EGI-ACE Open Call no.3

Checkpoint meeting with Shepherds

Cloud-based data services to integrate and share qualified marine data generated by the MINKE open infrastructures

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Dissemination level: Public

Disclosing Party:

Recipient Party:

Outline -

- *Background about the scientific use case*
- *Ambition, Impact and Challenges*
- *Integration Support*
- *Capacity Requirements*
- *Timeline*

Background about the scientific use case

Innovative design to monitor and manage data on marine ecosystems

- Website: https://minke.eu/
- 4 years projects (GA: 101008724), started the 1st. April 2021
- Coordinated by: CSIC https://www.csic.es/es (Spain)
- Overall budget: € 4 994 955
- Consortium: 22 (IFCA and EMSO ERIC are involved)

Ambition, Impact, Challenge(s)

- The EU-funded MINKE project will integrate key European marine metrology research infrastructures to propose an innovative framework of 'quality of oceanographic data' for European actors monitoring and managing marine ecosystems.

- MINKE services will be connected with the European Open Science Cloud (EOSC) through the collaboration with the H2020 Cos4Cloud project.

- MINKE will be **improve the qualitative and quantitative of the Cos4Cloud services by developing guidelines and methods to produce optimal and global ocean and marine products.**

Capacity Requirements

Initial allocation of

- 16 VMs, 96 vCPU cores and 192GB RAM
- 1 GPU (any type) for testing the model
- 1TB of block storage
- Few floating IPs allocated. Possibility to use VPN

The use of the EGI-ACE cloud services will be organized in two phases:

- Q3/2021 – Q3/2022: Baseline configuration in terms of compute and storage capabilities. Use of GPU resources for development and testing.

- Q4/2022 – Q3/2023: Larger cloud storage to support increasing data and additional compute resources to improve performance, if needed.
- There execution of the use case. two geo-distributed data centres during the entire execution of the use case.

Timeline

Current status:

- Set-up of the VO: minka-sdg.org (GGUS #154314)
- Configured a dedicated group in COManage.
- Initial capacity allocation configured @ IFCA-LCG2
- Started deployment services in the EGI Infrastructure
  - Q3/2021: Platform deployment
  - Q1/2022: Start operations in pre-production. Testing with selected users.
  - Q3/2022: Optimizations, scalability, and load testing
  - Q4/2022: Start operations in full production.
  - Q2/2023: Integration of external tools (based on collaborations with Cos4Cloud) and AI functionalities.
  - Q3/2023: Transition to sustained long-term operations.
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Thank you!

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