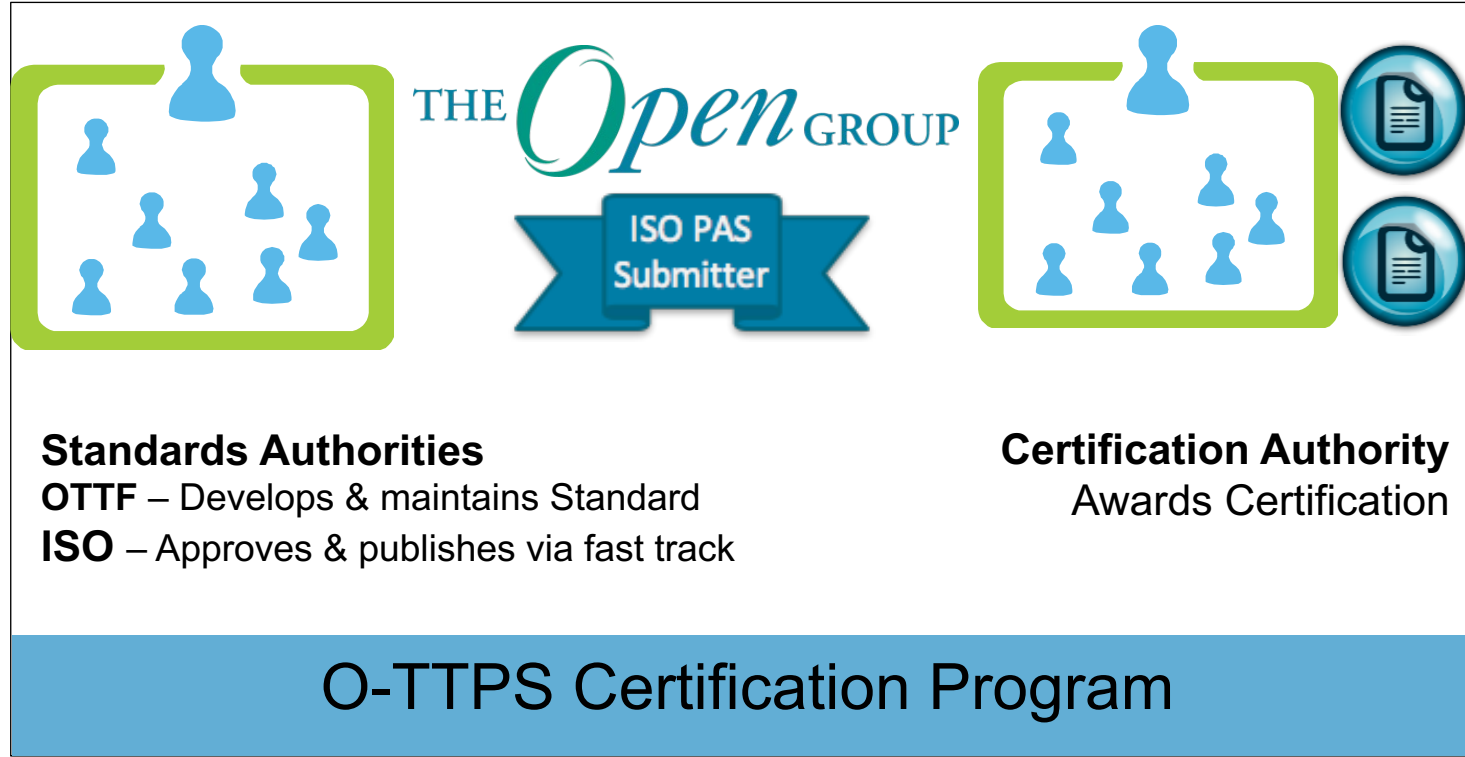
- Supply Chain Security (12 attribute categories; 45 total requirements)

O-TTPS Certification Program a.k.a. ISO/IEC-20243

**Suppliers
Distributors
Providers
Integrators
Resellers**



Applies



**Open
Trusted
Technology
Providers™**



Recognized 3rd Party Assessor

Relevant Documents

Document	Description
O-TTPS (Standard)	Part 1 provides guidelines, requirements, & recommendations that help assure against maliciously tainted and counterfeit products throughout COTS ICT product life cycle; Part 2 provides assessment procedures
O-TTPS Management Guide	Provides guidance on why technology provider company should adopt O-TTPS and become certified; what to understand about Certification Program; and how to best prepare for process once they decide to pursue certification
Certification Policy	Governs the operation of the O-TTPS Certification Program
Conformance Requirements	Defines the criteria that an Organization must meet to achieve certification
Conformance Statement	Publicly accessible; identifies version O-TTPS for compliance and indicates how comply
Organizational Contacts Form	Provides contact details for communications from Certification Authority
Certification Agreement	Details terms, obligations, liability, and fees for certification
Certification Trademark License Agreement (TMLA)	Details definitions, license, duration, standards of quality, use and ownership of trademarks, infringements, fees, termination, indemnity, assignment, export restrictions, etc. for trademark usage
Self-Assessed Guidance document	For Self-Assessed only ; serves as guidance in filling out Scope of Certification section in Conformance Statement
Implementation Selection Criteria Application (ISCA) Document	Required for Third-Party Assessed only; allows Organization to define set of products that represent processes used within Scope of Certification
Certification Package Document	Required for Third-Party Assessed only ; comprises various tables and mappings for defining scope and submitting evidence of conformance



