

Digital Identity Management and Trust Negotiation

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Federated Identity:

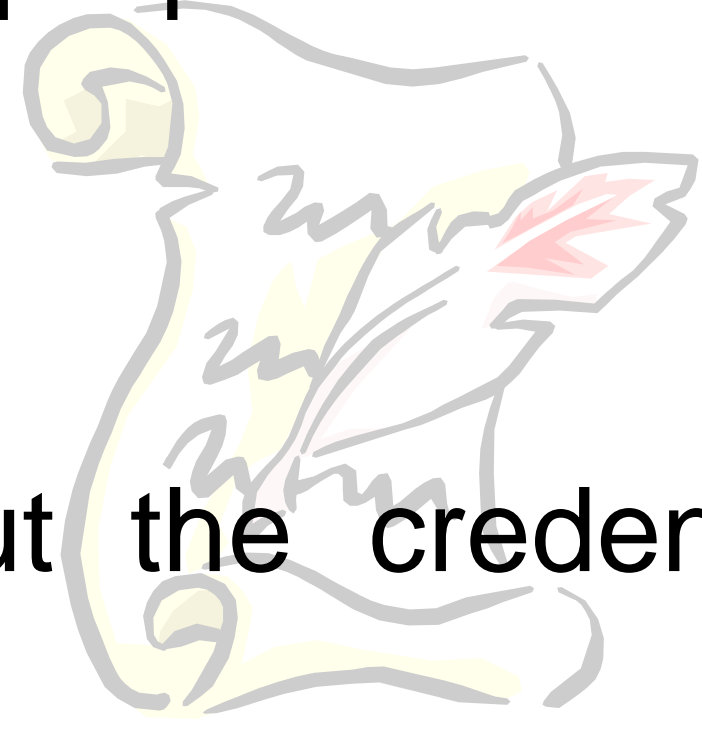
A federated identity is a digital credential analogous to a country passport. A federation is a set of organizations which establish trust relationships within which the federated identity is considered valid.



Trust Negotiation Model:

The gradual disclosure of credentials and requests for credentials between two stranger entities, with the goal of establishing sufficient trust so that parties can exchange sensitive resources.

- **The goal:** establish trust between parties in order to exchange sensitive information and services
- **The approach:** establish trust by verifying properties of the other party.



Building Blocks:

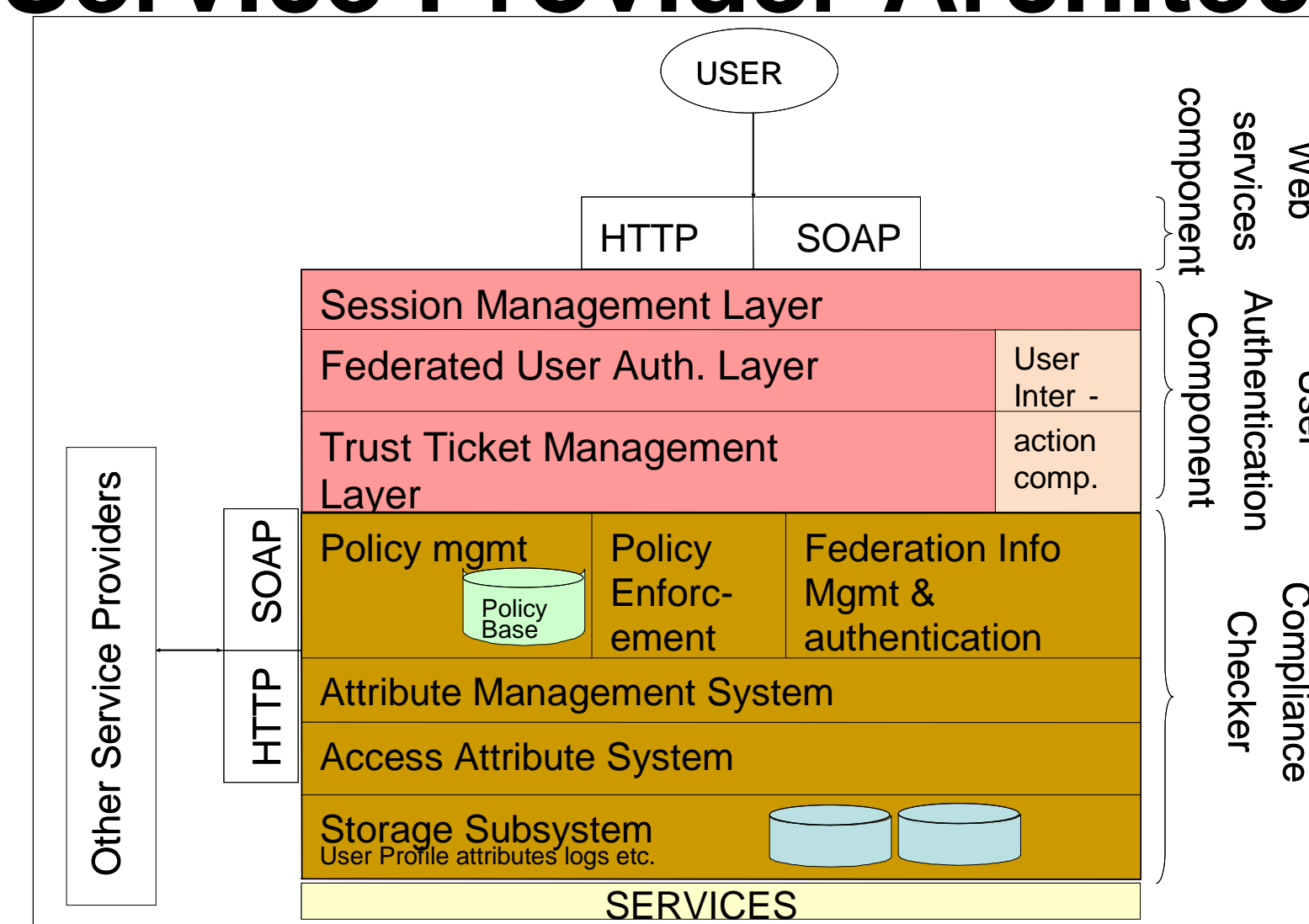
1. **Subject Credentials:** Assertions about the credential owner issued by a Certification Authority
2. **Disclosure policies:** Statements expressing trust requirements by means of credential combinations, protecting access to resources, sensitive information and disclosure of sensitive credentials.

Integrating Federated Identity and Trust Negotiation Model:

The **approach** we propose requires negotiation between service provider and user and among service providers. The negotiation protocol depends on the different types of users which are given as follows:

- Users that are *members* of the federation
- *External* users (new or repeated)

FAMTN Service Provider Architecture:



Strategies Support:

- **Sensitive policies protection:** disclosure policies logically linked
- **Negotiation similarity:** negotiation caching techniques
- **Previous successful negotiations:** trust tickets

Sharing Attributes in a Federation:

- Expressing privacy preferences in attributes
- Federation member hierarchy

