# Invenio @ CERN IT

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MLZ
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# CERN IT

**DR** Section

## Digital Repositories

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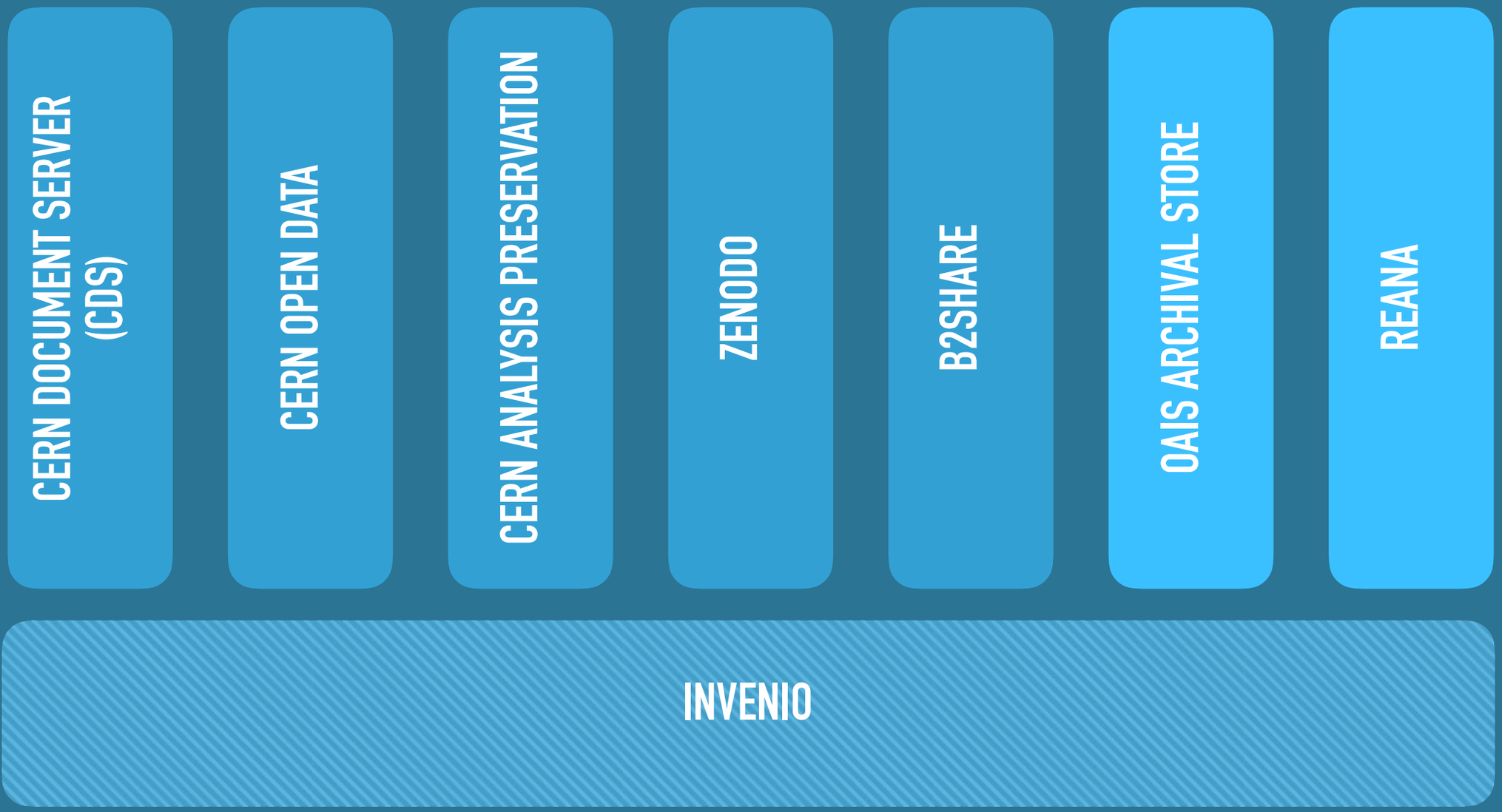
# Invenio

