FutureID Automotive Demo
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Trust in the Digital World, Madrid, 26.02.2015
Agenda

- **FutureID**
- Demo Background
- Realization based on ownCloud with elements from SkIDentity
- Demo
Single Market of Online Services Requires Trusted Electronic Identities

Many transactions require Trust
Important Success Factors

Critical Mass of Users AND Services

Is it worth while?

Users

Services

Is it worth while?

FutureID is partly funded by EU FP7 under GA n°318424
How to Reach Critical Mass?

Intermediation

- Interoperability
- Privacy Enhancement
- Consistent User Experience
FutureID – Overview
Consortium: 19 Partners from 11 European Countries

Easy and cost effective integration of authentication and identity services
Standardized, trustworthy and ubiquitously usable eID client
Privacy enhancing authentication protocols for the real world

Coherent European trust infrastructure for authentication

Addressing non-technical requirements

Policy
Law
Economics
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Situation in the Automotive Industry

- Complex network between OEMs und suppliers

- Significant amount of development and manufacturing is outsourced to suppliers (up to 70% of the value generation, 200-300 suppliers per car)

[VIAVISION (2014), Nr. 5, July, p. 2/3.]
Many different logins, tokens, passwords etc. for the various partner-companies

- Different and changing partners with various security policies
  - High (process)-costs
  - Security problems for example due to very simple passwords, password re-use, passwords written down, lost tokens, etc.
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Technical Base: ownCloud

- free and open-source web application for data synchronization, file sharing, and cloud storage.
- written in the PHP and JavaScript scripting languages.
- designed to work with several database management systems, including SQLite, MariaDB, MySQL, Oracle Database…
- File storage in conventional directory structures or via WebDAV
- Cryptography
- Synchronization of clients
- Calendar (CalDAV), Task scheduler, Address book (CardDAV)
- User and group administration (via OpenID or LDAP)
- Sharing of content across groups or public URLs
- Online text editor with syntax highlighting and code folding
- Bookmarking
- Photo gallery, PDF viewer, Viewer for ODF Files
- Logging Module: supports logging of file-related actions, logs, who accessed what, when and from where
Automotive Demonstrator: „Cloud-Team-Room“

Cloud Service: Team-Room

- Hosting design-information
- File sharing etc.
- Offers different user-roles: users with different roles have different access rights
- Offers services to a multitude of competing OEMs and TierN-Suppliers using varying authentication methods
„Cloud-Team-Room“ – Structure

Cloud Service: Team-Room
Specific security privileges for different users

OEM: Complete access

Tier1: Restricted access

Tier2: Access restricted further

Integrates different IDM-services
Controls identities

OEM: Car Manufacturer
Defines component specifications
Authentication with Smart-card

Tier1: Large Automobile Supplier
Develops component
Authentication with Smart-card

Tier2: Engineering Bureau
Develops component part
Authentication with Smart-card

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Demo
Added Value of the solution

Flexible
- no need to agree on a common authentication method
- ability to integrate the solution into environments with different security policies

Secure and trustworthy
- roles of the structure can be adjusted to the contractual relationships
- identities and roles can always be easily kept up-to-date

Business-enabling technology
- reduction of complexity
- easy implementation even for partners with limited IT-resources/skills
- cost reduction due to economies of scale
- bundling of competencies enables focus on core competencies
Thank you!

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