



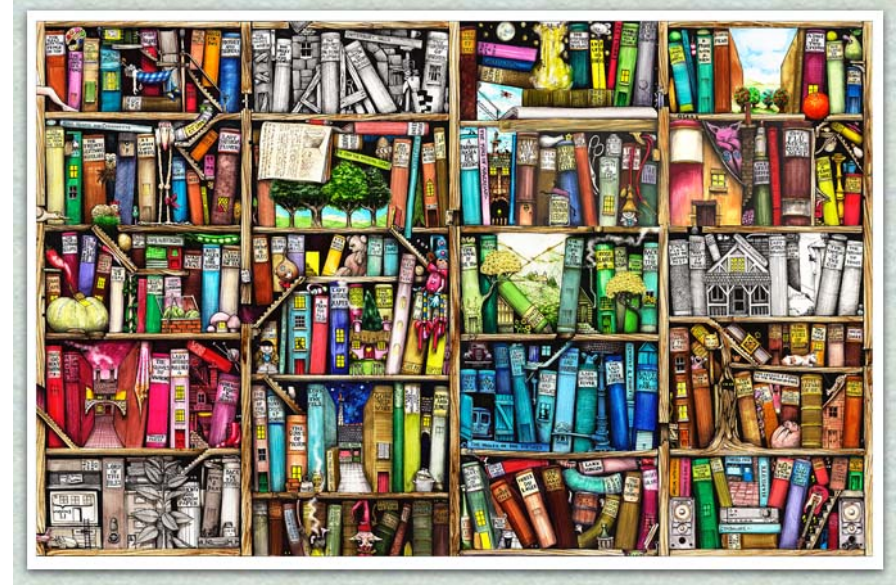
Liquid Books (LB)

Concepts and Motivation



Overview

- Liquid Books (LB): what are they?
- LB Challenges
 - **1st Scenario:** Textbook
 - **2nd Scenario:** Search and Retrieve of Content
 - **3rd Scenario:** Multi-faced Content
 - **4th Scenario:** Evolution and Community
 - **5th Scenario:** Collaboration
- So, **What's new with LB?**

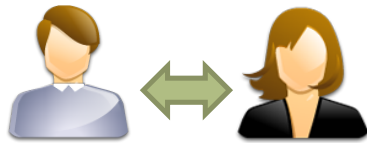


Liquid Books (LB): what are they?

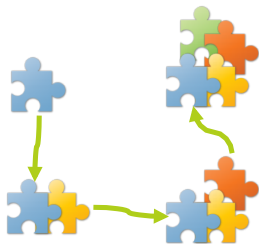


Review: Liquid Books Initial Definition

- Liquid books (LB) are:



Collaborative



Evolutionary



Possibly open-source



Multi-faceted

versions of the Traditional Books

- Composed of different kind of artifacts:
 - docs, slides, excercises, experiments, code, etc.



1st Scenario: Textbooks

- **Focus:**
 - **Reuse** of Content, **Legal** Issues and **Credit** attribution.
- **Assumptions.**
 - In this scenario, we do not care about:
 - How content is organized and retrieved
 - IT platform where content is actually hosted (svn, launchpad, etc.)
 - The multi-faced form of content.
 - Small set of authors
 - Small amount of content
 - LB just started
 - **Final Output:** PDF + Companion Site.

1st Scenario: Textbooks.

- Scenario Summary:



The Big Pot



Fabio



LB1



Stefan



LB2



Paco



LB3

- But...

- Can an author just take somebody else's content and put it into his book **without any change?**
- This brings up some issues...



