

Helpdesk

The EOSC-hub Helpdesk (<https://helpdesk.eosc-hub.eu/>) is the entry point and ticketing system/request tracker for issues concerning EOSC services. New service providers of EOSC can integrate into the Helpdesk and this results in:

- a corresponding support topic listed on the Helpdesk user interface (for users to ask questions or raise issues directly to the provider)
- the provider support team to receive notifications about tickets that are assigned to this topic by the users, or by the ticket handler team of EOSC-hub.

The Helpdesk therefore serves two groups, offering the following features to them:

- Main features offered to users:
 - Creation of a ticket for any of the EOSC Services (Hub and EOSC Portfolios)
 - Display all the tickets created by the owner
 - Find previously created tickets
 - Receive notifications about answers and changes to the tickets
 - Login with the EOSC AAI system
- Main features offered to the provider Helpdesk Team:
 - Notification when a new ticket is created
 - Classification of the tickets
 - Escalation of the tickets to the ticket handler team of EOSC-hub
 - Creation of a new support unit with assignation of an administrator role to specific users
 - Management of incident or disruption of Hub services
 - Interface for communicating with other service providers ticketing systems
 - First level support for EOSC integrated services as a service
 - Interface with a Known Errors Database and with a Change Management Database

EOSC services can use the EOSC Helpdesk choosing one of the following integration options:

1. Direct Usage: Use directly the EOSC helpdesk as the ticketing system for the service.
2. Ticket Redirection: Use the EOSC helpdesk only as a contact point to redirect the entry request for the specific service to a mailing list.
3. Full Integration: Integrate an external ticketing system with the EOSC helpdesk infrastructure to enable transfer of tickets between them.

Why to use it

- Have a central point of contact for support of your EOSC users
- Route/reroute issues to where they can be solved within EOSC

