Mastering EOSC Helpdesk: Training for providers and support teams

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08.03.2023
Agenda

● Help Desk in Modern Federated IT-Infrastructure
● Main Capabilities and Workflows of the EOSC Helpdesk
  ○ Practical session
● Q&A
● Integration with Help Desk for Providers
● Example of Integration and First Experiences
● Q&A and Open Discussion
Help Desk in modern federated IT-Infrastructure
What is a Help Desk and What It is for?

A **Help Desk** is a software tool or team of agents that provides support for the customers and users of the organization in resolution of their problems, technical incidents or questions related to the products and services of the organization.
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A **Service Desk** is a one-stop shop between customers and service organization with broad range of support functions, typically tightly integrated with IT services and business processes of the organization.
What is a Help Desk and What It is for?

Behind each service there is a Process…
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Process:
Set of activities that bring about a specific objective or set of results from a set of defined inputs.
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Incident & Service Request Management
What is a Help Desk and What It is for?

Behind each service there is a Process...

Incident & Service Request Management

Objective:
To restore normal / agreed service operation within the agreed time after the occurrence of an incident, and to respond to user service requests.
Incident & Service Request Management

A few more definitions...

**Incident:**

Unplanned disruption of operation in a service or degradation of service quality (versus the expected or agreed level of operation according to service level agreements).
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**Service request:**
Request for information, advice, access to a service or a pre-approved change.
Help Desk activities

Access channels
- Phone Calls
- Service portals
- Chatbots
- Emails
- Live chats
- Walk-up desks
- Forums

Help Desk
- Record
- Classify
- Prioritize
- Analyze/Escalate
- Resolve/Close

Incident records
- Service request records
- Identified Problems
- Requests for change
- Requests for improvement
Help Desk Benefits

- Process-driven help and support for users and customers
- Customer satisfaction and increased productivity
- Better Collaboration and Communication within organization
- Improved service delivery and operations
- Scale up organization: optimize and automate operations
Major Challenges: in any Organization

Define Process: policies, procedures, workflows

Choose appropriate software/technology

Train your support team

Get the customer tickets answered/resolved in agreed time
Major Challenges: in EOSC

Distributed EOSC Environment

Multiple organizations, communities, service providers

Alignment of processes and procedures

Different definitions of ISRM process, interoperability issues, organizational changes, support groups

Integration with multiple EOSC Services

Different mapping schemes, user journeys, integration scenarios
Major Challenges: Dream of Self Service
Main Capabilities and Workflows of the EOSC Helpdesk
# EOSC Helpdesk Reference Card

## Reference card

<table>
<thead>
<tr>
<th>Helpdesk URL</th>
<th><a href="https://eosc-helpdesk.eosc-portal.eu">https://eosc-helpdesk.eosc-portal.eu</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Helpdesk Email</td>
<td><a href="mailto:help@eosc-future.eu">help@eosc-future.eu</a></td>
</tr>
<tr>
<td>Helpdesk page in EOSC Portal</td>
<td><a href="https://eosc-portal.eu/contact-us">https://eosc-portal.eu/contact-us</a></td>
</tr>
<tr>
<td>Helpdesk Knowledge Base</td>
<td><a href="https://eosc-helpdesk.eosc-portal.eu/help">https://eosc-helpdesk.eosc-portal.eu/help</a></td>
</tr>
<tr>
<td>Interoperability guidelines</td>
<td><a href="https://zenodo.org/record/7308617#.Y24fR37MK">https://zenodo.org/record/7308617#.Y24fR37MK</a> EJ</td>
</tr>
<tr>
<td>Access policies</td>
<td>Wide-access for all EOSC Users</td>
</tr>
<tr>
<td></td>
<td>Policy-based for agents with support roles</td>
</tr>
<tr>
<td></td>
<td>depending on the support group, community.</td>
</tr>
</tbody>
</table>
Access Channels

1 Step

Helpdesk Dashboard

Multiple Feedback Forms

Telegram Bot: @EOSC Helpdesk

- Knowledge Base
- Service Documentation

Email

2 Step

Dashboard
Key Functions and Workflows of the EOSC Helpdesk Technology

Open-source rapidly developed technology Zammad
Key Functions and Workflows of the EOSC Helpdesk Technology

Open-source rapidly developed technology Zammad

Custom workflows (filters, automatic ticket assignment, automatic escalation procedure, notifications)
Key Functions and Workflows of the EOSC Helpdesk Technology

