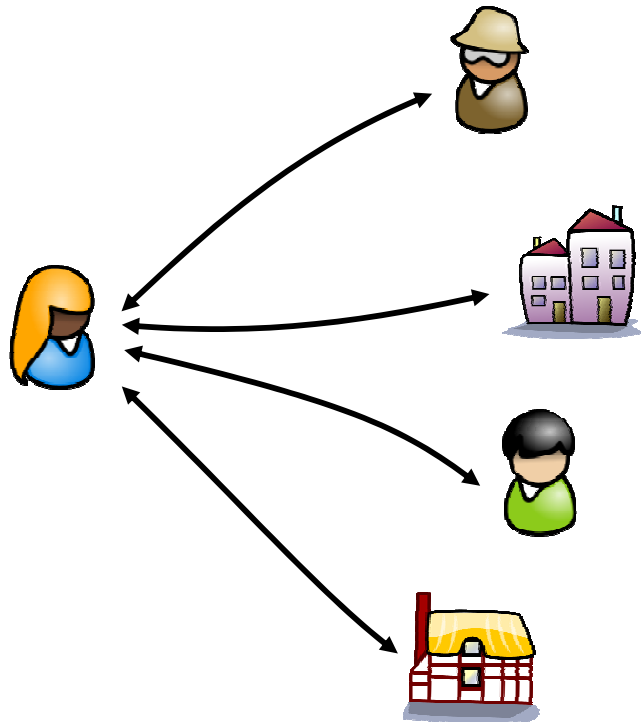


Privacy-Related Services in Identity Management



Presentation by the PRIME project
Pete Bramhall, HP Laboratories
Jan Camenisch, IBM Research
Marit Hansen, ICPP

PRIME goals



In the Information Society, users can act and interact in a safe and secure way while retaining control of their private sphere.

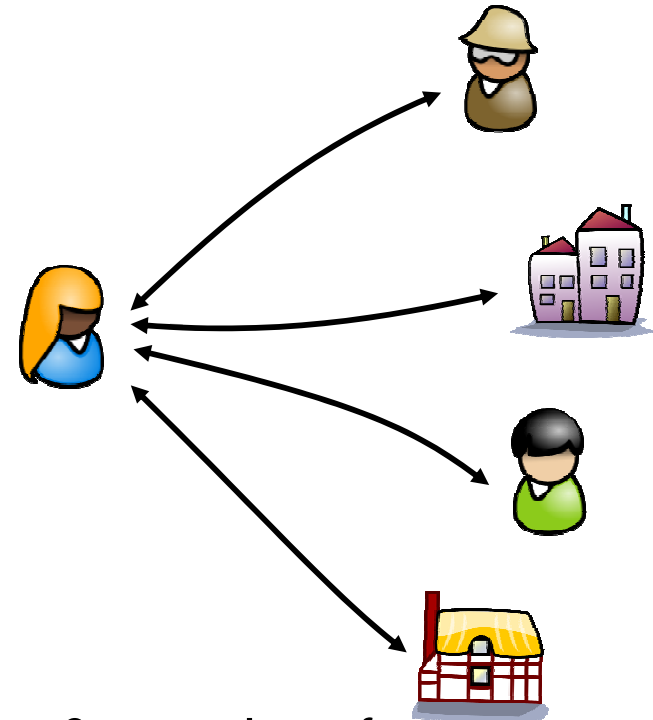
⇒ User-controlled identity management

PRIME – Privacy and Identity Management for Europe

User-Controlled Identity Management is Possible!