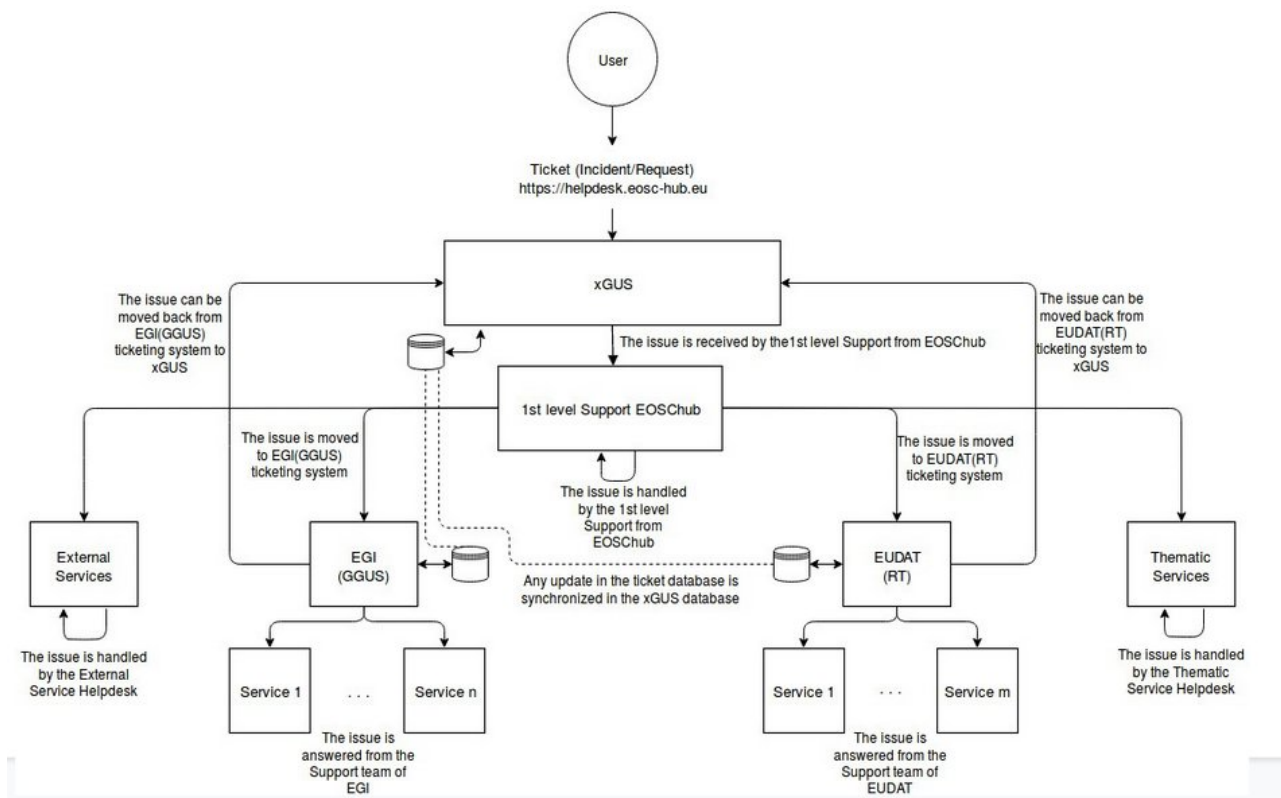
Features

Main features offered to the user are:

- Creation of a ticket for any of the Services of the Hub and of the EOSC Portfolio
- Display all the tickets created by the owner
- Find a previously created ticket
- Notify the user of answers and changes to the tickets
- Access through the EOSC Portal AAI system

Architecture

The EOSC-hub ticketing system is based on GGUS, with interfaces to support infrastructures like EUDAT-RT and EGI xGUS.

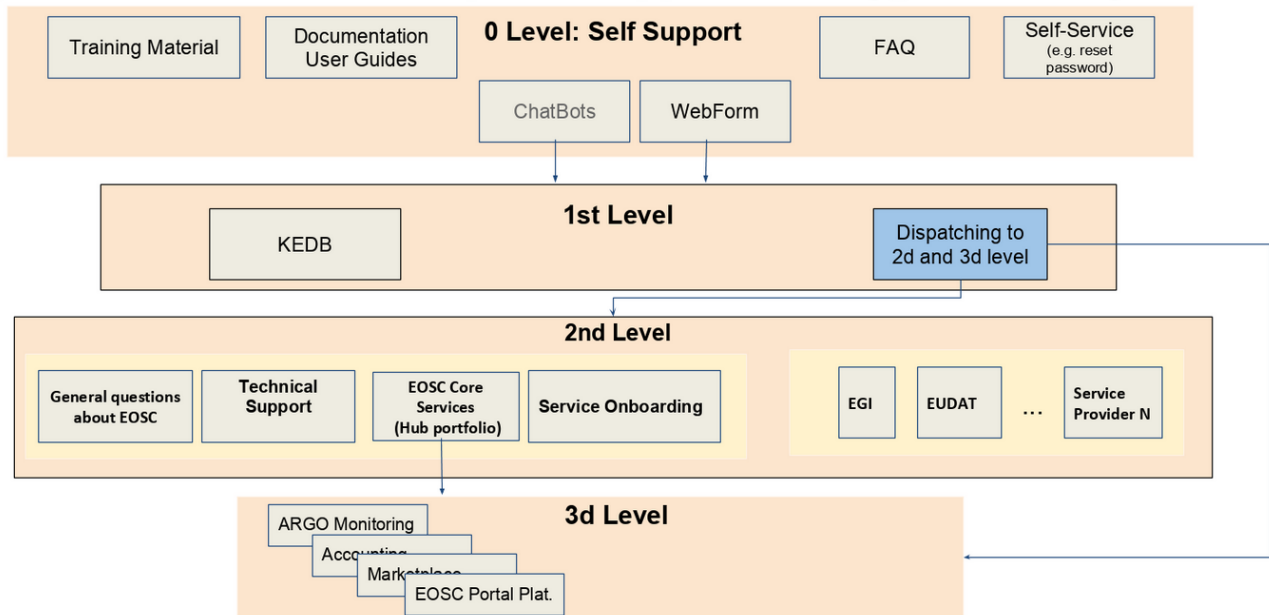


Service Support Units

The helpdesk service is structured in levels, and guaranteed by support units, with knowledge and responsibilities clearly defined.

