A reference architecture for Identity and Access Management (IAM)

(Referensarkitektur för Identitet och åtkomst)

Purpose? What is it? How can it be used?



• Reference architecture =

- Architectural pattern for designing solutions in a specific domain, independent of products
- The reference architecture is designed to achieve specific purposes = business use



Driving forces – business needs



What problems does the reference architecture solve?



- **Proprietary variants** of authentication & access management in each system
- **Direct integration** with the technology
- <u>One</u> way of authentication ("the card") does <u>not</u> suit all tasks

→Difficult to implement Single Sign-On

Poor manageability High cost

A smarter and more scalable architecture



- ✓ Investing in security technology in a **common IT infrastructure**
- ✓ **Standardised** integration (SAML2, OpenID Connect, OAuth2)
- ✓ Enables new authentication methods, multiple factor authentication, mobile bearers, biometric solutions
- ✓ Facilitates quality assurance of identity data

Reference architecture for identity and access management - content



- Business view needs, capabilities, work flow
- Governing principles federated authentication, loose integration, open standards, platform neutrality.
- Information view services in collaboration
- Technical view protocols and standards

The areas of the Reference architecture



Technical view- primary protocols

	SOAP/XML	HTTP/JSON/REST	
Federation & tillit	SAML2 Metadata	OIDC Federation	
Federerad inloggning, SSO	SAML2 WebSSO	OIDC	Support for multiple protocol stacks in the IT
Identitet & egenskaper	SAML2 Assertions	JSON Identity Suite	
Delegerad åtkomst	1	OAuth2	infrastructure
Provisionering	SPML I	SCIM	
Autentisering	elD på godkänd bärare. U2F, UAF m.fl.		

Use case



The areas of the Reference architecture





How to use the Reference architecture?

- **Guiding** and normative "map " of the domain
- Patterns of solution for secure information exchange
- Basis for procurement, further devolopment and design of
 - \checkmark e-services / information systems
 - ✓ IT infrastructure
 - ...national as well as local!

