Tin Badges / Open Can

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TIN CAN API

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What are Open Badges?

Based on definition at http://openbadges.org/

A **specification** to **recognize** and **verify learning** using **graphical badges**

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Images from http://openbadges.org/

Earn

Issue

Display

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Tin Can Similarities to Open Badges

- Defines a **data model** for describing l**earning experiences** and **achievements**.
- Uses **JSON**.
- Similar **age** of specification (1.0 released Spring 2013)
- Significant, but not ubiquitous **real world adoption**.
- Strong **community**.
- **Open source** (Tin Can is Apache 2, Open Badges is MPL 2)

Tin Can Differences to Open Badges

- More **granular**; issuing a statement is **cheaper** and **less significant** than awarding a badge.
- Focused on **reporting activity** rather than recognising achievement.
- Tin Can **tells the story** of how the Badge was earned, and of other non-badged activities.
- Tin Can **metadata** can contain an **image** file; Open Badge **images** contain **metadata**.
- **Github activity** on spec; Tin Can boasts 1,178 commits by 25 contributors.

Recipe 1:
Earned Badges

Without Tin Can

- Learners must download badge images and re-upload them.

OR

- They must register with the Mozilla backpack and integrate their badges there.

With Tin Can

- Earned badges can be transferred between LRS/ LMS/VLE systems via Tin Can.
- Transfer can happen within an organisation without using Mozilla systems
- Uses existing Tin Can conformant LRS products

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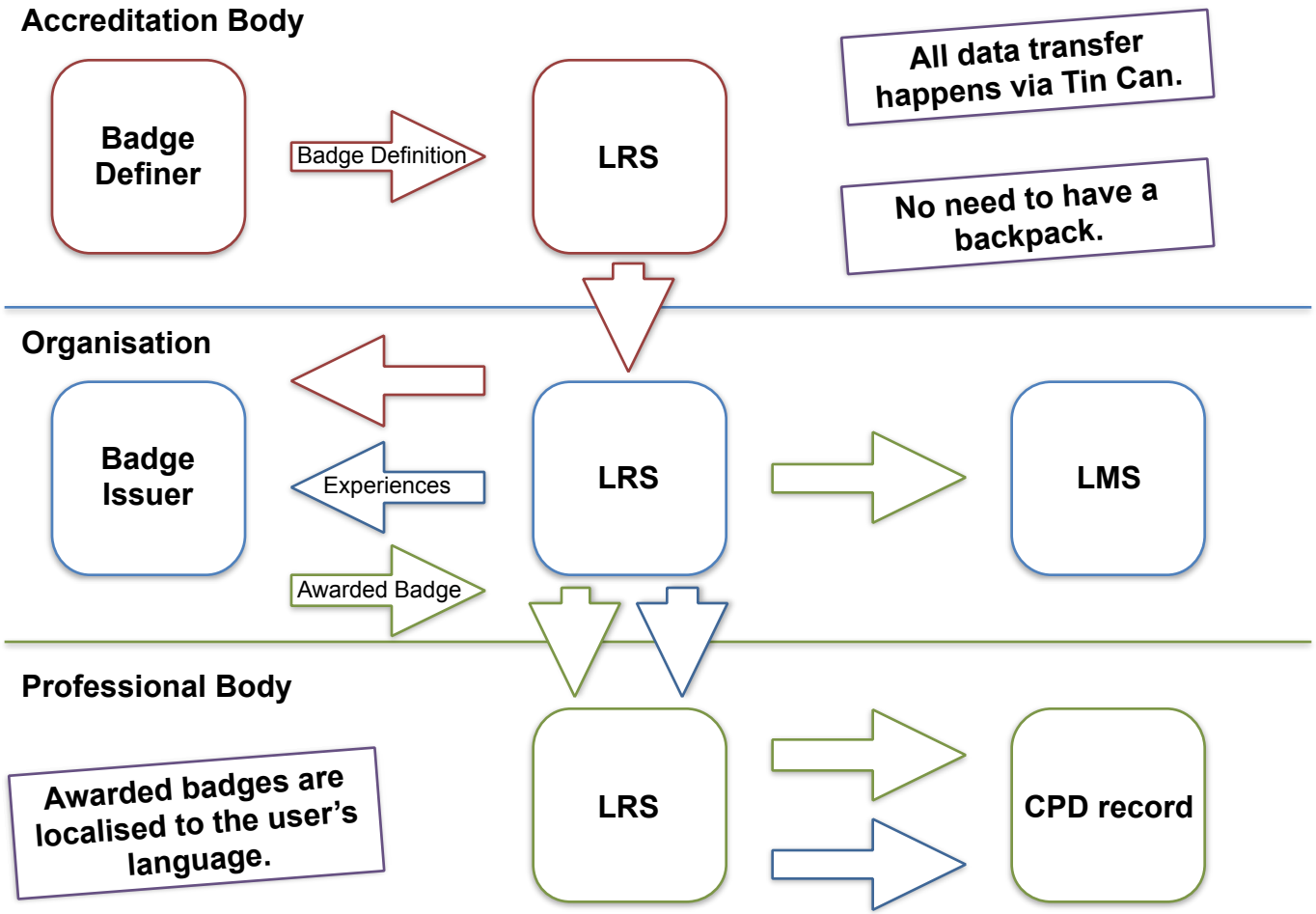
Recipe 2: Badge Class Definitions

