



PITHIA-NRF

Plasmasphere Ionosphere Thermosphere Integrated
Research Environment and Access services:
a Network of Research Facilities



User Registration

at PITHIA e-Science Centre

User Guide

Version 1.2

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1. Abbreviations

eSC	e-Science Centre
idP	Identity Provider

2. Introduction

This document provides detailed instructions on how users can register and obtain permission to publish Data Collections, Workflows, and Static Datasets at the PITHIA e-Science Centre (eSC).

3. Registration at the e-Science Centre

A user must register at the e-Science Centre only when it is required to publish resources – Data Collections, Workflows, and Static Datasets. Figure 1 presents the landing page of the e-Science Centre. In the top right corner, the user must select the Provider Login/Sign Up option (Figure 2). The e-Science Centre will redirect the user to the EGI Check-in¹ identity management system (Figure 3), so that the user can authenticate and login to the eSC.

¹ EGI Check-in - <https://www.egi.eu/service/check-in/>

The screenshot shows the homepage of the PITHIA e-Science Centre. At the top right, there are links for "Help & Support" and "Provider Login/Sign up". Below the header, a navigation bar includes "Data Collections", "Workflows", "Static Datasets", "Space Physics Ontology and Metadata Model", "Registration Help", and "About PITHIA-NRF". The main content area is titled "PITHIA e-Science Centre" and contains several sections:

- Data Collections**: Includes "Search by Content", "Simple Search", "All Data Collections", and "Data Collection-related Metadata".
- Workflows**: Includes "Search by Content" and "All Workflows".
- Features of Interest**: A list of real-world objects with their properties:
 - SolarSystem (75 Data Collections)
 - SolarSystem: Celestial Body (72 Data Collections)
 - SolarSystem: Heliosphere (1 Data Collection)
 - SolarSystem: Sun (5 Data Collections)
- Static Datasets**: Includes "Search by Content" and "All Static Datasets".
- Space Physics Ontology and Metadata Model**: Includes "Space Physics Ontology Guide", "Space Physics Ontology Browser", and "Space Physics Metadata Model".
- Registration Help**: Includes a "Data Resource Registration Guide".

At the bottom, there are links for "Contact Support", "Privacy Policy", "Terms of Use", "About PITHIA-NRF", and a "Theme" dropdown. A note at the bottom states: "This work uses the EGI infrastructure with the dedicated support of IN2P3-IRES".

Figure 1 – PITHIA e-Science Centre landing page

This screenshot shows a simplified view of the PITHIA e-Science Centre interface, focusing on the top right corner where "Help & Support" and "Provider Login/Sign up" links are located.