Detailed build-in statistics and reporting
Key Functions and Workflows of the EOSC Helpdesk Technology

- Detailed build-in statistics and reporting
- Easy integration with Grafana
Key Functions and Workflows of the EOSC Helpdesk Technology

Integration with GitLab/GitHub

Helpdesk Security
S/MIME Support
Access history
Connected Devices
Key Functions and Workflows of the EOSC Helpdesk Technology

Knowledge Base integrated with Helpdesk
EOSC Helpdesk Status:

- Hosted on-premise at KIT (Karlsruhe Institute of Technology, Germany)
- Number of registered users: >500
- Number of agents 70
- 60 Support Groups in Total
- EOSC Ticket rate ~30 Tickets/M, Total ticket rate 150 Tickets/M
Practical Session
Typical Custom Workflow for Resolving a Request

1. User needs to submit a request
2. Ticket is registered
3. Ticket management
4. Notification of resolution
5. Ticket is closed
6. User is notified about resolution

Ticket submission
Ticket registration
Ticket management
Notification of resolution
Ticket is closed
Practical exercise (optional)

- Login to the Helpdesk
- Change to dark mode :)
- Find the customer ticket
- Include article from Knowledge Base in the answer
- Submit answer to customer
Practical exercise (hints)

- Go to the Helpdesk [https://eosc-training.zammad.com](https://eosc-training.zammad.com)
  - Register as a **new customer** [https://eosc-training.zammad.com/#signup](https://eosc-training.zammad.com/#signup)
  - Confirm your mail
    - No worries to provide real mail (the instance will be deleted a few days after)
  - Get **Agent Role**
- Change to dark mode :) Your profile → Mode
- Find the customer ticket
- Include article “Ticket Management” from Knowledge Base in the answer using search by typing “??”
- Submit answer to customer
Integration with Helpdesk for Providers
Why to integrate

Typical initial situation:

- **Small provider/organization**
  - Small group
  - 1 service
  - 1 mailing list
  - Resources are limited

- **Big organization**
  - Multiple groups and divisions
  - Multiple services or infrastructures
  - Helpdesk system in place
Why to integrate

Benefits of the helpdesk integration/adaptation with EOSC

- **Small provider/organization benefits:**
  - Consistent helpdesk experience for users
  - More professional delivery of the service and scale up
  - No need to run own helpdesk

- **Big organization benefits:**
  - Instant interaction with other EOSC players
  - Wider audience, more users
  - Avoid working in silo
Three main integration options for Providers:

- **Direct usage (as-a-service):**
  - Support group or multiple groups
  - Implementation of custom workflows
  
  *Use case: CESSDA*

- **Ticket redirection:**
  - EOSC Helpdesk just a contact point which redirects tickets to provider’s mailing list or ticket system
  
  *Use case: EUDAT*

- **Full integration**
  - Bidirectional synchronization of tickets in EOSC and provider’s helpdesk
  - Prerequisite: provider’s helpdesk and API in place
  
  *Use case: EGI GGUS*
Onboarding/integration with Helpdesk in practice

1. Check KB documentation and integration options:
   https://eosc-helpdesk.eosc-portal.eu/help/
2. Choose an integration option
3. Send initial request using one of the methods:

   **Via E-mail:** help@eosc-portal.eu
   **Webform at** https://eosc-portal.eu/contact-us
   **Via helpdesk dashboard at** https://eosc-helpdesk.eosc-portal.eu
   **Via Telegram:** @EOSC Helpdesk https://t.me/EOSCHelpdesk_bot
   **Via Providers Dashboard extension** https://eosc-portal.eu/eosc-providers-hub
Helpdesk Delivery as-a-Service

2 Options:

**Helpdesk community space in EOSC Helpdesk**
- Portal for users with your domain (feature available from April, 2023)
- Multiple support groups
- Logo on login page and Dashboard (feature available from April, 2023)

**Helpdesk Instance**
- Full control & customization
- All Helpdesk functions available
Helpdesk Delivery as-a-Service

Minimum configuration:
- Number of Support Groups with Names e.g.: “Catalog Support”
- Number of Agents per Group, access rights
- Email specs

Advanced configuration - Minimum configuration plus:
- Other submission methods: Webforms, Telegram..
- Escalation procedure: First response time, Update time
- Escalation calendar (public holidays, countries)
- Filters for incoming tickets
- Custom fields, email signatures, custom workflows etc.
Helpdesk Delivery as-a-Service

