



You are what you keep!

6th Newsletter – September 2018

The CREDENTIAL Newsletter series keeps you informed about our project's progress, results, and events. Specifically, this issue provides you with an update of our pilots, recent events co-organized by CREDENTIAL, and gives an outlook of upcoming workshops and conferences

CREDENTIAL is Over – But Our Journey Continues ...



CREDENTIAL has been a long journey: 3 years, 11 partners, 16 face to face meetings, 10 cities and tens of thousands of code lines produced.

The primary goal was to develop, test and showcase innovative cloud-based services for storing, managing and sharing digital identity information and other critical personal data within different applications, devices, and use cases.

In these three years several exploitable items have been developed and tested to be commercialized:

- **CREDENTIAL Wallet:** the data sharing platform exploited with end-to-end proxy re-encryption and strong hardware-based multi-factor authentication. All pilots integrated this component in running use cases.
- **CREDENTIAL Components:** all tangible project outcomes ready to be introduced into the market. This group includes:
 - **Proxy Re-Encryption Library:** the technology that guarantees secure end-to-end data sharing even when data are stored in a public cloud. This technology has been tested both in e-health and e-business pilot.
 - **Redactable Signature Library:** the technology that gives the possibility to modify a part of a document digitally signed with a qualified certificate without invalidating the signature. E-Health pilot has introduced this feature to allows the patient personal data sharing.



Our project will formally end on September 30. However, our consortium will continue the collaboration and further pursue the main ambitions of CREDENTIAL also beyond 2018!



CREDENTIAL

Secure Cloud Identity Wallet

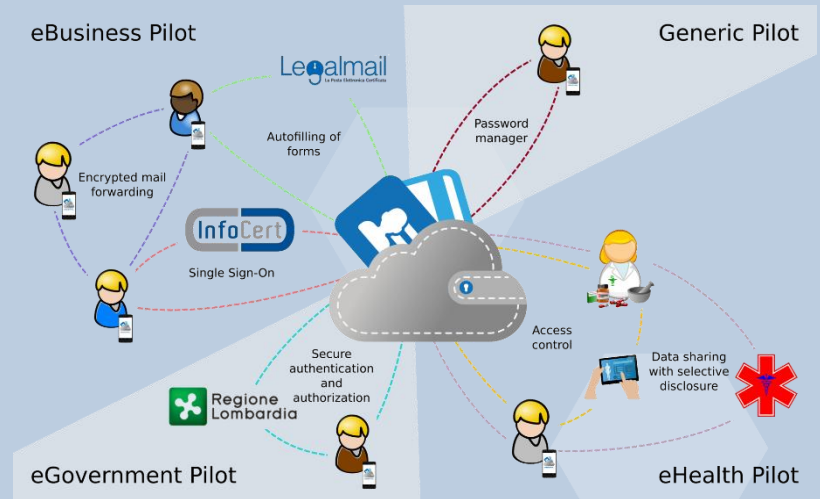


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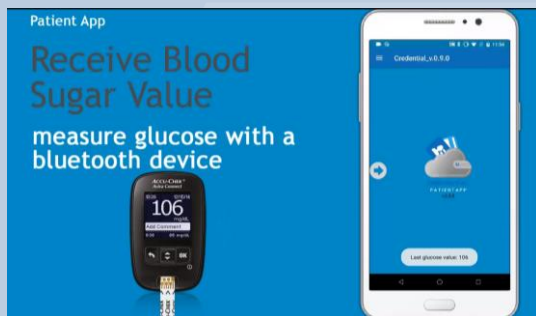
User Impressions

As described in the previous newsletter also, CREDENTIAL involved three pilot partners to showcase results within three different scenarios: eHealth, eGovernment and eBusiness.

Thanks to the user advisory board and the initial internal tests we had the possibility to enhance the use cases reaching the approval of the target involved in our tests.



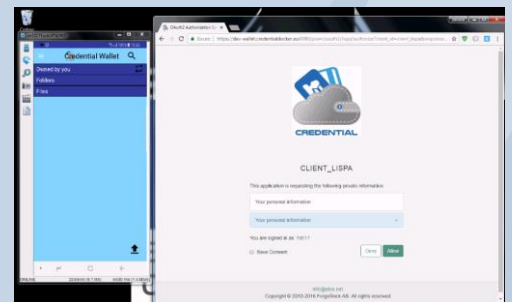
eHealth



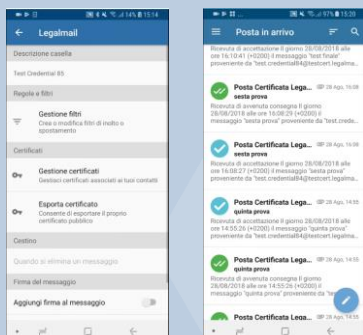
Users that tested the app for doctors within the eHealth use case were delighted about the potential to be connected to a more significant amount of patients and being able to respond faster to value changes in, e.g., the blood sugar of the patient. Another advantage seems the possibility of evaluating medical data for public health. However, these users were also concerned about the absence of a web-based PC version as well as the lack of an iOS app of the doctor's app. The fact that an external PHR is used for the eHealth use case was one more worrying mention from our test users.

eGovernment

Users involved in eGovernment use cases had the chance to test the authentication on public services online. They mostly liked the easiness in performing the required tasks and the perceived security: users were fully aware of the protection provided by CREDENTIAL and interested in installing the CREDENTIAL App on their mobile devices. On the other hand, they would appreciate the extension to the iOS platform and the fixing of some usability issues related to the data sharing authorization.



eBusiness



eBusiness pilot involved users not only in authentication and data sharing through CREDENTIAL wallet but also the implementation of re-encryption technology within Legalmail system, an Italian application to send and receive certified mail. Users tested the encrypted forwarding feature, and they found easy the process to set and manage this tool. Although they were aware of the security /privacy aspect of this «premium» feature, they sad to better underline in the process all the secure operations performed showing in this way the added value of the function.