Figure 2 – PITHIA e-Science Centre Login/Sign Up option

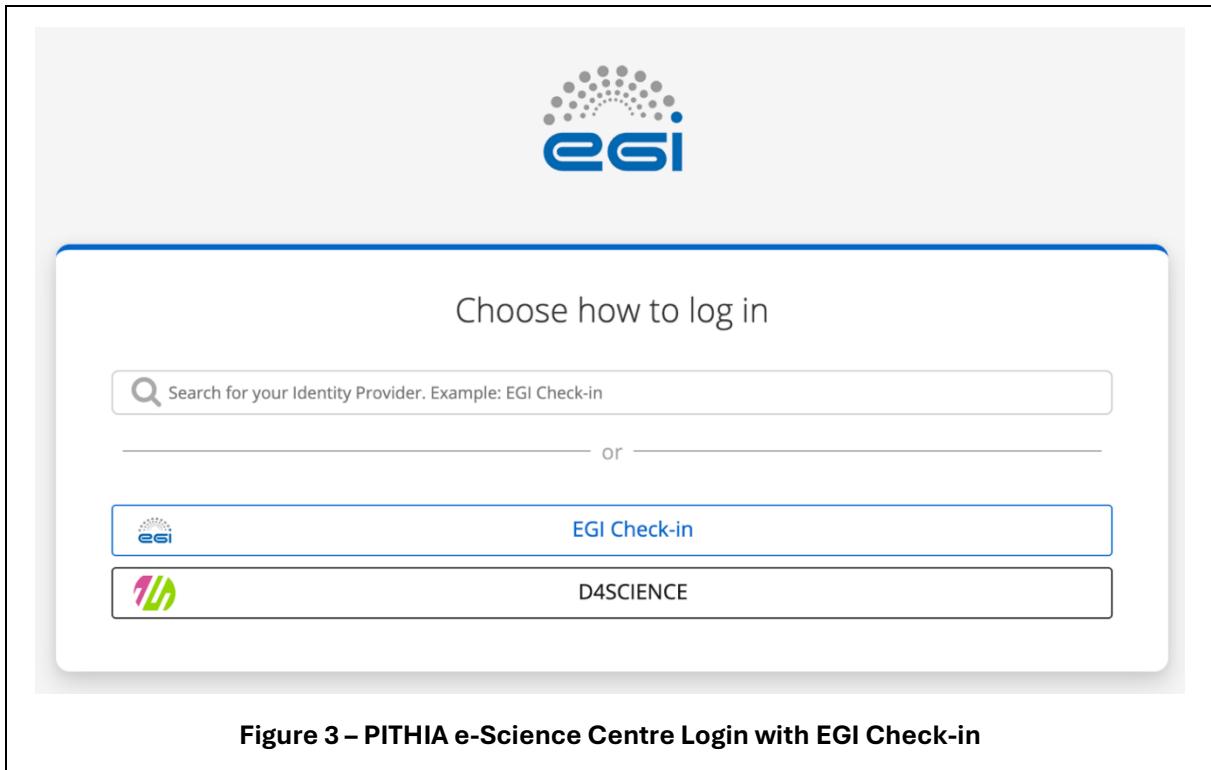
