

Online Trust Alliance (OTA) Trust Framework

An important initiative within the internet society that tackles the challenges of internet of things (IoT) is the Online Trust Alliance (OTA). It is a non-profit organization that provides guidance on the security and privacy of the internet. Its mission is to promote the open development, evolution, and use of the Internet for the benefit of all people throughout the world.

The OTA has developed an IoT Trust Framework which sets out principles to help secure IoT devices that are being used in homes (such as television, children toys), business, health (e.g. fitness devices).

The framework outlines the following:

- The need for comprehensive disclosures prior to product purchase.
- Policies regarding data collection, usage and sharing, as well as the terms and conditions of security patching post-warranty.
- The need to have security updates in order to maximize the protection of IoT devices that are vulnerable to attacks.
- Recommendations for manufacturers to enhance transparency and communication.

The Framework basically has the following key areas:

- Security Principles– Applicable to any device or sensor and all applications and back-end cloud services.
- User Access & Credentials – Requirement of encryption of all passwords and user names, shipment of devices with unique passwords, implementation of generally accepted password reset processes and integration of mechanisms to help prevent “brute force” login attempts.
- Privacy, Disclosures & Transparency – prominent disclosures on packaging, point of sale and/or posted online, capability for users to have the ability to reset devices to factory settings, and compliance with applicable regulatory requirements including the EU GDPR and children’s privacy regulations.
- Notifications & Related Best Practices - Key to maintaining device security is having mechanisms and processes to promptly notify a user of threats and action(s) required. Principles include requiring email authentication for security notifications and that messages must be communicated clearly for users of all reading levels.

The full framework document is available free online through the OTA website:

<https://otalliance.org/resources/iot-resources>

The Internet Society is a non-profit organization whose mission is to support and promote the development of the Internet as a global technical infrastructure, a resource to enrich people's lives, and a force for good in society. It focuses on:

- Building and supporting the communities that make the Internet work;
- Advancing the development and application of Internet infrastructure, technologies, and open standards; and
- Advocating for policy that is consistent with our view of the Internet