



B2SHARE

An Open eScience Data Sharing Platform


Nicolas Harraudeau
IT Engineer for EUDAT B2Share at
CERN

Schedule

- The context: EUDAT
- B2SHARE - An Open eScience Data Sharing Platform
- Invenio as a flexible framework
- Invenio's open community

Context: EUDAT

“EUDAT’s vision is to enable European researchers and practitioners from any research discipline to preserve, find, access, and process data in a trusted environment, as part of a Collaborative Data Infrastructure (CDI) conceived as a network of cooperating centres, combining the richness of numerous community-specific data repositories with the permanence and persistence of some of Europe’s largest scientific data centres.”

-  Users: European researchers (of any discipline)
-  Goal: Preserve/Find/Access/Process Scientific Data
-  Collaborative and Federated Data Infrastructure
-  Working with Research Communities and Scientific Data Centres



B2DROP
Sync and Exchange Research Data



B2SHARE
Store and Share Research Data



B2SAFE
Replicate Research Data Safely



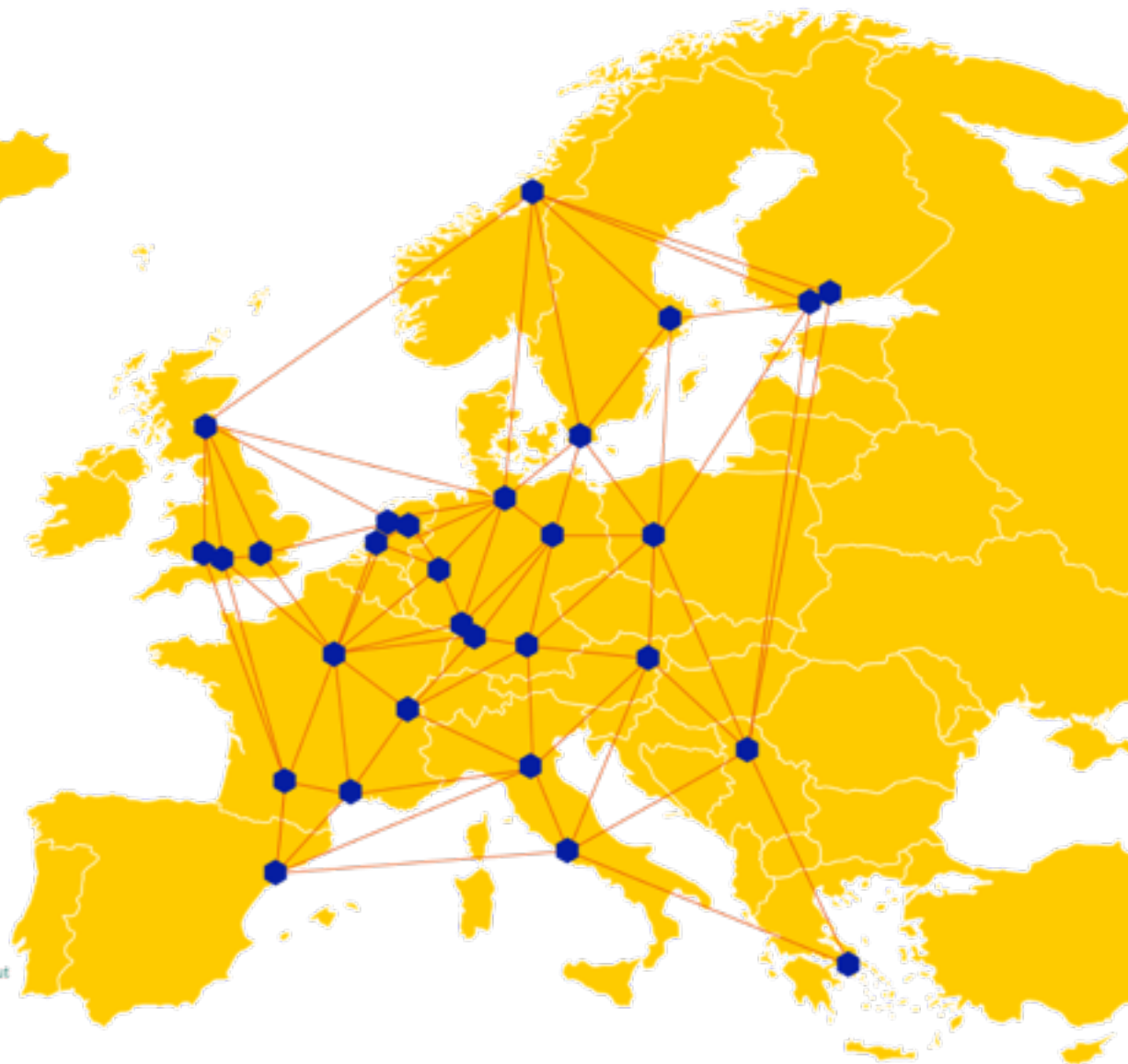
B2STAGE
Get Data to Computation



B2FIND
Find Research Data



Pan-European Data Infrastructure



-  CSC
-  Barcelona Supercomputing Center
-  CEMOS
-  CINECA
-  INES
-  DKRZ