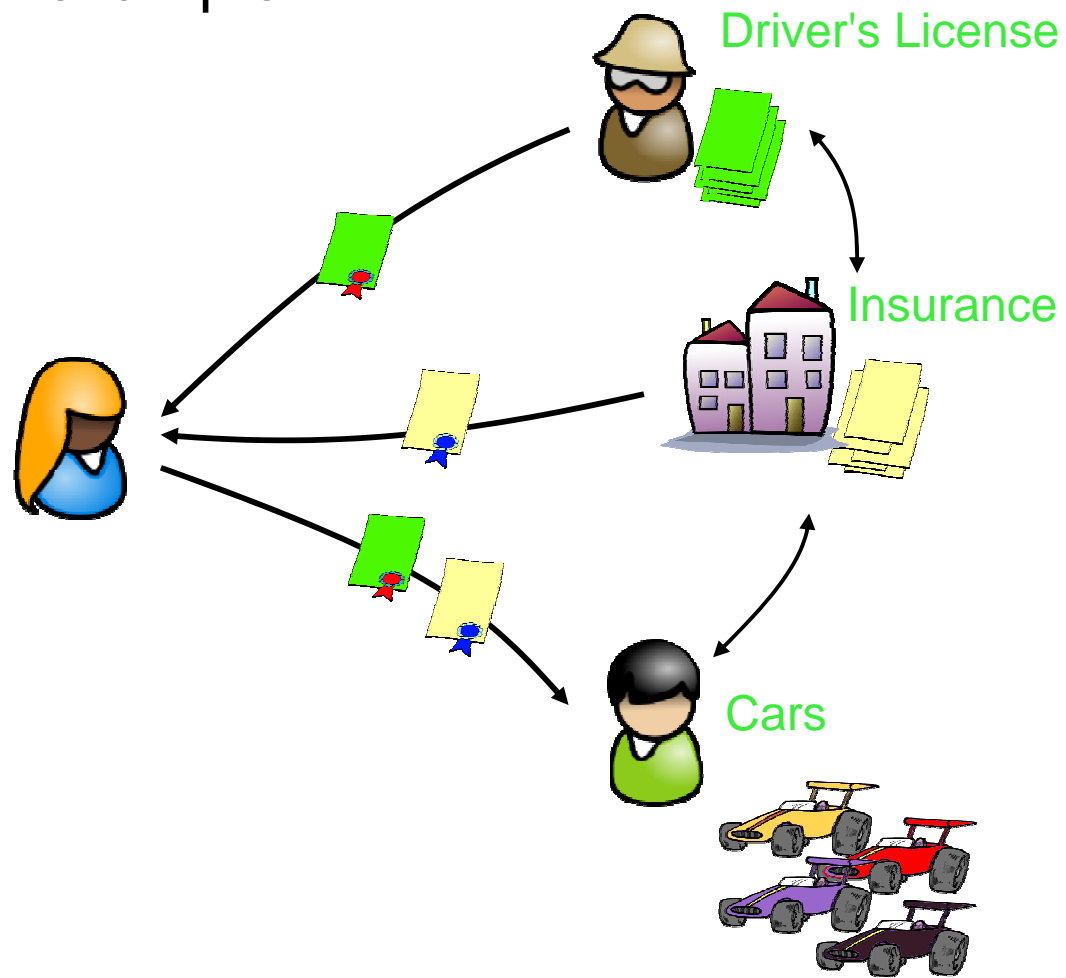
A Holistic Approach

- Legal, Social & Economic Framework
- Architecture
- Prototype implementation of architecture & user interface
- Application demonstrator (Collaborative eLearning, LBS)
- Tutorials (general public, end-user, experts)
- Research in all areas