- **0th level:** Is the Self support Tools the user has at hand to self-heal issues: documentation, FAQ sessions, information boxes, etc. It does not require helpdesk teams intervention. It is maintained by the portal web administrators (tools) and the Helpdesk teams (contents).
- **1st level:** Support unit to resolve the basic issues posted by the users, with the knowledge about the services status and KEDB entries available. It receives tickets created by the user (internal or external). It validates the ticket assignation done by the user, dispatch them assigning them to the correct Support Unit. It collects the frequent issues to feed the Level 0 tools and gets information by the KEDB entries, the services monitoring and the documentation provided.
- **2nd level:** Support team for technical issues. It receives tickets dispatched by the 1st level, and reacts to the ticket either by: written information, a bug fix, a workaround, a redirection of the ticket to another Support Unit. It is responsible of keeping the KEDB up to date with workarounds, or removing from the KEDB problems which have already been solved.
- **3rd level:** in-depth support by senior experts, to complement the second level support teams in case of complex services, for issues that request a long term, complex reaction by a dedicated team. It receives tickets from the 2nd level, or by the 1st level. It reacts to the tickets by either: developing new software, implementing new features, deploying new tools.

EOSC Helpdesk Support Units (generalized)



For assigning the tickets to one of the support units, processes have been defined, as shown in the arrows graph below.

EOSC Helpdesk Support Teams organization

Issue Type visible to the user

Information
EOSC Web
Marketplace
Portal Operations
Portal Access
Suggestions of improvement
Other (name of the service...)

USER

1st Level

EOSC-hub Core Services

Portfolio Services

Support Teams
(3d level)

EOSC Support
AAI
Marketplace
Monitoring
...

Support team
to be identified at the
moment of integration
with the portal
(EUDAT, EGI, ...)

The user optionally indicates explicitly the issue type while editing the ticket (new field needed).

The 1st level receives and answers, or validate and assign the ticket to the right support team

The support team processes the ticket and answers.

Service documentation

- [Helpdesk](#) Technical specifications manual

For end-users

- [Creating a ticket](#) instructions to create a ticket and the description to the web interface used for this scope

For service providers

Managing a ticket: manual that collects the guidelines for the selection of the tickets categories and the assignation of the tickets priorities.

1. Classification

Use the following fields :

- Ticket category:
 - Incident
 - Service request
 - Spam
- Support Unit Assignment:
 1. EOSC General
 - a. General Support
 - b. Technical Support
 - c. Service Onboarding
 2. Hub Portfolio
 - a. AAI
 - b. Accounting
 - c. Monitoring
 - d. Portal
 - e. Service Portfolio Management Tool
 3. EOSC Partners
 - a. EGI service
 - b. EUDAT service
- Ticket priority:
 1. Low priority
 2. Medium priority
 3. High priority
 4. Top priority

Triage of tickets

The 1st level support team will have to triage all the incidents and requests. The 2 main parameters to decide the ticket priority are:

- how many users are affected
- the security risk of a ticket

All tickets start at low priority.

If more than 5 users are affected a medium priority can be assigned.

If the problem of the ticket affects more than 50 users a High priority should be assigned.

If the incident affects and degrades a service a Top priority must be applied.

If the incident has a trivial security risk a level more in priority should be applied.

If the incident has an imminent security risk a Top Priority must be assigned immediately.

Analysis and assignment, escalation of the request, resolution.

The request is analyzed by the first level support team.

Depending on the request/incident, the ticket is managed directly by the 1st level support team or escalated.