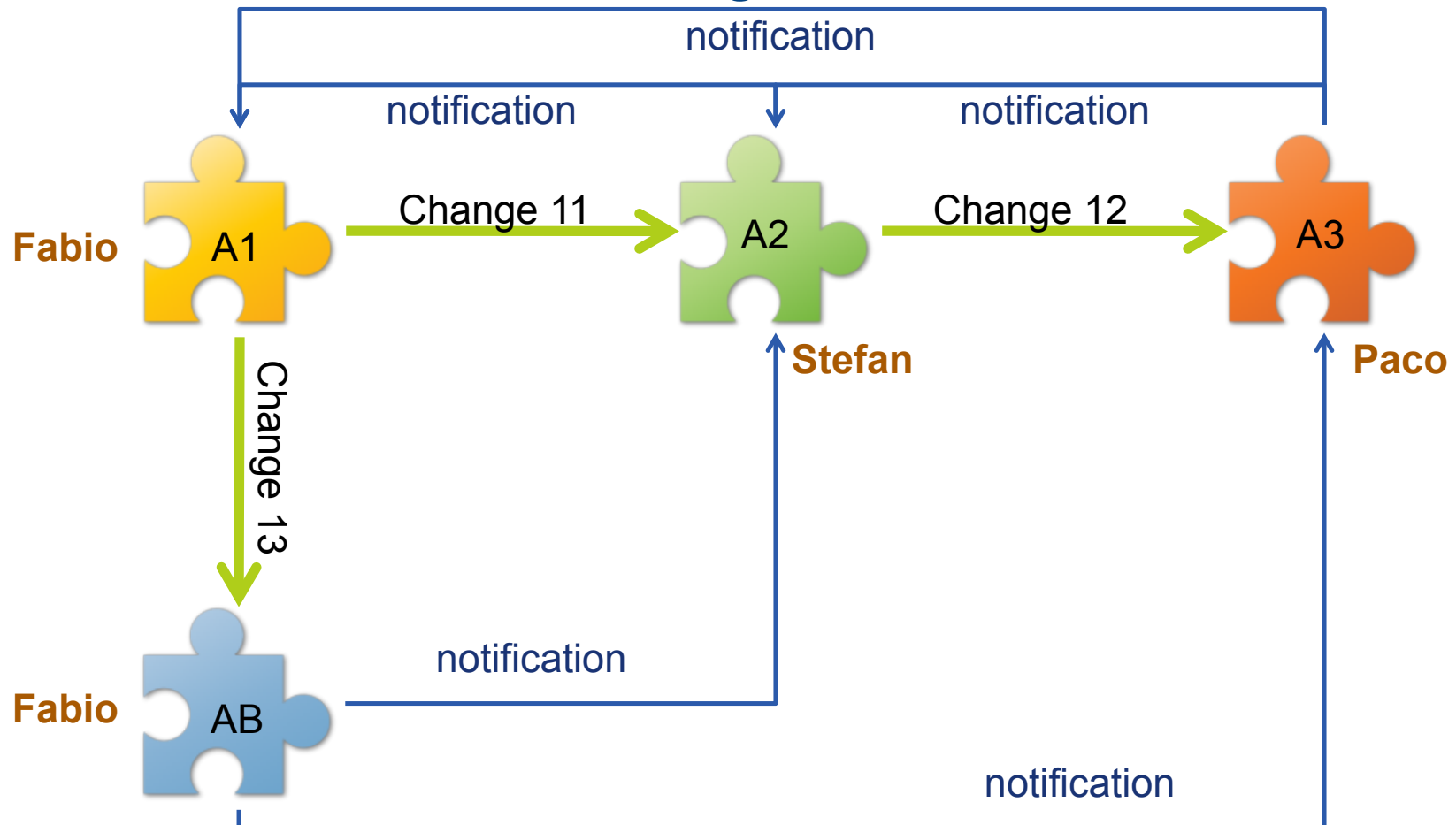
1st Scenario: Textbooks.

- **Issue #1: Extent of modification and reuse allowed**
 - Focus on **what I can change**, not how much
 - How to implement **guarantee** that content is used in an **appropriate way?**
 - to track/allow:
 - **Micro** changes (e.g. Moving references, adjusting terminology)
 - **Macro** changes (e.g. Table of contents structure)
 - Changes concerning the **meaning** (e.g. conceptual disagreement)
 - Changes concerning **personal opinions** or **perspectives**



1st Scenario: Textbooks.

○ Issue #2: Notification of Changes





1st Scenario: Textbooks.

- **Issue #3: Policies**
 - Approval Policies
 - e.g. ask for **content's owner** approval each time it's changed
 - Policies to opt out.
 - e.g. Paco doesn't want to be in the team anymore, so we delete all his content?
 - Can IT currently help to track changes in this scenario?



1st Scenario: Textbooks.