-  umweltbundesamt
-  EMERSON CHILS UNIVERSITÄT TUBINGEN
-  epcc
-  INGV
-  JÜLICH
-  POZNAŃ
-  SURF SARA
-  UNINETT Sigma
-  Science & Technology Facilities Council
-  UCL
-  Trust-IT Services Ltd
-  glnet
-  KIT
-  LIBER LIBER
-  DANS
-  e-Science Data Factory
-  Royal Netherlands Meteorological Institute
-  GFZ
-  CLARIN
- 
-  rzg
-  Jisc
-  EMBL
-  SNIC
-  KTH
-  Max-Planck-Institut für Meteorologie

- Publish long tail data
- Share it with colleagues all over the world
- Compatible with other EUDAT services
 - Replicated storage in B2Safe
 - Searchable with B2Find
 - Sharable from B2Drop
 - Secure with B2Access



B2SHARE

An Open eScience Data Sharing Platform

Sarah Berenji Ardestani, KTH, Stockholm

Carl Johan Håkansson, KTH, Stockholm

Erwin Laure, KTH, Stockholm

Ilja Livenson, KTH, Stockholm

Pavel Straňák, Charles University, Prague




Emanuel Dima, University of Tuebingen, Tübingen

Dennis Blommesteijn, SURFsara, Amsterdam





Mark van de Sanden, SURFsara, Amsterdam

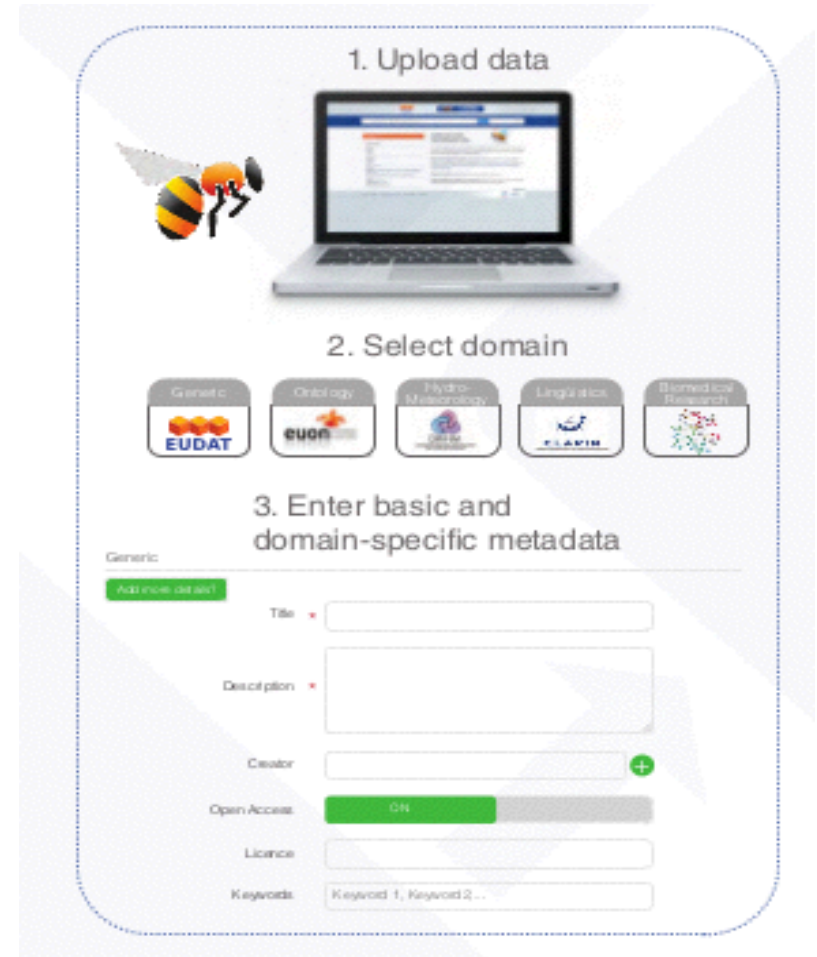
Nicolas Harraudeau, CERN, Geneva

Invenio as a flexible framework

-  Currently using Invenio 2.0
-  Many customizations (Jinja templates, views, custom modules)
-  B2Share 2.0 will use Invenio 3.0 (master branch) which adds even more flexibility.

