An IoT Device-trusted Remote Attestation Framework

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Abstract—Remote attestation allows the verifier to determine the level of trust for the system's health. We propose a framework for verifying the trustworthiness of the IoT device using remote attestation. The framework provides remote device trust verification and a trust management service for a large group of devices to prevent remote control and zombization due to firmware spoofing. We show how the framework performs remote attestation for object forgery attacks under various types of heterogeneous TEE (SW) and TPM (HW) IoT platforms.

Keyword—Remote Attestation, Security, IoT, Malware



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