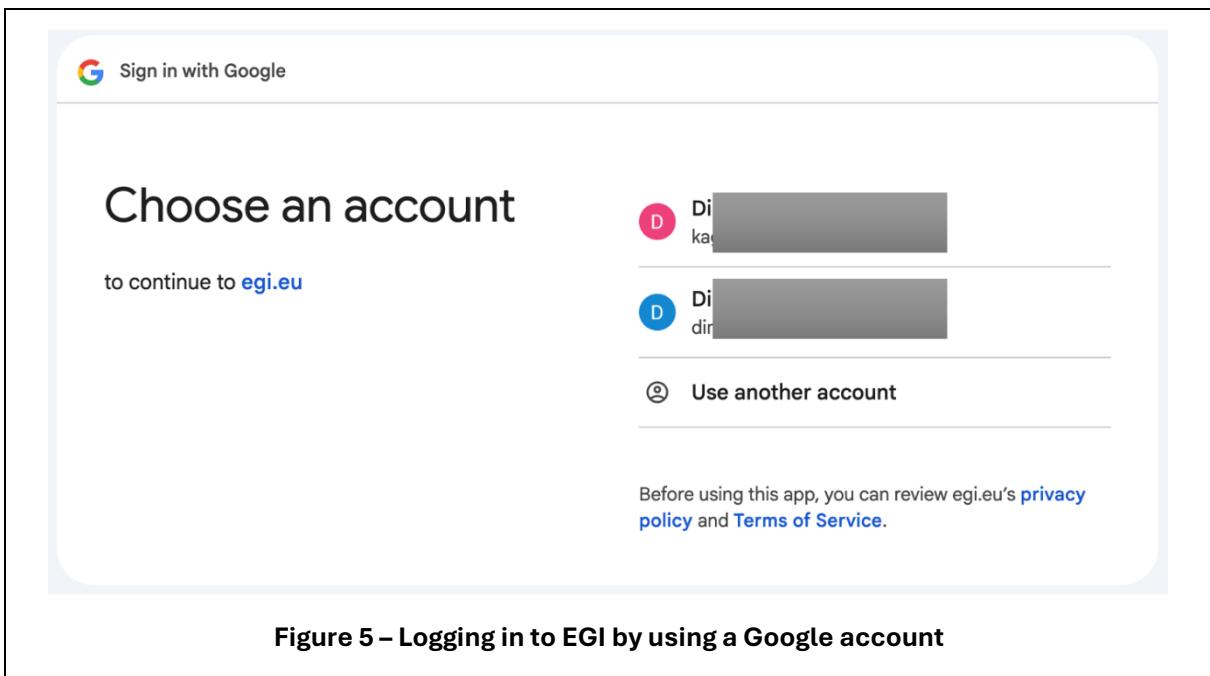
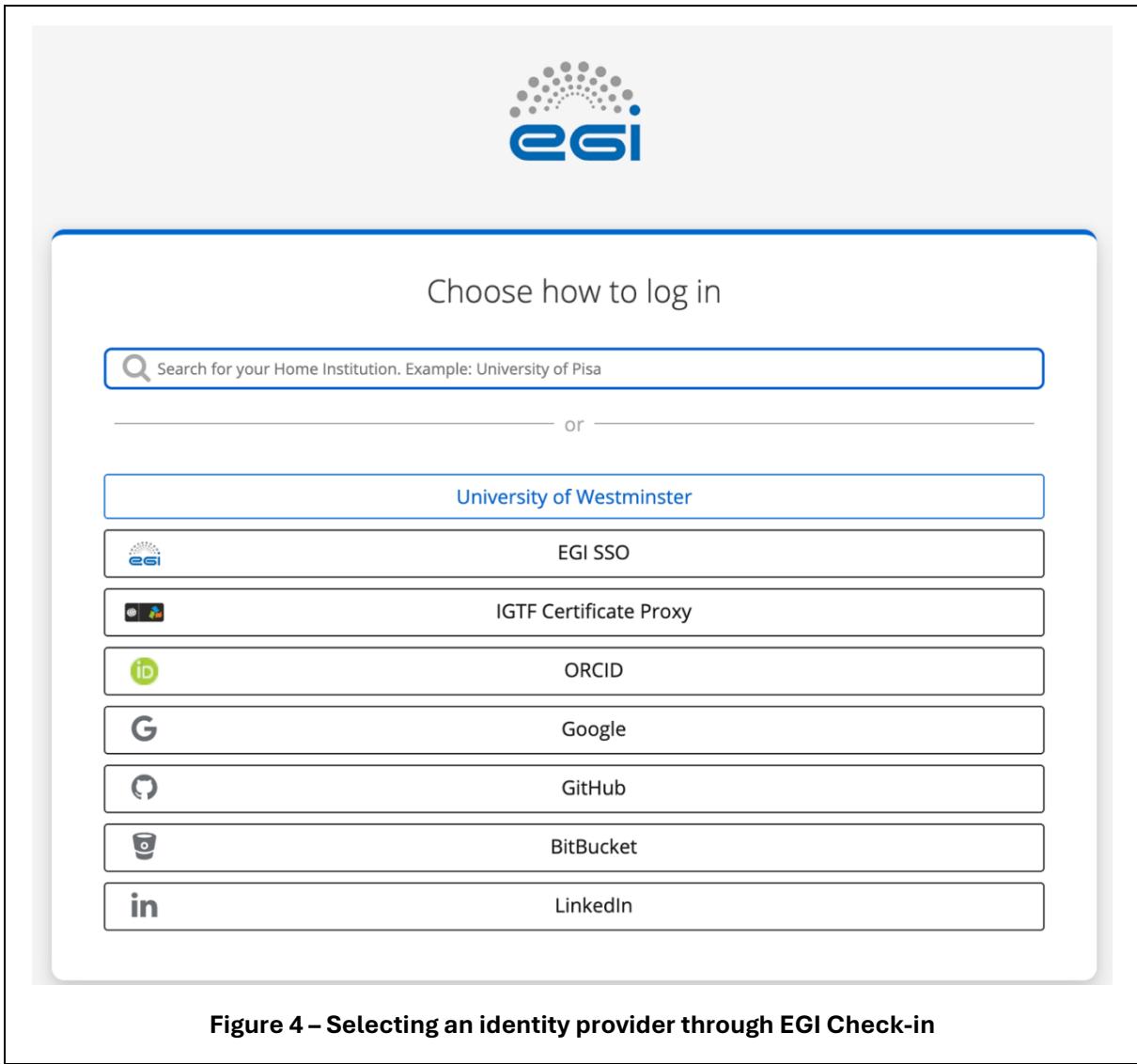


