ARO MEMO

The ARO Issue Tracker

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Version 1.0 – Oct 15, 2021

1. Introduction

This memo provides a brief introduction to the basics of the ARO Issue Tracking Tool as implemented with MantisHub (https://mantishub.com/). It does not aim at being comprehensive and omits quite a few details, but will allow anyone authorized to start using the tool, view issues, and report and update on issues.

The manual may seem a bit overwhelming, but in practice the tool is quite self-explanatory. Also the most important step is to simply start using the tool. This requires only basic navigational skills and filling in only two fields: a subject line and a description. Any other field can be set or changed after submission. Even if initially not the case, I expect that as a group we'll quickly converge on a consistent use of the tool. Thus don't hesitate and please start using the tool: whenever you are about to phone or send an email regarding a problem, please consider using the Issue Tracker instead. As a general guideline, whenever it concerns a general issue, observing, or something that relevant for the group or 'institutional memory', use the Tracker.

For more detailed information on Mantishub itself there are short tutorial videos available online at https://mantishub.com/tutorials, as well as their YouTube channel. Admittedly they are geared towards Mantishub administrators, but there is a e.g. video on how to use the *'Filter'* function (e.g. https://www.youtube.com/watch?v=w9Wanmi22do) that is quite useful in case you need to find a specific item as I will not be covering that in this memo.

2. Login

To access the ARO Issue Tracker please login at: **https://arotickets.mantishub.io/** with the credentials provided in the automatic email that is sent to when your account is first created. This will put you on the 'My View' overview page, which will be covered after the next section.

3. Report Issue page: Main concepts and navigation

For a general introduction and illustration of the main concepts and navigation of the Mantishub issue tracker, this section will in more detail discuss the 'Report Issue' page as shown in Figure 1. The 'My View' and 'View Issues' pages are presented in following sections.

Issue tracker web pages have of a top-bar with a 'project selector' and the user's role on the right, a side-bar for navigation, and a main pane for viewing and entering information. One aspect to be aware of is that the setting for Project in the top-bar can act as a filter for viewing and reporting. I found myself freuqently having to select 'All Projects', until I started to navigate via the 'My View' or 'View Issues' button on the side-bar on the left. A 2-min video tutorial on use of the project selector is available at: https://www.youtube.com/watch?v=LYWpetmvDwY.

