

USER MANUAL

1. INTRODUCTION

CLOUDIFIN is a Cloud computing centre managed by the Department of Computational Physics and Information Technology (DFCTI), at the Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering (IFIN-HH, https://www.nipne.ro/). It provides resources and services for researchers, research groups and research communities, in scientific domains related to the research and experimental development on natural sciences and engineering, and their applications. The site is fully integrated into the EGI's Federated Cloud and contributes to the EOSC infrastructure.

This manual details the steps that should be followed by anyone who intends to use CLOUDIFIN's infrastructure to carry out a computing project, from requesting resources to achieving and reporting the results.

Here by *computing project* is meant a coordonated activity that requires specific ITC resources and services for a limited duration of time in order to reach a well-defined goal with scientific relevance.

2. ACCESS PROCEDURE

The request for access to the resources and services provided by CLOUDIFIN is made by filling in an electronic form (AAF - Access Application Form) with information on the technical requirements and relevant scientific aspects of the proposed calculation project. The AAF also captures/includes the identification and the contact data of the applicant and of the principal investigator/team lider/supervisor.

The application is reviewed by the *Computing Resources Committee* (CRC), that makes the appropriate decision, taking into account the resource request/availability, technical capacity of the applicant and the scientific value of the project.

During the evaluation, the CRC may require more information on various aspects of the proposal.

Eventually the application may be accepted as it is, or accepted with amendments, or rejected, and the result of the evaluation is communicated to the applicant.

If the request is positively evaluated and the applicant agrees the conditions imposed by the CRC, he/she must undertake to comply with the *Terms of Use* (https://cloud.ifin.ro/TermsOfUse.pdf) and the *Privacy Policy* (https://cloud.ifin.ro/PrivacyPolicy.pdf), before having access granted to specific resources and services provided by CLOUDIFIN for the duration of the computing project. The applicant will be registered as a user and will get an account where his personal and work data will be stored in.

3. ACCESS INTERFACE

The access interface (https://cloud.ifin.ro/) has multiple purposes:

- to register a new user together with a computing project that he/she proposes;
- to access the resources of an ongoing computing project;
- to register a new user on an existing computing project;

- to let an existing user register a new computing project;
- allow a user to create a new password (e.g. in case of lost).

The possibility of registering a user without at least one computing project associated with him/her was excluded.

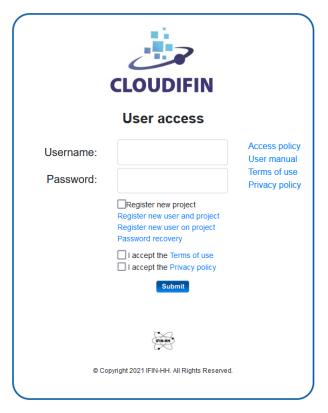


Fig. 1: Access interface

The actions that the visitor of the page should perform in order to achieve the above results are described below.

- 1. To register as a user and register a project proposal, the visitor should select the "Register new user and project" option.
- 2. The access by a registered user of the resources allocated to an ongoing computing project requires the completion of the "Username" and "Password" fields.
- 3. To register as a user on an ongoing computing project, the visitor should select the "Register new user on project" option.
- 4. The registration of a new computing project by an existing user starts by filling in the fields "Username", "Password", and selecting the box "Register new project".
- 5. The procedure for creating a new password begins with the completion of the "Username" field, followed by the selection of the "Password recovery" button.

Then, in the cases 2 and 4 above, before clicking the "Submit" button, the visitor of the page must check the "I accept the Terms of use / Privacy policy" boxes, after reading the contents of those documents.

The access interface also provides links to the documentation regarding the access policy, this user manual, the terms of use, and the privacy policy.

4. REGISTRATION OF NEW USERS AND PROJECTS

After selecting the "Register new user and project" option, the visitor of the page is directed to the AAF presented below.

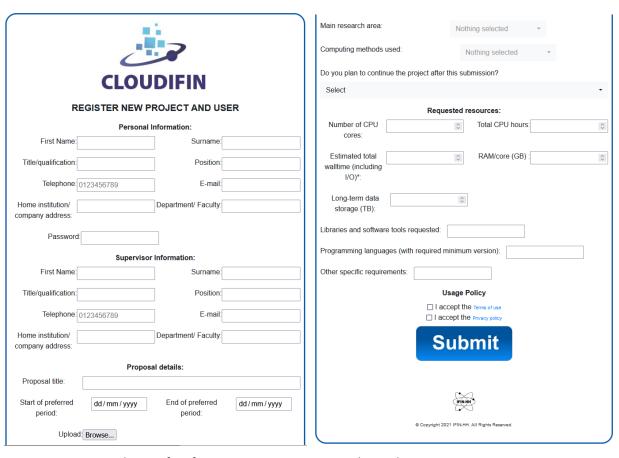


Fig. 2: The interface for registering new users together with new computing projects