Figure 3 – PITHIA e-Science Centre Login with EGI Check-in

In Figure 3 above, the user must select whether they would like to log in by using D4SCIENCE or EGI Check-in. The most common option for the PITHIA community is EGI Check-in. Once the user selects EGI Check-in, they must select an Identity Provider (idP) (Figure 4). The recommended authentication method requires a user to search for their Home Institution, such as the University of Westminster, as shown in the figure, and log in using their institutional credentials at their home institution's authentication portal. It is acceptable, though, for a user to use any of the other login options. For instance, by selecting Google, the user is taken to Google's authentication portal, as shown in this guide, where they are requested to grant permission to log in to EGI.eu (Figure 5). Then, a notification states what EGI.eu requires to collect from Google, such as the name and email address, and the user decides whether to accept it or not (Figure 6).



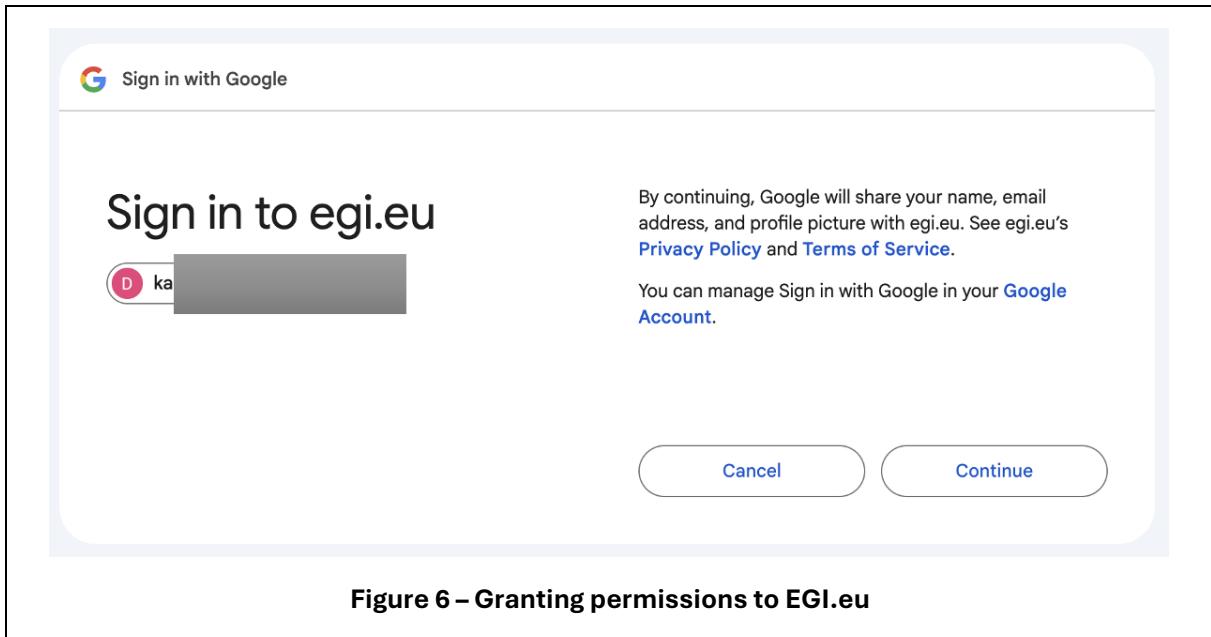


Figure 6 – Granting permissions to EGI.eu

Having authenticated and granted permissions with an identity provider (idP) to EGI, the EGI requests that the users confirm their personal information, as shown in Figure 7, provide a username, and agree to the Acceptable Use Policy shown in Figure 8, to complete the EGI signup process.



Welcome! Sign up

Please take a minute to sign up. To make the sign-up process quicker and easier, some information has been pre-filled based on your authentication provider. Please review, complete any missing details, and confirm your information.

Email
ka [REDACTED]

First name
Di [REDACTED]

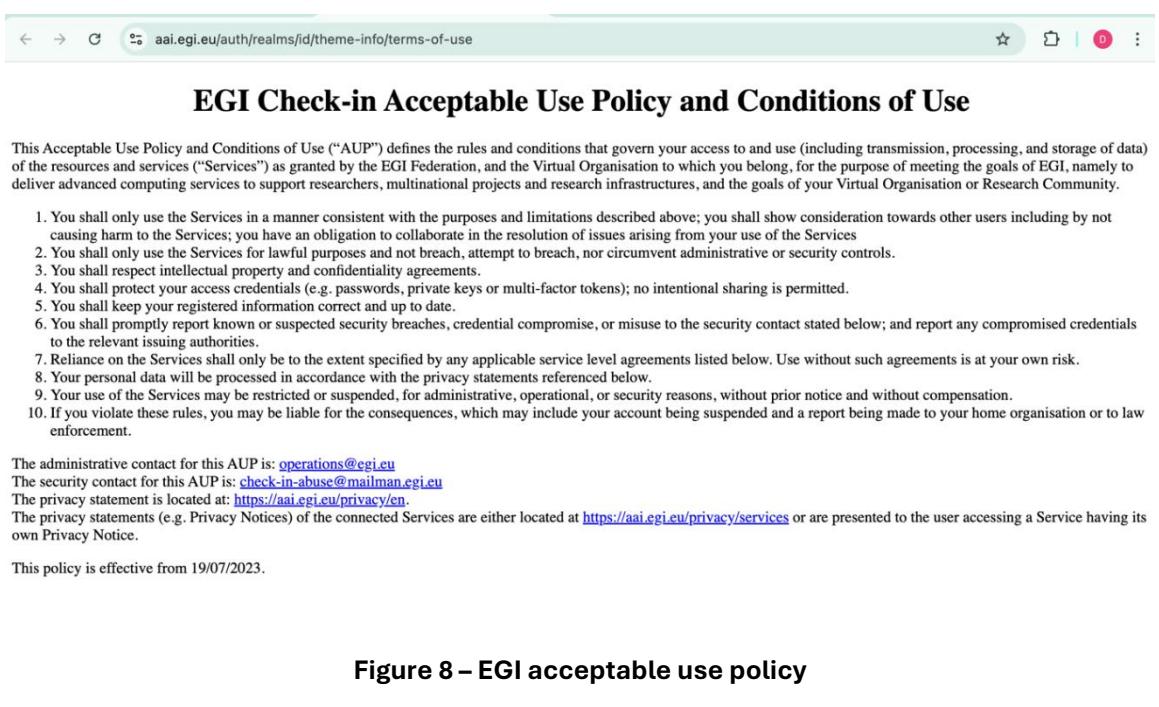
Last name
Ka [REDACTED]

Preferred Username ⓘ
ka [REDACTED]

I agree to the [Acceptable User Policy](#)

Sign Up

Figure 7 – Sign up at EGI



EGI Check-in Acceptable Use Policy and Conditions of Use

This Acceptable Use Policy and Conditions of Use ("AUP") defines the rules and conditions that govern your access to and use (including transmission, processing, and storage of data) of the resources and services ("Services") as granted by the EGI Federation, and the Virtual Organisation to which you belong, for the purpose of meeting the goals of EGI, namely to deliver advanced computing services to support researchers, multinational projects and research infrastructures, and the goals of your Virtual Organisation or Research Community.