# DR Section


CERN DOCUMENT SERVER (CDS)
CERN OPEN DATA
CERN ANALYSIS PRESERVATION
ZENODO
B2SHARE
OAIS ARCHIVAL STORE
REANA
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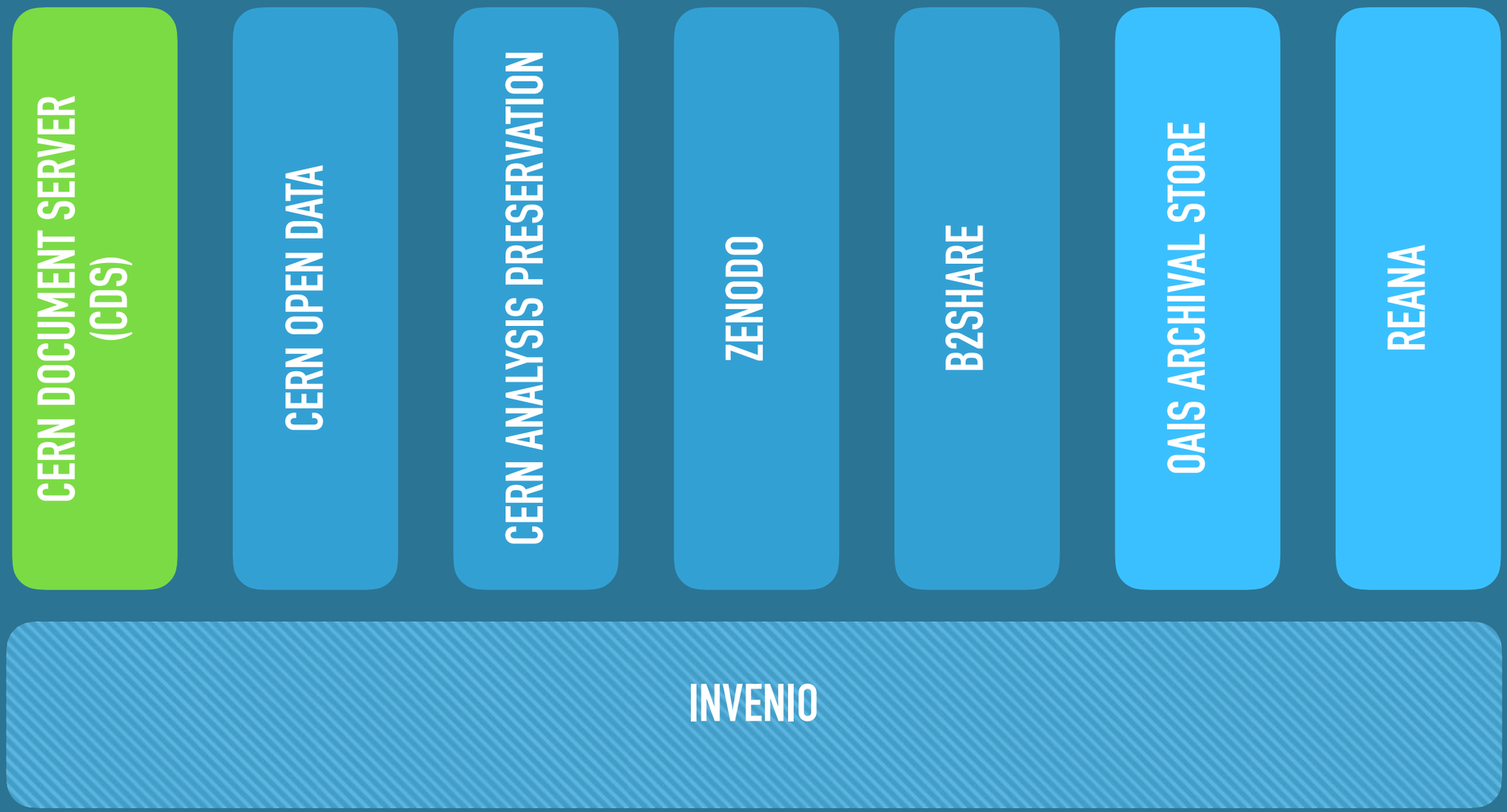
# DR Section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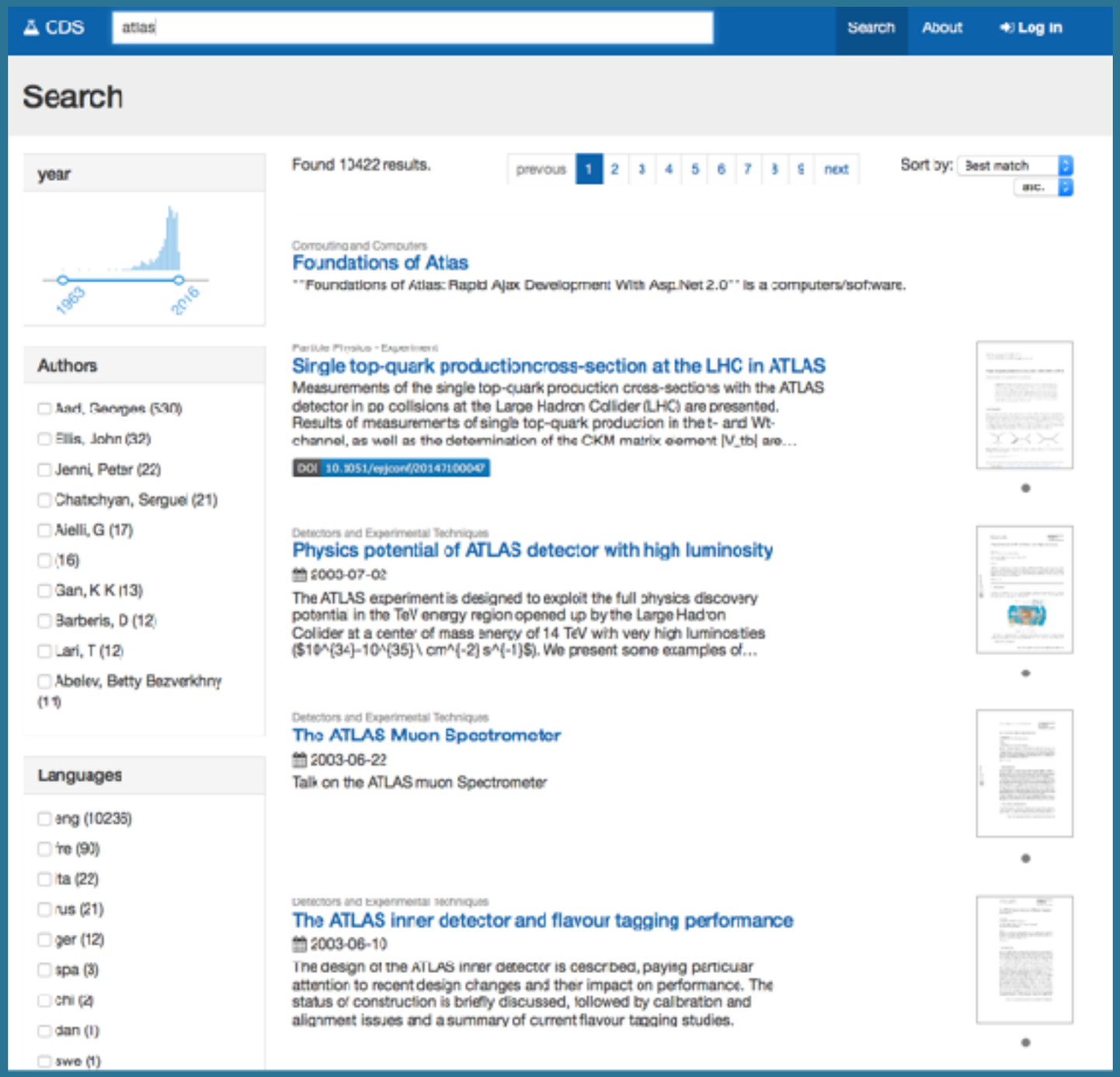
# CDS