Helpdesk Instance (Option will be available from April 2023)

- Full helpdesk functions
- Admin access
- Customization is done by provider
- Automatic backups
- Limited Support & Help
- Option for medium/big organizations
Full Integration (Provider operates own Helpdesk)

Option 1: Provider is using Zammad instance

Create a sync group e.g. EOSC Support
Add agent EOSC Agent for EOSC Support group
Share credentials for created EOSC Agent with EOSC Helpdesk

Option 2: Provider is using other type of Helpdesk Technology

Ensure that Helpdesk technology supports Rest API
Provide Rest API documentation to EOSC Helpdesk tech. team
Integration procedure and implementation

Helpdesk as-a-service: 1-2 days for helpdesk space, 1 week - instance
1. Fix initial parameters (groups, agents, email, webforms)
2. Specs & requirements
3. Implementation & tests
4. Discussion, support and improvement

Forwarding (1-2 days)
1. Connect to Providers’ Helpdesk E-mail
2. Test of redirection

Full integration: 1 week for Zammad instance, 1-2 months for other
1. Mapping of ticket fields
2. Specs & requirements
3. Implementation via API
4. Discussion, support and improvement
Data Privacy considerations

- Compliance with GDPR is important
- Depending on the integration type, each integration will be accompanied with either:
  - Data Processing Agreement (DPA)
  - Joint Controller Agreement
Example of Integration and First Experiences
CESSDA

- Consortium of European Social Science Data Archives
- 22 members and 1 observer country (Service Providers)
- 3 services Onboarded
  - CESSDA Data Catalogue, CDC
  - European Language Social Science Thesaurus, ELSST
  - Data Management Expert Guide, DMEG
  - More…
- Core services integration
  - Monitoring
  - Helpdesk
CESSDA Helpdesk Use-case

Incident Management

Service Request Management

Requirement Gathering
Helpdesk Implementation

Model
Use-cases

FitSM¹ Standard

- Lightweight ITSM
- Suitable to RIs
- EOSC Defacto standard
- Easy templates

ISRM Procedure

- ISRM₁: Record, classify, prioritize
- ISRM₂: Incident review
- ISRM₃: Escalation procedures
- ISRM₄: Incident management

EOSC Helpdesk

- Helpdesk as a Service
- Instance of helpdesk

¹ https://www.fitsm.eu/
Helpdesk: Typical Workflows

1a. Users contacts via support email

1b. Users contacts directly Service Owners, **without** 1st line involvement

2a. Ticket submission

2b. Ticket submission

3. Ticket exchange: L1 ←→ Service Owners

4a. 1st Line Support manages workflows

4b. Service Owners manages workflows

5a. Ticket resolved by 1st Line Support

5b. Ticket resolved by CESSDA Service Owners
Impression So far!

- Configurable
  - Trigger conditions
  - Workflows etc.
- Webforms integration
- Escalation procedures
- Reporting
- Data Privacy Concerns
  - DPA?
OpenAIRE

- 23 services Onboarded
- Open Science Helpdesk Service since 2012
  - Supporting EC policies and OA in european countries by NOADs
  - Support and guidance on the portfolio of Services
- Technical solution:
  - Before we used an extension of Joomla with a decentralized approach and recently we moved to Zammad.

Use case slides from André Vieira and Pedro Principe (OpenAIRE/University of Minho)
OpenAIRE Helpdesk Use-case

Software: Zammad

- Easy to use / configure
- Groups/Queues by service
- User permissions by Group (Agents)
- Triggers: highly customizable to set up automated actions on tickets
- Distinct channels to receive tickets: Web, Form, Email, Microsoft 365, ...
- Reporting
OpenAIRE Helpdesk Use-case

Full integration with EOSC Helpdesk

Main reason for adopting this solution:
- Zammad software is used by both Helpdesk systems, facilitating the integration process.

Advantages:
- Full bi-directional synchronisation between EOSC Helpdesk and OpenAIRE Helpdesk systems.
- Seamless ticket management in both systems.
- It ensures a timely response to user requests, whatever the entry point.
OpenAIRE Helpdesk Use-case

Full integration with EOSC Helpdesk

Bi-directional synchronisation
Q&A and Discussion
Thank you!
Contact: pavel.weber@kit.edu