



**UNIVERSITÉ
DE GENÈVE**

**DIVISION DU SYSTÈME ET DES
TECHNOLOGIES DE L'INFORMATION
ET DE LA COMMUNICATION**

SWITCH
Serving Swiss Universities

Unil
UNIL | Université de Lausanne

Long-term Storage of Forgery-Proof Certificates

Patrick Roth, Omar Benkacem, Anne Ronchi,
Pierre L'hostis, Rolf Brugger, Céline Restrepo Zea

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Context

– Question:

- How do Higher Educational Institutions intend to handle certificates and diplomas in the digital world ?

– Objective:

- Understand how forgery-proof academic certificates, signed and issued by universities, can be stored by individuals in their PLE (e.g. ePortfolio)

– Tasks:

- Describe tools and organizational structures necessary to issue and manage signed digital certificates
- Identify potential issues

Methodology

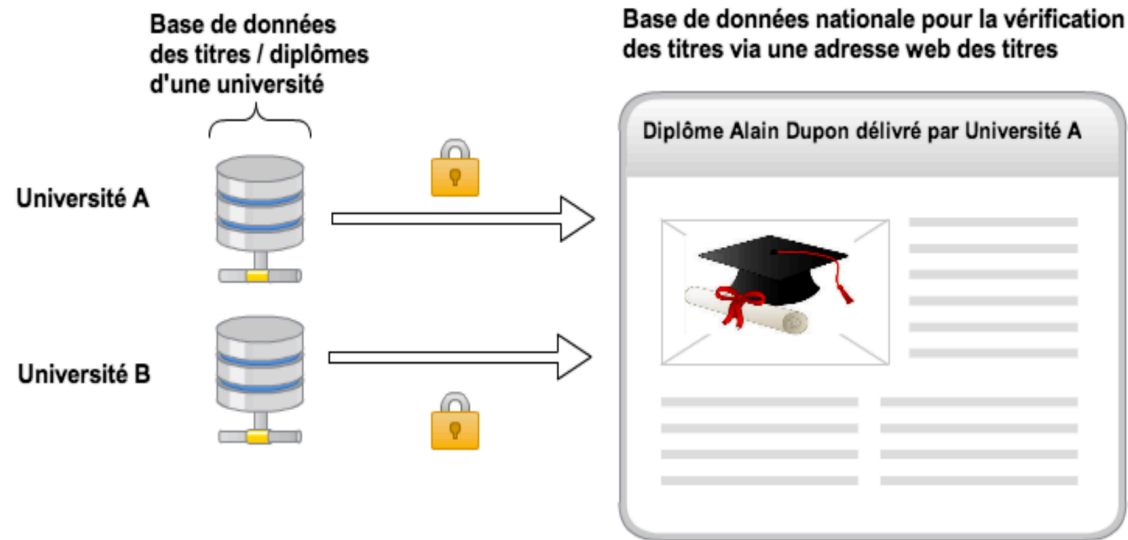
1. Literature review & requirement analysis
2. Qualitative survey
 - Interview of 10 administrative staffs from UniL and UniGE
3. Reflexion, evaluation & selection of the digital solution(s)
 - Based on the qualitative survey results
4. Validation of the solution by the stakeholders from universities partner's
 - Guidelines for a strategy and implementation

A 3D solution

- Administrative dimension
 - Understand the current workflow and rules
 - Find the official documents that may be involved
 - Describe the life cycle of a degree/certificate for UNIL and UniGE
- Technological dimension
 - Requirements for a technical solution
 - Concept for integration with : ePortfolio systems (e.g., Mahara), LMS (Moodle), Open Badges
- Legal dimension
 - Legal constrains of electronic signatures in Switzerland
 - Work with legal services at the institution