- Production (Invenio 1.2):
  - authority records for authors + disambiguation
  - recommender system
- Development: Invenio 3

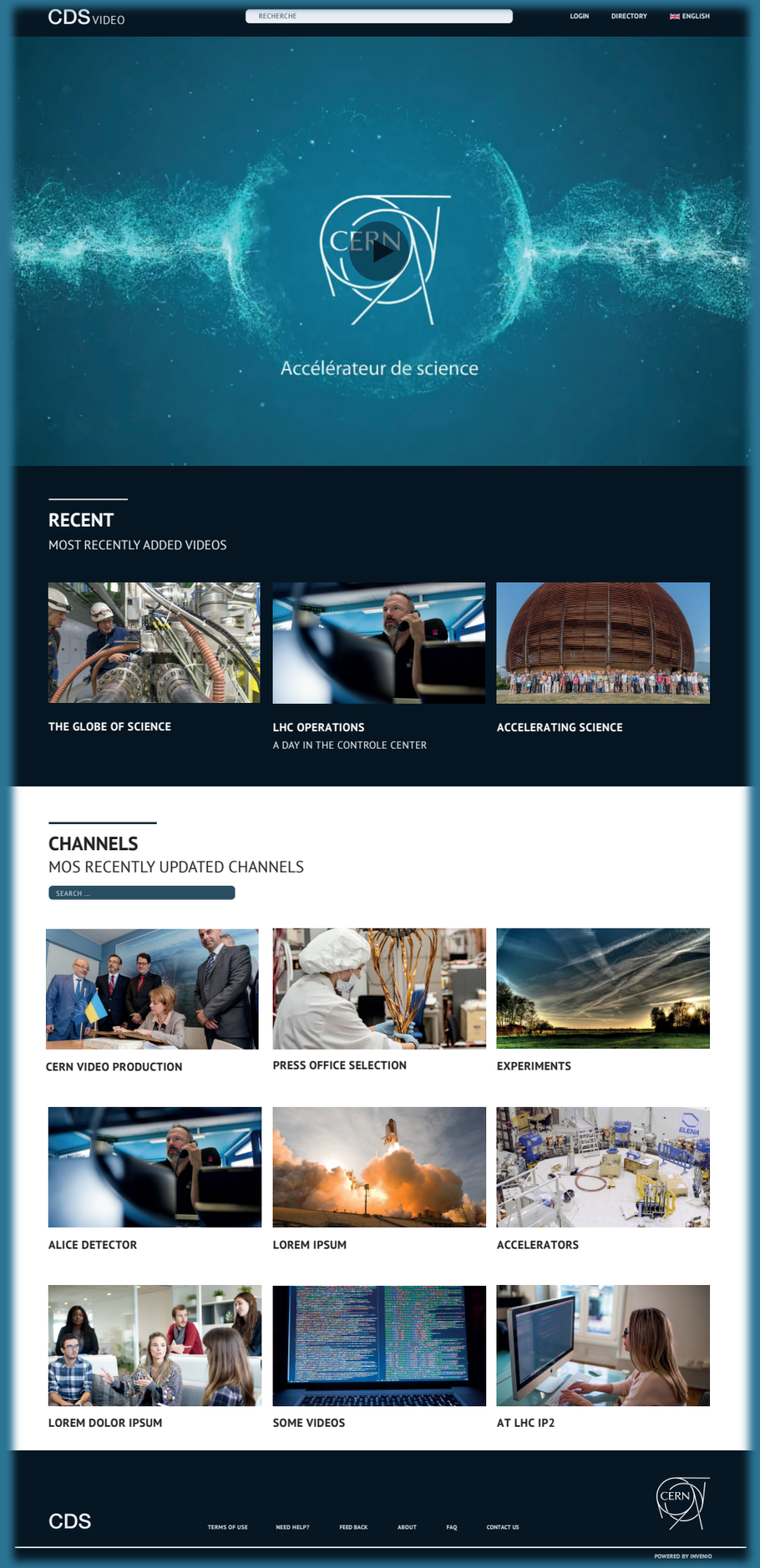
# **CDS** labs

- Basic CDS - Invenio 3
- Migrating content
- Testing, feasibility

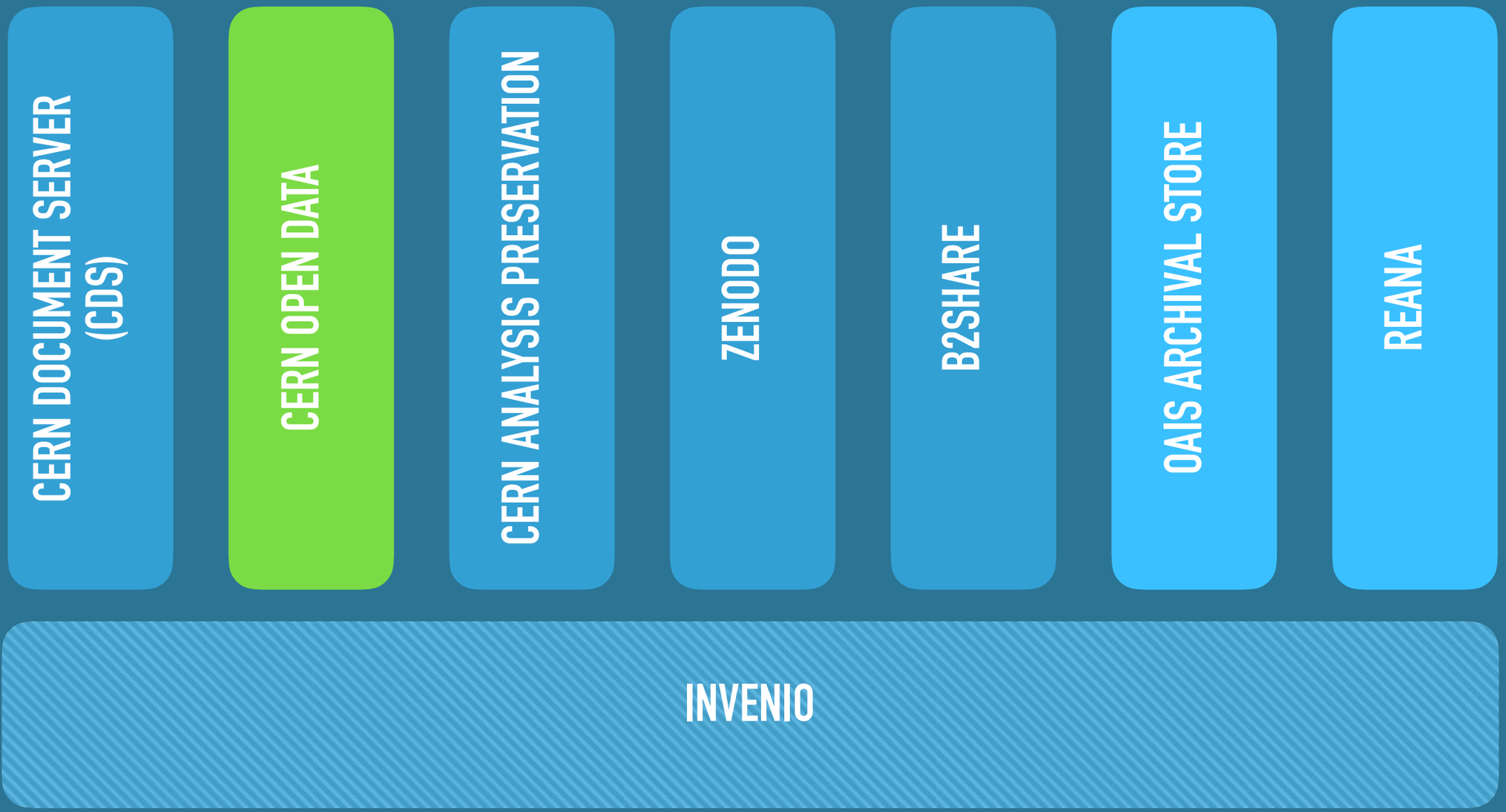


# **CDS** videos

- Archiving Videos
- Video experience
- Video CERN production



