INVENIO 2.0

THE NEXT GENERATION DIGITAL LIBRARY.



SERVICE PROVIDER CERN SPINOFF





OPEN SOURCE GPL RELEASED IN 2002 2.0 SINCE 2015



























Universidad Zaragoza



AGENDA



FEATURES & ARCHITECTURE



COMMON APPLICATIONS



TECHNOLOGY «HIGHLIGHTS»

THIS STUFF IS STILLIN BEIA.

FRONT-END









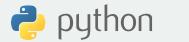
BACK-END













PERSISTENCE













COMBINE +60 MODULES

DEVELOP	MODULE 9	MODULE 10	MODULE 11	MODULE 12
+				
CUSTOMIZE	MODULE 5	MODULE 6	MODULE 7	MODULE 8
+			_	
OUT OF THE BOX	MODULE 1	MODULE 2	MODULE 3	MODULE 4

DISCOVERY

DIGITAL PRINT DEPOSIT CIRCULATION STATISTICS CURATION CATALOGING ACQUISITION ACCESS USER ADMIN Visualization OAI-PMH MANAGEMENT MANAGEMENT



CUSTOMER OVERLAY

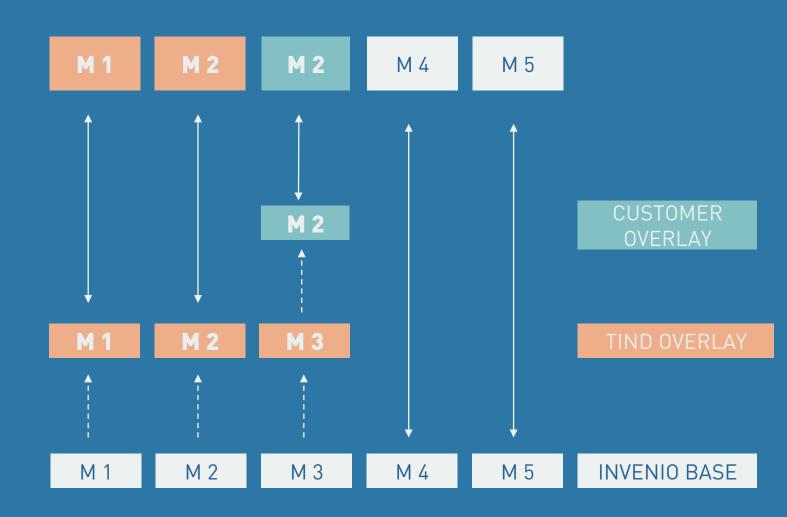
CUSTOMER OVERLAY

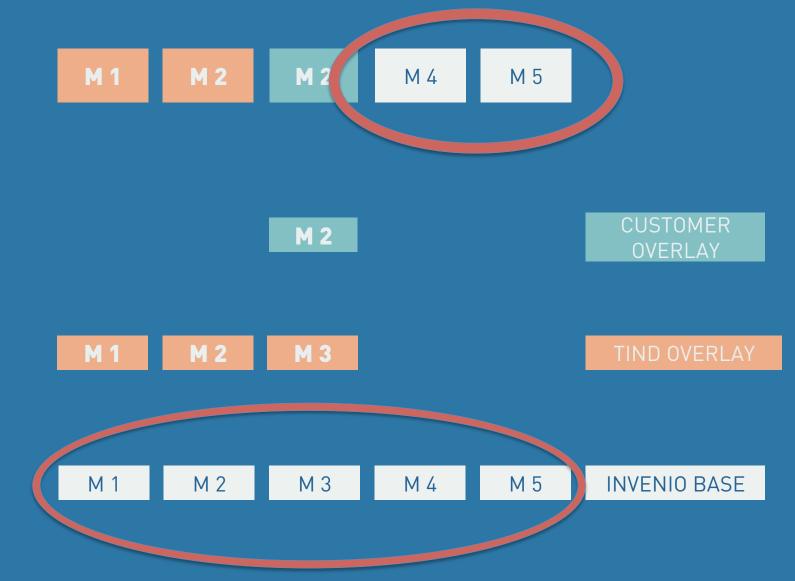
CUSTOMER OVERLAY

TIND OVERLAY

INVENIO BASE

M 1 M 2 M 2 M 4 M 5





12 YEARS OF OPEN SOURCE SOFTWARE DEVELOPMENT:

SEAMLESS UPDATES WHILE MAINTAINING LOCAL CUSTOMIZATIONS.

