
Security Engineering ...

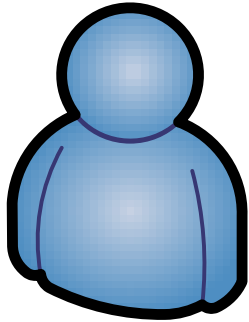
Privacy by Design ...

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)



UMA-Protocol Reference Implementation

Use Cases →



Photo Sharing

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



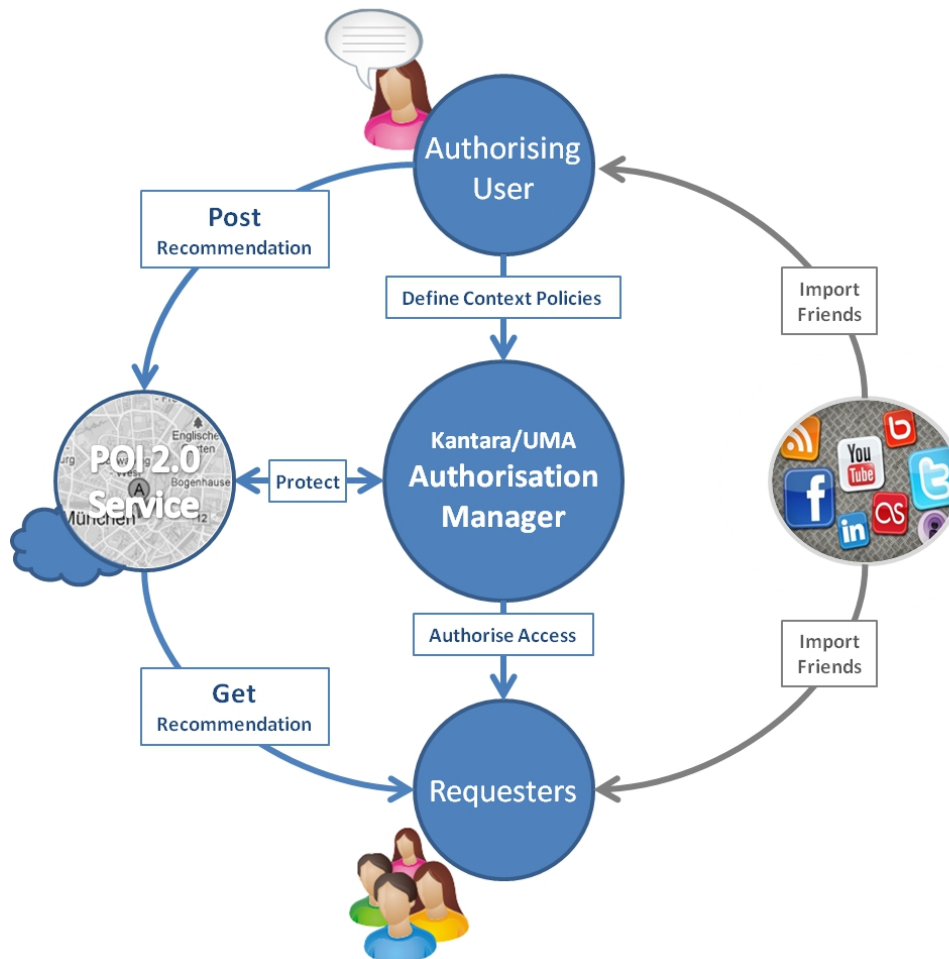
POI2.0

- 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



POI2.0

Sharing context-aware recommendations:

- Sharing relevant POIs with a well defined audience
- Depending on a specific context
- Cloud-based service solution



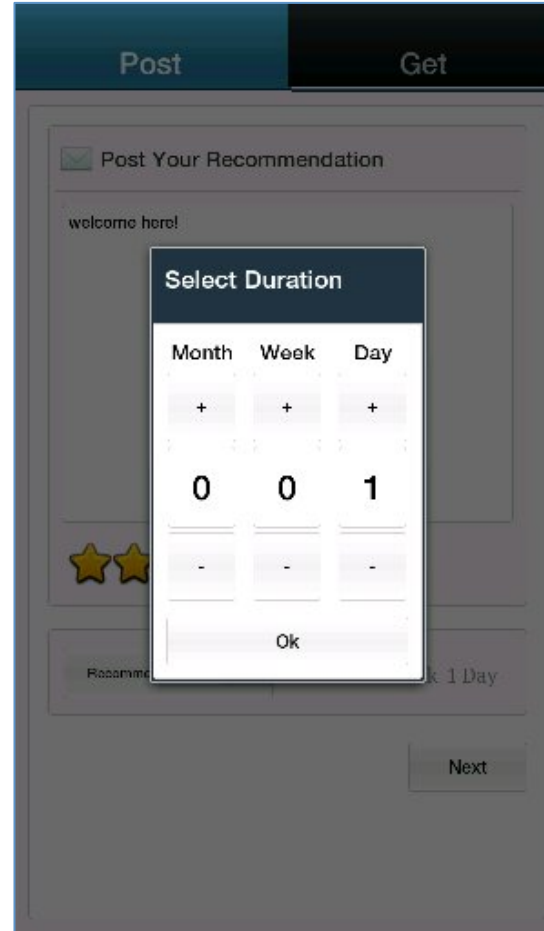
POI 2.0
Context-aware Points of Interest

