

The Integrated Content Environment for Research and Scholarship Taking repositories from Web 0.5 to Web 2.0

The problem with PDF-only documents

At Open Repositories 2006 in Sydney there was lively discussion about bringing repositories onto "Web 2.0", a theme of Open Repositories 2007.

The default document format for repositories is Adobe's Portable Document Format. Many web-based repositories are **not really part of the fabric of the Web.**



Publish my
research in PDF?
That's so Web 0.5

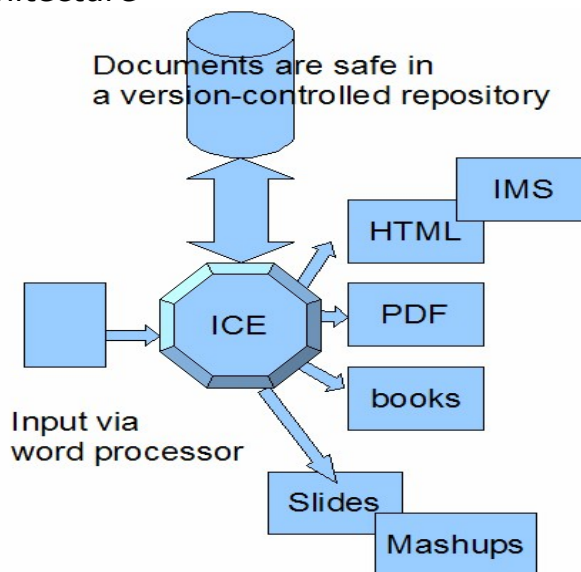
While PDF does have the advantage that it can faithfully render documents for print **it has a number of disadvantages, on Web 2.0.**

PDF is a poor choice for...

- Document re-use
- Long term preservation
- Re-rendering & remixing of content
- Online usability

PDF should certainly be offered as a document format but so too should HTML, allowing more seamless online scanning, browsing and reading and better integration with the rest of the web via mechanisms such as browser extensions.

Architecture



What is ICE?

- Standards based Content Management System
- Outputs HTML and Print (PDF)
- Cross platform (Mac, Windows, Linux)
- Free, GPL licensed
- Integrated with popular word processors
- Manages distributed, version controlled content
- Stores content in OpenDocument format

ICE for Research and Scholarship

ICE-RS extends on ICE, a system that allows faculty to **work in a word processor using styles** to capture the structure of their courseware, while providing a parallel HTML view generated automatically.


Behind the scenes, documents are stored in the standard, XML based OpenDocument Format, which promises to aid in preservation.

Building on ICE

ICE for research and scholarship

- Australian Government funded project
- Will tackle theses, articles and books
- Recommend best practice reference management
- Demonstrate integration with institutional repositories
- Add annotation and 'rating' systems
- Provide 'dashboard' views of workgroup content

ICE-RS will provide a toolkit for researchers to capture and manage content throughout its life cycle and create flexible, re-mixable HTML and preservation-quality XML as well as PDF.



ICE lets me keep
my word processor

An example of re-mixing: ICE software can extract labeled parts from a long document to make a HTML-formatted slide presentation from key diagrams and specially marked-up text in the document. No PowerPoint required.

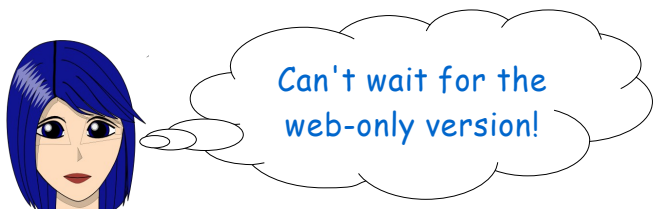
ICE includes a 'working repository', a version-controlled, distributed database that can aggregate work from multiple researchers, **capturing research reporting from the very beginning of its lifecycle**, rather than just at the end, as is the case with most Institutional Repositories (IR).

This ICE working repository will allow a 'dashboard' view of research in progress, aggregating information about the writing process across research teams and institutions. ICE software will collect metadata from the very start of the writing process, and enable automated 'zero-click' ingest into an IR at the appropriate time, for example upon acceptance of a paper into a conference.

Mockup of a dashboard for a thesis



The ICE-RS project has established partnerships with other projects in Australia for integration with DSpace and Fedora, and Fedora client software including VTLS Vital and the University of Queensland's Fez.



Can't wait for the
web-only version!

ICE-RS is supported by the Systemic Infrastructure Initiative as part of the Commonwealth Government's Backing Australia's Ability - An Innovative Action Plan for the Future.

(<http://backingaus.innovation.gov.au>)