Title

Tor4IoT: Enabling Onion Routing for the IoT

Authors

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Abstract

This work presents an approach for implementing Tor-like onion routing for the Internet of Things (IoT), utilizing a stack of communications and security protocols adapted to constrained IoT devices. We analyze the challenges of adapting onion routing to the constraints and requirements of IoT systems. We propose a modified onion routing solution that is tailored for IoT scenarios, detailing its design and impact on IoT security. We outline the needed architectural modifications and the appropriate usage of protocols suitable for constrained IoT devices. Furthermore, we highlight considerations and design choices that enable assuring privacy and security of the proposed solution.

Type

Presentation