D6.3 – ELViS HELPDESK: a unified helpdesk system to support researchers access the collections and DoD services

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Contents

Summary

1. Context

The objective of Deliverable 6.3 (D6.3), due 31st January 2021, was to choose and implement a helpdesk as a demonstrator (Technical Readiness Level 6) ready for testing. The deliverable is running here: https://dissco.jitbit.com. The helpdesk system will provide support by distributed partners to support researchers access the collections and Digitizing on Demand (DoD) services. This access is provided through Virtual and Transnational Access, which researchers can request through ELViS (the European Loans and Visits System developed in the JRA1 work package). Testing will be done by the NA2 work package towards milestone MS27 (helpdesk system beta operational), which is due 31 July 2021. The scope of the helpdesk and work plan for successfully fulfilling D6.3 was delivered as a milestone report (MS49) "Plan for Helpdesk Implementation" (DOI: 10.5281/zenodo.4064751)" submitted under JRA1 on the 30th September 2020. MS49 outlines, at a high level, the requirements of a helpdesk system initially focused on providing support to ELViS. Long term sustainability requirements are also given in terms of the scalability of the helpdesk to support other services in DiSSCo (the Distributed System of Scientific Collections research infrastructure), although since many of these services need to be developed, their exact needs are yet unknown. Additionally, MS49 provides a preliminary list of 'off the shelf' helpdesk systems and an evaluation of their compatibility.

Following onwards, further work was conducted to successfully complete D6.3, which is explained in more detail in Section 2. The work was largely coordinated under NA2 Task 2.4 ''Run helpdesk for online support' partners (MNHN, RBINS, Naturalis, RMCA, NHM) led by CETAF with collaboration and technical support from JRA1 (led by Picturae and Naturalis).

2. Work methodology

The work to fulfil D6.3 was completed in the following three phases:

Phase 1: Collation of helpdesk feature requirements - September - Early November 2020.

T2.4 and JRA1 partners were asked to identify helpdesk functional features needed for the distributed system to provide optimal support for ELViS users, in addition to the ones already listed in MS49 (e.g. ticket system, email support, canned replies, etc.). Feedback was collected in a shared google sheet.

Phase 2: Prioritisation of feature requirements - Early November - Early December 2020

Feature requirements collected in Phase 1 were prioritised using the MoSCoW Method (Must haves, Should haves, Could haves and Wont haves) in order to attain a shared agreement on essential requirements, so that the 'of the shelf' helpdesk systems could be critically evaluated for suitability. T2.4 partner's plus RBGE individually scored features, for example indicating a 'M' for must have, 'S' for should haves, etc. CETAF tallied the number of M, S, C, Ws allocated to each feature, and the

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prioritisation was based on a majority. A meeting was conducted on the 1st December to agree and finalise the prioritisation. Table 1 shows the final results for feature prioritisation.

Phase 3 Evaluation and shortlisting of systems Early December 2020 - Early January 2021

Altogether, 13 helpdesk systems were evaluated. The shortlisting of the most appropriate helpdesk system for the ELViS has taken into account the required technical features and the price (allocated budget - 5000 euros). In addition, future sustainability was considered with regards to its expansion to include other DiSSCo services and its ability to be incorporated into the research infrastructure in the future, as well as transferrable to other host servers or clouds, technical expertise needed for maintenance, as well as being affordable long term.

Ranking was primarily done by CETAF, supported by research previously done by T2.4 partners on the different systems as part of MS49. The presence of required features were summed and the systems that had the most 'must have' features, and then' should have' features were ranked the highest. For the shortlisting of current affordability, price quotas were based on a minimum number of 8 agents. This is the current number of partners involved in T2.4. Most of the helpdesk systems are paid per agent/month, this type of billing is not ideal for assessing sustainability because it is unclear on the number of personnel needed to run the Helpdesk in the future.

Results from the evaluation of present required features and price are as follows:

- **Jitbit** (https://www.jitbit.com/) is considered the best choice – for both features and price. It matches almost all of the demands and wishes listed in phase 1 for the ELViS helpdesk. Furthermore it is ideal because of the 1 time payment which includes an unlimited number of agents, important since the system should provide support through a potentially large number of distributed partners, hence a large number of agents. A downside is that upgrades are expensive (around 1000 euros). Thus it depends on how often it needs to be upgraded.
- **Freshdesk (**https://freshdesk.com/**) and Happyfox** (https://www.happyfox.com/) were ranked **2nd and 3rd** for features, however they are out of budget, and potentially expensive in the long term since their payment type is per agent/per month.
- **Topdesk (4th)** (https://www.topdesk.com/) also goes beyond the current budget.

The next best systems that are in budget (all have per agent/month billing type):

- Zoho (standard or professional packages), Helpscout, GrooveHQ, live agent.
- Redmine is open source, but ranked because of low presence of feature requirements, and the need for technical expertise to customise the feature and maintain it.