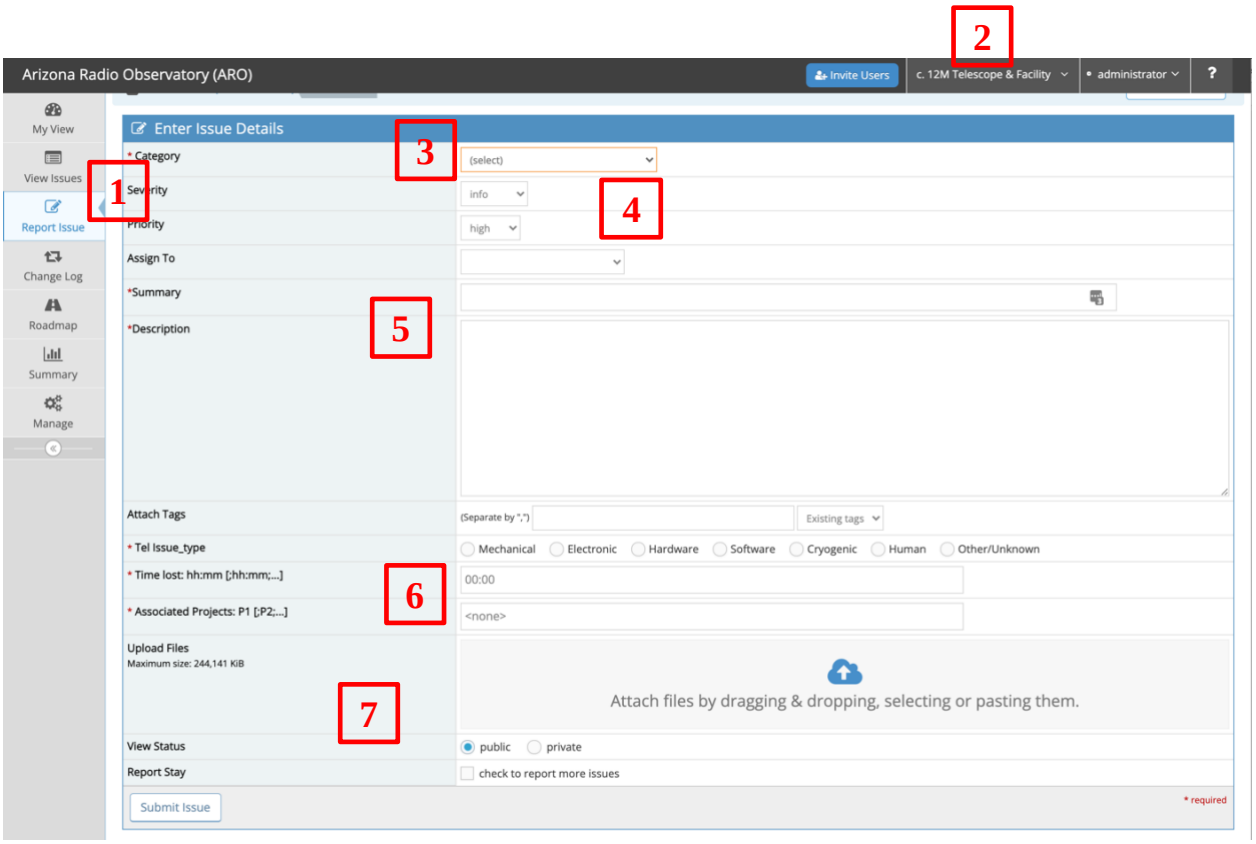

Figure 1: The Report Issue page.

Useful tip: *Navigating to 'My View' and 'View Issues'* ***[1]*** *automatically resets the project selector to 'All Projects'.*

[1] Navigation side-bar: the main buttons for a general user are **'My View'**, **'View Issues'**, and **'Report Issue'**. The exact layout of the navigation panel depends on the authorization level of the user, but all will come with these three options. The '*My View'* and *'View Issues'* pages are discussed separately in following sections.

[2] Project: Mantishub origins is in software development. As such, its main issue category is made up by 'Projects', that each can come with its own set of sub-categories, sub-set of users, and special fields. For ARO, 'Projects' instead map to main aspects of its operations, such as '*Safety', '12M Observing', 'SMT Telescope & Facility', 'Computing', 'Vehicles', etc.*

For ARO all categories are public, i.e. issues are viewable to all users. If needed, specific categories can be made private, which will restrict them to their defined list of users. By default most ARO staff will be added to all Projects. Other users may be added to selected Projects only.

[3] Category: As 'Projects' map to ARO's main issue categories, Mantishub's 'Category' selects a sub-aspect for each. E.g. '12M Telescope & Facility' has categories like *'Telescope', 'Surface', 'Receiver', Weather station', etc*. to specify what the issuein more detail.

[4] **Severity** and **Priority:** These two fields may appear to be duplicates. The way to think of them is that 'Severity' relates to the issue, whereas the 'Priority' relates to the work flow. The fields can have the following value:

> **Severity:** *'Info', 'Minor', 'Major',* and *'Blocking'.*
> **Priority:** *'Info', 'Low', 'High', 'Urgent'.*

The main field to provide when submitting an issue is *'Severity'*. By contrast *'Priority'* can simply be left at its default *'High'* if so desired and can be set later by those dealing with the issue. A random example: not being able to go to a particular frequency for a project can be rated in Severity as *'Major'* (or even *'Blocking'*), but if it is only one line out of many it could be assigned a Priority as *'Low'* depending on the overall work load.

Note that choices can be adjusted as needed, i.e. most important is to submit issues, while detailed categorization is secondary. For this reason, in the ARO Issue Tracker the list of choices Mantishub by default offers for these fields has been significantly shortened, but can still be adjusted downstream if wanted.

Assign to: Use this field if you want to bring the issue being reported to the attention of a specific person, but feel free to leave it blank. Once the system is fully up and running, it can be configured to by default assign particular projects and categories to specific persons. As issues move through a chain, the assign-to field can be used to re-assign issues between people and make them pop-up in the *'Issues assigned to me'* section of the *'My View'* page.

[5] **Summary** and **Description** *are the most important fields to fill out.* Please try to be concise but explicit for your Summary. In the Description section try to add as much relevant concrete information as possible, especially regarding the specific configuration and conditions concerning observations.

Tags: This field can be used to add 'keywords' to the issue. Tags are organic, can be defined and used on the fly, and be used on any issue. They can also be used to filter issues.

