



THE SURF EDUBADGES PROJECT

Working towards an open badge
infrastructure for Dutch HE

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SURF & Open Badges

2016

- Pressure cook session with stakeholders
- Whitepaper published
- Experiment with Mozilla open badge framework

2017 - 2018

- Proof of Concept

2018 - 2019

- Pilot eduBadges

2020

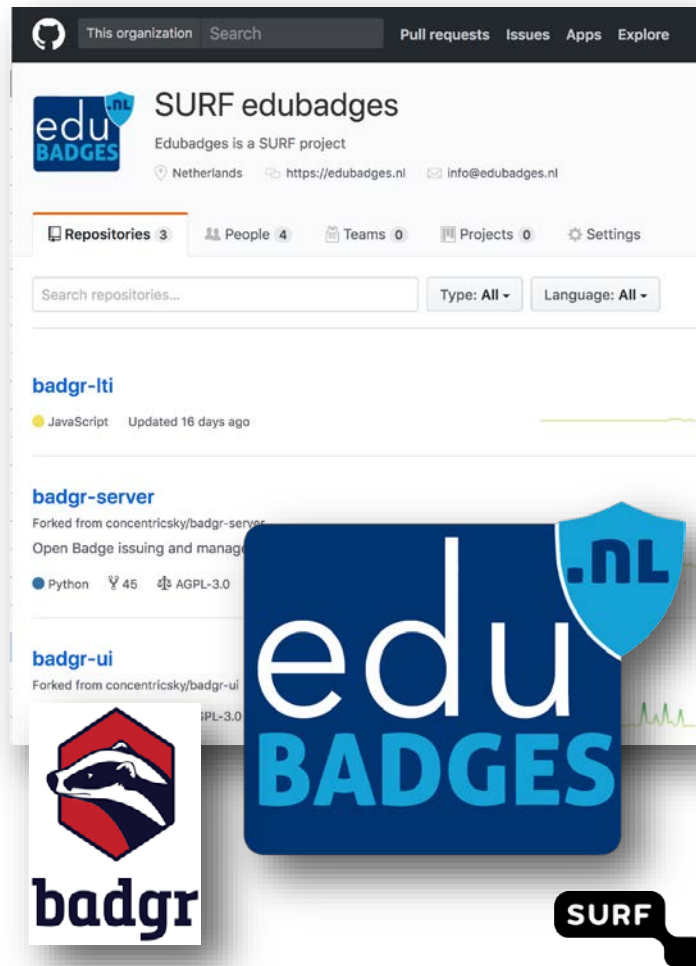
- eduBadges service offering for Dutch HE?



About the eduBadges PoC

2017 - 2018

- 10 participating institutions
- Open Badge Infrastructure based on Open Source Badgr
- Collaboration with Concentric Sky on joint development
- Development on Badgr on Github (<https://github.com/edubadges>)
 - SSO SURFconext – openID Connect
 - LTI integration component
- Code audit



Learned lessons Edubadges Proof of Concept



BADGE ISSUER (EDUCATIONAL INSTITUTION)

Lessons learned

- Badge strategy; determine the status that the badge has within the education system and how it relates to other badges.
- Badge governance; who may issue badges, when may they be issued, and to whom?
- Badges for micro-credentials require a vision on flexible education.



BADGE CONSUMER (EMPLOYER OR OTHER EDUCATIONAL INSTITUTION)

Lessons learned

- No experience acquired through the PoC (to be discussed in the future).



BADGE EARNER (STUDENT)

Lessons learned

- Possibilities offered by badges not yet known.
- Uploading badges to social media takes time and effort, and they are not displayed prominently.
- Managing badges is still an issue to be resolved.



INFRASTRUCTURE

Lessons learned

- Important focus is storage of edubadges.
- Standardisation: alignment required on subject-specific metadata and value system.
- Integration of the edubadge features in the digital learning environment and student information systems (SIS) is imperative.
- Important focus is on guaranteeing the authenticity of the badge's content, the awarding party and the badge earner.
- A persistent ID to manage the badges is a prerequisite (e-mail address is not sufficient).

Edubadges Pilot 2018 - 2019

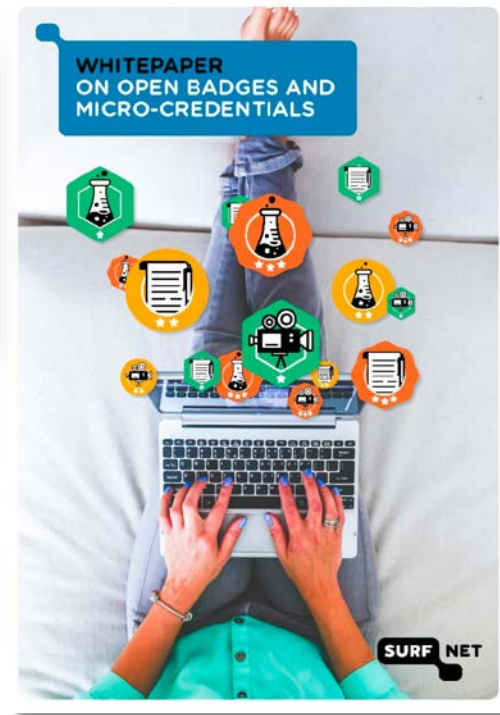
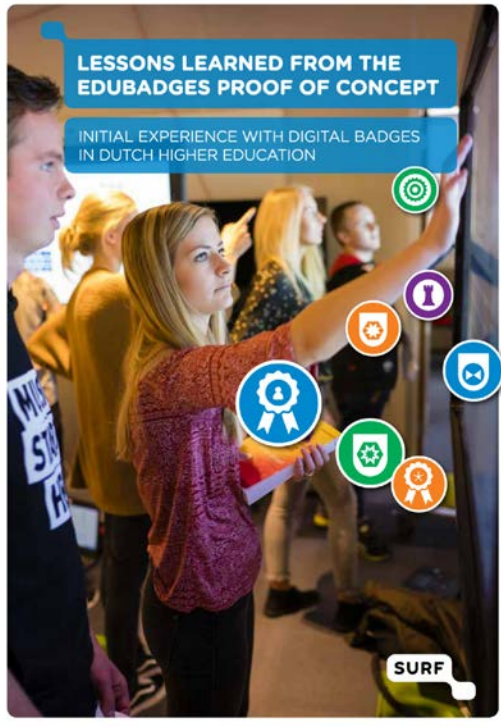
- Fresh install edubadges infrastructure
 - Roles and permissions model extended
 - Frontend Theming options
- GDPR compliant
 - New enrolment workflow
- More participating institutions
- Increasing effort on policy support for enabling microcredentialing within Dutch HE
- Preparing business model for service delivery by SURF to Dutch HE
- Persistent identity
- Continuous development



Work in progress



- Metadata Extensions
- Alignment with European exchange and description frameworks
- Develop badge signing - digital signatures to permit validation of open badges without a need to access an assertion database
- Extend LTI integration to improve LMS/SIS – badge system communication
- Researching and experimenting with blockchain/distributed ledger technology for making access to **endorsements** and **badge classes** more transparent and verifiable
- & many things more...



Full report that reviews for Signed Open Badges cryptographic practices :
<https://wiki.surfnet.nl/display/OB/Signing+Open+Badges>