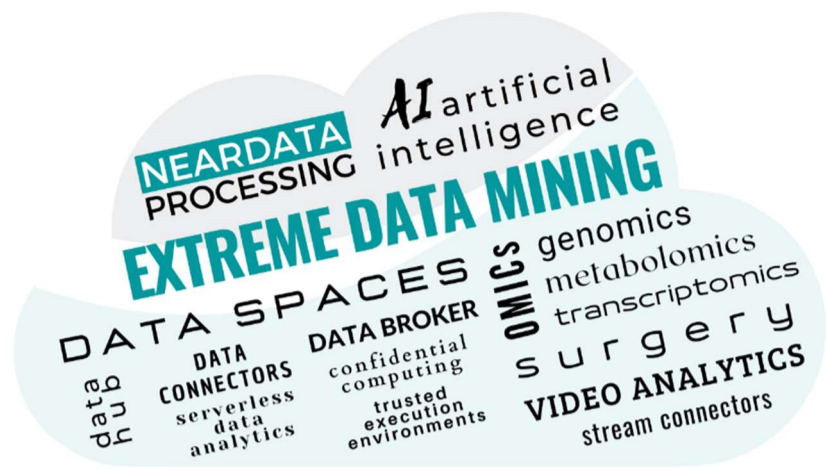


ABOUT THE PROJECT

Project title | NEARDATA: Extreme Near-Data Processing Platform
Programme | Horizon Europe
Topic | HORIZON-CL4-2022-DATA-01-05
Duration | January 2023 - December 2025 (36 months)
Project Coordinator | Universitat Rovira i Virgili
Funding from the EC | €3,913,585.00



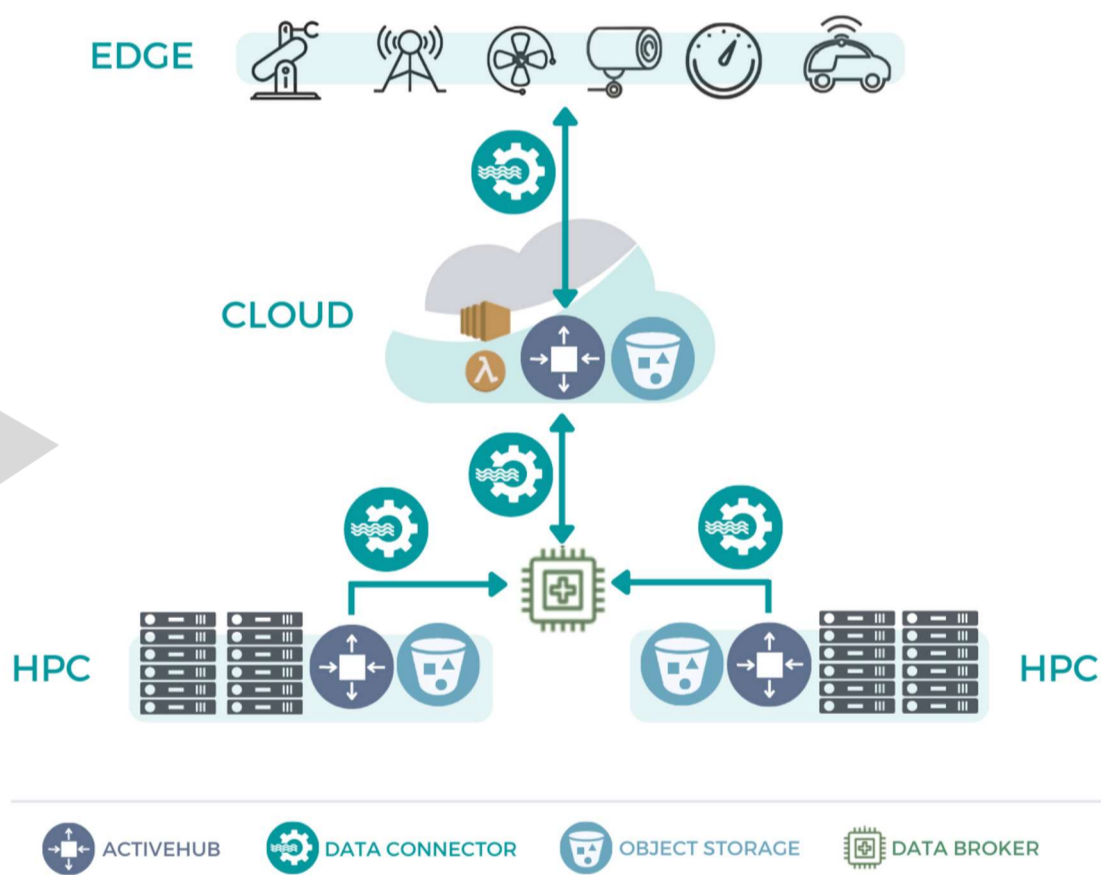
PARTNERS

- Universitat Rovira i Virgili (Spain)
- Barcelona Supercomputing Center (Spain)
- Technische Universität Dresden (Germany)
- Deutsches Krebsforschungszentrum Heidelberg (Germany)
- European Molecular Biology Laboratory (Germany)
- Dell Technologies (Ireland)
- KIO Networks España SA (Spain)
- Sano - Centre for Computational Medicine (Poland)
- Scoutain GMBH (Germany)
- UK Health Security Agency (United Kingdom)

OBJECTIVES

The goal of NEARDATA is to create an extreme data infrastructure mediating data flows between Object Storage and Data Analytics platforms across the Compute Continuum:

- Provide high-performance near-data **serverless data connectors** that optimize data management operations (e.g., partitioning, filtering, transformation) to **efficiently present data to analytics platforms**.
- Support **real-time video streams** but also event streams that must be **ingested and processed** very fast to **Object Storage**.
- Create a Data Broker service enabling **trustworthy datasharing and confidential orchestration** of data pipelines across the Compute Continuum.



SOFTWARE



USE CASES

- Genomics** | Creation of methods, fast storage, and communications infrastructures to communicate distributed computing power with scalable storage systems, allowing efficient distribution of datasets across the system.
- Metabolomics** | Expand the analysis of metabolomics raw data and boost external access and efficient re-use of open data. Creation of federated and hybrid distributed architecture and ensuring data privacy but also shared global computations.
- Surgery** | Create generalised machine-learning models that can aid surgeons during surgery and allow video data to be analysed in real-time and with low latency.