[6] **Type, Time lost,** and **Associated Projects** are custom fields added for ARO. I'd have preferred for them to appear before the Summary and Description, but this turned out not to be possible. The **Type** field aims to capture the general nature of the issue and has a different set of values for each Project, e.g. *'mechanical', 'human', etc*. The intent of **Time lost',** and '**Associated Projects'** is to capture any time lost from observing and from what project(s). For instance if a difficult tuning is reported that took an unexpected extra 30 minutes from project 'X', this is where to log that. The issue can be edited to update these fields if the issue occurs multiple times and/or for multiple projects.

[7] **Upload files** can be used to attach, relatively small, files and images.
View Status: Its default **'***Public'* allows all users on the project to see the issue, which in general will be the desired option. *'Private'* restricts access to the issue to users with a specific level of authorization, which I have set to 'Manager' and higher. I.e. only the reporter and 'Managers+' will be able to see an issue labeled *'Private'*. This may be relevant for safety related issues.

[Submit] enters the issue into the system as well as notifies users. Following submission it will still be possible to edit the issue.

Note that clicking *'Report Issue'* with the *'All Projects'* selected in the top-bar will first bring up a project selection page as shown in Figure 2. On this page pick the desired project from the drop-down list and click *'Select project'*.

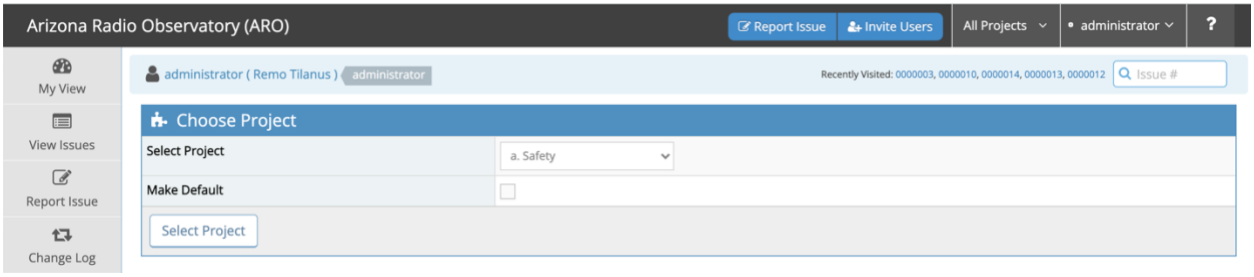

Figure 2: The Project selection page

4. My View page

Figure 3 show the 'My View' page, with only the section '*Recently Modified'* expanded. On first use the page has all sections expanded and you may want to collapse ones less relevant after which it will remember that configuration on next logins. This page serves as the main hub to quickly navigate to classes of issues.