1. You shall only use the Services in a manner consistent with the purposes and limitations described above; you shall show consideration towards other users including by not causing harm to the Services; you have an obligation to collaborate in the resolution of issues arising from your use of the Services
2. You shall only use the Services for lawful purposes and not breach, attempt to breach, nor circumvent administrative or security controls.
3. You shall respect intellectual property and confidentiality agreements.
4. You shall protect your access credentials (e.g. passwords, private keys or multi-factor tokens); no intentional sharing is permitted.
5. You shall keep your registered information correct and up to date.
6. You shall promptly report known or suspected security breaches, credential compromise, or misuse to the security contact stated below; and report any compromised credentials to the relevant issuing authorities.
7. Reliance on the Services shall only be to the extent specified by any applicable service level agreements listed below. Use without such agreements is at your own risk.
8. Your personal data will be processed in accordance with the privacy statements referenced below.
9. Your use of the Services may be restricted or suspended, for administrative, operational, or security reasons, without prior notice and without compensation.
10. If you violate these rules, you may be liable for the consequences, which may include your account being suspended and a report being made to your home organisation or to law enforcement.

The administrative contact for this AUP is: operations@egi.eu
The security contact for this AUP is: check-in-abuse@mailman.egi.eu
The privacy statement is located at: <https://aai.egi.eu/privacy/en>
The privacy statements (e.g. Privacy Notices) of the connected Services are either located at <https://aai.egi.eu/privacy/services> or are presented to the user accessing a Service having its own Privacy Notice.

This policy is effective from 19/07/2023.

Figure 8 – EGI acceptable use policy

The above signup process is designed to allow EGI to access users' information. As a next step, the user must join the PITHIA community. The e-Science Centre is built on top of EGI services, and Check-in is one of its components. Figure 9 presents the next step in this signup process, which is granting access to the PITHIA e-Science Centre. The users must review the Privacy Policy <https://esc.pithia.eu/privacy-policy> and the Acceptable Use Police <https://esc.pithia.eu/terms-of-use> of the e-Science Centre. Once a user clicks the Yes button, the user returns to the e-Science Centre, having signed up and already logged in. The upper right corner now displays the user's first name (Figure 10).

The screenshot shows a permission request dialog. At the top is the EGI logo. Below it is the PITHIA-NRF logo, which is circular with a blue and white pixelated pattern and the text 'PITHIA-NRF' around the perimeter. The main title is 'Grant Access to Pithia e-Science Centre'. A sub-section asks for permissions: 'This service requests the following permissions:' followed by a bulleted list: 'View your rights to resources', 'View your basic profile info', and 'View your email address'. Below this, it says 'The service is based in: France'. It then asks the user to trust the service by reading the 'Privacy Policy' and 'Acceptable Use Policy'. A detailed description follows: 'Description provided by the service: PITHIA, Plasmasphere Ionosphere Thermosphere Integrated Research Environment and Access services, aims to integrate data, models and physical observing facilities for further advancing European research capacity in this area. A central point of PITHIA is the PITHIA e-Science Centre that provides access to distributed data sources and prediction models to support scientific discovery. The e-Science Centre enables scientist to access Data Collections (datasets or models) from one single entry point, find them based on a rich set of metadata and interact (download and analyse data, run prediction models) with them through graphical user interfaces.' There is a link 'Additional information about the service'. Contact information is listed: 'Contacts: yin.chen@egi.eu, levente.farkas@egi.eu' and 'You can revoke access from the [Applications dashboard](#)'. At the bottom are two buttons: a blue 'Yes' button and a grey 'No' button.

Figure 9 – Granting permissions to the PITHIA e-Science Centre

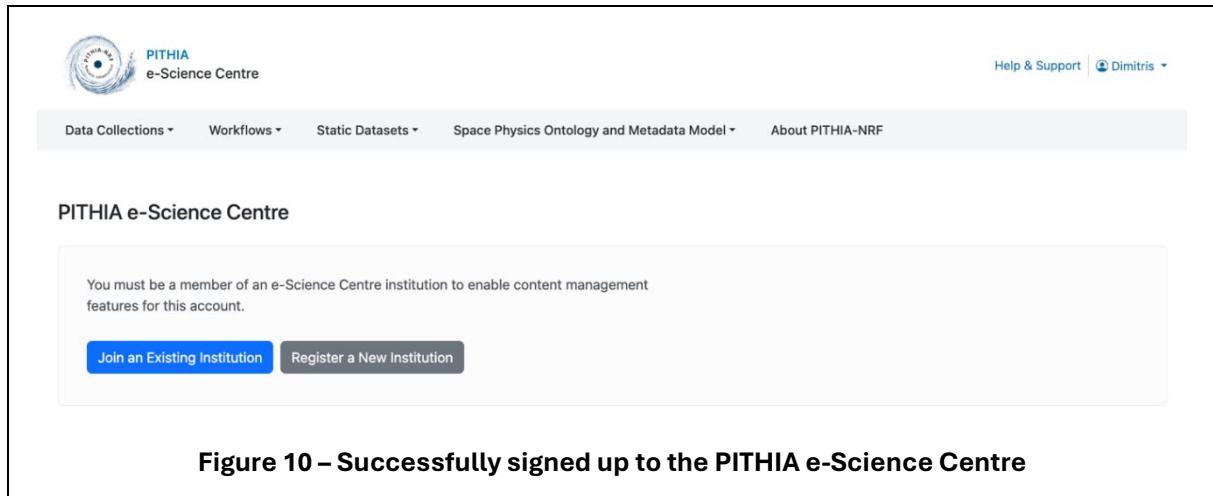


Figure 10 – Successfully signed up to the PITHIA e-Science Centre

As it can be seen, a user who registers at the e-Science Centre must select an identity provider, accept both EGI and PITHIA e-Science Centre policies, and then return to the e-Science Centre as a logged-in user.