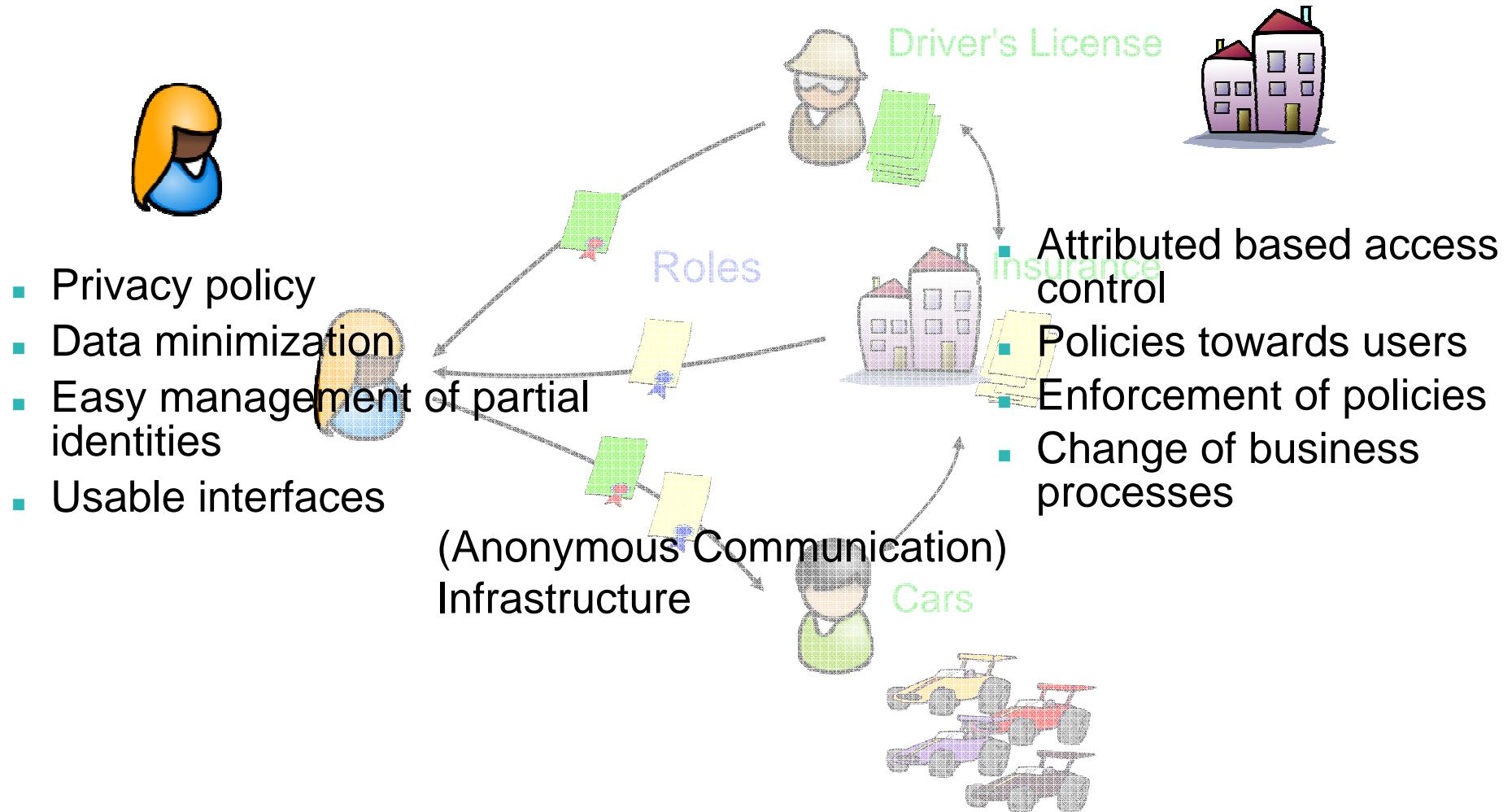


Identities – The Big Picture