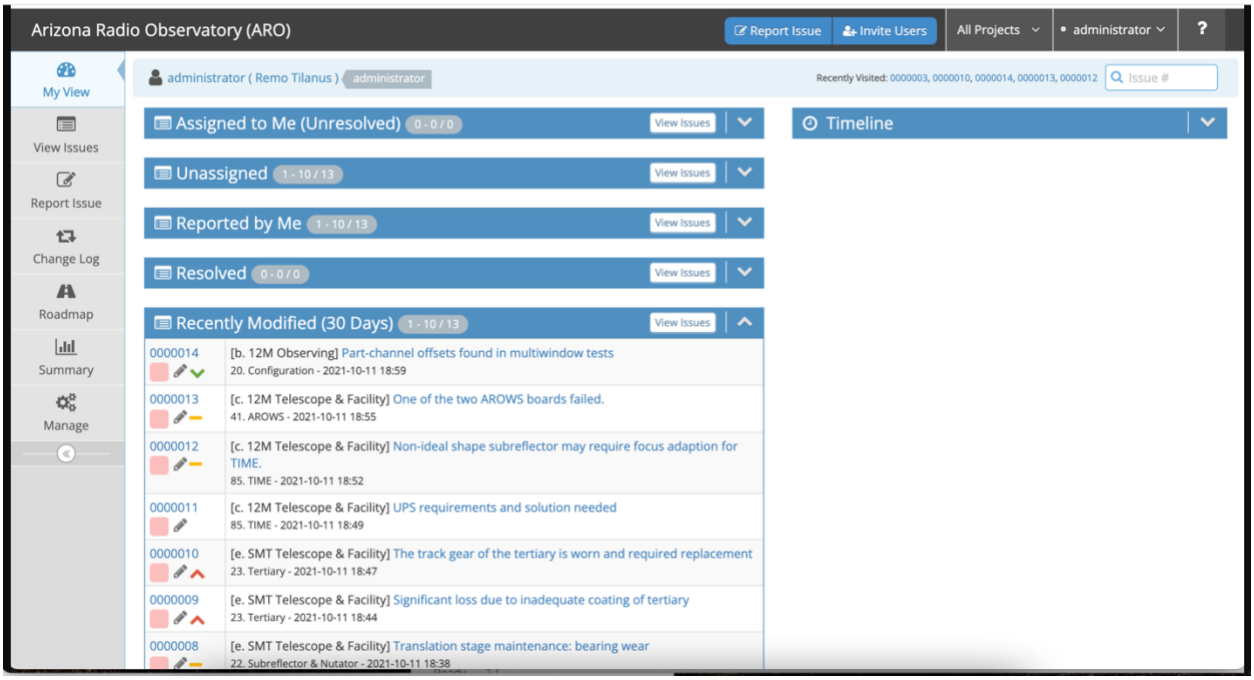

Figure 3: The My View page

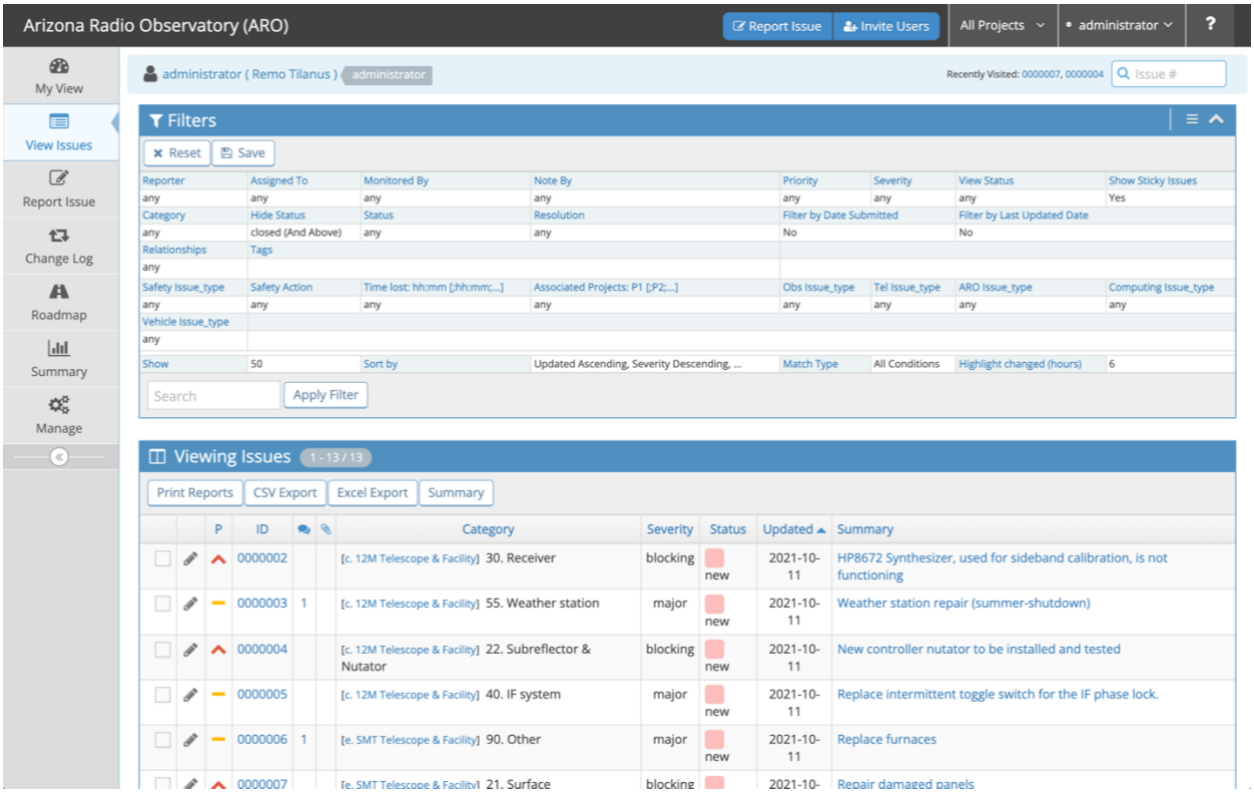

Figure 4: The View Issues page

5. View Issues page

Figure 4 show the 'View Issues' page, which is the general page for finding and viewing issues. The *'Filter'* offers many means to select down from the full list, but in general it may be sufficient to sort by *'Updated'* to list from the most recently active down (the selected sort option is 'sticky' between logins, as may be filter settings!). In general I keep the filter section collapsed. Note that the *'Search'* field allows for a free text search. For more information on filtering, please see the short video tutorial on *'Filtering Issues'* on YouTube: https://www.youtube.com/watch?v=w9Wanmi22do) or on https://mantishub.com/tutorials (see page below the 'Getting Started' video). Note than rather than always using *'View Issues'* to access *issues, in general it may be more efficient to navigate via the desired section on the 'My View'* page.

6. Viewing, Responding to , and Managing an issue

To view an individual issue click on its ID or subject line. This will show an 'Issue page' as in Figure 5 (where I collapsed the sections *'Relationship', 'Monitoring',* and *'Activity'*). The top section shows the issue details with the option the add Tags and an Action bar along the bottom. The **'Add Note'** section can be used to respond to or further document the issue, including the option to add files and figures.

