



ARCHIVING AND PRESERVATION FOR RESEARCH ENVIRONMENTS

Libnova – CSIC – University of Barcelona  
– Giaretta Associates - AWS - Voxility



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<https://tinyurl.com/yxss3py3>

# Building the next generation Research Data Management solution







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**CSIC**

CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS



**Giaretta**  
*Associates*



**voxility**





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- LIBNOVA mission is to safeguard the **world's research and cultural heritage. Forever.**
- LIBNOVA is a world leader in digital preservation, was founded in 2009, has offices in Europe and the US and is now present in 14 countries with activity in the academic, cultural heritage and research communities.
- Customers like the **British Library**, **HILA**, **Stanford University**, the **EPFL** and many more already trust us.



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- The University of Barcelona is the **foremost public institution of higher education in Catalonia**, catering to the needs of the greatest number of students and delivering the broadest and most comprehensive offering in higher educational courses.
- The **University of Barcelona is also the principal center of university research in Spain and has become a European benchmark for research activity**, both in terms of the number of research programmes it conducts and the excellence these have achieved.



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The Spanish National Research **Council is the main agent of the Spanish System for Science, Technology and Innovation** with competences aimed at: Generation of knowledge through scientific and technical research, Transfer of results from research, especially to boost and create technology-based enterprises, Expert advice provided to public and private institutions, Highly-qualified pre-doctoral and post-doctoral training, Promotion of scientific culture in society and management of large facilities and unique scientific and technical infrastructures.





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David Giaretta has worked in digital preservation since 1990 **and has led many of the most important developments in this area.** He chaired the panel which produced the OAIS Reference Model (ISO 14721), the “de facto” standard for building digital archives, and made fundamental contributions to that standard. **He leads the group which produced the ISO standard for audit and certification of trustworthy digital repositories (ISO 16363), and ISO 16919.**

Involved with the **Alliance for Permanent Access (APA)** from its start to its establishment, he became the Director of the APA in July 2010.



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Amazon Web Services (AWS) is the **world's most comprehensive and broadly adopted cloud platform**, offering over 175 fully featured services from data centers globally.

Millions of customers are using AWS to lower costs, become more agile, and innovate faster. AWS has the most extensive global cloud infrastructure. With multiple Availability Zones connected by low latency, high throughput, and highly redundant networking. AWS has 77 Availability Zones within 24 geographic regions around the world.



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**voxility**

Voxility **provides agile**

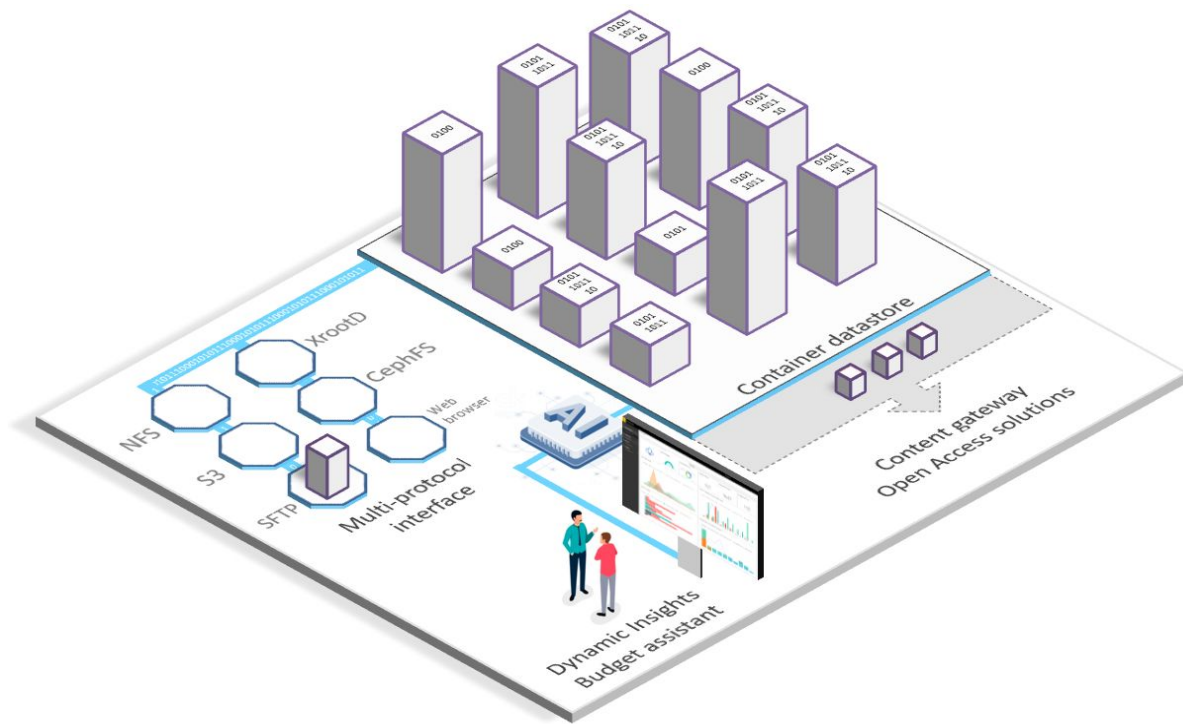
**Infrastructure-as-a-Service** in the biggest Internet hubs in the world: when, how and where is needed.

Massive scalability, raw processing power and the faster network connections across the world.





- Multi-petabyte scale with the **CSIC**'s vast experience on supercomputing and large-scale infrastructures plus **Amazon Web Services** and **Voxility Infrastructure**.
- Fully aligned with the EU legal requirements, GDPR, FAIR principles, TRUST principles and applying really advanced Artificial Intelligence techniques to gain unprecedented efficiency (classification, PII detection, etc) working with the **Universitat de Barcelona**.
- Completely aligned to the OAIS, ISO 16363 and CoreTrustSeal, working with **David Giaretta**.
- Built on top of **LIBNOVA**'s rock-solid foundation, based on our extensive digital preservation experience and proven solutions, already running in the most demanding organizations worldwide.



## LABDRIVE: Research data management

### Research organizations need to:

- Be confident about how research data is managed and protected for the whole data lifecycle, capturing it as soon as possible.
- Provide the best available tools for their researchers, carefully balancing resources across research projects.

**LABDRIVE** is the foreseen solution with which organizations will create the research data they produce and keep it protected, for all their projects/units/departments, starting when the data is created and for the long term, in a single platform.

## LABDRIVE will be:

- **Long-term preservation oriented:** OAIS, ISO16363, TRUST, FAIR, PREMIS among others are at the core of the solution.
- **Performant:** Scalable and parallelized, capable of preserving in the petabyte scale.
- **Flexible:** As a service or on-premises
- **Multi cloud:** No cloud vendor lock-in, open to competition.
- **Multi-protocol:** S3, rsync, SFTP, NFS and other protocols can be used to access data.
- **Interoperable:** Extensive API plus the adoption of open standards: BagIt, METS, Premis, etc.
- **Environmentally friendly:** Runs with minimal environment impact.



- **Multidisciplinary:** Our consortia includes the University world, public research center, best field experts, infrastructure leaders and a world leader in preservation.
- **Disruptive:** We are thinking long-term. How to change the approach to solve the challenge.
- **Co-Developed:** Working together with the Buyers Group and early adopters, to understand their needs and create best practices.

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