# DR Section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# CERN Open Data

- Publicly-accessible site for curated releases of CERN **data sets** and **software**
- Contains data from all **LHC experiments**
- Based on Invenio 2.0
- http://opendata.cern.ch
- https://github.com/cernopendata

*Developed by CERN SIS and CERN IT in collaboration*

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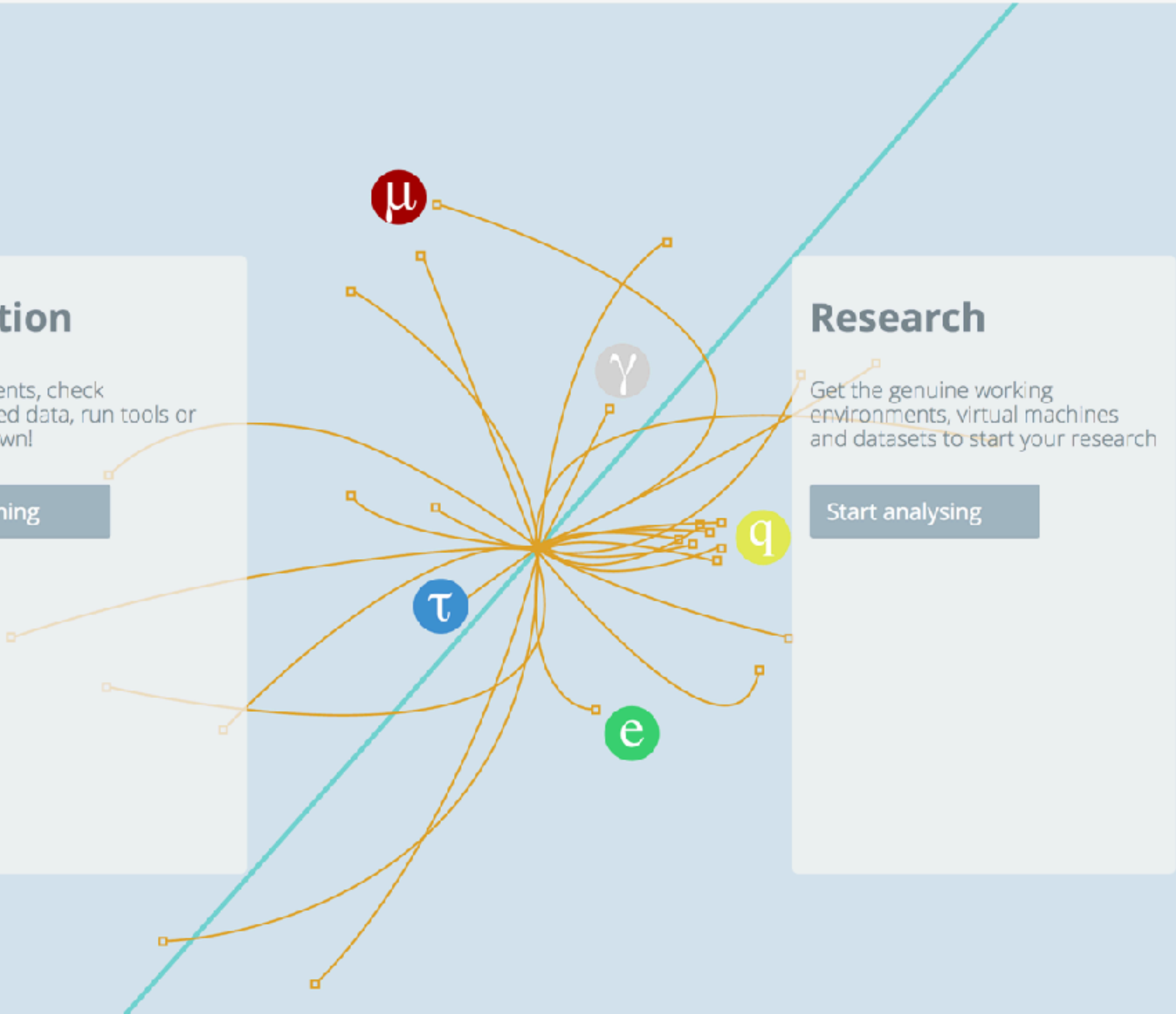
opendata CERN