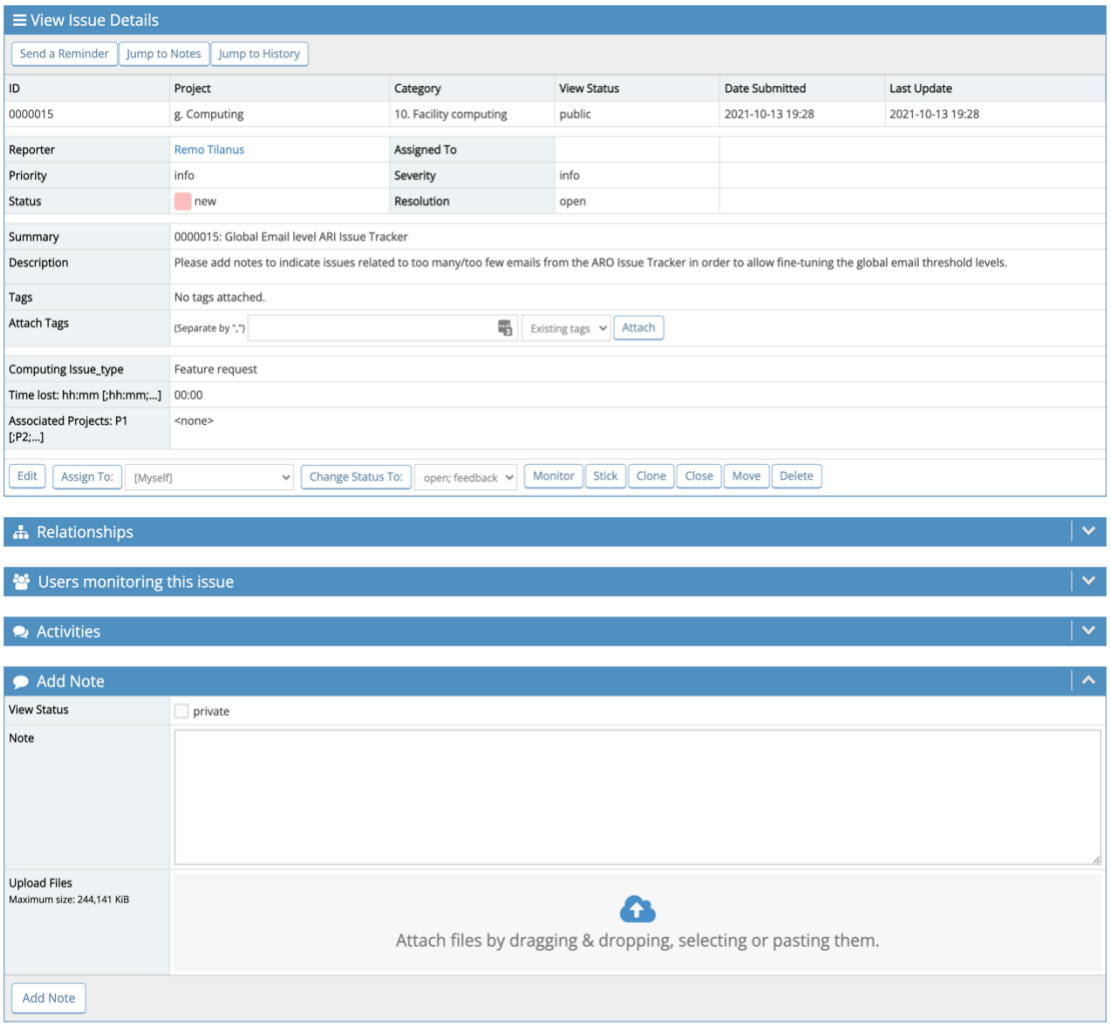

Figure 5: Issue page

Other than adding a note the following actions are available although their use can largely wait until you become more familiar with the tool:

Edit: Allows you to go in an edit any of the issue fields such as severity, priority, category or any custom fields.

Assigned to: This allows you to assign the ticket to a user from the drop down list.

Change Status: This allows you to change the status of an issue from the drop down menu. The ARO Issue Tracker is customized so that all users can change the status of issues.

Closed and **Reopen**; The 'Closed' button is simply a shortcut to 'Change Status'. It will do the exact same as if you chose 'Closed' in the Change Status dropdown list. If an issue is in a resolved or closed status, then you will also see the **Reopen** button which will perform a status change to the 'Feedback' status.

Monitor: The monitor buttons allows the user to subscribe to activity and notifications on an issue. ***Note:*** *the ARO Issue Tracker has been customized to standard notify users of new and*

updated issues. We can adjust this in case it generates too many emails, but unless we do so it largely renders the Monitor option moot.

Clone: The clone button will create a duplicate of the issue within the same project. Before cloning you will be taken to the 'Enter Issue Details' form to change some of the issue fields and details as needed.

Move: This option will relocate the issue to a another project. When clicking *'Move'*, you will see a drop-down list with projects to choose from. After moving the issue, in general you will have to assign it a category valid for its new project.

7. Additional notes

MantisHub uses access levels to define what a user can do. Each user account has a **global** default access level based on its assigned role. This access level is used for all actions associated with public projects, unless the user has been specifically added to the public project with a more specific access level. Access levels defined at the project level will override global access levels.

The follow list gives the roles/access levels in MantisHub and their typical usage. Note that each level has all the privileges of the ones before it.

- **Viewer** - login and view issues.
- **Reporter** - report issues and comments on issues.
- **Updater** - a user who can update issues.
- **Developer** - a team member who is able to take ownership of issues and view reports.
- **Manager** - ability to manage a project including project details, who has access to its categories, versions, and custom fields, and can view private issues,
- **Administrator** - all administration tasks and communication with MantisHub support team.

Most ARO staff will have an **'Updater'** status to start with, to be fine-tuned with use of the Tool. Alyson, Natalie, and myself will have 'Manager' or 'Administrator' status and will thus get notified and be able to see issues marked *'Private'*. As with most settings, the detailed access associated with each role can be customized globally as needed.

Preferences: Users can access their own account preferences (Figure 6) by clicking the dropdown box next to the '?' at the top right-hand corner of the web page and selecting *'My Account'* and the *'Preferences'* tab.

Emails: Email notifications are sent depending on what action has been taken on an issue and the access levels and preferences of users in the system. The notifications can be customized globally and I have opened a ticket to collect comments to allow these to be fine-tuned for ARO use: https://arotickets.mantishub.io/view.php?id=15. Email notifications can be customized on a per-Project basis, if needed.

Each user can also individually restrict the number of emails from the ARO Issue Tracker as illustrated in Figure 6, but I suggest to refrain from changing the user-based options until the global levels have been finalized.