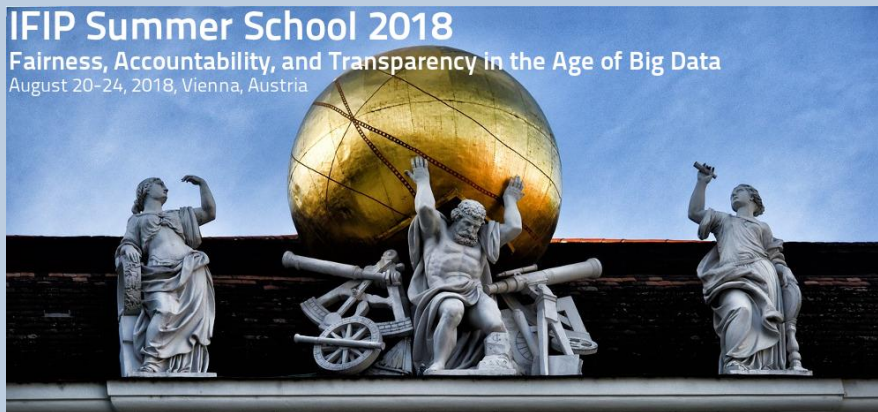




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Recent Events

13th IFIP Summer School on Privacy and Identity Management August 20-24, 2018, Wien, Austria



The 13th International IFIP Summer School on Privacy and Identity Management was hosted and co-organized in Vienna, Austria, by CREDENTIAL's coordinator AIT. With a special focus on fairness, accountability, and transparency in the age of big data, the summer school took a holistic approach on privacy and IAM, bringing together PhD students and senior researchers with technical, legal, social, and socio-economic backgrounds.

Given the relevance of the topic, the summer school welcomed members of numerous European research projects, such as PRISMACLOUD, LIGHTest, SECREDAS, or FENTEC. CREDENTIAL was represented by members from AIT, GUF, and KAU, and actively contributed a talk on "Implementing Attribute-Based Credentials over OAuth 2.0", presenting a prototype of research results published at CANS 2017, which received significant positive feedback from the audience.

3rd Workshop on Security, Privacy, and Identity Management in the Cloud August 27-30, 2018, Hamburg, Germany

Given the success of the previous years, CREDENTIAL, together with our liaison project PRISMACLOUD and the DPSP and TRUSTEE clusters of European research projects on cloud security and privacy, organized the 3rd Workshop on Security, Privacy, and Identity Management in the Cloud (SECPID) in August 2018. The workshop was co-located with the 13th ARES Conference in Hamburg, Germany. The presented papers covered topics anonymous credentials, privacy related to deduplication strategies in cloud-storage, or fingerprint recognition on mobile devices -- the latter paper containing CREDENTIAL research results and being presented by our partner KAU.



Also co-located with the ARES conference, our peer projects ARIES and LIGHTest organized the European projects Clustering workshop On Cybersecurity and Privacy (ECoSP), where we had the chance to present CREDENTIAL and discuss recent advances in security and privacy with 15 other H2020 research projects.





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Recent Publications

Since the release of the last newsletter, the following papers have been published within CREDENTIAL:

- Stephan Krenn, Henrich C. Pöhls, Kai Samelin, and Daniel Slamanig: *Protean Signature Schemes*. In: Cryptology and Network Security – CANS 2018, Naples, Italy.
- Farzaneh Karegar, John Sören Pettersson, and Simone Fischer-Hübner: *Fingerprint Recognition on Mobile Devices: Widely Deployed, Rarely Understood*. In: International Conference on Availability, Reliability, and Security – SECPID@ARES 2018, Hamburg, Germany.

Upcoming Events

Among others, you can meeting CREDENTIAL researchers at the following upcoming conferences and events:

- 24/09 – 26/09/2018: *Connect Security World*, Marseille, France.
- 29/09/2018: *AppPETs workshop on privacy-by-design*, Berlin, Germany.
- 30/09 – 03/10/2018: *Cryptology and Network Security – CANS 2018*, Naples, Italy.
- 30/09 – 04/10/2018: *ISO/IEC JTC1/SC27 „IT Security Techniques“ working group meetings*, Gjøvik, Norway.
- 03/10/2018: *Final LEPS workshp*, Murcia, Spain.
- 01/11 – 02/11/2018: *ISO/PC 317 „Consumer protection; privacy by design for consumer goods and services“ meeting*, London, UK.
- 04/12 – 06/12/2018: *ICT 2018 „Secure Digital Economy and Society“*, Vienna, Austria.

Pilot Videos

Do not miss our pilot videos on YouTube: <https://www.youtube.com/channel/UCzIKCLCIEhvVaSmFSxyklqQ>

Contact Details and Meta Data

Website: <https://credential.eu>

Twitter: <https://twitter.com/CredentialH2020> | @CREDENTIALH2020

LinkedIn: <https://www.linkedin.com/in/credential> | CREDENTIAL Project

CORDIS: http://cordis.europa.eu/project/rcn/194869_en.html

Additional information can also be also requested via admin@credential.eu

Call: Digital Security: Cybersecurity, Privacy and Trust

Topic: DS-02-2014 Access Control

Type of Action: Innovation Action

Duration: 36 months

Start Date: 01.10.2015

Requested EU Contribution: ~6.0M €

Coordinator: AIT Austrian Institute of Technology GmbH