CETAF presented their final rankings/shortlist to T2.4 and JRA1 partners on the 21st December 2020 and gave a deadline of the 8th January 2021 for confirmation of agreement or further recommendations. Two responses were received asking why Redmine was not chosen, to which CETAF responded with the reasons as mentioned above.

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Table 1. The prioritisation of considered helpdesk system requirements.

Must haves	Should haves	Could haves
Ticketing System	Customisable	Group email distribution
Multi-lingual	Scalable (i.e can be expanded to include other services).	reporting features, dashboard, analysis tools
Trustworthy	Data migration	Split and merge tickets
API integration	AAI Support	
Connect with Github	Form design	
Security	Canned replies	
Good user experience	Resource management tools, tick response times, overview of ticket types.	
File sharing	Collaboration tools	
Storage space		
Alerts and notifications		
Automated workflows		
Email import		

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3. Description of Deliverable

The Jitbit system was chosen for implementation of the helpdesk demonstrator due to the completeness of its functionality which matched almost all of the demands and wishes for the ELViS helpdesk, listed during phase 1, it has a user friendly and intuitive interface with possibilities for interoperability with other systems. In addition the JitBit helpdesk system can be run as a SaaS solution on the hosting of the JitBit supplier and also has a reasonable pricing.

A trial version of the JitBit system was configured on the hosting of the JitBit supplier, operational on Wednesday the 27th of January 2021, for a trial period of 21 days, which can be extended.

The first installation and configuration of the ELViS Helpdesk Demonstrator, which can be reached here: https://dissco.jitbit.com, was done by Picturae and after a short introduction to the SYNTHESYS+ NA2 T2.4 team on Tuesday the 2nd of February 2021, Picturae handed over the admin access to CETAF for further configuration, exploration and testing during the trial period.

The system can take in helpdesk requests in two ways: either automatically via email (by sending an email to: support@discco.jitbit.com), or manually by registered users in the system filling in a helpdesk ticket form. The functionality for turning emails into helpdesk tickets will in due time be connected to the build-in helpdesk form in ELViS.

Appendix A provides an overview of the main functionalities that the ELViS Helpdesk Demonstrator now offers, when logged in as an admin user.

Appendix A - Overview of main ELViS Helpdesk Demonstrator functionalities

General

Homepage

Landing page after login:

Standard helpdesk ticket form

Categories for standard helpdesk ticket form

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Prioritisation for standard helpdesk ticket form

Options of Administration tab

Options for configuring the helpdesk functionality 1 / 2

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Options for configuring the helpdesk functionality 2 / 2

Administration – general settings

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General settings

Helpdesk URL: dissco .jitbit.com

Custom domain:
Leave blank to disable this feature. More info about custom domains

Helpdesk title (displayed on top): DiSSCo Helpdesk Title link (optional): http://my-company.com

Note on the ticket creation page:
This note is shown at the top of the ticket creation page and in the widget. Use it to provide some tips for users before they create a new ticket. Or to add a checkbox-input requiring users to agree to your TOS/Privacy policy. HTML allowed. Shown on user registration page too.

Top announcement bar message:
If you have an urgent important announcement for your users - show it at the top of every page on a yellow bar. HTML allowed. Advanced...

☐ Hide the 'powered by' label from the page footer and from emails

Region ❓

Language: en-US
Used for UI language and calculating public holidays (for time-based reports). ❓

Time zone: (UTC-05:00) Eastern Time (US & Canada)
Current UTC time is: 16:32:21
Current time on your computer: 17:32:23 set to your local timezone...

Working hours: From - to -
Optional. Used to correctly calculate "response time" etc. add custom holidays...

Various settings ❓

☐ Restrict ticket deletion and marking as spam to Admins only (uncheck to allow users to delete their own tickets)
☐ Restrict ticket closing to Technicians only (uncheck to allow users to close their own tickets)
☐ Restrict ticket priority to Technicians only (uncheck to allow users to set ticket priority)
☐ Everyone sees everyone's tickets (not recommended)
☐ Disable "Assets" module
☐ Disable avatars
☑ Auto-assign the first replying technician as ticket-agent (recommended)
☐ Allow assigning a ticket to multiple technicians (not recommended)
☐ Allow users from the same company to see each other's tickets
☐ Disable automatic 'time spent' clock on the ticket page

Default category (pre-selected on the 'new ticket' page): [none]

Auto-close inactive tickets after (days): 0 If a ticket has not been answered by the SUBMITTER within this time, the ticket is closed. "0" means never.

Minimum characters required in subject & body: 0 When creating new tickets.