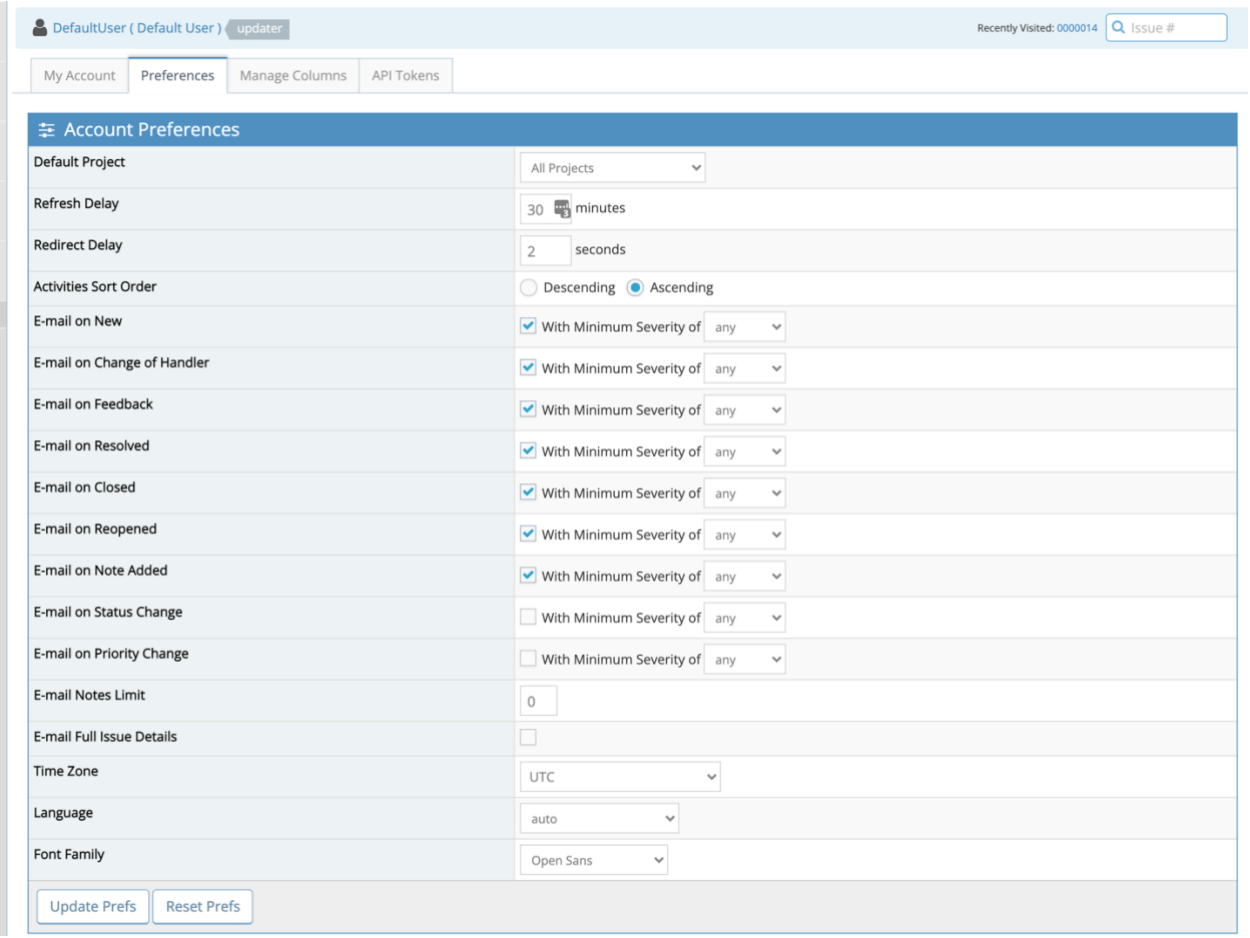

Figure 6: Account preferences that can be customized by each user.

Responding to notifications: When you receive an email notification for an issue, you can directly add a comment by sending a reply. Your comment will be added to the issue as a note similar using *'Add Note'* when viewing an issue with the Issue Tracker.

Submitting an issue by email: This issue has not yet been activated, but can be if desired.

Helpdesk: This option is not yet activated, but the intention is to start offering a helpdesk function for ARO. This will allow non-ARO staff, students, postdocs, and external users to submit issues.

Slack: Mantishub offers free integration with Slack, which is an open source messaging platform used by many organizations. Using this feature ARO Issue Tracker 'Projects' will be matched with corresponding Slack channels and users can elect to receive Slack messages instead of emails. If you would like to have this feature, please file a request.

Private projects: The option 'My Project' is switched off in the ARO Issue Tracker, but can be activated upon request. 'My Project' is fully managed and defined by each user. In addition

projects with a limited users-list can be set up for specific activities/developments managed by one (or more) of its users.. An example could be the development of the new 1.3/0.8 mm MRI Rx for the SMT. Or Alyson may want to a dedicated category for ARO Management. These are all easy to add to the system upon request.