# Task 3.3. Build an European-wide network of Pulsar sites

## Description

Each partner in this task will provide and maintain a collection of compute resources, accessible via Pulsar endpoints. Each site will integrate with the shared file system (CVMFS) infrastructure developed as part of EOSC-Life, to access tool containers and reference datasets in the most efficient and reproducible way. The Pulsar endpoints (Figure 3.3) will be connected to the European Galaxy servers (WP4) and thus integrated into our public monitoring service available under stats.galaxyproject.eu. The goal is to raise the maturity of the Pulsar Network and all its partners, including EGI and the EuroHPC partners, to a TRL-9 level at the end of the project (M3.1).

## Participants

| **Name** | **Institution** | **Role** |
|---|---|---|
| | CESNET | Task Leader |
| | ALU-FR | |
| | VIB | |
| | EPFL | |
| | CESNET | |
| | BSC | |
| Anthony Bretaudeau | CNRS | |
| Marco Tangaro | CNR | developer, Galaxy expert, pulsar network endpoint maintainer |
| | INFN | |
| | UiO | |
| | AGH / AGH-UST | |
| Jan Astalos, Viet Tran | IISAS | |
| | TUBITAK | |

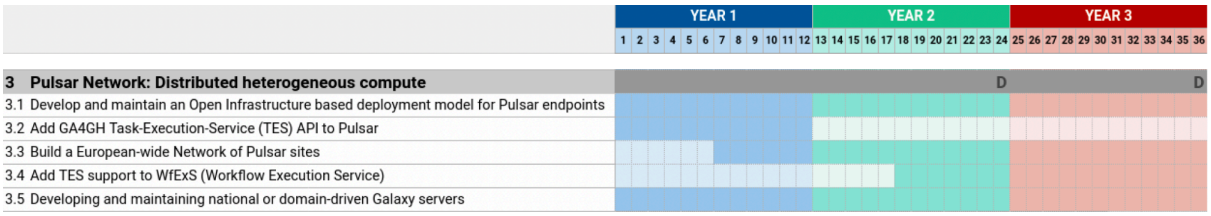
# Activities

## Pulsar endpoints deployment and maintenance

Leader: ?
Goal: ?

# Timeline

Start: March 2023 (M7) - End: August 2025 (M36)




# Deliverables

## D3.1 Operations documentation on the Open Infrastructure deployment

Deadline: **Aug 2024, M24**.
Involvement: T3.1 and T3.5;
Partners: INFN[1], ALU-FR, CESNET, CNR, IISAS, UiO, UB, CNRS

## D3.2 Publication on the Pulsar Network, integrated in workflow management systems

Deadline: **Aug 2025, M36**.
Involvement: T3.1, T3.2, T3.3, T3.4 and T3.5;
Partners: CNR[2] and all WP3 participants

[1] short name of lead participant
[2] short name of lead participant

# Milestones

## M3.1 Demonstrated job submission via the WfExS to the Pulsar Network

Deadline: Aug 2024, M24:
Means of verification: Documentation and pulsar network available
Involvement: T3.1 and T3.3
Partners: INFN, ALU-FR, CESNET, INFN, CNR, IISAS, VIB, EPFL, BSC, CBRS, UiO, AGH/AGH-UST, TUBITAK

# Reference material

## Galaxy

https://galaxyproject.org

## Pulsar

https://pulsar.readthedocs.io/

- Pulsar and containers: https://pulsar.readthedocs.io/en/latest/containers.html#co-execution

https://pulsar-network.readthedocs.io/en/latest/
https://github.com/usegalaxy-eu/pulsar-infrastructure

## TES

https://github.com/ga4gh/task-execution-schemas

## TESP

https://github.com/ndopj/tesp-api

## ARC

https://www.nordugrid.org/arc/arc6/