User Log In

alice@gmail.com

.....

Sign Up Here Forgot Your Password ? Log In



Post Get

Post Your Recommendation

welcome here!

Select Duration

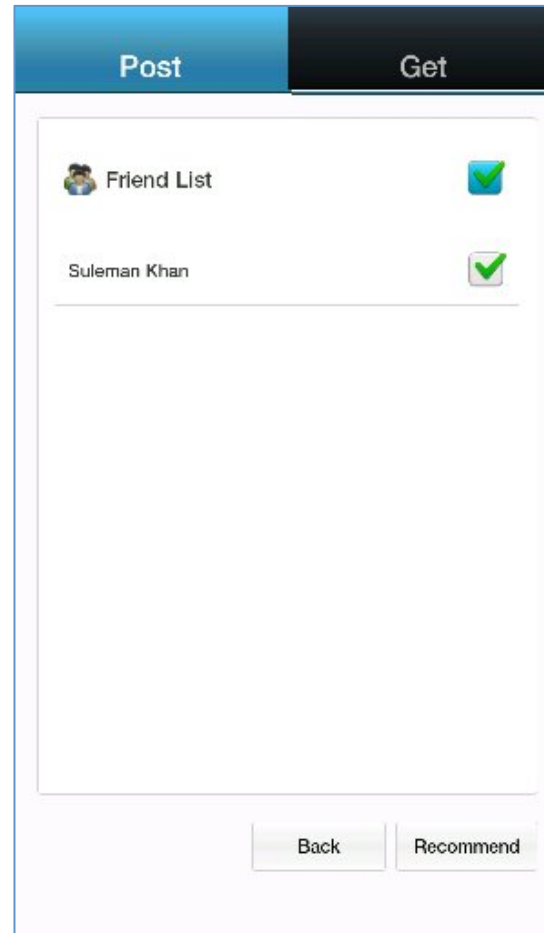
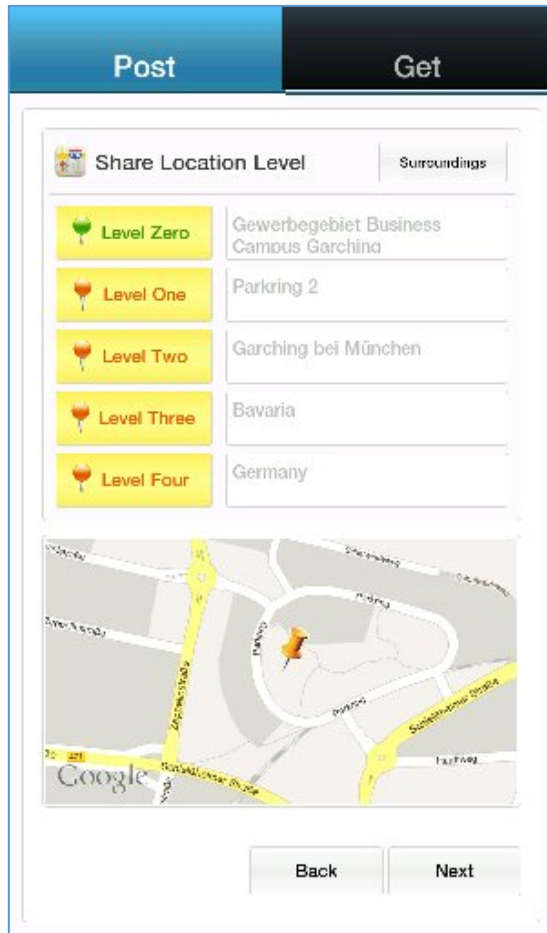
| Month | Week | Day |
|-------|------|-----|
| + | + | + |
| 0 | 0 | 1 |
| - | - | - |
| Ok | | |