Custom submission workflow

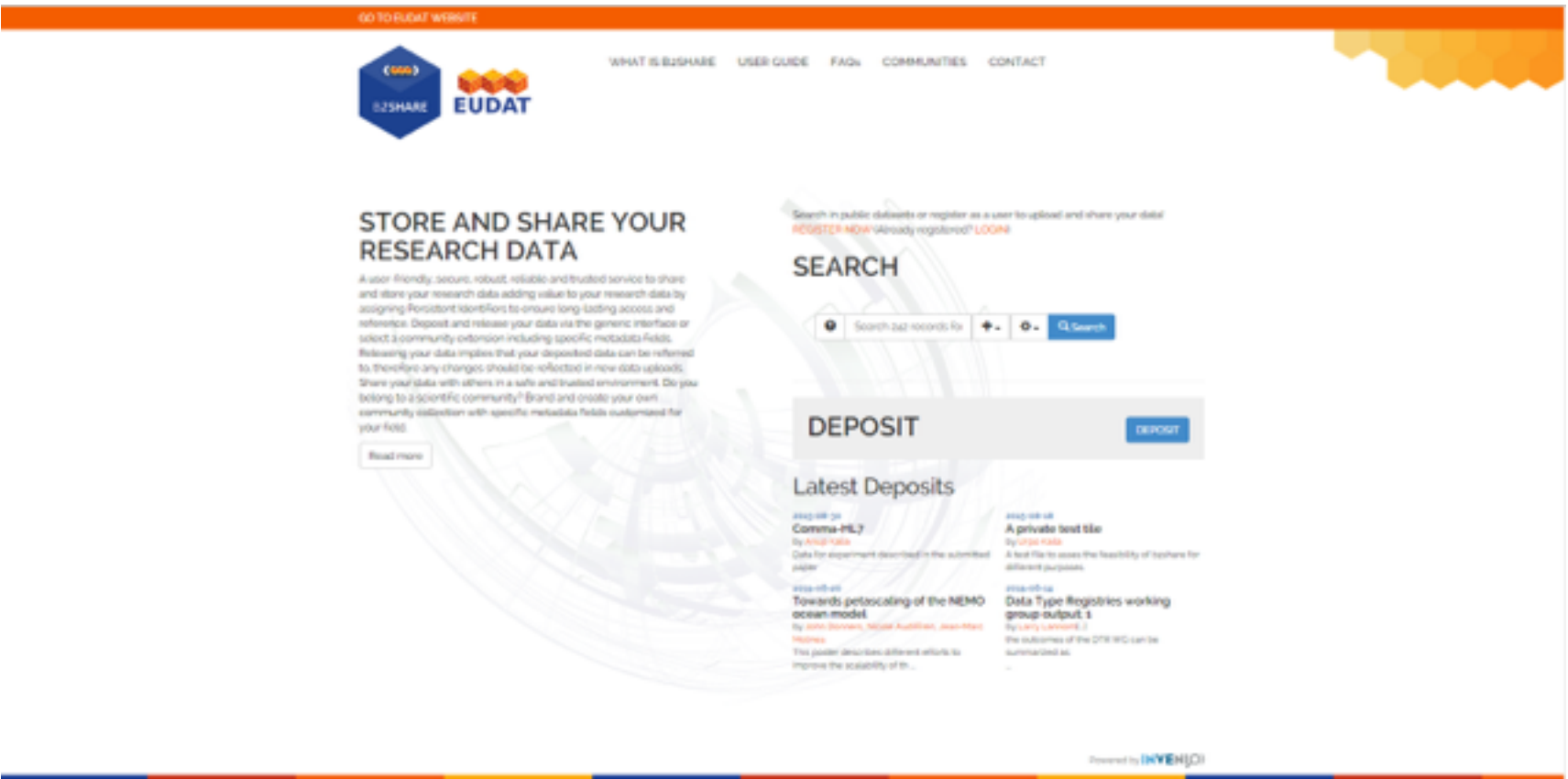
-  Upload Files
-  Choose a community
-  Fill Metadata for this community
-  Publish



Custom user interface

 Custom Design

 Moving to custom technology (AngularJS)

A screenshot of the EUDAT website's user interface. The page has a white background with orange and blue accents. At the top, there is a navigation bar with the text "GO TO EUDAT WEBSITE" and a menu with links: "WHAT IS B2SHARE", "USER GUIDE", "FAQ", "COMMUNITIES", and "CONTACT". The EUDAT logo and "B2SHARE" logo are visible on the left. The main content area is divided into several sections: "STORE AND SHARE YOUR RESEARCH DATA" with a detailed description of the service and a "Read more" button; "SEARCH" with a search bar containing "Search 242 records for" and a "Search" button; "DEPOSIT" with a "DEPOSIT" button; and "Latest Deposits" which lists several data items with their titles, authors, and brief descriptions. At the bottom right, it says "Powered by INYEN|DI".

APIs

- OAI-PMH for metadata harvesting is provided by Invenio. Used by



- Custom HTTP REST API
- Currently working on a core record API compatible with Zenodo




Custom Data and Data storage

 Store data in



 Moving to new Invenio json-schemas for our custom metadata schemas

Custom Authentication and Access control

-  B2Access service for authentication
-  Separate policy management service
-  Three access levels: Users, Community Managers and Admins

Invenio Open community

- We are all contributing to Invenio in some way
 - User requirements
 - Code
 - Feedback (missing or bad documentation, bug reports...)

Want to know more?

 Start using: <https://b2share.eudat.eu>

 Try it: <https://trng-b2share.eudat.eu>

 Read more: <http://eudat.eu>