Assessment by 3rd-Party Labs

Publicly Available Assessment Procedures

- Now ISO/IEC 20243-2:2018
- Help achieve objectivity, repeatability, and consistency across assessments

Two types of requirements/evidence to be assessed:

- **Process** – Evidence that there are documented processes
- **Implementation** – Evidence that processes are implemented

Recognition of O-TTPS 3rd-party labs

- Must meet established criteria, and assessors must pass O-TTPS Assessor exam
- Receive certificates and listed on public registry

<https://certification.opengroup.org/ottps-recognized-assessors>

O-TTPS Attribute and Requirements Example

Attribute Definition

Secure transmission and handling of assets and artifacts during delivery is needed to lower the risk of product tampering while in transit to their destination.

Requirements

SC_STH.01	Secure transmission and handling controls shall be established and documented.
SC_STH.02	Secure transmission and handling controls shall be designed to lower the risk of physical tampering with assets and artifacts that are physically transported.
SC_STH.03	Secure transmission and handling controls shall be designed to lower the risk of tampering with assets and artifacts that are physically transported.
SC_STH.04	Secure transmission and handling controls shall be designed to lower the risk of tampering with assets and artifacts that are physically transported.
SC_STH.05	Secure transmission and handling controls shall be designed to lower the risk of tampering with assets and artifacts that are physically transported.
SC_STH.06	For assets and artifacts that are physically transported, the controls shall be designed to lower the risk of tampering with assets and artifacts that are physically transported.
SC_STH.07	Methods and procedures for secure transmission and handling shall be available.

SC_STH.02	Secure transmission and handling controls shall be designed to lower the risk of physical tampering with assets and artifacts that are physically transported.
Assessment Type	Process Evidence and Implementation Evidence required
Related Requirements	None.
Specific Requirements for Assessor Activities	NOTE: The assessor is not required to determine the effectiveness of the controls themselves. NOTE: Assets and artifacts include products. NOTE: Physical transport includes movement inside or outside the factory/facility.
Evidence of Conformance (Process)	Risk management process, security controls, secure transmission and handling procedures
Evidence of Conformance (Implementation)	Secure packaging, security tape, shipping logs, badges, guards, bonded transport, photographic evidence, interviews with security staff

Third-Party Assessed

Organization	Scope of Certification	Standard	First Certified	Re-Certification	Status	Conformance Statement	Certificate
Altran ACT S.A.S and Altran Group Entities	IBM Business Unit	Open Trusted Technology Provider™ V1	6-Aug-2020	6-Aug-2023	Certified		
Aricent Holdings Luxembourg S.a.r.l, an Altran Company	IBM Business Unit	Open Trusted Technology Provider™ V1	7-Jun-2019	7-Jun-2022	Inactive		
CyberCore Technologies	CyberCore Technologies IT Products, Value Added Services and Data Center Systems	Open Trusted Technology Provider™ V1	15-Sep-2017	15-Sep-2023	Certified		
HCL Software	Products & Services for Software Engineering Framework Phase 1	Open Trusted Technology Provider™ V1	25-Mar-2020	25-Mar-2023	Certified		
HP, Inc	HP Enterprise Printer Products	Open Trusted Technology Provider™ V1	16-Sep-2021	16-Sep-2024	Certified		
HP, Inc.	HP Print Cartridges	Open Trusted Technology Provider™ V1	16-Sep-2021	16-Sep-2024	Certified		
Inspur Power Commercial Systems Co., Ltd.	Inspur K1 Power Systems Product Line	Open Trusted Technology Provider™ V1	27-Oct-2021	27-Oct-2024	Certified		
International Business Machines Corporation	IBM's Application Infrastructure and Middleware (AIM) Software Business Division	Open Trusted Technology Provider™ V1	30-Jan-2014	30-Jan-2016	Inactive		
Lexmark International Inc.	Laser Printer Controller Cards	Open Trusted Technology Provider™ V1	25-Oct-2019	25-Oct-2022	Certified		
Lexmark International Inc.	Laser Printing Products and Integrated Solutions	Open Trusted Technology Provider™ V1	2-Jun-2020	2-Jun-2023	Certified		
Seagate Technology LLC	Seagate and Lacie attached storage drive product lines	Open Trusted Technology Provider™ V1	29-Oct-2020	29-Oct-2023	Certified		
Seagate Technology LLC	Seagate Enterprise and Internal Hard Disc Drive (HDD) product lines	Open Trusted Technology Provider™ V1	12-Aug-2019	12-Aug-2022	Inactive		
Seagate Technology LLC	Seagate Enterprise Solid State Drive (SSD) product lines	Open Trusted Technology Provider™ V1	1-Oct-2020	1-Oct-2023	Certified		
Seagate Technology LLC	Seagate Lyve Services	Open Trusted Technology Provider™ V1	21-Jun-2021	21-Jun-2024	Certified		
Teracloud SA	TDMF, zDMF, and IZDS	Open Trusted Technology Provider™ V1	27-Nov-2019	27-Nov-2022	Certified		
Vizient, Inc.	Vizient Operational Data Base (ODB) hosted on Azure	Open Trusted Technology Provider™ V1	29-Oct-2020	29-Oct-2023	Certified		