Now that the user is logged in and authenticated, they must acquire authorisation to publish Data Collections, Workflows, or Static Datasets. To do so, the user must choose “Register a New Institution” or “Join an Existing Institution”. All resources in the PITHIA e-Science Centre are published under one of the e-Science Centre’s available institutions, and the user performs this action on behalf of an institution that is a member.

The first time users log in to the e-Science Centre, they see a notification to join or create an institution (Figure 10). Whatever action they choose, they must first join the PITHIA community at EGI Perun² and grant access to the service (Figure 11). EGI Perun is the authorisation service for the e-Science Centre.

² EGI Perun - <https://perun.egi.eu/>

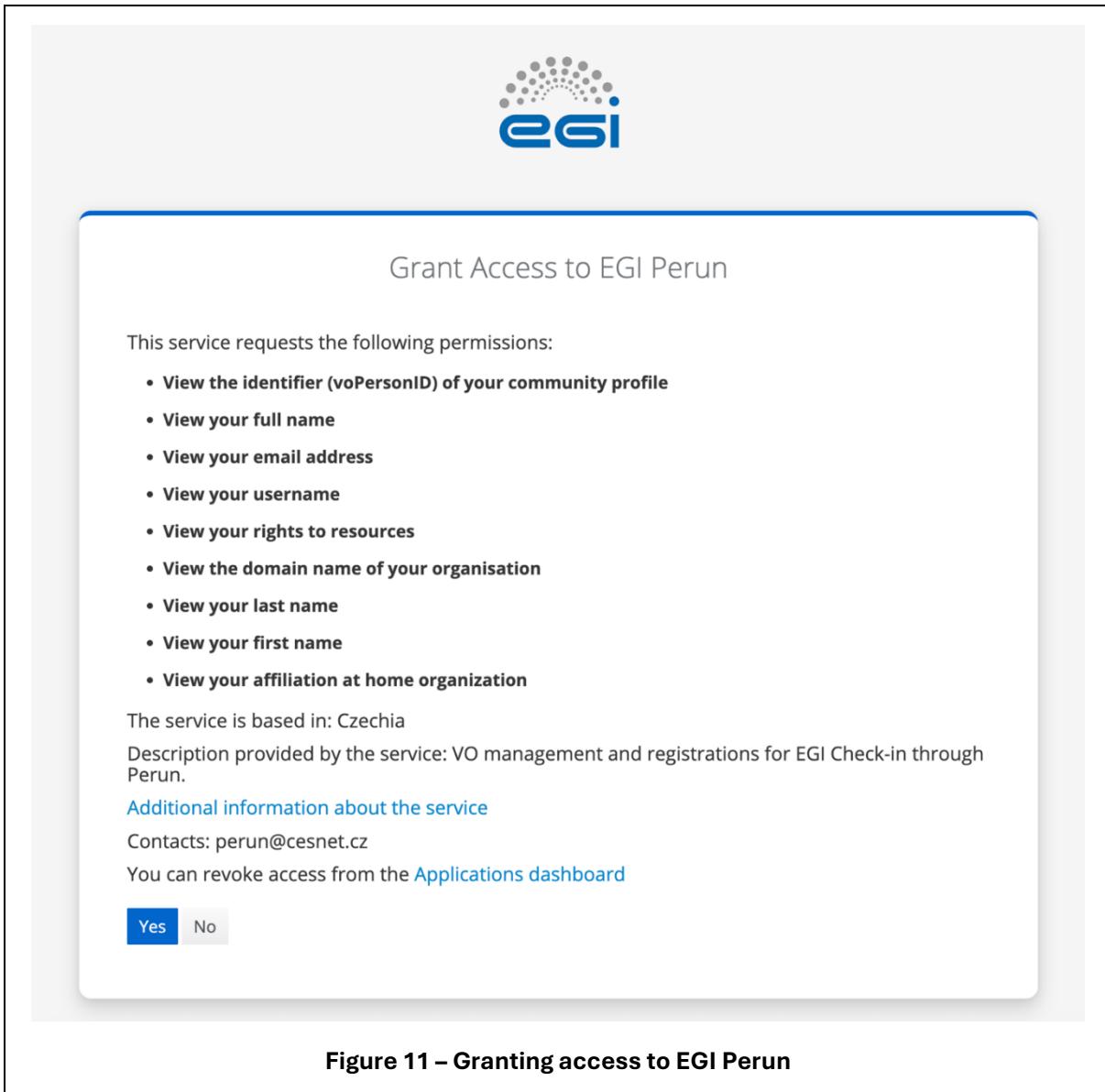


Figure 11 – Granting access to EGI Perun

The subsequent section describes how a user joins an existing institution or registers a new one.