COMMON APPLICATIONS



INSTITUTIONAL REPOSITORY



RESEARCH DATA MANAGEMENT





INSTITUTIONAL REPOSITORY







MULTIMEDIA



SPECIAL

INSTITUTIONAL REPOSITORY

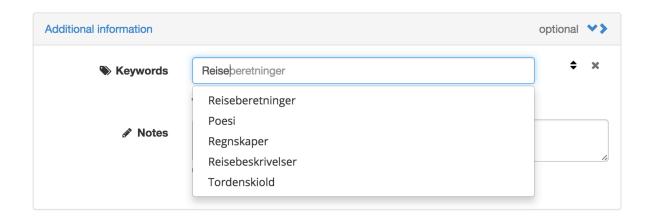
2-STEP REGISTRATION WORKFLOW





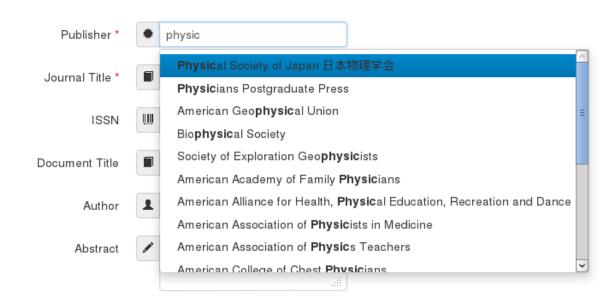
AUTOCOMPLETION OF FIELDS

INTERNAL KNOWLEDGE BASE



EXTERNAL KNOWLEDGE BASE





METADATA IMPORT BASED ON DOIS





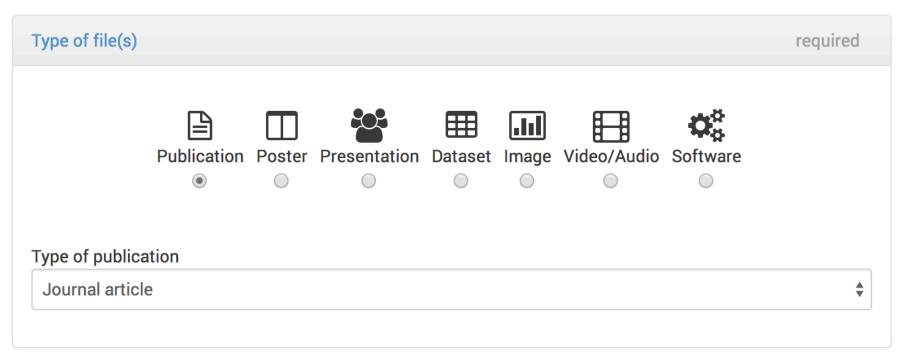


Import information			•
TIP: Fill in both fields to automatic	cally import more data. This will save you time!		
arXiv ID	e.g. hep-th/9711200 or 1207.7235 or arXiv:1001.4538		
DOI	e.g. 10.1086/305772 or doi:10.1086/305772		
		Skip, and fill the form manually	Import

CUSTOMIZABLE DEPOSIT FORM

New upload

Instructions: (i) Press "Save" to save your upload for editing later, as many times you like. (ii) Upload and remove extra files in the bottom of the form. (iii) When ready, press "Submit" to finalize and make your upload public.





MARC -> JSON

BECAUSE NOT EVERYTHING <u>CAN</u> OR <u>Should</u> be described with marc.

DATA MODEL: DATA STORED IN JSON

```
"title": "Invenio 2.0:"
    "subtitle": "The new generation Digital Libraries",
    "firstName": "Kenneth"
    "lastName": "Hole"
}
```

DATA MODEL: EXAMPLE OF JSON SCHEMA

```
{
     "name": "Example Schema",
     "type": "object",
     "properties": {
                "tile": {
                           "type": "string"
                "subtitle": {
                          "type": "string"
                "firstName": {
                           "type": "string"
                "lastName": {
                           "type": "string"
     "required": ["title", firstName", "lastName"]
}
```

DATA MODEL: JSON Alchemy

```
title:
  schema:
     {'title': {'type': 'dict', 'required': False}}
  creator:
     @legacy((("245", "245___","245___%"), ""),
          ("245 a", "title", "title"),
          ("245__b", "subtitle"),
      marc, '245..', {'title': value['a'], 'subtitle': value[b]}
      dc, 'dc:title', {'title': value}
  producer:
     json_for_marc(), {'a': 'title', 'b': 'subtitle'}
     json_for_dc(), {'dc:title': ''}
```

DATA MODEL: JSON SCHEMAS

- Change bases on use cases (books vs, research data, physic vs. chemistry)
- Migration purposes
- Preservation purposes

RESEARCH DATA MANAGEMENT







DATASETS

SOFTWARE

IMAGES

RESEARCH DATA MANAGEMENT



ASSIGN **DIGITAL OBJECT IDENTIFIERS**TO MAKE THE DATA CITEABLE.

GitHub

GITHUB INTEGRATION FOR SEAMLESS PRESERVATION OF **SOFTWARE AND CODE**.



VISUALIZE DATA USING BUILT IN HTML AND JAVASCRIPT APPLICATIONS.

