



FIDELITY

Federated Identity Management based on LIBERTY

The Fidelity project has built four so-called Circles of Trust (CoT) and has made them interoperable. The purpose was to test the technical, economical, and legal viability of the Liberty Alliance approach for Identity Management in a pan-European context through seven close-to-market use cases.

Main focus

User identification and authentication are key enablers for Internet business. However, nowadays user identities are numerous, independent, and fragmented, preventing them to benefit from authentications already achieved at other places on the Internet. To solve this problem, the Liberty Alliance Project (www.projectliberty.org) specified a Federated Identity Management system, defining a Circle of Trust (CoT) which includes an Identity Provider (IdP), responsible for user authentication, Service Providers (SP), and Attribute Providers (AP) offering services to end users and sharing their personal

attributes. These specifications can even extend the scope of Identity Management (authentication and attribute sharing) beyond the border of a CoT, through establishing a pervasive trust framework, composed of multiple CoTs.

Approach

The Fidelity project has built a network focusing on solving the problems that could be found in an international environment and that could be subject to regulation(s) addressing the user data security and privacy. The project consortium was made up of four telcos (France Telecom, TeliaSonera, Telenor and Amena), each one implementing a CoT, three industrial partners (Ericsson, Axalto and Italtel) providing software and hardware for the CoTs, three SME's (Moviquity, TB-Security and Linus) and the University of Oslo providing specific knowledge, such as development and integration.

Fidelity

Project ID: CP2-013

Start Date: 1 April 2005

Completion date: 30 December 2006

Partners

Ericsson Spain, Spain

France Telecom R&D, France

Gemalto, France

HiO (Oslo University College), Norway

Italtel, Italy

Linus, Norway

Moviquity, Spain

ORANGE - FT España, Spain

TB-Security, Spain

Telenor, Norway

TeliaSonera, Finland

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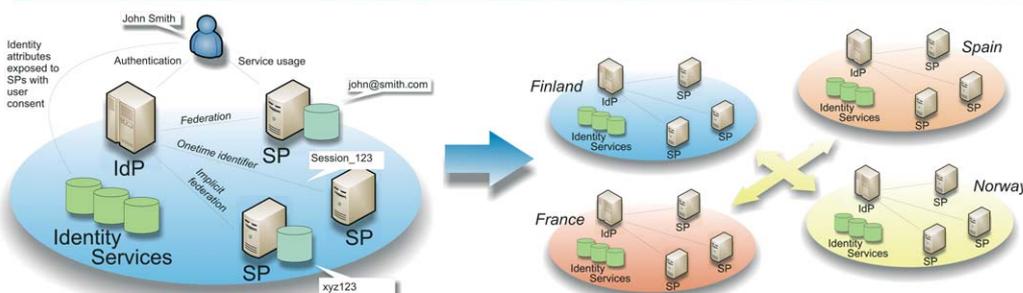
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Project web site

www.celtic-initiative.org/projects/fidelity

www.celtic-fidelity.org/

From single Circles of Trust (CoT) into a PAN European interworking



The project had three main objectives:

🌐 To show the technical feasibility of a large scale multi-vendor implementation based on the Liberty Alliance specifications.

🌐 To show that seamless authentication with defined security levels and attribute sharing across CoT boundaries is possible.

🌐 To produce best practices recommendations regarding security to end users, legal issues in a pan-European context and business related issues.

Achieved results

The Fidelity results can be considered from different points of view:

Technical point of view:

As planned, the Fidelity project deployed a "real-life" infrastructure, using heterogeneous products to implement all of the Liberty functionalities. Commercial products, such as Ericsson, Sun Access Manager, HP Select Federation, but also, self-developed products, such as France Telecom IDMP, have been successfully interconnected to allow the user to navigate across his CoT's borders. Gemalto's authentication framework, integrated in each CoT, allows the user to be stronger authenticated.

About CELTIC

Celtic is a European research and development programme, established as Eureka cluster, to strengthen Europe's competitiveness in telecommunications through short and medium term collaborative R&D projects. Celtic is currently the only European R&D programme fully dedicated to end-to-end telecommunication solutions. Launched in November 2003, Celtic (Cooperation for a sustained European Leadership in Telecommunications) was founded and has been supported by major European telecommunication players, both vendors and operators. Celtic fills the gap between public R&D programmes not specifically focused on telecoms and short-term R&D efforts by the telecoms industry

Timeframe: 8 years, from 2004 to 2011

Economical point of view:

The Fidelity project, through the deployment of close to market use cases, proposed a business model for Identity Management in which a telecoms network operator acts as Identity Provider. This business model, illustrated with pertinent demonstrations, has been proposed to the Telco's business units.

European regulation point of view:

The Fidelity project provided recommendations regarding the European laws protecting the user's privacy.

Dissemination and standardization point of view:

Fidelity members took part in many dissemination and standardization activities to promote the Liberty approach in Europe. A cooperation memo was signed between Liberty Alliance and the Fidelity project that pushed two SIS profiles to Liberty SIGs (wallet and calendar profiles). Fidelity also presented its results at the Liberty Alliance meetings and many other IT and marketing-oriented congresses (IST 2006 in Helsinki, Celtic Event in Dublin, ISSE in Rome, France Telecom's Research Result Exhibitions, 3GSM World Congress in Barcelona, etc.). Fidelity has also released public versions of the consolidated evaluation report and evaluation results.

Total budget: in the range of 1 billion euro, shared between governments and private participants

Participants: companies from the telecommunications industry (small, medium and large), universities, research institutes, and local authorities from all 35 Eureka countries may participate in Celtic projects.

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Impact

Knowledge in Identity Management

The first and main impact the Fidelity project had for its members was to reinforce their conviction that Identity Management is a key enabler for tomorrow's Internet, and that telcos, thanks to the trust relationship they have with their customers, can play a very important role.

Partners are now convinced that the Liberty approach is suitable for the management of identity and they are fully aware of its multiple advantages and few drawbacks.

New products, better products

The partners have gained important knowledge in development and integration of Liberty products. Ericsson and France Telecom have built or enhanced their own IDP taking in account the Fidelity results, Telenor and TeliaSonera have asked for modifications on the commercial products they use. Gemalto has developed and enhanced its smartcard infrastructure to integrate easily any Liberty framework.

New projects

Gemalto and France Telecom have started to work on a French collaborative project dealing with Identity Management based on Liberty. This project has the goal to be much closer to market requirements, building pilots to be evaluated by real users.

New commercial offers

TBSecurity has developed a commercial Service Provider tool based on Liberty mechanism. It is based on Fidelity results. France Telecom has recently won the "Mon Service Public" (My civil service) call for offer. The goal of the project lead by the French MINEFI (Ministry of Economics, Finances and Industry) is to build a web portal through which the citizens will be able to access all of their civil services and share their data among them. The Identity Management solution chosen is Liberty, and the product sold is IDMP, the "made by Fidelity" Identity Provider.

Telenor is now investigating the opportunities of being an Identity Provider, leveraging strong authentication based on mobile phones to other Identity Providers.