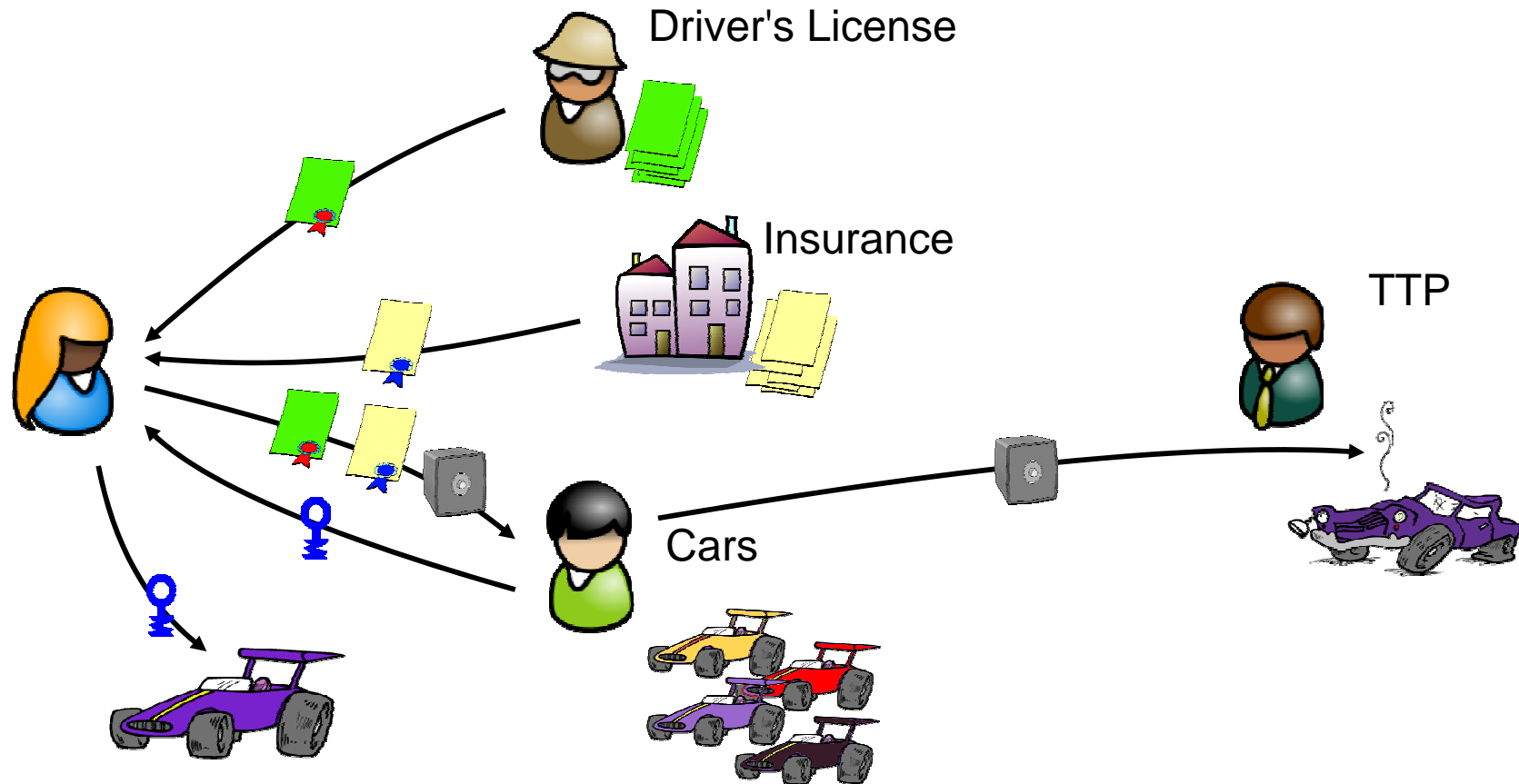
Transaction example:



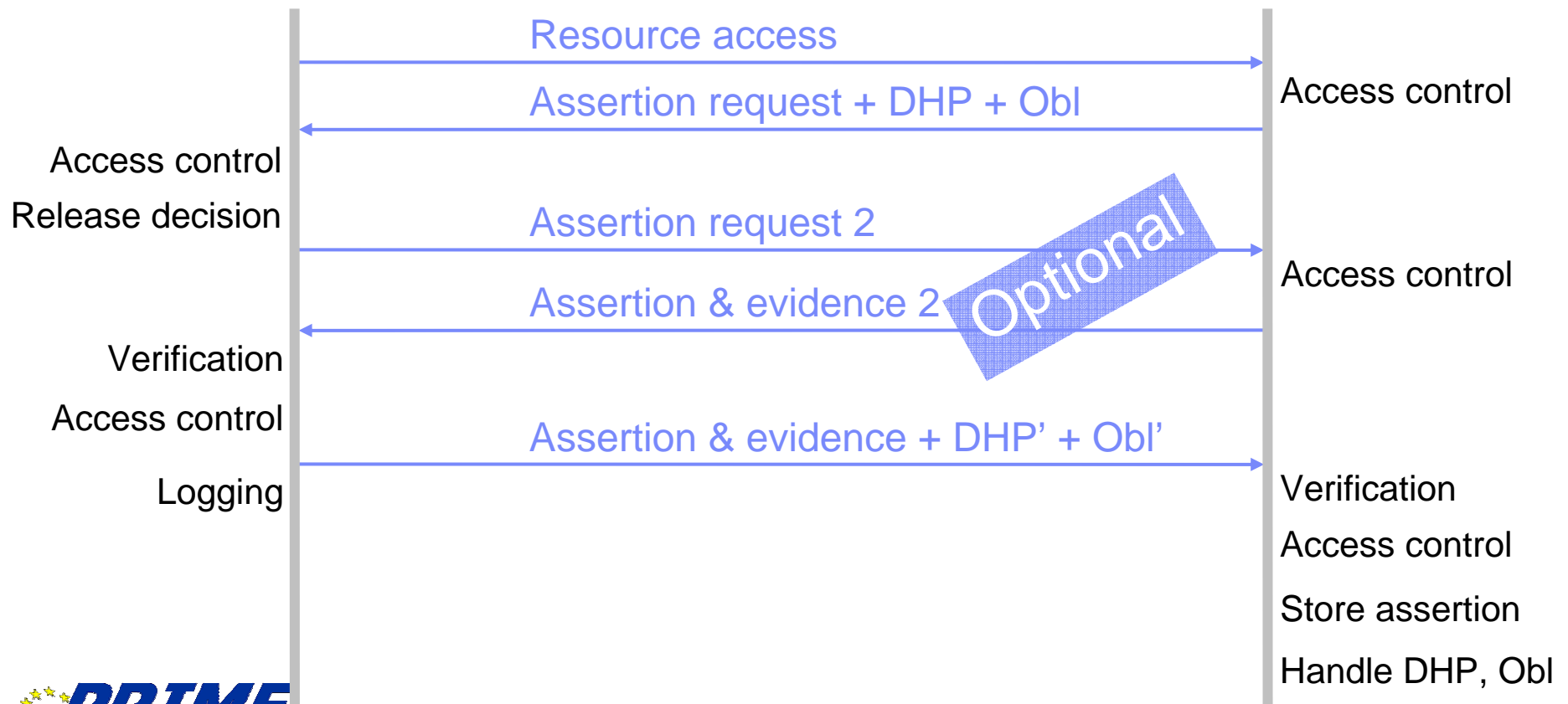
What is needed?