Q Search

A> Research > CMS

CMS is releasing data in the same format as used in data analysis by CMS physicists. A CMS-specific analysis framework is needed, and it is provided as a Virtual Machine image with the CMS analysis environment. The data can be accessed directly through the VM image. Basic information of the data contents is provided in About CMS and in About CMS Physics Objects. The original data are in primary datasets, i.e. no selection nor identification criteria have been applied (apart from the trigger decision), and these have to be applied in the subsequent analysis step. For the first release, no simulated Monte Carlo datasets are provided







CMS Primary Datasets

CMS primary datasets are AOD (Analysis Object Data) files, which contain the information that is needed for analysis

Total records:

14

CMS Derived Datasets

This collection includes data that have been derived from the CMS primary datasets

Total records:

37

CMS Tools

This collection includes tools, with which the CMS open data can be accessed and used

Total records:

7

CMS Validated Runs

This collection includes CMS Validated Runs

Total records:

1

CMS Learning Resources

This collection includes learning resources that use CMS public data

Total records:

6

CMS Open Data Instructions

This collection contains CMS open data instructions.

Total records:

4



♠> Education > Visualise Histograms > CMS 🎉 -

Explore CMS open data and play with the histograms

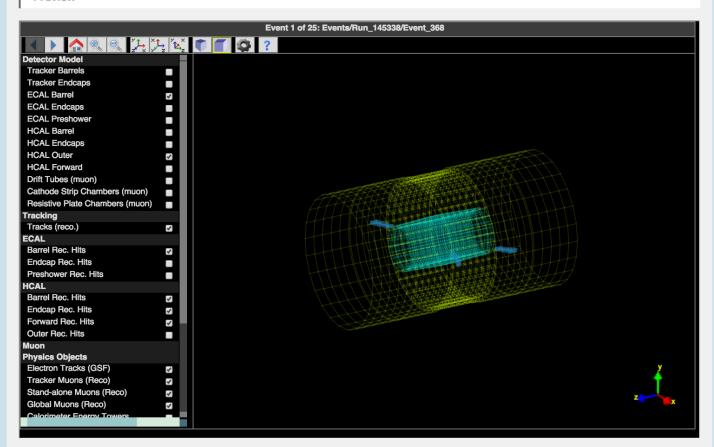




Description

Sample event set from /ZeroBias/Run-2010B-Apr21ReReco-v1/AOD primary dataset in json format readable from the browser-based 3d event display

Preview

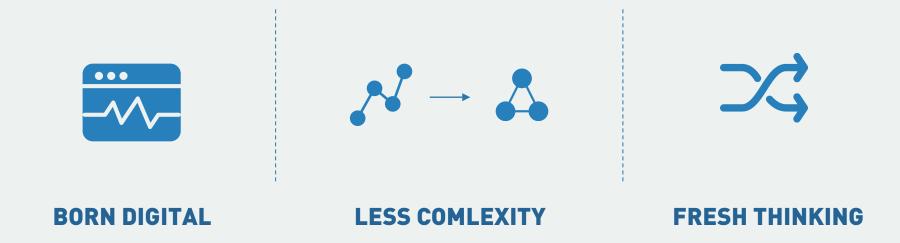


Characteristics

STORAGE

- Storage on multiple places
- File to link
- Point directly to correct storage place
- Optimizing the merging of chunks

INTEGRATED LIBRARY SYSTEM



INTEGRATED LIBRAY SYSTEM

ADVANCED STATISTICS

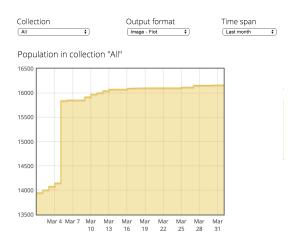


OVER 20 PRE-CONFIGURED KEY STATISTICS DASHBOARDS

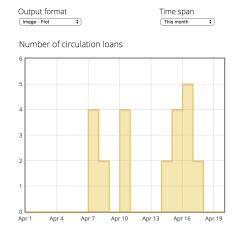


CONFIGURE YOUR OWN DASHBOARD WITH CUSTOM QUERIES

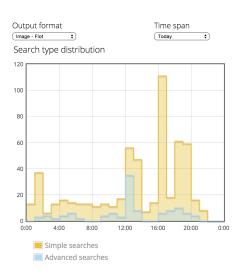
Collection population



Circulation loans



Search type distribution



INTEGRATED LIBRARY SYSTEM

APIS FOR EFFECTIVE INTEGRATION.

DISCOVERY

KNOWLEDGE BASE

LINK RESOLVER

EBSCO Discovery



Summon













WHY CHOOSE OPEN SOURCE?

OPEN SOURCE BENEFITS.



DOWNLOAD OR GET IN TOUCH.

www.tind.io www.invenio-software.org

contact@tind.io

TI\D