## Education

Visualise events, check reconstructed data, run tools or build your own!

Start learning



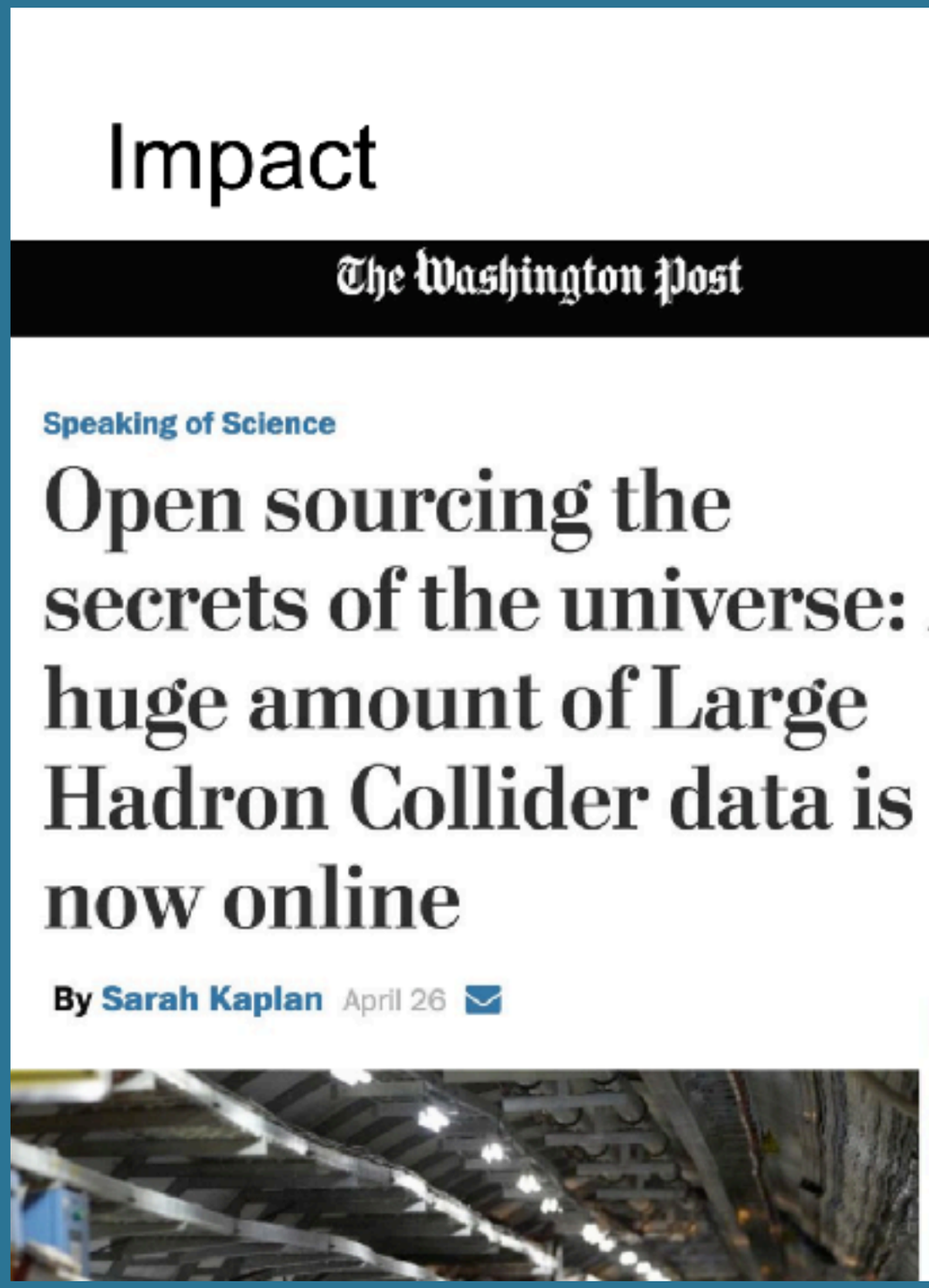

## Research

Get the genuine working environments, virtual machines and datasets to start your research