Credentials – the key enablers

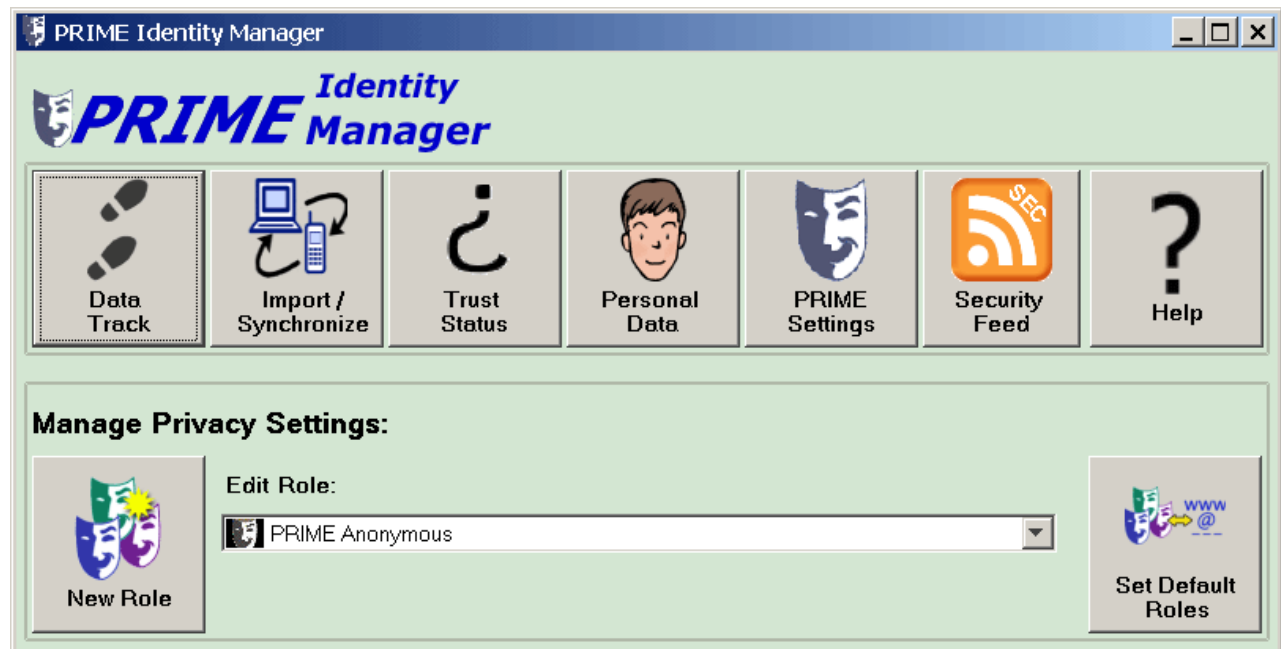


Trust establishment: attribute and policy exchange





User-side implications

- Human factors
- Data track management
- Credential management
- Preference authoring and management
- Trust management
- Reputation management



Data Track



- PRIME Identity Manager...
- My Data Track...**
- Set Default Roles...
- ? Help
-  Close

file:/// - Prime - Data Track - Mozilla Firefox

File Edit Settings View Passwords Simulations Assistance Help Quick demo

Data Track

Here you can see who knows your data and get assistance with data correction or removal

Search

(Search on name, date etc.) [More search options](#)

Who have recieved information about my ?

What data about me has recieved?

Browse Results

search answer...

