AI4EU TGB Meeting
8.7.2022

Agenda

- 10:00 - 10:20 Introduction and platform status updates (Martin)
  - Move from Acumos to Eclipse Graphene
  - Playground Beta Test (Demo of Training Pipeline)
- 10:20 - 11:00 How to build secure Dataspaces with (F)OSS technologies in the context of IDS and Gaia-X

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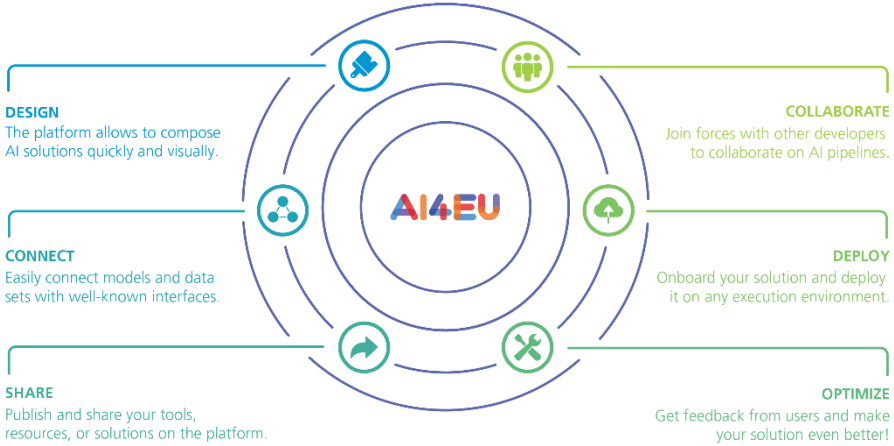
- 11:00 - 11:30 Answers to questions from the DIH (Martin)

Proposed date for the next TGB Meeting: Friday 23.9.2022 10:00 - 12:00 CEST

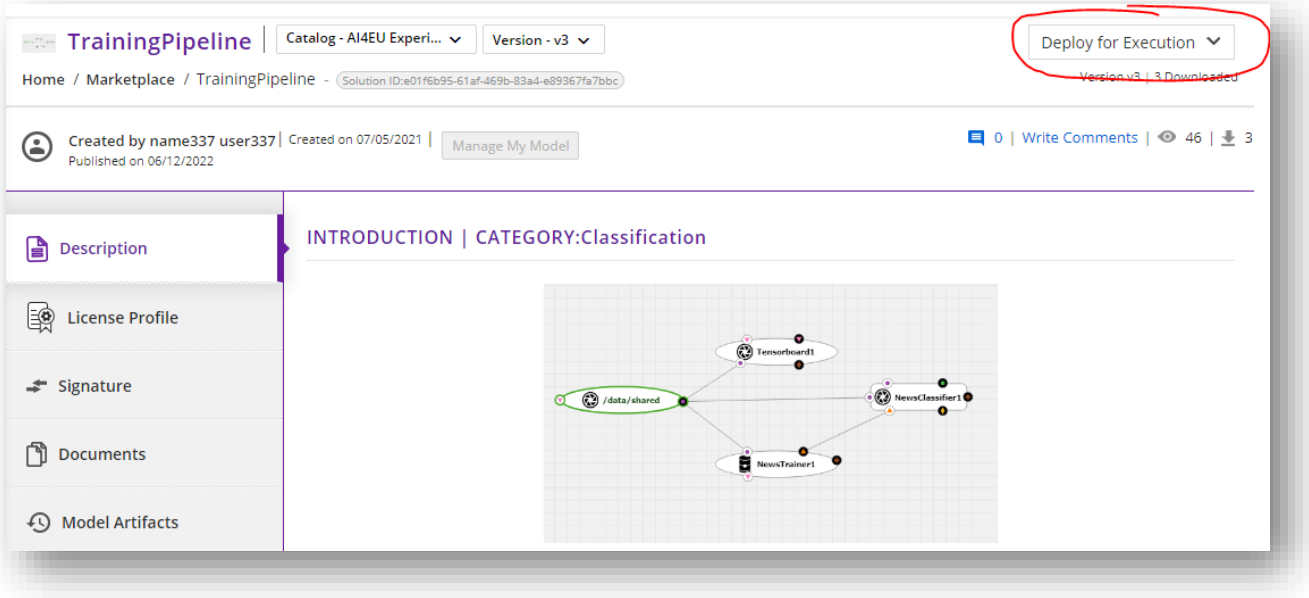
Eclipse Graphene

- Most repositories have been moved to Eclipse Gitlab
  - https://gitlab.eclipse.org/eclipse/graphene
- Github repositories have been set to archive (read-only)
- First Graphene release planned until end of September
- We have new Artwork to replace the Acumos one