If the request is managed by 1st level support, the steps to manage the request/incident are :

1. the responsible of the unit assign it to a unit member who will become the ticket responsible and who will manage the ticket (owner);
2. Change the status of the ticket from new to in progress
3. the new owner needs to answer the user with any questions related to his/her query or directly with the answer to his/her questions.
4. The owner needs to keep track of the answer of the user
5. If the answer from the user is satisfactory, then the ticket has to be resolved, if not, go back to step 1 and re-analyze the request to decide whether to escalate or manage it.

If the request or issue must be assigned to another EOSC support team, change the unit assignation by selecting the most appropriated one from the list displayed.

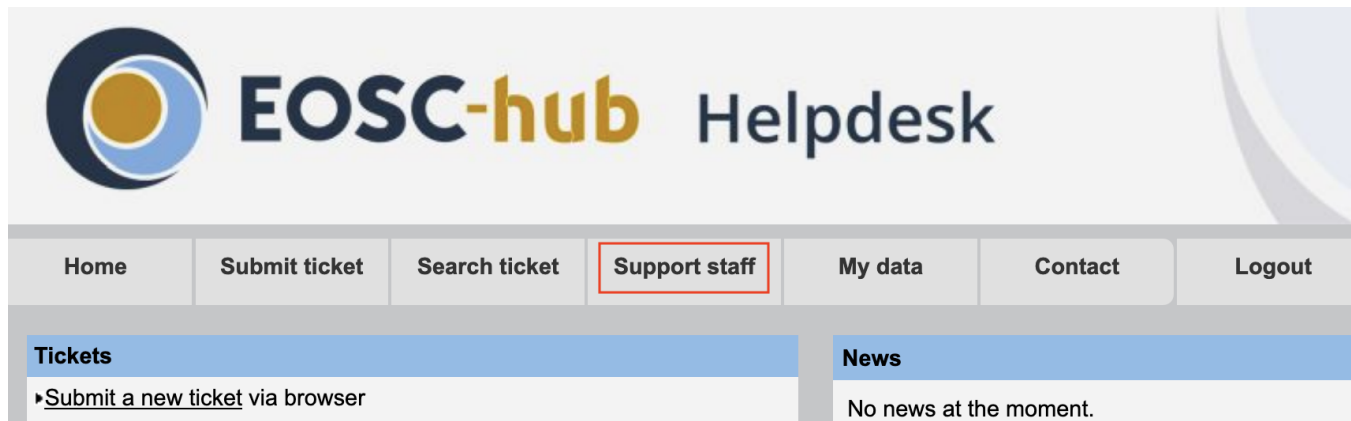
If the issue is escalated to an external support team (EOSC Partners), the request needs to be managed from their own ticketing system (RT in case of EUDAT or GGUS in case of EGI), for this ticket the 1st level support will only check periodically the progress of the ticket, but the final responsible and who will need to fulfill their own SLA's is the final infrastructure (EUDAT, EGI, or any other infrastructure integrated in the EOSC-hub helpdesk).

Join a Support Unit: procedure to add and manage members of a Support Unit

The access to the ticketing system and the management of the tickets is exclusively permitted to the people belonging to the related Support Units (SUs).

In the following, the procedure to be registered in the system as part of a SU, and thus being able to access and update the tickets information assigned to it, is described.

1. Before starting the process of joining a certain SU, get in contact with the SU responsible and identify the SU name(s) to be joined.
2. Register to the EOSC helpdesk <https://helpdesk.eosc-hub.eu/>
3. Apply for support permissions from the helpdesk web page selecting it in the "Support Staff" menu.



4. When it will be granted, join one or more SUs, with the consensus of the SU responsible:

- The SU responsible should communicate the changes to be done in the SU mailing list, asking for updating the members e-mail addresses. The new SU members have to be added to the list in order to receive notifications by e-mail of tickets assigned to their SU.
- The SU responsible should ask for adding new members to the SU in the ticketing system. The members of a SU correctly registered in the ticketing system can access visualize and modify the tickets assigned to their SU.

Operation handbook for service providers Documentation about how to operate the Helpdesk

(in preparation)