



Handbook for the EGI-ACE shepherds

Abstract

EGI-ACE is a 30-month project coordinated by the EGI Foundation with a mission to empower researchers from all disciplines to collaborate in data- and compute-intensive research through free-at-point-of-use services.

This handbook provides insights and guidelines for the EGI-ACE shepherds involved with the integration plans of the use cases selected through the EGI-ACE open call, and the onboarding of the resulting solutions in EOSC. Shepherds are technical experts who are assigned to the use cases that are served by the project, and have the overall responsibility for mapping the use cases to providers, managing the implementation of the use cases, and reporting about achievements, lessons learnt and other outcomes.

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TERMINOLOGY

<https://confluence.egi.eu/display/EGIG>

| Terminology/Acronym | Definition |
|---------------------|--|
| PI | Principal Investigator |
| EOSC | European Open Science Cloud |
| EGI-ACE SDS | EGI-ACE Service Delivery and Support group |
| VA | Virtual Access |
| VO | Virtual Organization |
| SO | Service Order |

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1. Introduction

EGI-ACE Horizon 2020 [1] is a European Commission initiative to facilitate access to the cloud technology offered by the 'EOSC¹ Compute Platform' (a federated infrastructure of computing and storage facilities) to the different research communities. EGI-ACE (acronym for *Advanced Computing for EOSC*) is funded by the *European Union's Horizon 2020 research and innovation programme* under grant agreement No. 101017567.

Researchers from all disciplines can formally apply for access to EGI-ACE through the **open calls for Use Cases** [2], which will allow them to use the EOSC services they need to conduct their data- and computation-intensive research, as well as to obtain dedicated user support and training. For example, a Use Case can request access to Cloud Compute services, such as virtual servers, that a scientific project needs to successfully complete its objectives. The researchers involved in this request might not be familiar with cloud technologies and may require specific training and dedicated support from technical experts. These benefits are free of charge to them, as they are sponsored by the European Commission and various national funding agencies.

Use Case applications are reviewed to determine the objective of the request, and to analyse its maturity and its feasibility, amongst others. Selected applications from the different scientific disciplines play an essential role as early adopters of the EOSC, as they will stimulate the engagement of their respective scientific communities and stakeholders in Open Science by leveraging the expertise of the research infrastructures and their service providers.

The purpose of this document is to provide user-friendly guidelines for structuring the interactions between the selected Use Cases and the EGI-ACE project. This interaction is led by the technical experts from EGI-ACE (also known as **Shepherds**), who are involved in the integration plans of the different Use Cases in EOSC and are responsible for their successful implementation.

Shepherds are technical experts who are assigned to the Use Cases served by the project, and have overall responsibility for assigning Use Cases to the appropriate providers, managing the implementation of the Use Cases, monitoring the Use Case status and potential problems, and reporting about achievements, lessons learnt and other outcomes.

Shepherds create 'Competence Centres', which are use-case specific support groups consisting of service providers, technical experts and other interested parties providing assistance for a Use Case.

¹ European Open Science Cloud

For a comprehensive introduction about EGI-ACE, it is recommended to see the “Introduction to EGI” session presented at the *EGI Conference 2021* [3].

The rest of the document is organised in three main sections:

- [Section 2](#) briefly describes the overall engagement process.
- [Section 3](#) highlights the roles and the responsibilities of the EGI-ACE Shepherds, and
- [Section 4](#) provides pointers to additional documentation and links that can be useful to assist Shepherds during the implementation of the work plans.

An overview of the whole workflow for the Use Case management can be found in [Appendix B](#).

2. The Engagement process

The engagement process starts immediately after the EGI-ACE *Service Delivery and Support* group (SDS [4]) expresses positive feedback to support the Use Case during the consensus meeting. The SDS board members are technical experts that will convene to assess together the different Use Case applications. During this consensus meeting, the SDS board members:

- **Agree** on the list of eligible Use Cases to be supported.
- **Identify** resource and service providers to be involved in technical support.
- **Define** an appropriate Shepherd to act as the single point of contact responsible for the Use Case.
- **Inform** the Principal Investigator of the Use Case application about the successful approval of his/her Use Case, which will be supported in the EGI-ACE project. Principal investigators of not selected use cases may be invited to improve and re-submit their applications in one the next cut-off dates.

3. Roles and responsibilities

As soon as the EGI-ACE SDS board members agree to support a Use Case, the Shepherd will organise dedicated meetings with the main Use Case primary contact to ensure a steady progress of the Use Case development in the context of the EGI-ACE project. If necessary, Shepherds can also invite service providers and other relevant interested parties to these meetings, who can provide additional clarification on the technical solutions that the Use Case can adopt.