Suddenly possible and desperately needed:



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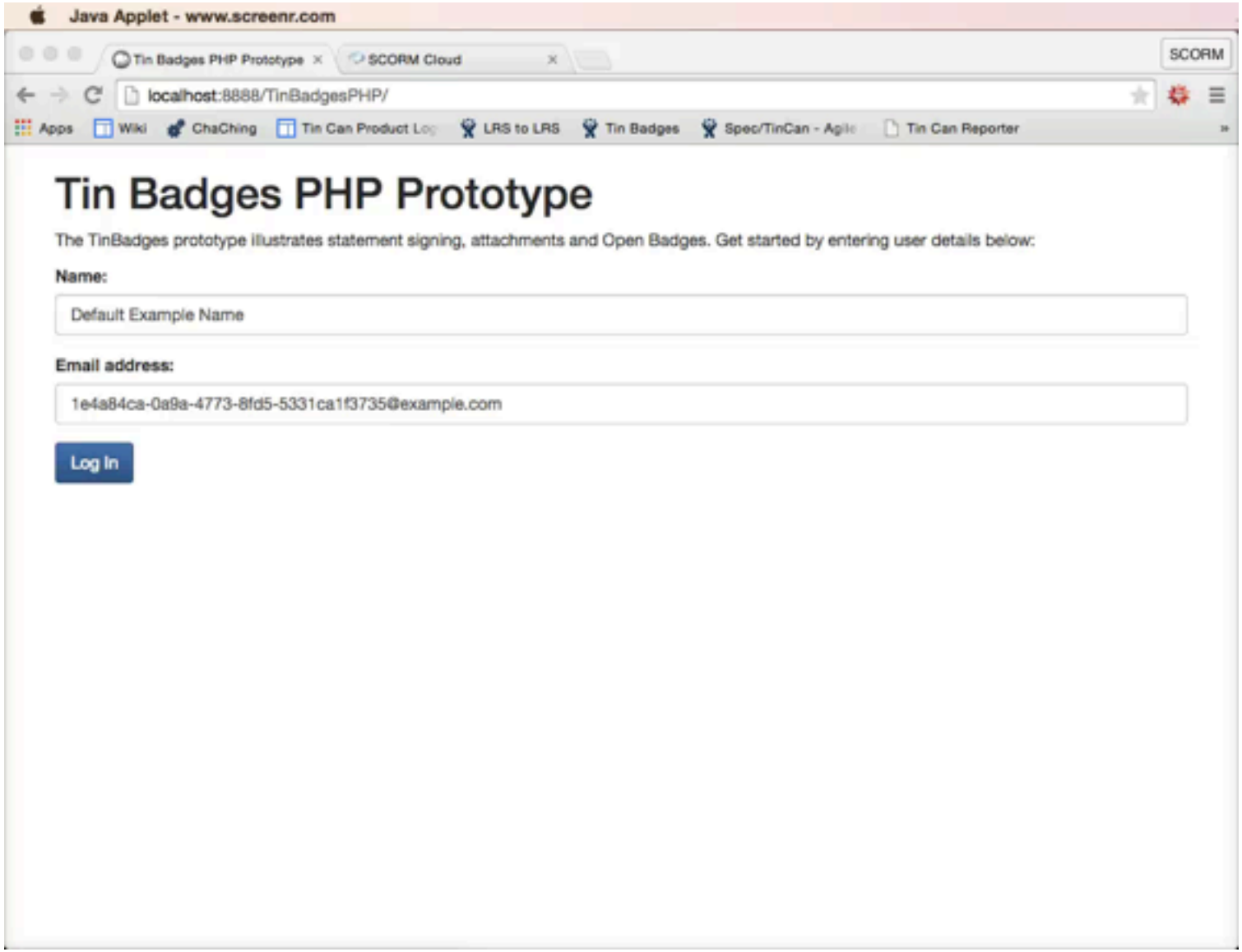
Prototype