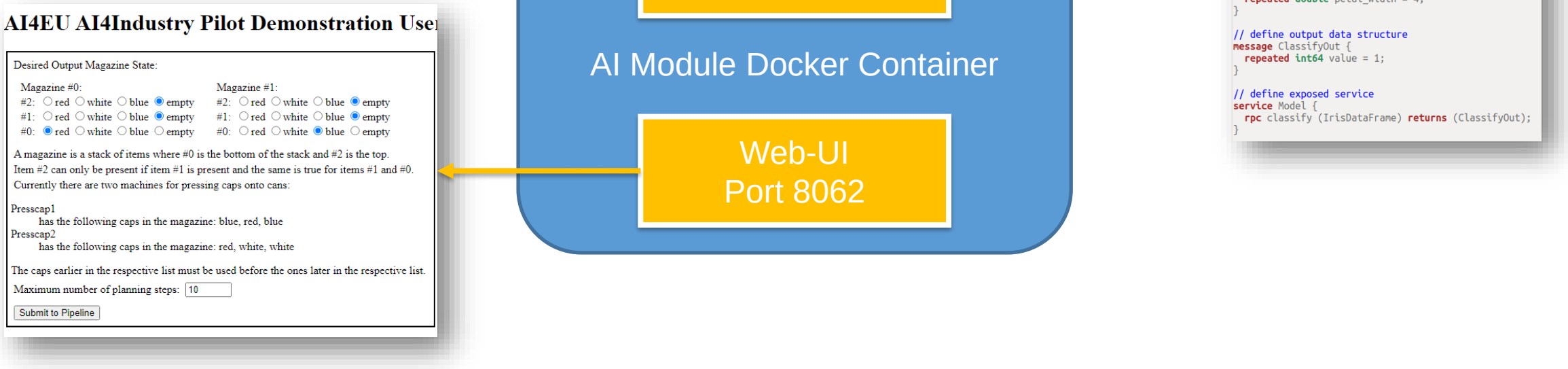
Playground Beta-Test

- Recent update of the Training Pipeline
  - Add Web-UIs for Trainer and Classifier nodes
  - optimized docker image build speed
  - Re-Usable Tensorboard node
  - Try it out here: [Training Pipeline on Preprod]



Playground Beta-Test: Web-UI

- The Web-UI of an AI-Tool / Module is running inside the same docker container
- It is created by the tool provider along with the container
- A Web-UI is optional but highly recommended



Support

Questions from the DIH

Questions from DIH #1

Q: Shall somebody make an inventory of how many and which pof the 245 are currently available and supported?

A: Yes, that would be great! For AI4EU Experiments it would mean to check if the docker image URL is valid, if author and publisher addresses are valid/exsisting. In the next step, this could be automated and run periodically.

And now, maybe deploy to playground...

Reviewers are welcome ☺

Questions from DIH #2

Q: What assest should be checked? Just open source components?

Origin? AI4EU and other H2020 HEP DEP projects? Or also US / commercial OSS assets?

Back- or just fore-ground assets (most of the projects are IA, so they are not supposed to develop, but to integrate/use)

A: I think it would be best to include all assets. In AI4EU Experiments there is no difference between backend and frontend: all are docker containers.

Questions from DIH #3

Q: Which TRL is allowed? There are different services provided around a TRL 5 (RIA) rather than a TRL 8 or even TRL 9 asset

A: Since the platform is for Researchers as well as industry users, it would be best to add the TRL as a Tag to the asset, to help the users decide.

Questions from DIH #4

Q: What support services are mandatory and to be provided through the platform (and not by separate communication channels such as e-mails? shall we have a digital assistant for that?)

A: Very good point, We could think of connecting the AI4EU chatbot to AI4EU Experiments!

This would be a very good contribution ☺

Questions from DIH #5

Q: Who can access the design studio? Anyone also from outside the AIoD community?

A: Anybody who has an EU-Login.

Questions from DIH #6

Q: At the moment the service is free of charge, but what is the business model in the future?

A: That is still an open question. Currently it is possible to publish commercial assets, so at least the asset providers could make money even right now.

Questions from DIH #7

Q: And what happens after the deployment on premise? In the DIH4AI we are building in IMT TERALAB a Kubernetes Cluster (sorry I am not a technician). Is it supposed to have some decentralised facilities or just IAIS (and IMT)?

A: The separation of catalog/design-studio and execution is a fundamental part of the architecture. The idea is to support many different execution environments, especially the deployment to existing Company-IT Systems to enable the access to confidential data:

- A typical commercial user would deploy a pipeline to his company internal Kubernetes cluster and connect to internal systems
- A researcher could deploy the pipeline to her laptop or to the University HPC/GPU cluster
- A teacher could deploy to the Playground to live demonstrate concepts
- A student could use the Playground to solve exercises
- A consultant could use the playgound to work with a customer on a PoC

The execution of AI-Pipelines is decentralized and independent from the AI4EU Experiments instance.

No Lock-In: It's Docker

- AI4EU Experiments containers are standard Docker containers with some *additional* properties
- If done right, the same docker image can be used for many use cases
  - with and without GPU
  - run on laptops as well as big multi-core GPU clusters
- They can be run and used completely independent from AI4EU Experiments in common environments:
  - Kubernetes
  - Docker-Compose
  - Standalone Docker