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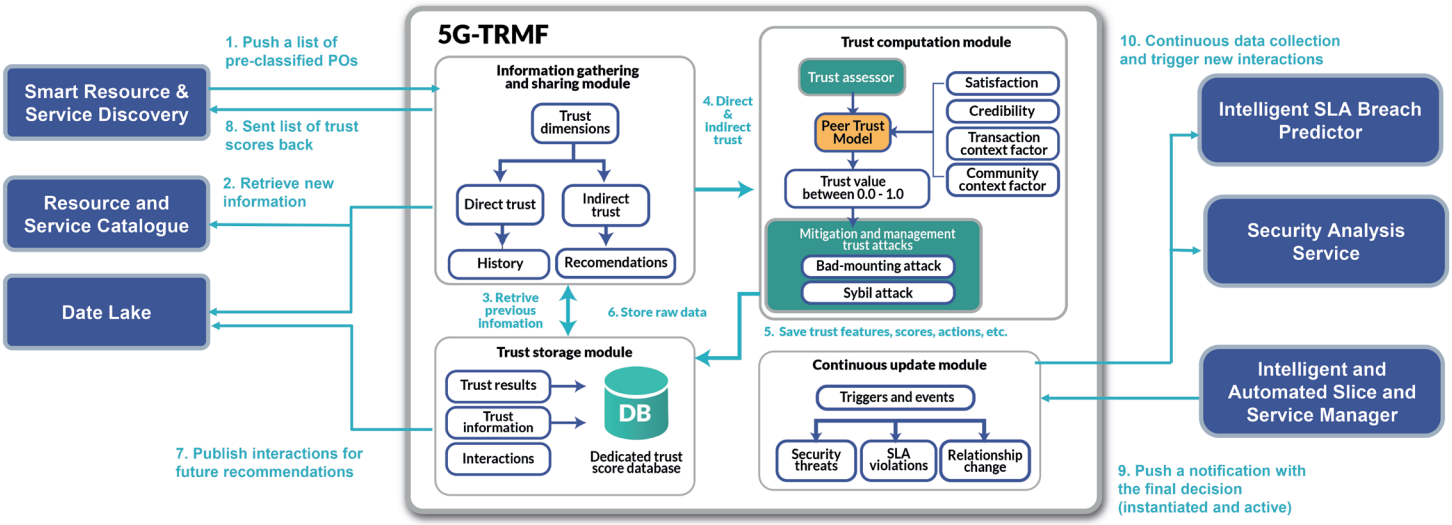
Trust Management in 5GZORRO ecosystem

5G-enabled Trust and Reputation Management Framework (5G-TRMF)

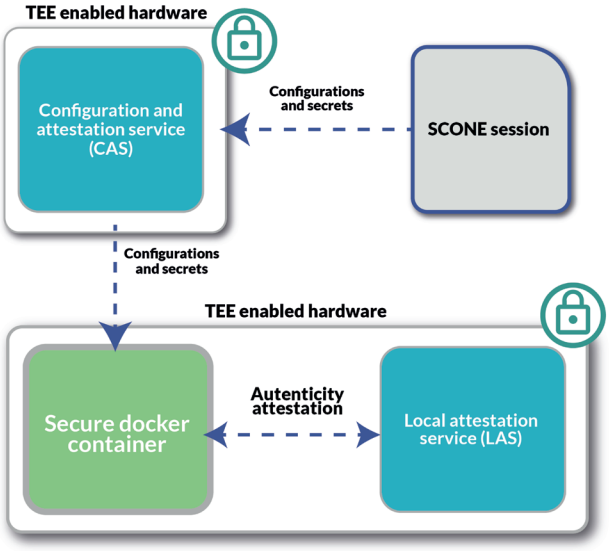
Overview

- **This module offers a cross-domain trust and reputation management framework to guarantee end-to-end trustworthiness establishments for distributed environments such as the one constituting the 5GZORRO ecosystem.**
- Trust, or the lack of it, influences the selection of partners for business relations, the way they are carried out and under which conditions.
- Trust is a key element when trading (purchasing or selling) resources and services, allocated in a third-party infrastructure, one of the main 5GZORRO features.
- The 5G-TRMF aims at enabling the development of feasible communications in 5G and beyond networks, through which a group of entities can establish chains of services between cross-operators, with trust and security.



Trusted Execution Environment Security Management

Overview



- **Trusted Execution Environment (TEE) is an isolated processing environment in which services and applications can be securely executed irrespective of the rest of the system.**
- In 5GZORRO we have adopted a hardware-based TEE approach, specifically Intel's SGX (Software Guard Extension), which guarantees a secure memory area where code and data can be protected from disclosure or modification.
- 5GZORRO envisions to enhance the security and trustworthiness of the system by providing the execution of some of its core services and components in a TEE.
- The SCONE framework was selected to enable the TEE capabilities. This framework abstracts the interface within Intel SGX and allows the secure instantiation of container-based services in a TEE.

SCONE

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5GZORRO Consortium

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