4. Join an Existing Institution

Joining an existing institution requires approval from the institution's administrators.

In case a user selects to join an existing institution (Figure 10), they must first find and choose the institution they would like to join (Figure 12) and then select to request joining the institution as an admin or member (Figure 13). Both members and admins can publish resources; admins can also accept users to join as members of the institution.

[Home](#)

Join an Institution

[ARCAFF - Active Region Classification and Flare Forecasting](#)

[Astron](#)

[Borealis Global Designs](#)

[Centre National d Etudes Spatiales](#)

[Centrum Badan Kosmicznych Polskiej Akademii Nauk](#)

[EISCAT Scientific Association](#)

[Ebro Observatory](#)

[GFZ German Research Centre for Geosciences](#)

[German Aerospace Center - DLR - Institute for Solar-Terrestrial Physics](#)

[Institute of Atmospheric Physics CAS Prague](#)

[Istituto Nazionale di Geofisica e Vulcanologia](#)

[KU Leuven](#)

[National Observatory of Athens](#)

[Pithia Organisation](#)

[Polytechnic University of Catalonia](#)

[Royal Belgian Institute for Space Aeronomy](#)

[Royal Meteorological Institute of Belgium](#)

[Royal Observatory of Belgium](#)

[Sodankyla Geophysical Observatory](#)

[University Toulouse III](#)

[University of Westminster](#)

[jfwConsult](#)

Figure 12 – Selecting an institution to join

Join Pithia Organisation

[Join as an Admin](#)

[Join as a Member](#)

If your request to join this institution has been approved and you are still unable to access it, logging out and logging back in again may fix the problem. If this does not work, please [let our support team know](#).

[Contact Support](#) | [Privacy Policy](#) | [Terms of Use](#) | [About PITHIA-NRF](#)

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Figure 13 – Selecting to join as admin or member

Having selected to join as a member or admin, the user must grant access to Perun, as shown in Figure 11. Finally, the user can submit a request to join the institution at Perun (Figure 14) and once the request is submitted, Perun returns a confirmation message to the user (Figure 15).

Registration for Pithia Organisation

Placeholder for custom text or instructions.

Name*

Din

E-mail*

din



Submit

Figure 14 – Submitting a request to register as an eSC user in Perun

You have successfully applied for membership

Please wait until your application has been approved. You will be notified by email.

Figure 15 – Join an institution request confirmation message

After submitting an application for membership in an institution, a user receives an email message and waits for approval.

Dear User,
your registration for the e-Science Centre has been approved.
--
e-Science Center
vo-manage@pithia-nrf.eu

Following the above email, the eSC admin receives a notification to permit the user to register at the e-SC in EGI Perun. Once this is accepted, another notification is sent to the institution's administrator to accept or reject the request. Upon acceptance, the user receives the following email.

Dear User,
your registration for the Pithia Organisation has been approved.
--
e-Science Center
vo-manage@pithia-nrf.eu

Once the above steps are complete, the user must log out of the e-Science Centre and then log in again to update their authorisation information. Now, the user can register and publish Data Collections, Workflows, and Static Datasets on behalf of the institution that was permitted to join.

5. Register a New Institution

Registering a new institution requires approval from the PITHIA community board.

In case a user selects to register a new institution (Figure 10) and grants access to Perun (Figure 11), they must first register at the e-Science Centre in Perun (Figure 16) and then

submit a request to create a new institution (Figure 17). The institution/organisation name, description and purpose are required.

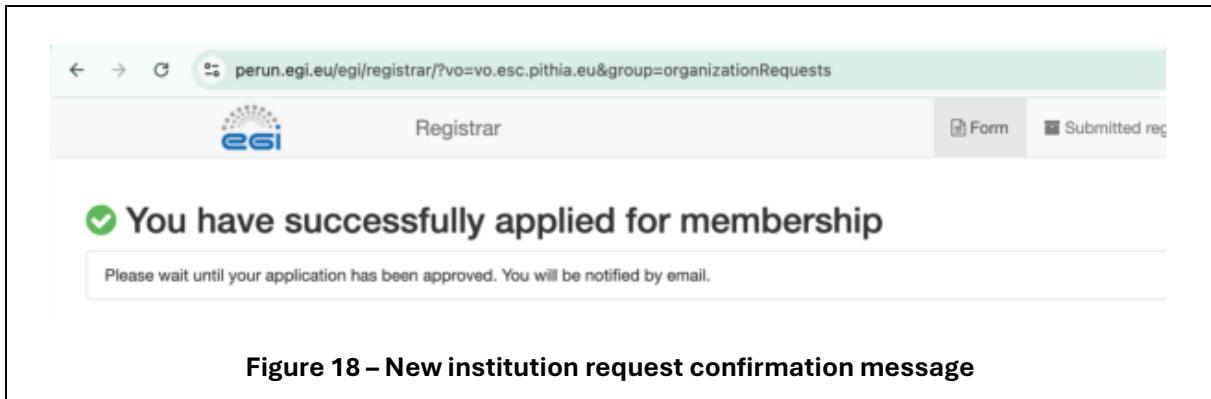
The screenshot shows a web browser window with the URL perun.evi.eu/egi/registrar/?vo=vo.esc.pithia.eu&group=organizationRequests. The page title is "Registrar". The main heading is "Registration for the E-Science Center". Below it is a placeholder text "Placeholder for custom text or instructions.". There are two input fields: "Name*" with the value "D" and "E-mail*" with the value "ka". A green "Submit" button is at the bottom.