In a nutshell, the roles and responsibilities of the Shepherd are:

- **Schedule meetings** with the Principal Investigator to clarify the technical requirements of the Use Case, identify the initial set of resources needed to start the integration plan, and agree on a working plan for the coming months.
- **Enable** the capacity allocation in the resource provider(s). Instructions for setting up a Zoom meeting using the facilities offered by EGI are available here [5].
- **Submit a Service Order** (SO) via the EOSC Portal with the resources/services agreed with the Principal Investigator.
- **Update** the WP3 resources allocated to support the Use Case.
- **Keep** updated information of the Use Case at all times in the EGI-ACE Customer database [6].
- **Register** a follow-up action in Jira (under the *EGIREQ* project category [7]) for every problem and suggestion that is raised during a meeting with the customer.
- **Monitor** the progress of the integration plan on a regular basis and report during the regular meetings.
- **Liase** with the Principal Investigator to register potential new services in EOSC.
- **Create** a Case Study of the Use Case for the EGI-ACE Website.

These tasks will be discussed in detail in the following sections.

3.1. Schedule meetings

During the meeting, together with the submitter, the Shepherd should:

- A. Clarify the **geographical coverage/impact** of the Use Case, according to these two possible options:
 - a. If the impact is **local/national**, then the Shepherd should allocate local/national cloud/HTC resources that are already paid by their national agencies to support such national groups.
 - b. If the impact is **international** (or if the Use Case falls outside the mandate of the national provider) then the Shepherd can use cloud/HTC providers that offer resources with EGI-ACE funding, also known as *Virtual Access* (VA) funding. The full list of cloud and HTC providers offering resources for the EOSC Compute Platform is published in Confluence [8].
- B. Identify the **list of services** needed to support the implementation of the work plan. The EGI-ACE Service Catalogue can be found in [9] and a presentation of the portfolio in [10]. It is also recommended to read the user documentation for EGI services [11] and the sessions of the Webinars [12].

C. **Record** the main outcomes and follow-up actions of meetings in the Confluence page of the customer [6], which contains a dedicated entry for each supported Use Case. These entries are created by the EGI-ACE SDS board. Note that the Shepherd needs an EGI SSO account² to access Confluence and record such information.

3.2. Enable the capacity allocation in the provider

The capacity allocation requires the creation of a dedicated **Virtual Organisation**³ (VO), as explained in the EGI *PROC14 procedure* [13], during which the Shepherd assumes the role of the *VO Manager*. The procedure to enable a new capacity allocation in the EGI Operations Portal and the resource provider(s) **must be** coordinated with the Use Case Principal Investigator, who **must** identify VO contacts and the VO Manager to handle requests for joining the EGI resources.

3.3. Submit Service Orders (SOs) in the Marketplace

Submit an *EOSC Service Order* through the EOSC Portal [14] in relation to the Use Case for the types of services required. Instructions for creating a dedicated project for the Use Case in the EOSC Portal and submitting a Service Order can be found in [15].

3.4. Update the EGI-ACE WP3 resources

Update the total amount of WP3 resources allocated to support the specific Use Case in [16]. Instructions to keep the WP3 dashboard up to date are available in the “Instructions” tab of the spreadsheet.

3.5. Monitor progress and report

Monitor the progress of the integration plan with the Principal Investigator by organising regular meetings (typically, monthly or fortnightly meetings). The template found in [17] can be used to report on the status of the integration plans during regular meetings.

Report progress during regular meetings and extract Key Performance Indicators (KPI) and Metrics for dedicated events (e.g. annual conference, project reporting, and the like).

² <https://egi.eu/sso>

³A Virtual Organisation (VO) is an allocation of resources in the scope of a project that, once supported by resource providers, can be monitored in the EGI infrastructure. VOs also provide the technical means to authorise a group of users to access the allocated resources

Attend follow-up meetings (checkpoint) organised with all Shepherds to discuss the status of ongoing Use Cases [18]. These meetings are usually held monthly.

3.6. Onboarding and creation of case study

Liaise with the Principal Investigator on the incorporation of possible new services/platforms/etc. in the EOSC Portal when the Use Case reaches a *production* status. Instructions for service providers to register a new service on the EOSC Portal are available in the 'service providers' section of [19].

Prepare, in collaboration with the Principal Investigator of the Use Case, a *Case Study* for the EGI-ACE Website [20]. A template for the preparation of the Case Study can be found in [Appendix A](#). Revised versions of the case studies waiting to be published in the EGI-ACE website can be temporarily uploaded in the Google shared folder [21].