Start analysing

# CERN Open Data

- 2016 highlights:
  - CMS Run2011 Release (300 TB)
  - ATLAS open data release (2016)



Impact

The Washington Post

Speaking of Science

**Open sourcing the secrets of the universe: huge amount of Large Hadron Collider data is now online**

By Sarah Kaplan April 26

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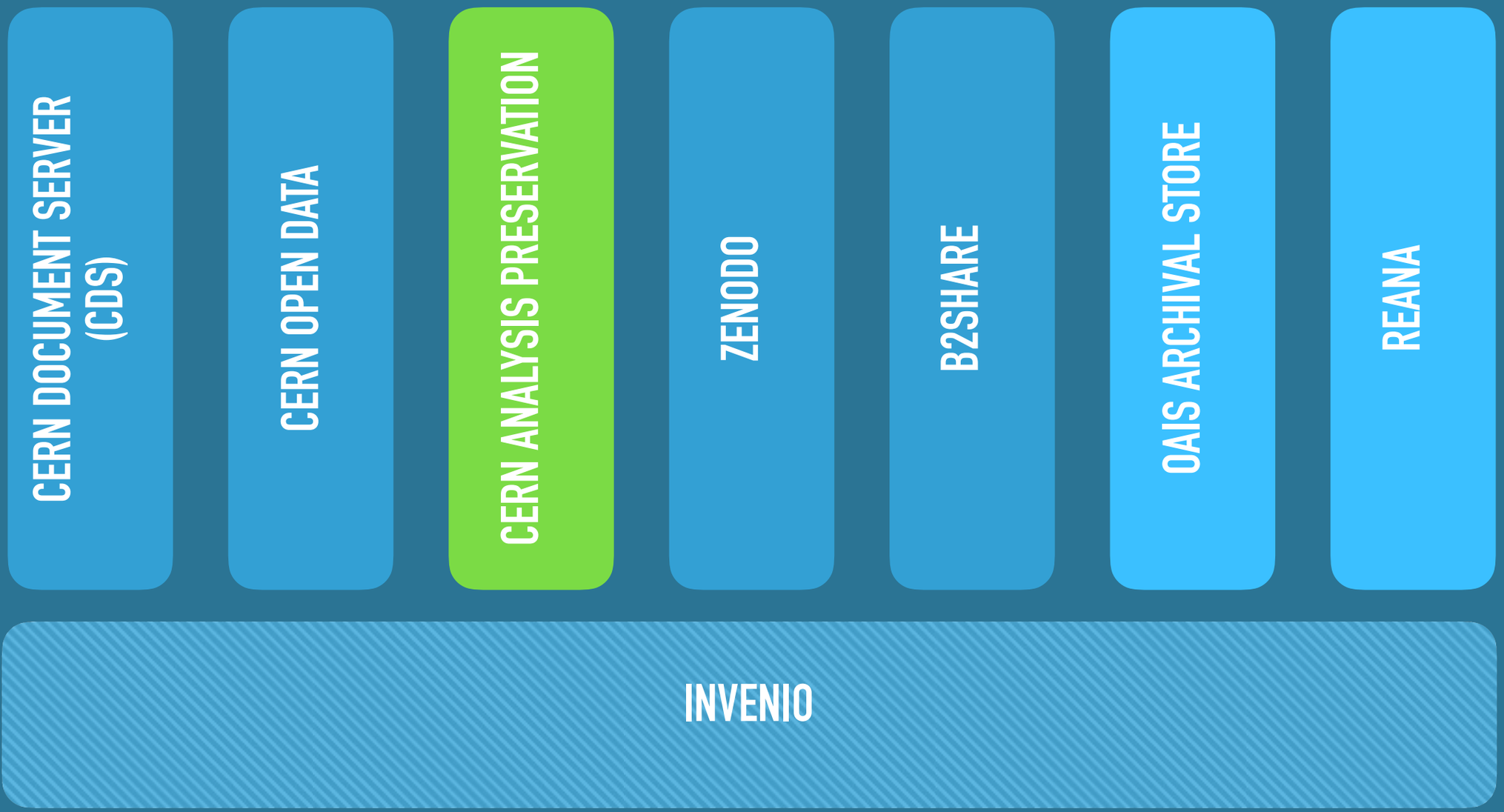
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# CERN Analysis Preservation

- A platform for **preserving knowledge** and **assets** of an individual physics analysis.

- Capturing the elements needed to **understand** and **rerun** an analysis even several years later:

| | |
|---|---|
| ✔ data | ✔ workflow |
| ✔ software | ✔ context |
| ✔ environment | ✔ documentation |

- http://analysispreservation.cern.ch

- https://github.com/cernanalysispreservation

*Developed by CERN SIS and CERN IT in collaboration*

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# CERN Analysis Preservation