Reopen closed tickets on new replies: ❓ Yes No If posted within 30 days

Knowledge base

☐ Disable the knowledge-base
☐ Allow unregistered users to access the Knowledge Base
☑ Show KB suggestions hint from Jitbit Bot to technicians in new tickets

KB description:
Shown above the search bar. HTML allowed

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Administration – email settings

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Email notifications

- Email notifications enabled (warning: disabling this setting turns off all email functionality)

- Send ticket confirmation notification (the one users get after submitting a new ticket)
- Send "Ticket closed" notification
- Notify all administrators of new tickets
- Notify technicians of new tickets in their categories (remember to edit the category permissions)
- Notify ALL technicians in a category when a customer updates a ticket (not just the ticket-technician and ticket-subscribers)
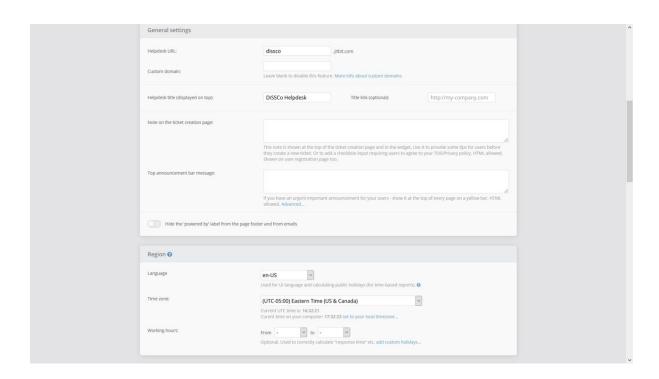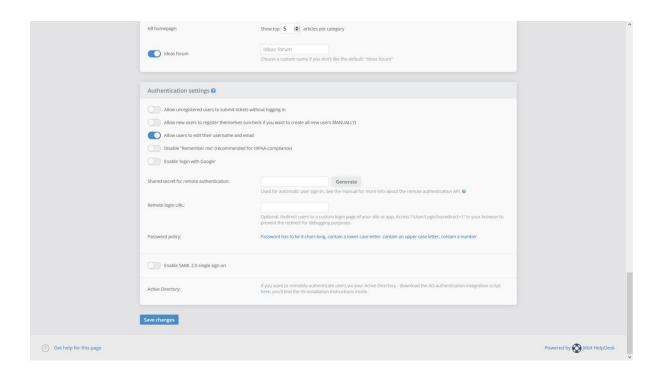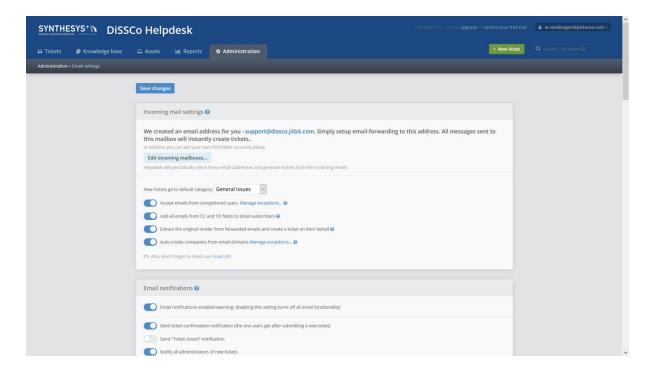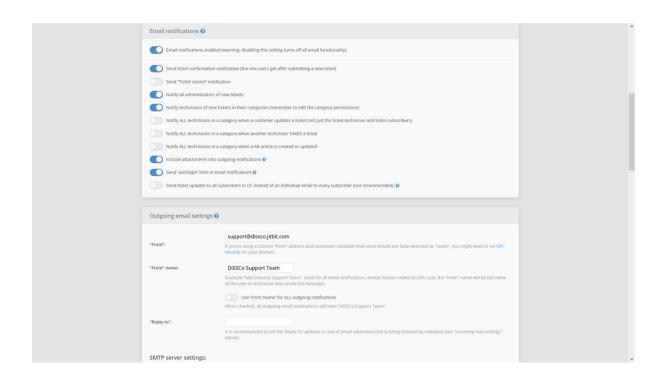- Notify ALL technicians in a category when another technician TAKES a ticket
- Notify ALL technicians in a category when a KB article is created or updated
- Include attachments into outgoing notifications
- Send 'autologin' links in email notifications
- Send ticket updates to all subscribers in CC instead of an individual email to every subscriber (not recommended).

Outgoing email settings

"From": support@dissco.jitbit.com
If you're using a custom "from" address and customers complain that some emails are false-detected as "spam", you might want to set SPF-records for your domain.

"From" name: DiSSCo Support Team
Example "MyCompany Support Team". Used for all email notifications, except human replies (in this case, the "From" name will be the name of the user or technician who wrote the message).

