



# A Modern Digital Library System for Grey Literature

Jérôme Caffaro Samuele Kaplun

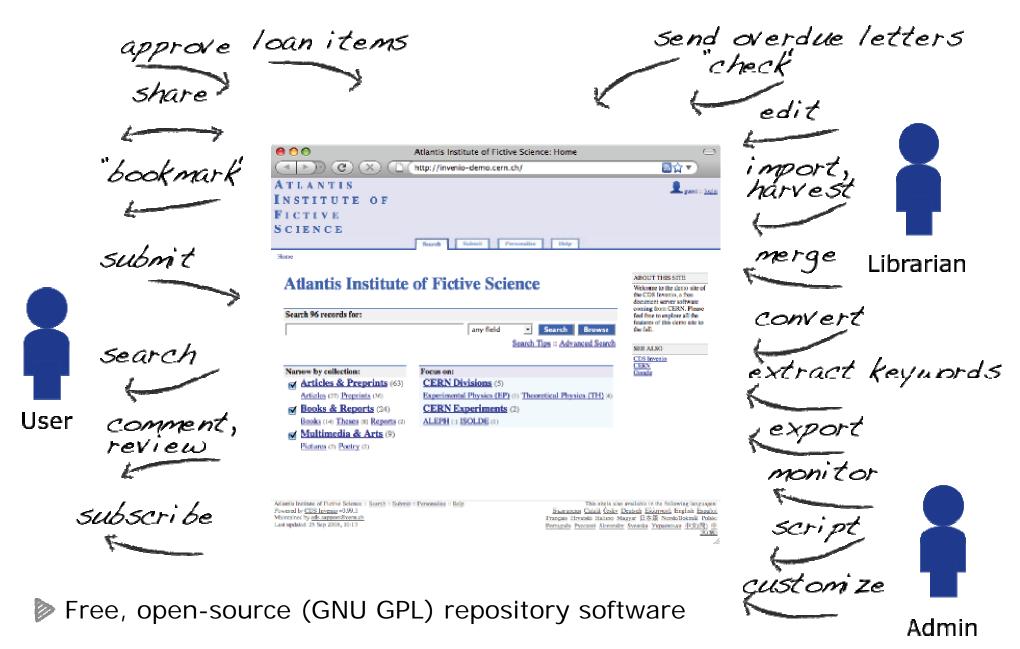
http://invenio-software.org





# What is Invenio?

tammaning tanbang man





# CFRN

# Context

- 1954 CERN (European Center for Nuclear Research) is born. 12 initial member states (20 + 15 observers today; About 10'000 persons; > 500 universities)
- 1989 Tim Berners-Lee invents the Web at CERN.
- **1991** SPIRES (SLAC) first database available on the web.
- 1991 arXiv repository for preprints in physics.
- **1993** CERN Preprint Server on the Web: institutional repository.
- 1996 CERN Library Server (weblib): added books, periodicals and "other material".





# Context

- **2000** CERN Document Server: multimedia material, internal notes)
- **2002** First release (CDSware). Worldwide installations. International collaborations.
- 2006 changed name to CDS Invenio
- 2007 started collaboration with SPIRES
- 2008-2010 many new features, optimizations, change of development model and code stabilization for Invenio 1.0 started collaboration with NASA-ADS





# Shaped by grey literature

- Grey literature is a major channel of communication in the High-Energy physics community<sup>[1]</sup>
- CERN is the world's largest particle physics laboratory, and has developed Invenio as a mean to archive produced material and make it accessible to the largest possible audience

[1] Anne-Gentil Beccot, How do High Energy Physics scholars search their information?, Grey J. 4, 1 (2008)





# Feature-Full Digital Library



Librarian & Admin tools



Collaborative tools



Multi-lan uage



#### Focus on:

CERN Articles & Preprints
CERN Published Cicles (47,570
Theses (2,608) CERN Reports (1
CERN Series (2,000)

Fast search + Browse



Alerts (emails, RSS)



Commenting reviewing



Multiple files formats support



Circulation

OAI-PMH MARCXML
OpenURL
XSLT EndNote
BibTeX OpenSearch

Standards support

Web journals, OCR, and more...

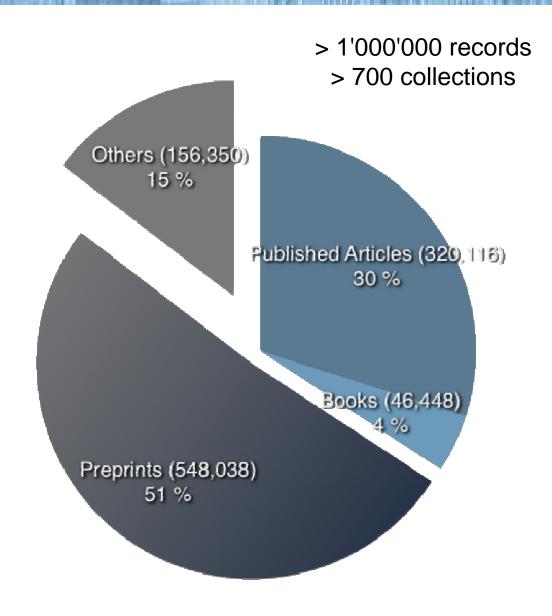




#### A case study:

CERN Document Server (powered by Invenio)

- Reports, notes
- Slides, posters
- Photos, videos (movies, rushes, lectures, etc.) & audio archives
- Museum objects
- Agreements, contracts
- etc.



Data: 2nd november 2010





#### MARCXML as core medata format

- Flexible to adapt to about any material
- Understood and loved by our librarians
- Same powerful cataloguing tool to curate grey and non-grey material
- Flexible metadata-formatting layer
  - Map your material to any HTML/XML representation





# Customizable workflows engine

- Handle complex workflows
- Living documents are immediately searchable and made available in their dedicated collection
- Support for authors or community-based revision of files and metadata
- Possibility to integrate with commenting system





## Powerful search engine

- Support large repositories
- "Google-like" search speed
- Simple and advanced search syntax.

#### Collaborative tools

- Commenting and reviewing system
- Notifications (email, RSS) of new material or new comments
- Support for groups and sharing of material





### Interoperability

- Harvest and disseminate using OAI-PMH
- Multiple/customizable exports
- SWORD export (coming soon)

# Integrated digital library

- One system: IT infrastructure simplified; easier maintenance
- Does not cost more to actively support grey material in addition to other library material





# Conclusion =

- Invenio is designed from the ground for a community heavily relying on grey literature.
- Invenio is an established, open-source software for diverse medium to large sized repositories.