The form fields are grouped in 5 sections regarding person and project attributes, and user pledges:

1. Identification and contact data of the applicant ("Personal information")

Fields to be filled in:

First name	Surname
Title/qualification (dropdown select menu)	Position
Telephone number	e-mail address
Home institution / company address	Department/Faculty

2. Identification and contact data of the principal investigator/team lider/supervisor indicated by the applicant in relation with the computing project ("Supervisor information")

Fields to be filled in:

First name
Surname
Title/qualification (dropdown select menu)
Telephone number*
Home institution or company address
Position
e-mail address
Department/Faculty

3. General information regarding the computing project ("Proposal details") Fields:

Proposal title (max. 100 characters)

Preferred start date (dd/mm/yyy) Proposed end date (dd/mm/yyy)

Upload project description (max. 5000 characters) (button => file selection from client)

Main research area (dropdown select menu)

Compute methods used (dropdown select menu)

Do you plan to continue the project after the proposed end date? (YES/NO menu)

4. Resource request ("Requested resources")

Number of CPU cores

Total CPU hours (sum hours for each core) (textbox)

Estimated total walltime (including I/O time)*

RAM/core (GB)

Long-term data storage (TB)

Libraries and software tools (max. 200 characters)

Programming languages (specify min. version)

Other specific requirements (max. 500 characters)

5. User commitments

I read and accept the <u>Terms of Use</u> (tickbox)
I read and accept the <u>Privacy Policy</u> (tickbox)

If all the fields are filled in correctly, the click on the "Submit" button will trigger two actions:

- a) the information provided by the applicant will be forwarded to the Computing Review Committee, which will evaluate the project proposal;
- b) an e-mail will be sent to the address provided by the visitor, containing his application.

If the application is accepted, the applicant will acquire an account in quality of "project leader".

5. REGISTRATION OF A NEW COMPUTING PROJECT

After a registered user fills in the correct *Username* and *Password* on the access interface, when selecting the box "*Register new project*" he/she is redirected to the project registration form which is reproduced in Fig. 3.

All the fields of the form referring to the identification and the contact data will be pre-filled and inactive. If the user intends to change this information, he/she must login into his/her account.

The active fields are identical to those of the last four groups in the form that was presented in Section 4.

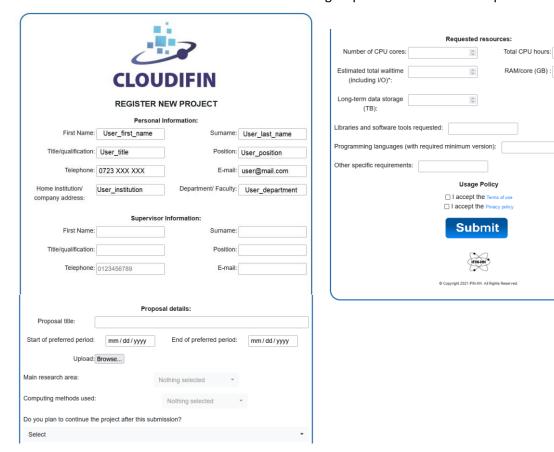


Fig. 3: The form that a registered user should! fill in for registering a new computing project

As in the previous section, by clicking on the "Submit" button the user will forward the application to the Computing Review Committee, and will receive a copy of it by e-mail.

6. REGISTRATION OF A NEW USER IN A COMPUTING PROJECT

The relationship between users and computing projects is many-to-many. While the many-projects-per-user situation was treated in Section 5, here we focus on the many-users-per-project case.

It is assumed that an ongoing computing project was previously defined by a different user and now, for some reasons, another user would like to have access to the project resources.

Because the project information is already stored in the database, all what is needed is:

- a) the ID and contact data of the applicant;
- b) the agreement of the project leader for joining the new user in the team.

The registration interface is shown in Fig. 4.



Fig. 4: The interface for the registration of a new user on an existing project

The fields for the capture of the identification and contact data of the applicant ("Personal information") are similar to those seen in Fig. 2.

The name of the project leader is pre-filled and inactive, but the applicant should provide the e-mail address of the project leader. This address will be used to get the project leader's acceptance.

Before sending the form, the applicant should confirm that he/she has read and accepts the Terms of Use and the Privacy Policy.

7. REQUEST FOR PASSWORD CHANGE

Whenever a wrong password is filled in the "Password" field an error message is issued.

If the user does not remember his/her password, a new password can be generated through the following standard procedure.

First, the user should access the "Password recovery" link, which will open a new form where the user's email address should be filled in. After submission, if the e-mail address corresponds to a registered account, an e-mail will be sent to that address for the request confirmation, which will include a link to the web page where a new password can be set, that shold satisfy some minimal security conditions.