

# Towards a Global Federated Framework For Open Science Cloud

|                          |                                                                                                                                                                                                                                                   |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Short description</b> | The ultimate goal of the project is to empower the scientific researchers from Africa and China to interact with EOSC services and data - publish data sets and data analysis services to EOSC Marketplace and access them from outside of Europe |
| <b>Type of community</b> | Others                                                                                                                                                                                                                                            |
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| <b>Interviewer</b>       | <a href="#">Giuseppe La Rocca</a>                                                                                                                                                                                                                 |
| <b>Date of interview</b> |                                                                                                                                                                                                                                                   |
| <b>Meetings</b>          |                                                                                                                                                                                                                                                   |
| <b>Supporters</b>        | <a href="#">Giuseppe La Rocca</a>                                                                                                                                                                                                                 |

- [User stories](#)
- [Use cases](#)
- [Requirements](#)
  - [Technical Requirements](#)
  - [Capacity Requirements](#)

## User stories



### Instruction

Requirements are based on a user story, which is an informal, natural language description of one or more features of a software system. User stories are often written from the perspective of an end user or user of a system. Depending on the community, user stories may be written by various stakeholders including clients, users, managers or development team members. They facilitate sensemaking and communication, that is, they help software teams organize their understanding of the system and its context. Please do not confuse user story with system requirements. A user story is an informal description of a feature; a requirement is a formal description of need (See section later).

User stories may follow one of several formats or templates. The most common would be:

"As a <role>, I want <capability> so that <receive benefit>"

"In order to <receive benefit> as a <role>, I want <goal/desire>"

"As <persona>, I want <what?> so that <why?>" where a persona is a fictional stakeholder (e.g. user). A persona may include a name, picture; characteristics, behaviours, attitudes, and a goal which the product should help them achieve.


Example:

"As provider of the Climate gateway I want to empower researchers from academia to interact with datasets stored in the Climate Catalogue, and bring their own applications to analyse this data on remote cloud servers offered via EGI."

| No. | User stories                                                                                                                                                                                                                                                                                                        |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| US1 | As a user, I want to use federated authentication mechanisms based on EGI AAI Check-In service to access the federated cloud infrastructure composed by EGI and CNIC CAS resources.                                                                                                                                 |
| US2 | As a user, I want to use the OPENcoastS and DMCC+ services to analyse the high resolution (8 m) satellite data exposed by the CASEarth service for the simulation of tsunami, hurricane, typhoon, floods and extreme weather. The high resolution satellite datasets will be to predict the trajectory of typhoons. |
| US3 | As a user, I want to use sensor and satellite data to perform a disaster assessments                                                                                                                                                                                                                                |

|            |                                                                                      |
|------------|--------------------------------------------------------------------------------------|
| <b>US4</b> | As a user, I want to use genomics datasets for analysing genetic make up of diseases |
|------------|--------------------------------------------------------------------------------------|

# Use cases


**Instruction**


A use case is a list of actions or event steps typically defining the interactions between a role (known in the Unified Modeling Language as an actor) and a system to achieve a goal.

Include in this section any diagrams that could facilitate the understanding of the use cases and their relationships.


| Step       | Description of action                                                            | Dependency on 3rd party services (EOSC-hub or other) |
|------------|----------------------------------------------------------------------------------|------------------------------------------------------|
| <b>UC1</b> | The resulting cloud infrastructure integrates federated authentication mechanism | EGI AAI Check-In                                     |
| <b>UC2</b> | ...                                                                              |                                                      |
| ...        |                                                                                  |                                                      |



# Requirements

## Technical Requirements


**Instruction**

- Requirement number: Use numbers RQ1, RQ2, RQ3, ...
- Requirement title: Use a short but descriptive title. Use the same title in the Jira ticket 'Summary' field
- Link to requirement JIRA ticket: Open a ticket in <this JIRA queue <https://jira.eosc-hub.eu/projects/EOSCWP10/issues/EOSCWP10-4?filter=allopenissues>> (click on 'CREATE' button in the middle-top of JIRA)
- Source use case: Refer back to the use cases above (UC1, 2, ...)

| Requirement number | Requirement title                                | Link to Requirement JIRA ticket                                                     | Source Use Case |
|--------------------|--------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|
| Example            | EOSC-hub to provide an FTS data transfer service |  | UC1             |

|     |                                                           |                                                                                                                         |                    |
|-----|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------|
| RQ1 | Enable a global federation of e-Infrastructure            | <div> EOSCWP10<br/>-126 - Jira .</div> | UC1, UC2, UC3, UC4 |
| RQ2 | A forecast system for storm surges in the coast of Taiwan | <div> EOSCWP10<br/>-125 - Jira .</div> | UC2                |
| RQ3 |                                                           |                                                                                                                         |                    |

Capacity Requirements

| EOSC-hub services | Amount of requested resources | Time period |
|-------------------|-------------------------------|-------------|
|                   |                               |             |
|                   |                               |             |
|                   |                               |             |