Include transactional pseudonyms even if no data have been sent

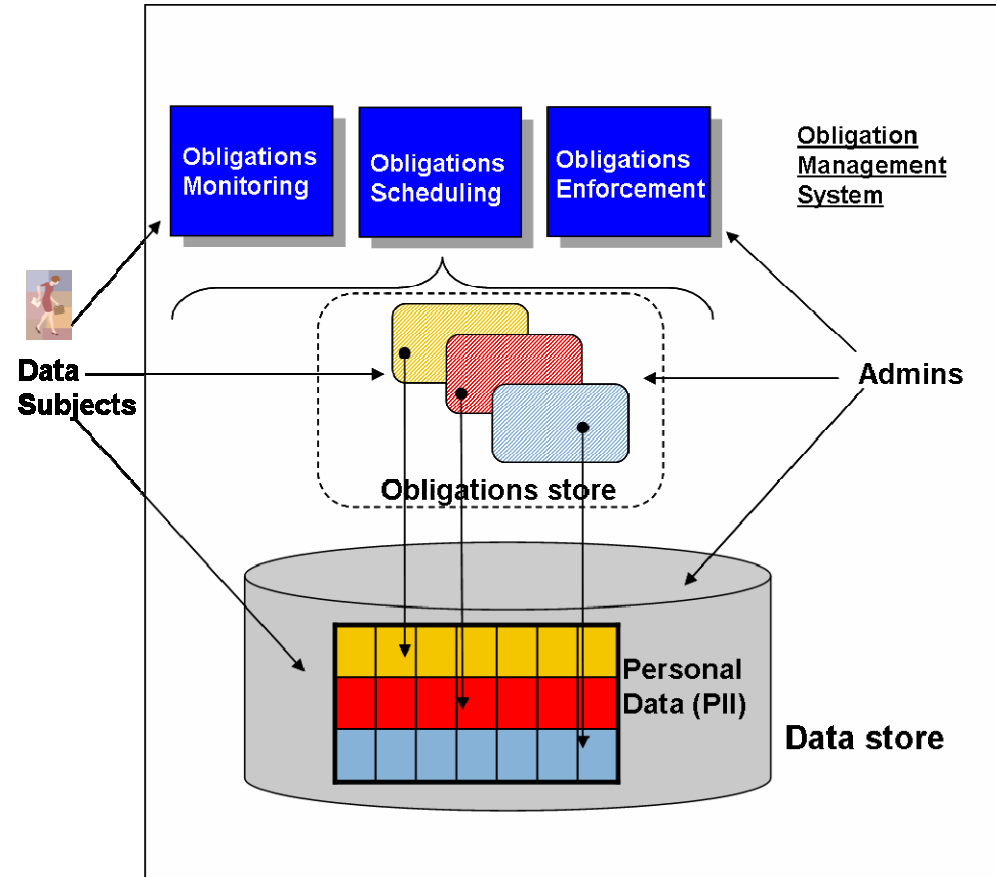
Ikea 2006-06-0 Purchase Sommaren john_prime	PartyPoker.c... 2006-06-12 Purchase Sommaren 2006 john_primeur...	Fritidsres 2006-06-19 Purchase Sommaren john_prime	PartyPoker.c... 2006-06-22 Purchase john_primeur...
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Credential management: example

The screenshot shows a Firefox browser window titled "Identity Mixer Demo - Firefox" with the address bar displaying "http://como/idemix/healthcare_catalyst/catalyst_login.html". The page content includes a "Health Information Portal" header, a search bar, and a navigation menu. The main content area is titled "PERSONALIZED HEALTH INFORMATION LOGIN" and contains text explaining the login process and a "Policy for logging into a member area of website". A security dialog box is overlaid on the page, showing the website's name, location, and verification status. Below this, there are options to "Reply with" previous session choices or manual selections. Two credential options are listed: "IDCard.CompanyInsurance Recommended" (with an IBM logo) and "GovtID.DependentInsurance" (with a US flag logo). The dialog box also includes "Proceed" and "Cancel" buttons. The browser's status bar at the bottom shows "Done", "PRIME", and "Proxy: None".

Services-side implications

- Fine-grained access control
- Obligation management
- Policy negotiation
- Policy compliance check and feedback

