

Digital Shadow: Biometric Sensor

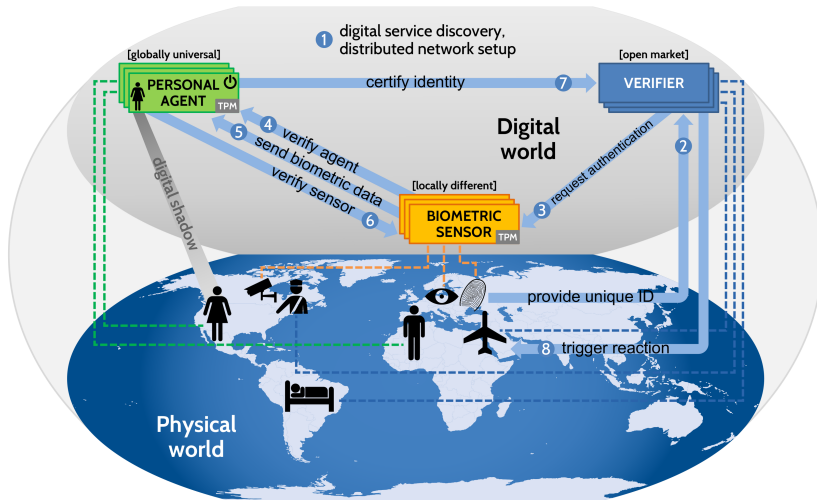
Master's Thesis Seminar

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Project Overview Digital Shadow



Biometric Sensor: Tasks



Focus of this Thesis

- Measured Boot with TPM and GRUB
- measure all relevant software parts
- extract the data of a biometric sensor
- send sensor data to Personal Agent
- cryptographic verification of running software
- ...

State of the Project: What is done

- bought small PC with TPM2.0
- installed s version of GRUB with TPM2.0 support
- learned Rust programming language
- read parts of the book *Trusted Computing Platforms - TPM2.0 in Context*

State of the Project: Problems and Next Steps

- bought hardware does weird things with the TPM (Communication with the service desk of the manufacturer ongoing)
- special version of GRUB is not yet booting properly
- when GRUB is booting properly, Rust should access the written registers in the TPM and generate the checksum