Figure 16 – Submitting a request to register as an eSC user in Perun

The screenshot shows a web browser window with the URL perun.evi.eu/egi/registrar/?vo=vo.esc.pithia.eu&group=organizationRequests. The page title is "Registrar". The main heading is "Request to create a new institution". Below it is a placeholder text "Placeholder for custom text or instructions.". There are three input fields: "Organization name*" (empty), "Organization description*" (empty), and "Organization purpose*" (empty). A green "Request a new organisation" button is at the bottom.

Figure 17 – Submitting a request to create a new institution

Once the request for registering a new organisation is submitted, Perun returns a confirmation message that the request was submitted successfully (Figure 18).



Having successfully requested to create an institution, the user receives an email such as the following:

Dear User,

your registration for the e-Science Centre with ID XXX has been submitted and is awaiting approval by the administrator.

If you have changed your email address during registration, you will receive a verification link in the next message.

Without address verification, your registration cannot be approved.

You will be notified of the approval or rejection of your registration in a separate message.

--

e-Science Center

vo-manage@pithia-nrf.eu

The e-Science Centre administrator accepts the request to join the e-Science Centre in Perun, and the user receives a second message:

Dear User,

your registration for the e-Science Centre has been approved.

--

e-Science Center

vo-manage@pithia-nrf.eu

Finally, if the administrator accepts the request based on the PITHIA community board's decision, the user receives a final email with the following text:

Dear User,

your request for a new organization "Pithia Organisation" has been approved by administrator and your organization

has been created.

Administrative interface for your organization can be found here:

<https://perun.egi.eu/egi/gui/>?

--

e-Science Center

vo-manage@pithia-nrf.eu

Once the above steps are complete and the user receives the final confirmation email, they must log out from the e-Science Centre and re-login to update their authorisation information. Now, the user can register and publish Data Collections, Workflows, and Static Datasets on behalf of the newly created institution.

6. Manage Registrations

After registering at the e-Science Centre and joining an institution, users are presented with a landing page similar to the one shown in Figure 19. At the bottom of Figure 19, the user can see the institution they are a member of and select to manage their registrations (Figure 20), i.e. register new Data Collections, Workflows, and Static Datasets and/or edit the existing ones.

PITHIA e-Science Centre

 PITHIA
e-Science Centre

Help & Support |  Aggeliki (National Observatory of ...)

Data Collections ▾ Workflows ▾ Static Datasets ▾ Space Physics Ontology and Metadata Model ▾ Manage Registrations ▾ About PITHIA-NRF

PITHIA e-Science Centre

Data Collections

-  ?
Search by Content
-  ?
Simple Search
-  ?
All Data Collections
-  ?
Data Collection-related Metadata

Workflows

-  ?
Search by Content
-  ?
All Workflows

Features of Interest

Real-world object that carries the property which is observed or modelled to produce a Data Collection.

- SolarSystem**
75 Data Collections
- SolarSystem: Celestial Body**
72 Data Collections
- SolarSystem: Heliosphere**
1 Data Collection
- SolarSystem: Sun**
5 Data Collections

Static Datasets

-  ?
Search by Content
-  ?
All Static Datasets

Space Physics Ontology and Metadata Model

-  ?
Space Physics Ontology Guide
-  ?
Space Physics Ontology Browser
-  ?
Space Physics Metadata Model

Space Physics Ontology and Metadata Model

-  ?
Space Physics Ontology Guide
-  ?
Space Physics Ontology Browser
-  ?
Space Physics Metadata Model

Registration Help

-  ?
Data Resource Registration Guide

National Observatory of Athens

- [Manage Registrations](#)
- [View Members](#)

e-Science Centre Institutions

- [Register a New Institution](#)
- [Join Another Institution](#)

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This work uses the EGI infrastructure with the dedicated support of IN2P3-IRES

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Figure 19 – Landing page of a registered user with an active membership in an institution

National Observatory of Athens

- [Manage Registrations](#)
- [View Members](#)

Figure 20 – Manage registrations option for a specific institution

Guidelines on how to register new Data Collections, Workflows, and Static Datasets are given to the relevant User Guides available on the e-Science Centre.