Hybrid DataCloud

Supporting machine learning and deep learning in the European Open Science Cloud (EOSC).

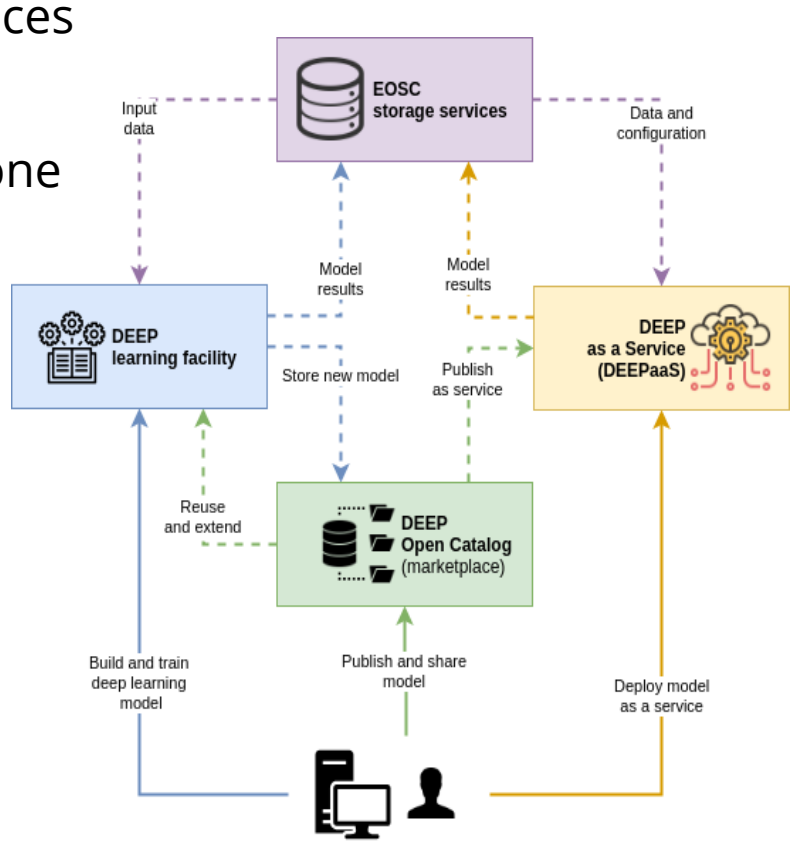
Many research areas are being transformed by the adoption of machine learning and deep learning techniques. Research e-Infrastructures should not neglect this new trend, and develop services that allow scientists to employ these techniques, effectively exploiting existing computing and storage resources.

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.

SERVICES FOR THE WHOLE MACHINE LEARNING CYCLE:

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

- **Build** a model from scratch or using an existing one
- **Train**, **test** and **evaluate** a model
- **Deploy** and **serve** as a service
- **Share** and **publish** a model



KEY TECHNOLOGIES:

- Docker container based
- Transparent GPU access
- HPC integration
- Serverless architectures
- Transparent hybrid cloud deployments through PaaS layer
- Marketplace containing existing models ready to use
- Standard APIs for model training, testing and inference
- Integration with EOSC data services

Available through the EOSC portal:
http://bit.ly/deep-training-eosc

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European Commission

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