- Use 'From Name' for ALL outgoing notifications
When checked, all outgoing email notifications will have "DiSSCo Support Team".

"Reply-to":
It is recommended to set the 'Reply-To' address to one of email addressed that is being checked by Helpdesk (see "Incoming mail settings" above).

SMTP server settings:

SMTP server settings:

- Use Jitbit's SMTP server

SMTP server address:
SMTP server port: 25 (25, 465, 587 etc.)
- SMTP server requires authentication
SMTP username: w.vandongen@picturae.cor
SMTP password: **********
- Use SSL\TLS to connect to the SMTP server

Test SMTP settings...

Email Templates
(leave a template empty to skip sending that message)

"New ticket" email template
Sent to technicians when a new ticket arrives. All technicians that have permissions to the category get one of these.

Subject
RE: #Subject#
Body:

New ticket: #Subject#

#Body#

#URL#

NOTE: When replying to this email please leave the subject-line intact.

"Ticket-updated" email template
Sent to both technicians and ticket-submitter (and all ticket-subscribers if any) when a new reply is added to the ticket

Subject
RE: #Subject#
Body:

#What_Happened#

#URL#

#Recent_messages#

#Body#
#Category# | #Status# | #Priority# priority

NOTE: When replying to this email please leave the subject-line intact.

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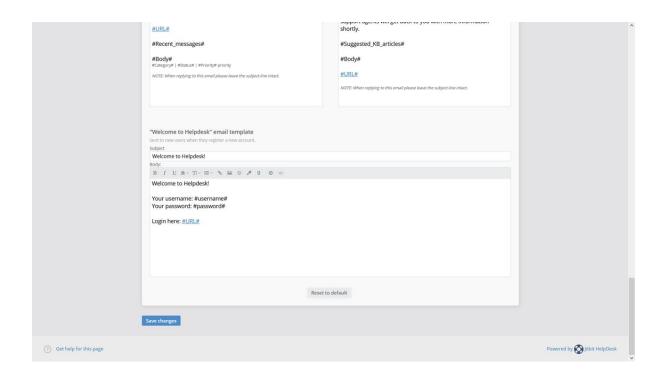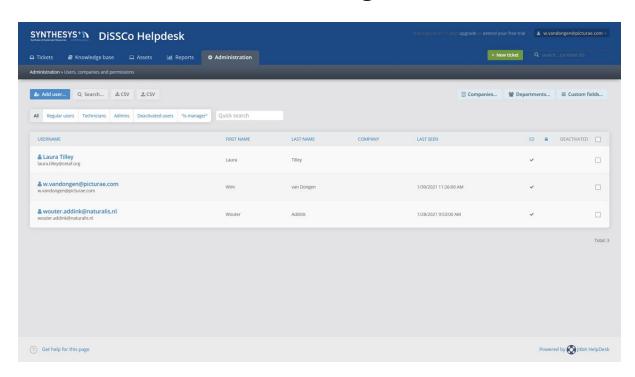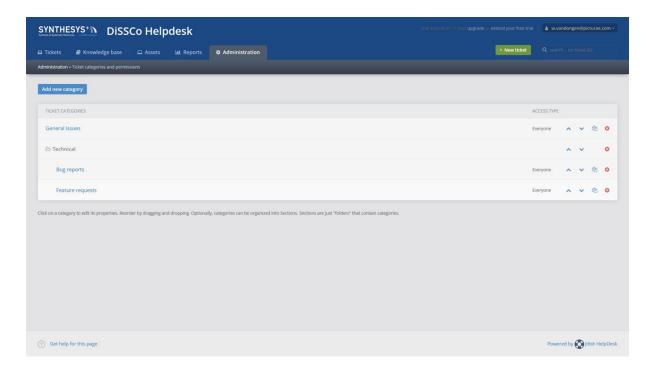Synthesis of Systematic Resources
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Administration – user management

Administration – ticket categories management

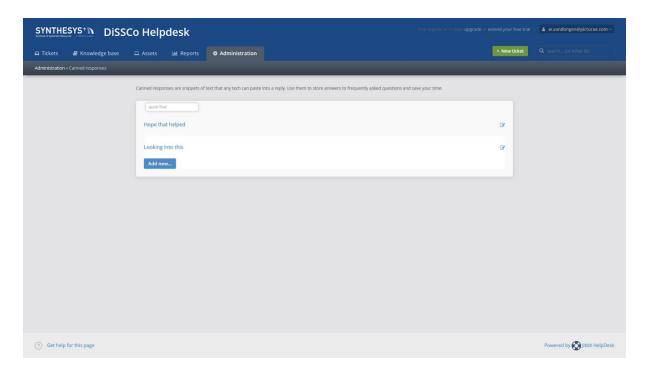# Administration – custom fields management

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Administration – custom statuses management

Administration – canned responses management

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Administration – reports