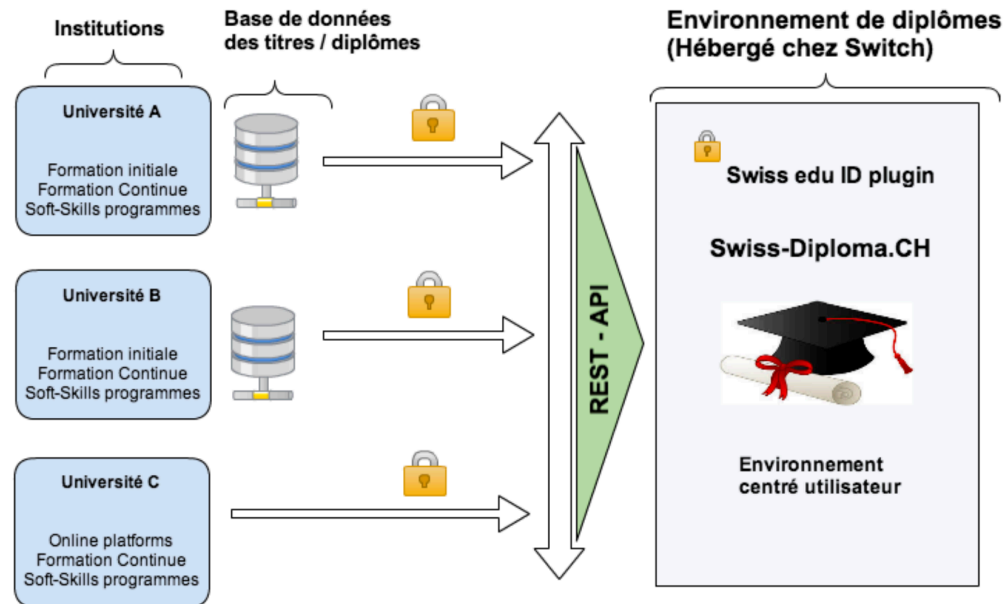
Scenario for the dematerialization of diplomas and certificates

- Basic functionalities



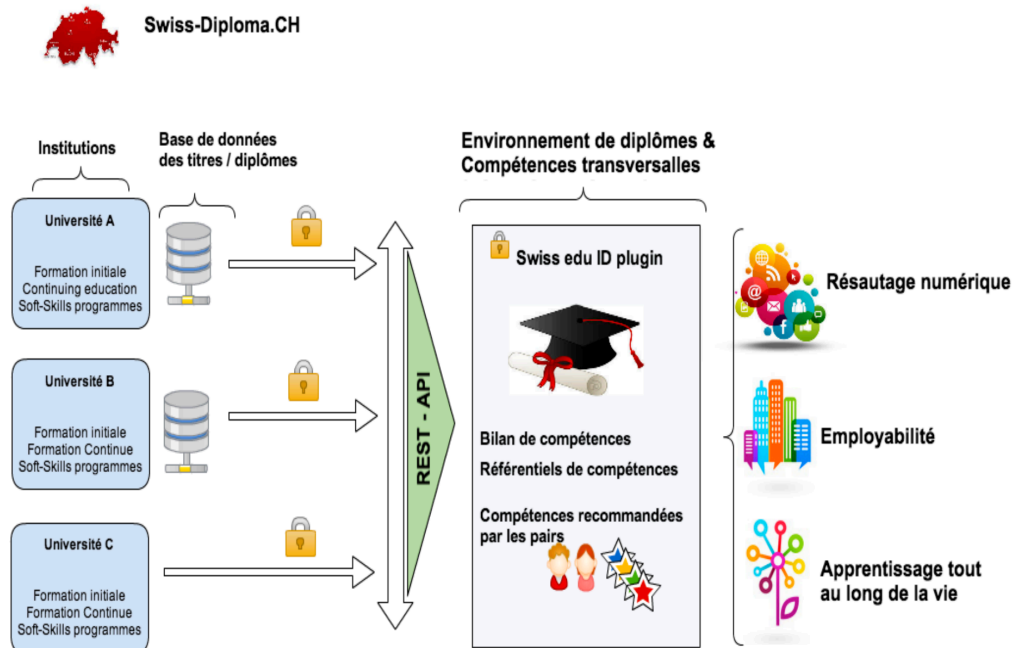
Scenario for the dematerialization of diplomas and certificates

- Advanced functionalities



Scenario for the dematerialization of diplomas and certificates

- Long-term solution



Further developments

- Development and pilot phase:
 - CUS-P2 project
 - For all Swiss HE institutions



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Thank you

@ : Patrick.Roth@unige.ch

🐦 : [@rothp](https://twitter.com/rothp)

📺 : [patrickroth](https://www.youtube.com/user/patrickroth)

in : [rothp](https://www.linkedin.com/in/rothp)

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