Secure Services and Quality Testing – SST

Security Engineering ... Privacy by Design ... Trusted Solutions ...

for Service Ecosystems

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Goals

Secure, unified management of virtual identities:

- Identities of people, things and services enabling the future ambient lifestyle in intelligent environments
- Design of Identity Ecosystems: User-centric, personalised and privacy preserving
- Mobile usage of ID tokens for authentication and authorisation (e.g. SIM cards, TPM, HSM, nPA)

Challenges

- User Empowerment: Managing the Identity Lifecycle
- Harmonisation of Identity Management approaches
- Realisation of seamless interoperability in business processes (e.g. Identity as a Service)
SST – Identity Management
Solutions – Kantara/UMA

UMA-Protocol Reference Implementation

Use Cases

Photo Sharing
- Sticky policy before uploading
- Policy enforcement on service provider side

POI2.0
- Sharing recommendations context-aware
- Fine-grained policies
- One update for multiple social/business networks

PIA
- “I am the app."
- User Empowerment: Full control over the identity life cycle
- Services benefit from user data up-to-date at any time

SST – Secure Services and Quality Testing
POI2.0

Sharing context-aware recommendations:

- Sharing relevant POIs with a well defined audience
- Depending on a specific context
- Cloud-based service solution
POI2.0
Sharing context-aware recommendations:

- At user login you can choose any pseudonym to authenticate yourself.
- Then, in POST mode, you make your recommendation,
- you might attach 0-5 stars to your recommendation,
- and give it an availability.
- Example: A restaurant I just been to is 4*, let’s make this recommendation available for one day.
POI2.0
Sharing context-aware recommendations:

- Furthermore you might restrict your recommendation to people who are in the same region, which makes your recommendation much more targeted.
- Currently this is provided taking advantage of Google API.
- And, finally, you choose the people you would like to reach, assuming they fulfil the policies defined.
POI2.0

Sharing context-aware recommendations:

- Assuming you are one of the potential recipients and fulfil all policies attached to the recommendation you will receive it by changing into GET mode.

- A notification service is on our agenda.

- Available at the Android app store at 1. Mai 2012!

- Currently, we are looking for cooperation partners to improve our developments as well as adapt our UMA reference to additional use cases and application domains.
Personal Information & Identity Assistant:

- Imagine you are an app and others are an app as well.
- You can download them and they can download you.
- You can create new virtual identities at any time and add information.
- Subscribers are up-to-date as soon as you edit your profile.
- You control at any time who has access to what and how long.
- You master the identity life cycle – terminate virtual profiles you do not need.

It’s just apps – No central service necessary.
Web Identity Landscape:

- Application Areas
- Technologies
- User Empowerment
- Threats
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Launch 1. Mai, 2012!

http://www.cloud-competence-center.de