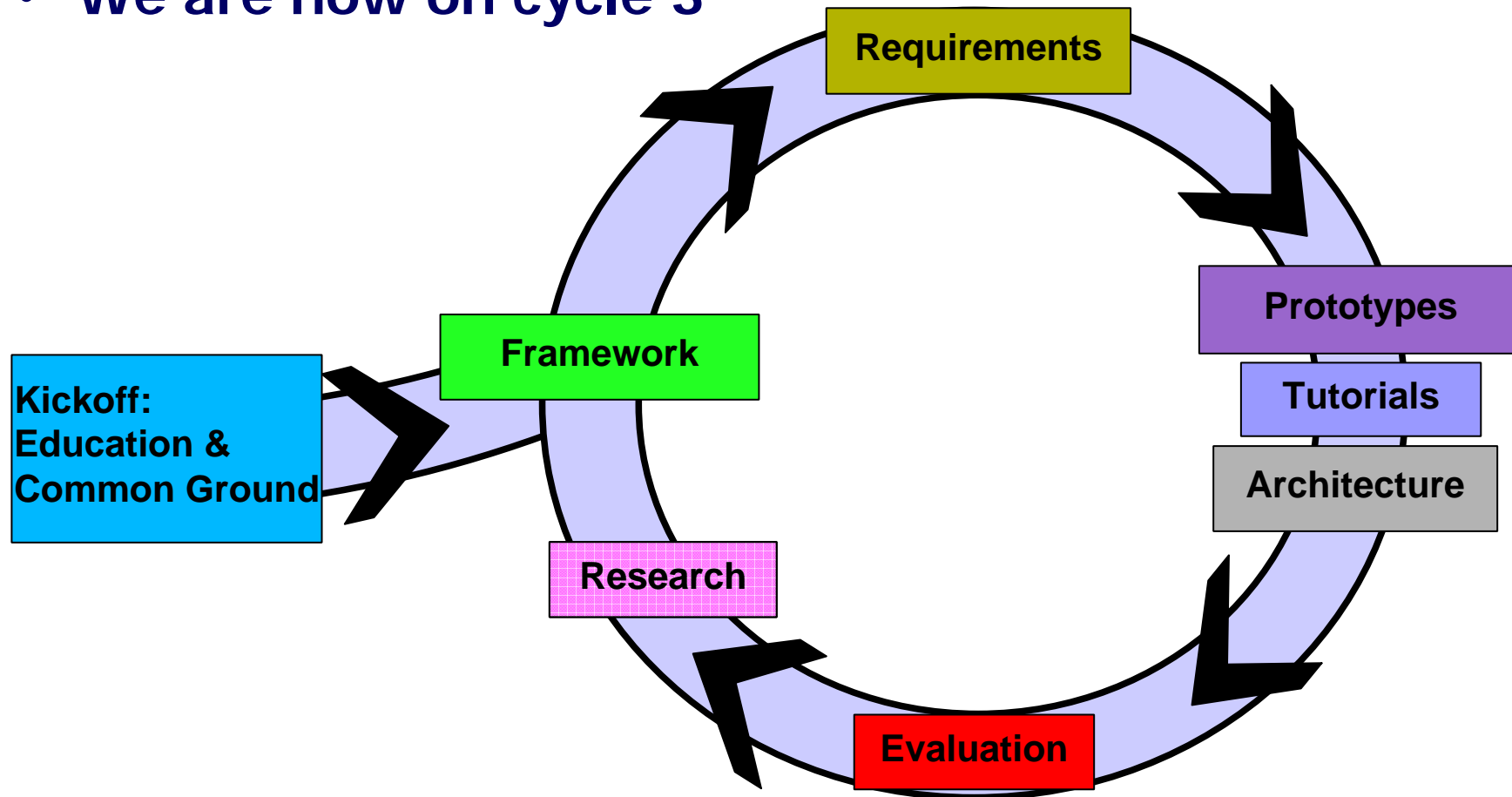


System implications

- **Sticky policies and preferences**
- **Cryptography**
- **Ontologies**
- **Data modelling**
- **Linkability/anonymity**
- **Law enforcement**

Project life cycle

- We are now on cycle 3



Conclusion

- All-embracing approach is the **key enabler**
- Legal, socio-cultural and economic context
- Single **over-arching** technical architecture
- **Research & prototyping**
 - Fundamental: ontologies, cryptography
 - Applied: user-side, services-side
 - Integration and validation
- **Wide variety** of stakeholders and participants:
 - Research institutions
 - System vendors
 - Enterprise users
 - Data Protection Authorities
 - Standardization

Further information

- www.prime-project.eu
- *The PRIME project receives research funding from the European Union's Sixth Framework Programme and the Swiss Federal Office for Education and Science.*



PRIVACY AND IDENTITY MANAGEMENT FOR EUROPE

