

## Application form

Select what you want to apply for

1. Data curation, handling and integration for publishing into the cloud
  - a. Project with EOSC-Life data expert support
  - b. EOSC-Life data project without external data expert support
2. Tool interoperability, workflows and containerization
  - a. Project with EOSC-Life workflow expert support
  - b. EOSC-Life workflow project without external workflow expert support
3. Cloud deployment and resources
  - a. Project with EOSC-Life cloud expert support
  - b. EOSC-Life cloud project without external cloud expert support

Select an area you project aligns with and whether you require support from experts in the respective areas. Multiple areas can be selected. All applicants are strongly encouraged to contact the experts (using the consult an Expert button - <https://instruct-eric.eu/submit-proposal/?t=eosclife>). Contact with experts has to be made by 08.12.2020 at the latest)

**Project Title**

**Institutions to be involved in the project and PICs**

Please list all institutions which would be funded for this project. Please include European Commission participant identification codes (PIC) for these institutions if possible (<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/participant-register-search>)

**Scientific background**

Give details about the scientific question you are addressing

Max 4000 characters

**Technical background**

Give details about the technical challenges that will be addressed in your project and what work has already been completed e.g. Dataset already containerised.

Max 4000 characters

**Planned work**

Please include the key deliverables of the planned work with their approximate timings (months) after project initiation.

Max 4000 characters

**Which of the following tools/workflow management systems/registries/infrastructure/standards do you plan to use for your project? Select all that apply.**

*The tools/workflow management systems/registries/infrastructure/standards listed are included in the EOSC-Life roadmap <https://forum.eosc-life.eu/t/eosc-life-wp2-roadmap/31> Using the components included in this roadmap will help EOSC-Life to promote interoperability between research infrastructures*

Conda/Bioconda	Jupyter	ELIXIR bio.tools	Snakemake
Singularity	RStudio	BioContainers	Common Workflow Language
Docker	OpenStack	EOSC-Life Workflow Hub	EOSC Datasets Minimum Information
OpenAPI	Kubernetes	OpenEBench	Don't know
Galaxy	Amazon Web Services	Galaxy workflow-testing	Other (please specify)
KNIME	Global Alliance for Genomics and Health (GA4GH)	EOSC-Life Life monitor	
Nextflow	RO-Crate (researchobject.org)	Workflow testing tools	

**Provide Key features of the data resource/services that you will be using**

*If relevant to your project, give details regarding data types, dimensions, data models, ontologies, current storage and hardware, containerisation, curation, software and licenses, sensitive data or relevant ethical aspects.*

Max 4000 characters

**Key features of your workflow (if relevant to your project)**

*Description of the steps to be executed in your workflow, ontologies, containerisation, workflow engine, software and license, registry, repository. Is your workflow fully established? Is it cloud ready? Describe the limitations and /improvement to be done (e.g. data input/output, runs-only-on-my-computer, user authentication/authorization, compute resources, amount of human intervention, licensing...)*

Max 4000 characters

**Compute and data resources required**

*What compute and data resources are required for your project? Be explicit with the requirements, e.g. CPUhrs, RAM, GBhr storage, Network, ancillary services (data transfer, workflow execution) etc. Describe the sensitivity of the data that will be processed by your project. For each required resource please state whether you would request access through EOSC-Life or whether you have access in-house or from another source.*

Max 4000 characters

**Technical expertise in your team**

*Please list which members of the project team will be responsible for which aspect of the proposed work and detail their expertise.*

Max 4000 characters

**Will you or a member of your team benefit from training? If yes, specify in what specific field**

*Select trainings that would be beneficial to you or a member of your team*

1. no training required
2. data curation
3. data and workflow containerisation
4. policies for data management
5. FAIRification of data
6. workflow management (CWL, snakemake, nextflow, galaxy...)
7. tool registries (Biocontainers...)
8. RO-crate
9. cloud deployment (on OpenStack, kubernetes, AWS, GCP, GA4GH, other (name))
10. cloud infrastructure management (Openstack, Kubernetes, other)
11. data protection
12. Other

**FAIR data (FAIR=Findability, Accessibility, Interoperability, Reusability)**

*Please describe how your project work will improve upon the current situation with regards to FAIR data standards and how you will ensure that your project adheres to FAIR data principles.*

Max 2000 characters

**Expected Impact**

*Please include both expected scientific impact and expected impact providing resources for the EOSC and the scientific community.*

Max 2000 characters

**Scientific domain**

*Select all scientific domain(s) that are relevant to the project. Each domain is associated with an EOSC-Life infrastructure.*

1. Biobanking
2. Bioinformatics
3. Chemical biology
4. Clinical research
5. Functional genomics
6. Biological and biomedical Imaging
7. Marine organisms
8. Microbial resources
9. Pathogenic microorganisms
10. Plant phenotyping

11. Structural biology
12. Systems biology
13. Translational medicine

**Budget**

(download the [template spreadsheet](#) provided and complete with tasks and budget then upload here)

**Relevant publications**

*Please add here up to 10 publications, either by members of your application team or other external works relevant to your project*

max 10

**Duration**

*Please give estimated start and end dates for the project. Projects should have a duration of approximately 12 months and start within 2 months after project acceptance.*

**Sustainability plan**

*What is the plan for the project after EOSC-Life? Include any Data Management Plan, Software Sustainability Management Plan, Project Output Management Plan.*

Max 2000 characters

**Questions dependent on project alignment with the expert areas**

For Projects aligned with Data curation, handling and integration for publishing into the cloud

**Have you been in contact with an EOSC-Life data expert to discuss your project? If “Yes” please give the name of the expert, you have been in contact with**

For Projects aligned with Tool interoperability, workflows and containerization

**Have you been in contact with an EOSC-Life workflow expert to discuss your project? If “Yes” please give the name of the expert, you have been in contact with**

For Projects aligned with Cloud deployment and resources

**Have you been in contact with an EOSC-Life cloud expert to discuss your project? If “Yes” please give the name of the expert, you have been in contact with**

**Technical Support**

*Please give details of any requested support from the EOSC-Life cloud experts during your project.*

**Technical Constraints**

*Are there any technical constraints or flexibility to the project? E.g. This service must be deployed in multiple geophysical regions, or require 99.99% availability, etc.*