Recommendation 1 Day Next

POI2.0

Sharing context-aware recommendations:

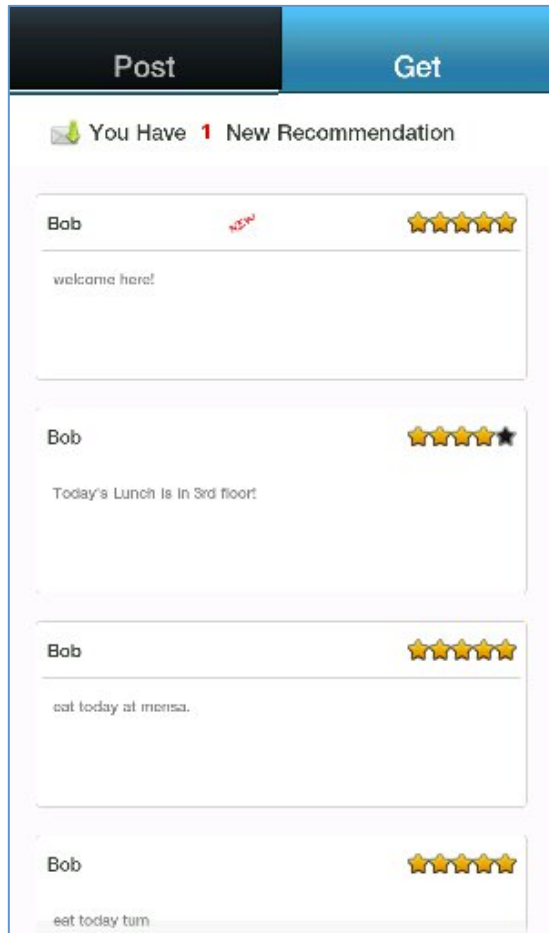
- At user login you can choose any pseudonym to authenticate yourself.
- Then, in *POST* mode, you make your recommendation,
- you might attach 0-5 stars to your recommendation,
- and give it an availability.
- Example: A restaurant I just been to is 4*, let's make this recommendation available for one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

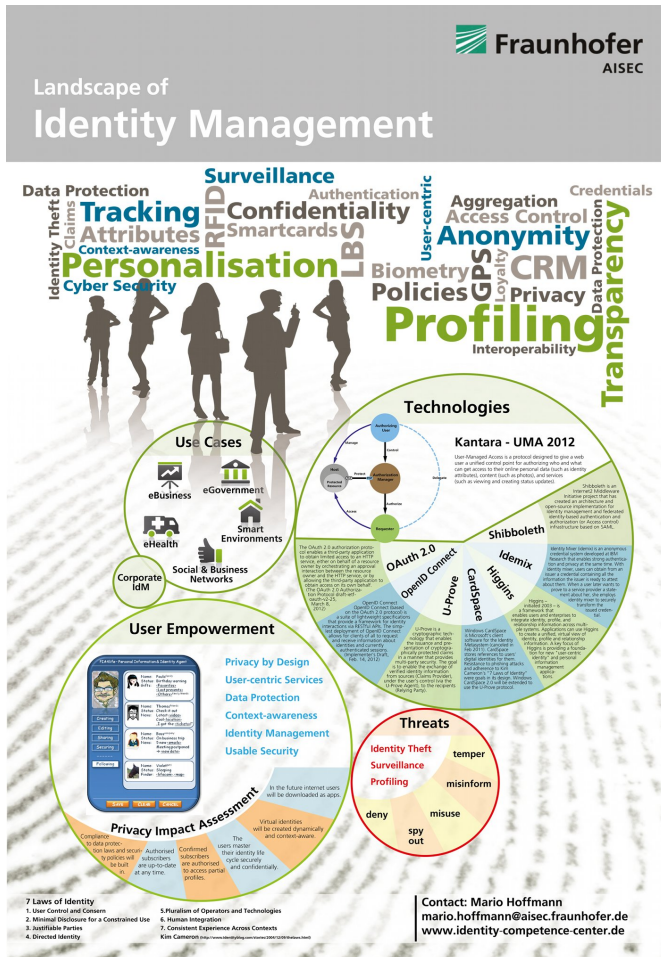
- Assuming you are one of the potential recipients and fulfil all policies attached to the recommendation you will receive it by changing into GET mode.
 - A notification service is on our agenda.
 - **Available at the Android app store at 1. Mai 2012!**
- ➔ Currently, we are looking for cooperation 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 identities and can terminate virtual identities at any time, not necessarily.

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>