

DESIGNING AND ENABLING E-INFRASTRUCTURES FOR INTENSIVE PROCESSING IN A HYBRID DATACLOUD

Supporting artificial intelligence (machine learning and deep learning), parallel post-processing of very large data, and analysis of massive online data streams over distributed e-Infrastructures in the European Open Science Cloud (EOSC)





www.deep-hybrid-datacloud.eu

## GOALS

The goal of the project is to prepare a new generation of e-infrastructures that harness latest generation technologies, **supporting machine learning** and **deep learning**. The project provides the corresponding services to lower the adoption barriers for new communities and users, satisfying the needs of both research, education communities and citizen science.

Input

data

DEEP

learning

Reuse

and

Build and

train

deep

model

learning

facility

## SERVICE CYCLE

The Deep-Hybrid-DataCloud project provides services that allow scientists to:

- Build a machine learning from scratch or using an existing one
- Train, test and evaluate a model
- Easily deploy a module and serve it as a service
- Share and publish a model

## GET ACCESS

You can request access to our services through the **EOSC Portal**: <u>http://bit.ly/deep-training-eosc</u>



DEEP-Hybrid-DataCloud is a project that aims to deliver a framework to easily develop **Machine Learning** and **Deep Learning** modules on top of e-Infrastructures.

In the DEEP Open Catalog you can find ready to use modules in a variety of domains. These modules can be executed on your local laptop, on a production server or on top of e-Infrastrucutres supporting the DEEP-Hybrid-DataCloud stack. https://marketplace.deep-hybrid-datacloud.eu

## USE CASES

The collection of Use Cases in the DEEP-HybridDataCloud project have been chosen from several communities and different scientific disciplines. They provide a relevant sample of demanding requirements for the DEEP as a Service Platform.



**DEEP Hybrid Data Cloud** 

in







EOSC

Model

results

- - - -

Store

new

model

DEEP Open Catalog

Publish and share

model

(marketplace)

storage

services

Model

results

Publish

as service Data

and

DFFP

Deploy

model

service

as a

as a Service

(DFPPaaS)

configuration



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