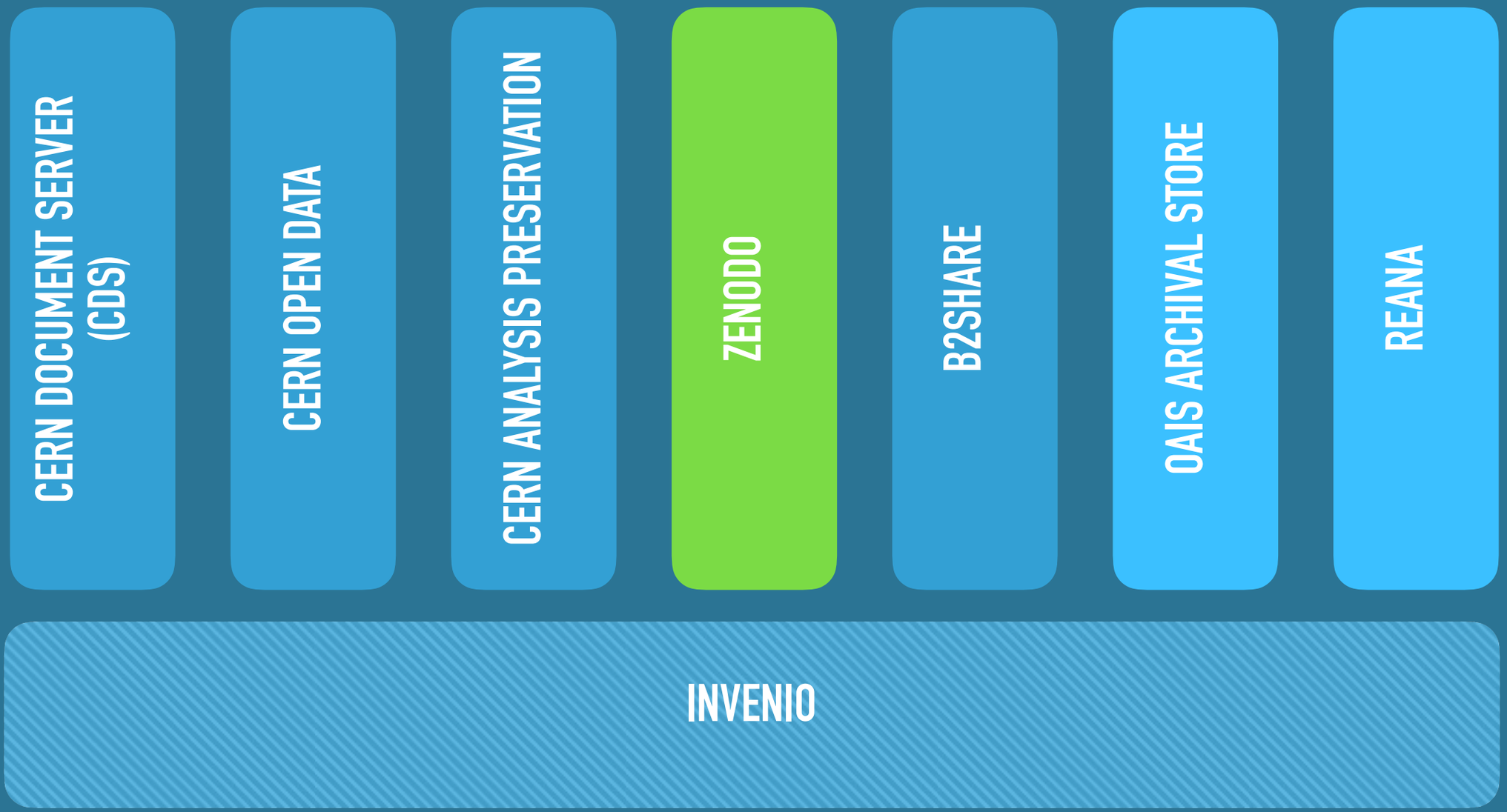
CERN
Analysis Preservation

## Welcome to the CERN Analysis Preservation Portal.

Our mission is to preserve the analyses
across all CERN experiments for years
to come...

