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Standardization viewpoint on Identity & Access Management

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1. History and concepts





- ☐ History
- ☐ Purpose
- Concepts
 - **Identity** is generally taken in a broad sense, as data to be stored or processed:
 - A set of attributes that describe and represent a particular entity (subject, principal)
 - o The capability to distinguish entities from each other to the extent relevant in a domain
 - **Attribute:** Referential existence, evolution over time, physical existence (e.g. biometrics), other references, assignments
 - Identification: determines an identity that contains the information required to be known in a domain
 - **Authentication**: formalized process of *verification of a provided identity -> Authenticated identity*
 - Identifier: unique attribute or attributes in an identity
 - **Credential**: representation of an *identity* for use in an *authentication*
 - **Domain, of origin**: can provide metadata for attributes; **of applicability**: where *entity* can use *attributes*



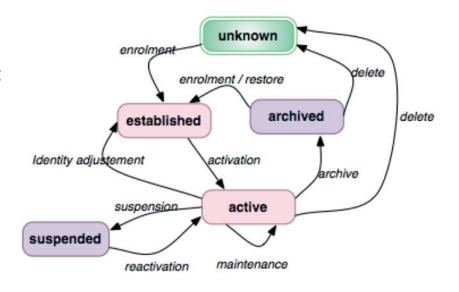
1. Concepts

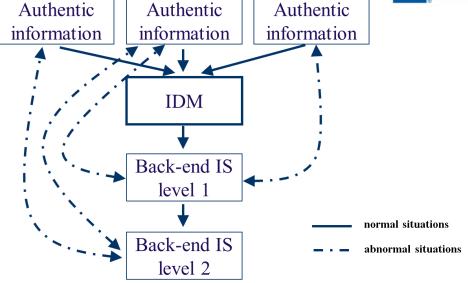




☐ Concepts

 Lifecycle & Authentic info:





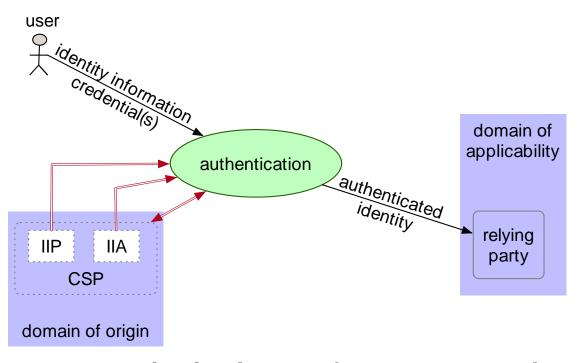
- Authenticator: representation of an entity to demonstrate it is known in a domain of origin (e.g. OTP)
- Access token: trusted object encapsulating the authority for a principal to access a resource
- **Authentication factor**: distinguishing feature of an authenticator to characterise its use in authentication: something that principal knows, possesses, biometric, behaviour pattern
- Credential Service Provider (CSP): Manages credentials



2. Credential use



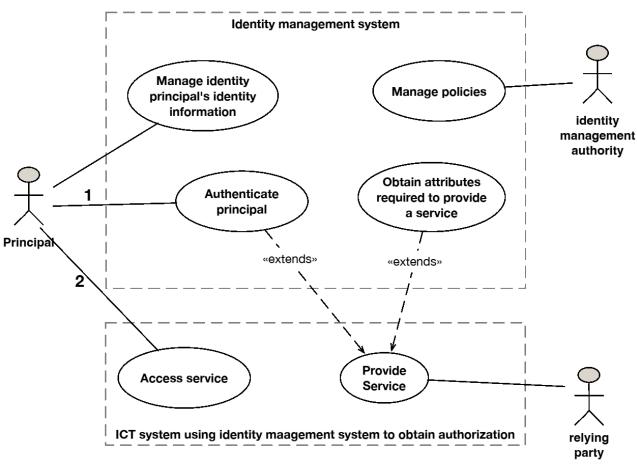




IIP provides the identity information contained in the authenticated identity

IIA provide an assertion for the content of the authenticated identity

CSP directly or indirectly in a user authentication



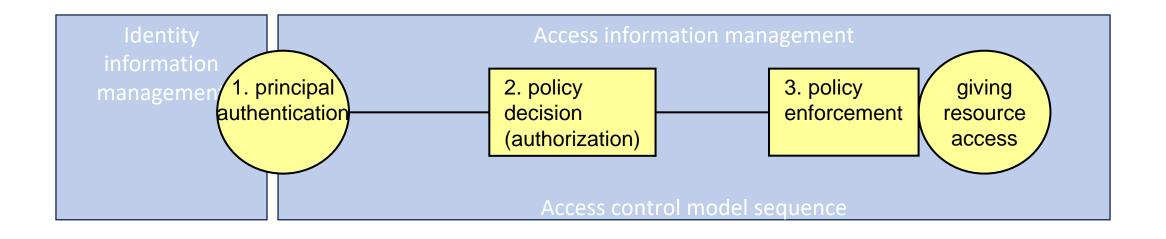
«extends» = use case pointed to includes the functions of the use case at the tail 1, 2 sequence of interactions by a principal to access a service controlled by a relying party



3. Identity management & Access management









4. References





- ☐ ISO/IEC 24760, A framework for identity management
 - Part 1: Terminology and concepts
 - Part 2: Reference architecture, guidelines and requirements for the implementation of systems for the management of identity information
 - Part 3: Practice
 - Part 4: Authenticators, credentials and authentication
- ☐ ISO/IEC 29146, A framework for access management