4. References

- [1] **EGI-ACE Website.** <https://www.egi.eu/projects/egi-ace/>
- [2] **EGI-ACE Open Call for Use Cases.**
<https://www.egi.eu/projects/egi-ace/call-for-use-cases/>
- [3] **EGI-ACE introduction presentation**, EGI Conference 2021.
<https://www.youtube.com/watch?v=X1VAp3O6AtY>
- [4] **SDS Service Delivery and Support board.**
<https://confluence.egi.eu/display/EGIACE/SDS+Service+Delivery+and+Support+board>
- [5] **Setting up a Zoom meeting.**
<https://confluence.egi.eu/display/Office/Setting+up+a+Zoom+meeting+-+Practical+example>
- [6] **Customers DB.** <https://confluence.egi.eu/display/EGIACE/Customers+DB>
- [7] **Jira EGIREQ issues.** <https://jira.egi.eu/projects/EGIREQ/issues>
- [8] **WP3.2 IaaS Services UC.**
<https://confluence.egi.eu/display/EGIACE/WP3.2+IaaS+Services+UC>
- [9] **EGI-ACE Service Catalogue.**
https://marketplace.eosc-portal.eu/services?related_platforms%5B%5D=52
- [10] **EGI-ACE portfolio Presentation.** <https://indico.egi.eu/event/5359/>
- [11] **EGI Services User Guides.** <https://docs.egi.eu/users/>
- [12] **The EGI Webinar Programme.** <https://www.egi.eu/webinars/>
- [13] **PROC14 VO Registration.**
<https://confluence.egi.eu/display/EGIPP/PROC14+VO+Registration>
- [14] **EOSC Marketplace.** <https://marketplace.eosc-portal.eu/>
- [15] **How to submit a service order in the EOSC Marketplace.**
<https://confluence.egi.eu/display/EGIACE/Marketplace>
- [16] **WP3 Resources Dashboard (Capacity Allocation - WP 3).**
<https://docs.google.com/spreadsheets/d/12PCg9FyW1134kcXj280mCdjUygNBQfDVuGWQBw8wz7Y/edit#>
- [17] **PPT template for integration plan meetings.**
<https://docs.google.com/presentation/d/18KNZHL3aTqIUGLN5zyRFjcvKTfParDKd/edit#>
- [18] Minutes from past meetings with Shepherds.
<https://docs.google.com/document/d/1HMJYvv1vc78M0kDIaVGrzb5dEwjZpYhwx33CsSLqPyU/edit#>
- [19] **Service Management Documentation.**
<https://confluence.egi.eu/display/EGIACE/Service+Management+Documentation>

[20] **EGI-ACE case studies.** <https://www.egi.eu/projects/egi-ace/case-studies/>

[21] **EGI-ACE case study shared folder.**

https://drive.google.com/drive/folders/1a9Wry8-kfKCwULwYfHqPieB9YRa5_NIJ

Appendix A. Case Study template

INSERT LOGO

[Catchy title, including the name of the community/organization/project/experiment,... and the challenge they tackle]

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About the user community/organisation/project/experiment,...

Provide:
Social media channels the project/community/organisation is active on (with handles)
Website
Contact information
Legal entity and main partners, other relevant practical information

Elevator Pitch

In one or two sentences: what do you do? What was achieved?

Background information

- What scientific domain are you active in?
- Main objectives: what scientific questions are you trying to answer?
- What do you do specifically (e.g. deliver data and services for X, Y, Z)
- What's new or innovative about your work?

Include a picture (logo, or image illustrating the instruments used or scientific challenge, ... no group pictures!)

Word count: Max. 400

Numbers

List here relevant numbers that you want to share, showcasing the size and impact of the project/community/organisation/experiment,...

Describe some stats about users, about datasets produced, processed, etc.

The number of countries reached, number of publications produced about or with the help of the setup.

Can include EGI-usage statistics, such as list of EGI members you work with, list of services you use from them, number of CPUhs consumed, storage space used, number of jobs submitted, etc.

Note: these numbers can be provided by EGI.

News

Did anything spectacular happen recently? Did a publication generate a lot of interest? Did you make an interesting discovery? Word count: max 100

Provide links and images if relevant

The Challenge

What challenges (computational/data/AAI) did the project/organisation/community face.

Word count: max 200

Support from EGI

When did the collaboration with EGI start and on what did you collaborate at the time?

What format does the collaboration take on now?

Include participation in EOSC-hub, EGI-ACE, other projects, ...

EGI Services used

XXX is now using the following EGI services:

- The [insert service] to [describe purpose].

Additional paragraph if relevant (Word Count: max 300) Describe any interaction between services, where do they fit in the overall workflow?

If you have any graph, image that can illustrate this, you can add it here. We (EGI) might make our own graph if relevant.

Testimony by senior researcher/project lead/...

Note: you can repeat what is said elsewhere in this document, but formulated from a personal angle (we faced issue X, and decided to do Y because we believed that ...). You can also add a direct quote.

- Why did you decide to work with EGI (members)/What challenges does the collaboration with EGI solve for your project/organisation/community/experiment,...?
- Which EGI services are you using and what are you using them for ?
- Why did you choose EGI and not other solutions? What were the alternatives and why didn't they work for you?
- Anything else they want to share :)

Provide:

A headshot (rights cleared)

A full and up-to-date function title/affiliation

Role in the project/community/organisation

EGI providers supporting

[community/organisation/project/experiment,...]

A Service Level Agreement with the following providers was agreed with community/organisation/project/experiment,...

Data centres, resources + numbers (can be a repeat of the table above)

For further details, about the collaboration agreement between EGI and community/organisation/project/experiment,..., please check the [EGI documents repository](#).

Add logos of the EGI services and resources providers supporting the community.

If you need any help with this, we (EGI) can add this information afterwards!

More information and relevant publications

List any relevant publications

Appendix B. Overall workflow