130+ Certified Major Organizations

O-TTPS Adoption

Self-Assessed

Organization	Scope of Certification	Standard	First Certified	Re-Certification	Status	Conformance Statement	Certificate
AccessAgility LLC	AccessAgility Organization	Open Trusted Technology Provider™ V1	28-Mar-2022	28-Mar-2025	Certified		
Ace Technology Partners LLC dba ATP Gov	ATP Gov Organization	Open Trusted Technology Provider™ V1	15-Dec-2020	15-Dec-2023	Certified		
Advanced Computer Concepts, Inc	Advanced Computer Concepts Organization	Open Trusted Technology Provider™ V1	3-June-2021	3-June-2024	Certified		
Akira Technologies, Inc.	Akira Organization	Open Trusted Technology Provider™ V1	03-Mar-2021	03-Mar-2024	Certified		
Allegiance Supply Inc.	Allegiance Supply Organization	Open Trusted Technology Provider™ V1	17-Nov-2020	17-Nov-2023	Certified		
Alliance Technology Group LLC	Alliance VAR Activities for the Federal Government	Open Trusted Technology Provider™ V1	14-Jan-2021	14-Jan-2024	Certified		
Alvarez LLC	Alvarez Organization	Open Trusted Technology Provider™ V1	5-May-2021	5-May-2024	Certified		
American Wordata, Inc.	American Wordata Organization	Open Trusted Technology Provider™ V1	24-Aug-2022	24-Aug-2025	Certified		
Anacapa Micro Products, Inc.	Anacapa Organization	Open Trusted Technology Provider™ V1	1-Mar-2019	1-Mar-2025	Certified		
August Schell Enterprises, Inc	August Schell Organization	Open Trusted Technology Provider™ V1	23-Apr-2021	23-Apr-2024	Certified		
BahFed Corp	BahFed Organization	Open Trusted Technology Provider™ V1	3-May-2021	3-May-2024	Certified		
Better Direct, LLC.	COTS Information and Communication Technology Solutions	Open Trusted Technology Provider™ V1	21-May-2020	21-May-2023	Certified		
Blazar Technology Solutions, LLC	Blazar Organization	Open Trusted Technology Provider™ V1	4-May-2021	4-May-2024	Certified		
Blue Tech, Inc.	Blue Tech Organization	Open Trusted Technology Provider™ V1	1-Apr-2021	1-Apr-2024	Certified		
BlueSun Technologies, Inc.	BlueSun Technologies Organization	Open Trusted Technology Provider™ V1	30-Nov-2018	30-Nov-2020	Inactive		
Braxton-Grant Technologies, Inc.	Braxton-Grant Organization	Open Trusted Technology Provider™ V1	21-Nov-2021	21-Nov-2024	Certified		
Bridges System Integration, LLC	Bridges System Integration Organization	Open Trusted Technology Provider™ V1	3-Jun-2021	3-Jun-2024	Certified		
C&C International Computers and Consultants, Inc.	C&C International Organization	Open Trusted Technology Provider™ V1	5-Mar-2021	5-Mar-2024	Certified		
CALIBRE Systems, Inc.	Technology, Tools, and Solutions Division	Open Trusted Technology Provider™ V1	3-Dec-2021	3-Dec-2024	Certified		



O-TTPS Adoption



130+ Certified Major Organizations



Resources

- [The Open Group](#)
- [The Open Trusted Technology Forum \(OTTF\)](#)
- [OTTF Data Sheet](#)
- [OTTF Standards and Publications](#)
- [O-TTFS Certification Program](#)
- [O-TTFS Certification Register](#)
- [Open CTFP Professional Certification](#)