Log in with your CERN account

# DR Section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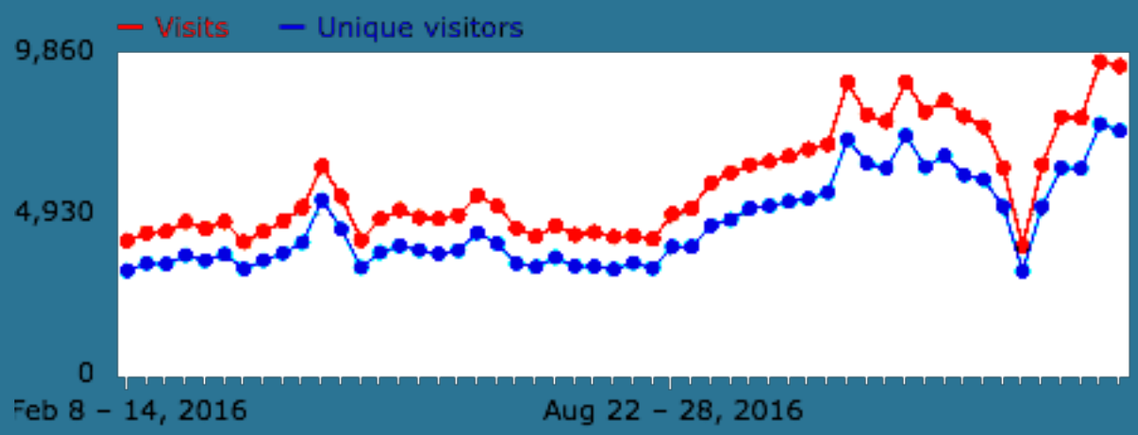
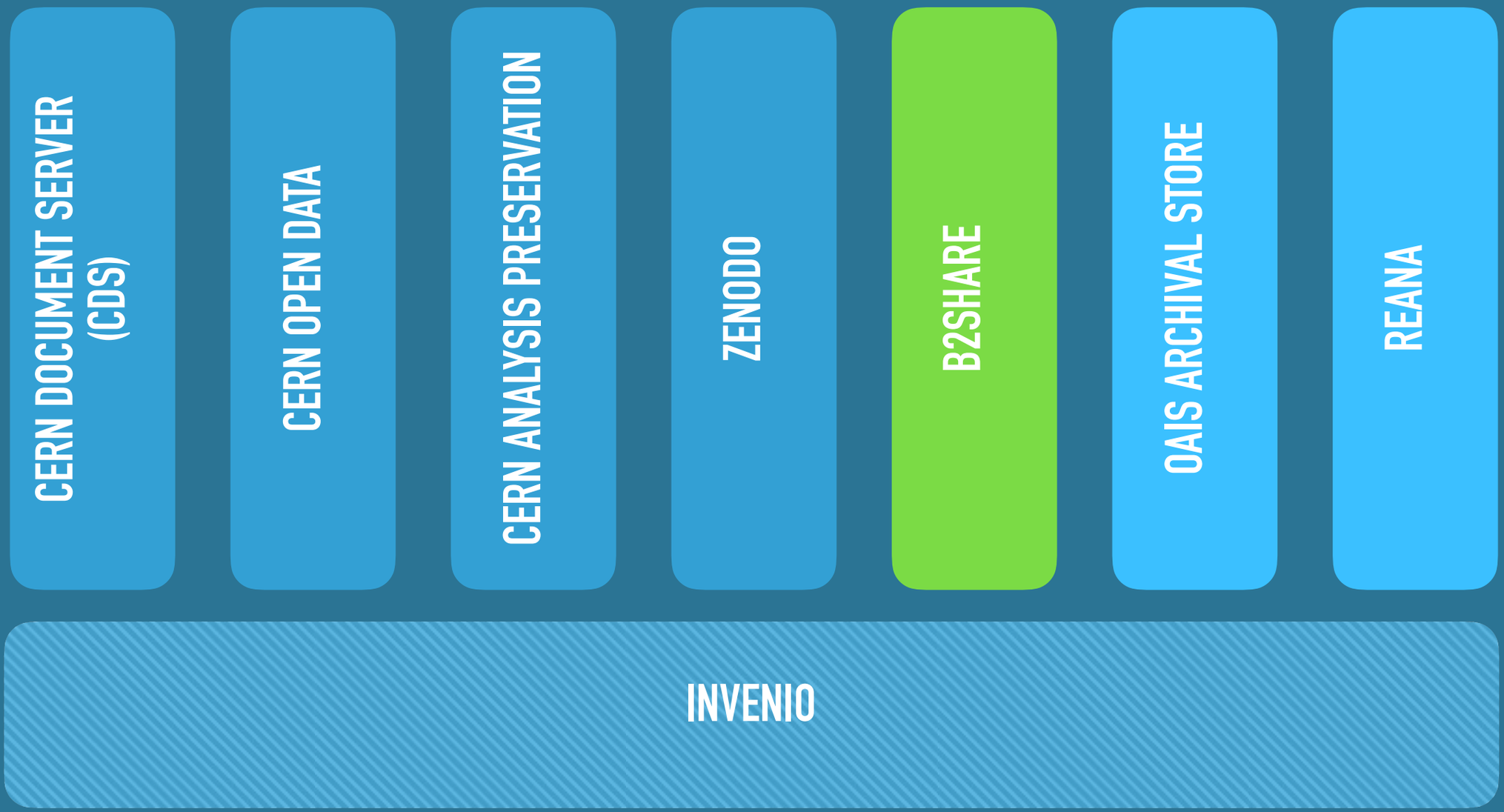
# Zenodo

- Zenodo on Invenio 3 (September)
- Search is 10 times faster
- Handling fast uploads up to 100GB of data
- 2 times more visitors and 3 times more records



# DR Section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# B2Share

- **EUDAT**: European e-infrastructure of integrated data services and resources to support research.
- B2Share can be deployed by any organisation
- Enables researcher to **publish research data**
- Enables communities to define custom metadata format
- B2Share v2 released as an Invenio 3 overlay (last February)
- http://b2share.eudat.eu.

# English-Greek Lexicon of Electronics

by Kaliontzopoulos Panos;

Feb 13, 2017

Last updated at Feb 23, 2017

**TechnicalInfo:** Second edition with more than 31.000 terms

**Disciplines:** 5.6.25 → Engineering → Electronic engineering;

**Keywords:** Lexicon, English-Greek, Dictionary ;

**DOI:** 10.23728/b2share.8b49a31f0faa4f479f8263db8382d531 Copy

**PID:** 11304/7117c31b-ea35-437a-949a-4765c43f149d Copy

EUDAT EUDAT

## Files

| Name | Size |
|---|---|
| Lexicon_V2.xlsx | 1.69MB |

## Basic metadata

| | |
|---|---|
| **Open Access** | True ✔ |
| **License** | Creative Commons Attribution-NonCommercial-ShareAlike (CC-BY-NC-SA)<br>**URL** http://creativecommons.org/licenses/by-nc-sa/4.0/ |
| **Contact Email** | pkalio@iccs.gr |
| **Publication Date** | 1916-10-20 |

Report Abuse

# DR Section

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CERN OPEN DATA

CERN ANALYSIS PRESERVATION

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OAIS ARCHIVAL STORE

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# Incubator

- **OAIS Archival Store**
  - Preserving for the long term
  - Following OAIS reference model
  - Base on Archivematica + Invenio module (integration)
- **REANA**
  - Started as part of CERN Analysis Preservation
  - Re-run research data analyses
  - https://github.com/reanahub

# Questions?

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# Next

- **CDS**
  - Books (Circulation, Acquisition, ILL), Photos, “CRIS”, Self-Service
- **Open Data**
  - New data model, new UI, Invenio 3
- **Analysis Preservation**
  - Wider user testing, progressive deployment
- **Zenodo**:
  - Consolidation, DOI versioning, DSoA, Software integration
- **B2Share**:
  - UX, connecting with other EUDAT services (B2Safe, B2Drop, …)