https://youtu.be/3XLaeNEc8MI

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Tin Badges PHP Prototype

Claim your badge, Default Example Name

This page simiuates a user (54b690af-f7a0-495e-ab63-b42f79938e33@example.com) logged into an LMS earning a badge. Badges can be earned by completing some kind of signnificant achievement, but today you'll earn a badge by clicking a button!

Fake signature?

Earn!

Fake signature?

Earn!

Use the fake signature button to simulate a hacker attempting to issue a badge to 54b690af-f7a0-495e-ab63-b42f79938e33@example.com. Badges issued with a fake signature will be displayed in the bagde stream below with an Invalid Signature tag. They will not appear in Default Example Name's Badge Block.

All **earned** badges displayed on this page are downloadable Open Badges, however badges attached to statements with invalid signatures will not verify when uploaded to an Open Badges Backpack. (Also note: the Backpack needs HTTP access the resources folder of this prototype in order to verify any badges).

Default Example Name's Badges

You have earned these badges:

Badge Stream

All statements about Open Badges for all users are shown below.

Statements generated by this prototype are signed and those signatures are verified in the stream below. This prototype leaves it up to the end user to confirm that the signature is hosted at the url controlled by a trusted authority (this url is shown in grey). A real system could handle this for the user by using a whitelist of trusted certifcate locations, either stored within the system itself or provided by a trusted 3rd party.

2015-03-24T14:13:56.962 Default Example Name **experienced** 'TinBadges Prototype' Signature Verified: http://localhost:8888/TinBadgesPHP/signing/cacert.pem

2015-03-24T14:13:23.653 Default Example Name **experienced** 'TinBadges Prototype' Signature Verified: http://localhost:8888/TinBadgesPHP/signing/cacert.pem

2015-03-24T14:13:04.677 Default Example Name **earned** 'Example Tin Badge number two'  Signature Verified: http://localhost:8888/TinBadgesPHP/signing/cacert.pem

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TIN CAN API

Problems solved by Tin Can

(Based on Open Badges community requirements)

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Backpack Federation

- Tin Can can be used to transfer earned badges between backpacks.

- In fact, a Tin Can LRS could be used to store badges, with no backpack required. This could make it easier for new adopters to implement Open Badges using existing LRS products.

Badge Templates

- Badge criteria can be defined in terms of Tin Can statements.
- Badge Class definitions can be transferred between systems via Tin Can.
- Badges can be awarded by a system based on experiences recorded via Tin Can.

Empower Learners

- Learners can have their own personal Learning Record store.
- This will contain a record of their learning experiences and achievements.
- It can include earned badges.

Next steps

- **Join the conversation:** https://gitter.im/ht2/BadgesCoP
- **Review the recipes:** https://github.com/ht2/BadgesCoP and https://github.com/ht2/BadgesCoP/pull/5
- **Prototype** coming “soon”…

Continuing Educational Credits

- Statements around the award of credits
- **Criteria** for credits and **who can award** is out of scope.
- **Progress so far:** we have a draft recipe and need somebody to try it out.

Attendance

- Created by the team at TES
  - http://trainingevidencesystems.com
- Tracks scheduling of, registering for and attendance at events.
- This recipe is in use in TES products today.
- https://registry.tincanapi.com/#profile/48

Questions? Comments?

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