

Collaboration Partnership

between

EOSC DIH and DEEP-Hybrid-DataCloud

Partnership Overview

Brief Intro

Deep Hybrid Data Cloud

Deep Hybrid Data Cloud is a project funded by the European H2020 Framework (grant agreement No 777435) that supports intensive computing techniques (in particular machine learning and deep learning tasks) that require access to specialized HPC hardware, like GPUs or low-latency interconnects, to explore very large datasets. Many research areas are being transformed by the adoption of machine learning and deep learning techniques. Research e-Infrastructures should not neglect this new trend, and develop services that allow scientists to employ these techniques, effectively exploiting existing computing and storage resources.

The DEEP-Hybrid-DataCloud is paving the path for this transformation, providing machine learning and deep learning practitioners with a set of tools that allow them to effectively exploit the existing compute and storage resources available through EU e-Infrastructures for the whole machine learning cycle. Under the common label of “DEEP as a Service”, the project deploys a set of building blocks that enable the easy development of machine learning applications. These services are being integrated into the EOSC framework in order to be fully exploited by user communities other than the ones participating in the project, where they can be further scaled up in the future.

EOSC DIH

The EOSC Digital Innovation Hub (DIH) is a mechanism for private companies to collaborate with public sector institutions in order to access technical services, research data, and human capital. Some of the services offered by the EOSC DIH are the following:

- Piloting and co-design: Pilots/proofs of concepts, Service/product design, PaaS/SaaS integration, Performance verification, Testing
- Training & Support, Technical consultancy, Service management, Commercialization & business coaching, Brokerage to funding & opportunities
- Technical Access, Compute (HTC, HPC, Cloud), Storage (Online/Archive), Data management, Research data Tools & applications
- Visibility, Media Exposure, Participation to events, Promotional print material, Inclusion in the marketplace, Networking



Objectives

Bullet points of the aims of the collaboration

- Include the following DEEP-Hybrid-DataCloud services into the EOSC DIH offering, fostering their adoption by SMEs.
 - **ML application porting to EOSC technological infrastructure.**
 - **ML implementation best practices.**
 - **AI-enabled services prototyping in EOSC landscape.**
- Try to identify SME's interested in such an offer and setup business pilot: SME/EOSC DIH/DEEP/EOSC-hub provider
- Disseminate the new offer through EOSC DIH channels
- To redirect existing and future SME collaborations through the EOSC DIH channel.
- To find providers willing to support the business pilot and DEEP services through the EOSH DIH.

Activites

Bullet points of the concrete actions and potential timelines

- EOSC DIH will disseminate the collaboration with DEEP through the website.
- Atos will try to find a pilot among the SMEs related to their Business Units. DEEP will define the pilot to run in the EOSC DIH. Timeline: 30 November
- In the same time EOSC DIH will search for SME interested in DEEP services, Timeline: 15 December
- Discuss and define the type of collaboration for the pilot in a MoU. Timeline: December
- EOSC DIH will disseminate the new pilot start through the website. Timeline : January