- **Issue #4: Authorship**
 - Who decide it?
 - Supposing that Stefan did the main work:
 - Stefan as the **main author**. Fabio, Paco as contributors (on the main cover)
 - All authors without distinction.
 - Stefan is as the only author, but inside the book, for each section there is the indication of who wrote/inspired/initiate the section itself.
 - There is authorship with the description of what each contributed, what has been reused, extent of changes, etc.



1st Scenario: Textbooks.

- **Issue #5: Royalties (who gets the money)**
 - Authorship is not only about “intellectual property”
 - Need of number/percentages



1st Scenario: Textbooks.

- **Issue #6: IT platform**
 - What do we need from the IT platform?
 - e.g. Tracking changes, estimate kind/amount of changes
 - What we already have?
 - Collaborative writing platforms (wikis, gdocs, svn, etc.)
 - What we need that is not already there?
 - Contractual Framework
 - Credit attribution
- Because of these issues, at the end Paco, Stefan and Fabio **give up** the idea of having different books. So, they go traditional...



1st Scenario: Wish List for LB platform

- **Reuse of Content:**
 - Track contribution editing and the reuse of each part/whole
 - Identify semantic differences/similarities and parts shared between contributions
 - Nature of the increment/changes between different versions of the same contribution
 - Provenance and time of each modification (what I changed, not only how much).
- **Notification of Changes**
- **Authorship:**
 - Details of what each contributed, what has been reused, extent of changes.



2nd Scenario: Search and Retrieve

- **Focus:**
 - How the content is **organized**
 - How it is possible to **retrieve** content from the **big pot**
 - How (and if) the content is **tagged** and by whom
- **Scenario:**
 - More authors. More content shared. Need to **organize** and **retrieve** content.
 - Authors **tag content**. Search for content through tags.
 - Tracking **who tags what**.
 - **Distinguished tags:** tags that authors agree on their meaning (e.g. old, advanced, preliminary, etc.)
- **IT needs:** a tag-based system

