Digital Identity for University People

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Agenda

• Digital Identity vs Federated Digital Identity
• Identity Management
• European eID solutions
• Enjoy My UniCam project
• Results
• Conclusions
“An identity of an individual person may comprise many partial identities of which each represents the person in a specific context or role” (Pfitzmann, Hansen)
Agreement between organizations and resource providers, with which the participants decide to trust each other of information exchanged in the processes of

- Authentication
- Authorization
- Accounting

on the basis of rules and policies established to manage relationships of trust.
Identity Management (IdM)

Digital Identity

Federated Digital Identity

The Identity Crisis - Security, Privacy and Usability Issues in Identity Management (2011)
European Research Projects

• **FIDIS** (FP6-ICT, 06-2009)
  Integrated approaches to research. Legal, socio-economic, usability and application requirements. Public architecture and specifications.

• **PRIMELIFE** (FP7-ICT, 06-2011)
  New concepts for privacy, prototype tools realizing the novel technologies developed by the project activity, studies about functionalities and security of IdMs.

• **GINI-SA** (FP7-ICT, 05-2012)

• **DIGIDEAS** (FP7-IDEAS-ERC, 09-2013)
  Increase the understanding of the social and ethical aspects of digital identity management, to contribute to the quality and social/ethical acceptability of technological developments.

• **FUTUREID** (FP7-ICT, 10-2015)
  Availability of a ubiquitously usable open source eID client that is capable of running on arbitrary desktop PCs, tablets and modern smartphones.
European Projects (ICT-PSP)

• **STORK** (ICT-PSP, 06-2011)
  Interoperability among countries participating in it. Pilot project about the Erasmus student mobility.

• **SSEDIC** (ICT-PSP, 12-2013)
  Identify the actions and the timetable for the Digital Agenda (DAE) and the successful launch of the European Large Scale Action (ELSA), as well as to provide a multi stakeholder planning resource to assist its implementation.

• **STORK 2.0** (ICT-PSP, 04-2015)
  Contribute to the realization of a single European electronic identification and authentication area.
The project allows

- **Students**
- **Faculty staff**
- **Administrative staff**

... on a **single physical card**... to have on a several functionalities related to:

- Facilitated **banking account**
- **University services**
- **Digital signature**
Enjoy My UniCam Project

Several issues have been addressed and solved, under different point of view

- **Political** → means of bringing IT innovation in UniCam
- **Legal** → adoption of the Italian Digital Administration Code
- **Organisational** → agreement regulating terms and conditions among stakeholders
- **Technical** → implementation of a new system, considering integration
Enjoy My UniCam Project

It is possible to establish a federation (based on SAML 2.0) through the advantages from a trust relationship between UniCam IdP and Idp of other organisations.
Stakeholders

- **University of Camerino**
  - Manages and controls the whole distribution process of the card
  - Offers UniCam services

- **Italian Banking Group UBI**
  - Offers banking services

- **Namirial Certification Authority**
  - Manages digital certificates

- **Oberthur Technologies**
  - Releases and personalizes the card
Card produced and commercialized by Oberthur Technologies™, with the following main features:

- It is compliant with the **IAS ECC** standard (Identification Authentication Signature European Citizen Card)

- It can be used in the following ways: **Contact**, **Full-Contactless** and **Dual**

- **Common Criteria** EAL5+ and the **FIPS 140-2** level 3 certifications

Compliance with these standards are a prerequisite to preserve the legal value of the digital signature over the time.
- Request
- Information gathering

- Digital signatures
- Information validation

- Banking data

- Card production
Supported services

• **Banking Services**
  - **Prepaid card** with an associated IBAN; valid for 5 years
  - **Banking operations**: pay with MasterCard™ circuit, send or receive transfers using home banking, pay bills, etc.

• **UniCam Services**
  - Access to **laboratories and libraries**
  - Interact with the **academic career**
  - Require **internships and thesis**
  - Pay the meal at the **canteen**
  - Enrolment to university **sports center**

• **Digital Signatures**
  - Digitally sign documents with legal value
  - Fill some UniCam documents on the user pc and digitally sign it
IDEM: Italian Federation of Authentication and Authorization Infrastructure (AAI) involving Institutions of the scientific and academic community.

UniCam joined IDEM (April 2013)

using the card ➔ services offered in IDEM such as access to Wi-Fi networks, online libraries, e-learning and wiki platforms, subscriptions to scientific journals, etc.
## Start-Up

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<th></th>
<th>Total</th>
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<tr>
<td>Required cards</td>
<td>327</td>
<td>305</td>
<td>22</td>
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<tr>
<td>Card delivered</td>
<td>261</td>
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<td>(234 students - 27 staff)</td>
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(September 2012-June 2013)
Conclusions

- In 21 months 2330 cards required (average waiting time of 15 days)
- “All-in-one” solution guarantying security, privacy and trust
- Remarkable simplification of the administrative paperwork
- Benefits from joying/creating Federations
- Novel services will be activated from UniCam aiming to build up a smart campus
Thank you!

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