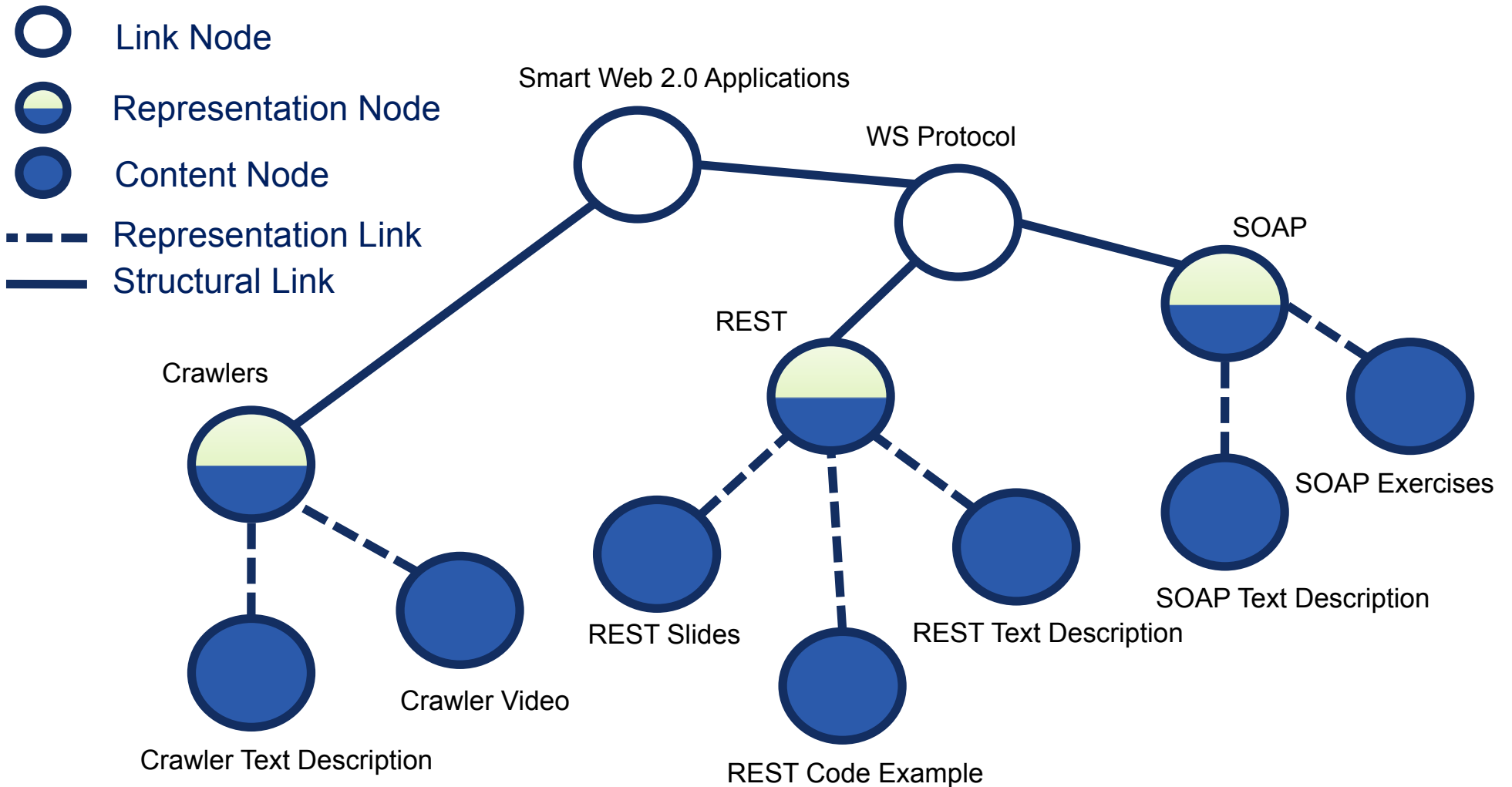


3rd Scenario: Multi-Faced Content

- **Focus:**
 - Different kind of content. **How to link them together?. How to render final result?.**
- **Scenario Summary:**
 - Back to Fabio, Paco and Stefan... Their teaching material includes: *slides, lecture notes, videos, exercises, code, libraries, web pages, etc.*
 - Some materials are just different representations of the same content.
 - They want to be able of choosing different materials and render them in different ways.
- **IT needs:**
 - Management of diff. types of content.
 - Rendering of diff. type of content.



LB Structure





4th Scenario: Evolution and Community

- **Focus:**
 - Evolution of content and the power of community
 - In this scenario there is the aggregation of all the dimension we have in the first three, plus the community.



4th Scenario: Evolution and Community

- **Scenario Summary:**

- Fabio, Paco and Stefan choose a “**Contractual Framework**” agreeing:
 - Each one of them can transfer rights to modify content to other trusted contributors
 - Each modification of the content should be approved by the author/s, who contribute to that content
 - Each one of the authors can “open” (part of) the content to comments of people they authorize
 - The authors together decide the preferred way for distributing the content (completely free access, fee payment, etc.)
 - Each one of the authors can give the “*status of authors*” to contributors who contribute substantially to the LB



4th Scenario: Evolution and Community

- Fabio creates his LB for his course “Web 2.0 Applications”
 - He choose materials from the **big pot**.
 - Then he render it, creating a TOC.
- Before make it public, he shares the LB with a **trusted network**.
- He gets **feedback** from his *trusted* network and some contributors, who strongly contributed with new content (or updating exsisting one) become authors
- Then fabio share the LB with his students, getting feedback (comments/rating) also from them



5th Scenario: Collaboration

- **Focus:**
 - Collaboration (but not on a Textbook)
- **Scenario Summary:**
 - Paco wants his LB, but industry-oriented.
 - He adds more technical and advance content.
 - He invites a huge list of contributors from the industry and then he plays the role of “Editor”
 - After several review phases, when Paco is satisfied, he publish the LB.
 - All contributors are listed as contributors inside the book.



LB: What's new

- Differently from WikiBook I can have different roles in the community:
 - Authors
 - Contributors
 - People who just rate, write comments/reviews
- We want to offer a (legal) framework to authors to easier collaboration
- Tailored material for different needs (classes, professionals). Several *Personalized* Editions which stay up-to-date with the current state of the art.
- Multi-Faceted Content
- Sharing and reusing of content among a trusted network of authors, who guarantee the quality



LB: Main points addressed.

- Liquidity of content (continuous evolution)
- Multi-faced content
- Views on the book
- Possibility to get feedback
- No need for a mandatory publisher
- Management of access rights
- Collaborative way of writing