# INTERNAL REPORT

# SRT*rill* v1.0

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# SRTrill v1.0

## A board of short messages for the Sardinia Radio Telescope

## 1 Introduction

The SRTrill message board (hereafter SRTrill) is a web application designed to facilitate the exchange of information between the personnel involved in the Sardinia Radio Telescope (SRT) activities. Users can submit the messages via e-mail to SRTrill and see them appearing after a few minutes in the application's web interface. SRTrill organizes the messages by their arrival time and displays them in a form of posts. SRTrill helps the reader to navigate through the board by creating the necessary cross-links between the posts and by archiving them in different folders accordingly to their age. A minimal capability for filtering is also provided.

## 2 How does it work?

Using SRTrill is very simple and does not require you to setup or configure anything.
Regular e-mail messages can be submitted to

`srtrill@oa-cagliari.inaf.it`

so that after a few minutes they will appear in the application's web interface at

`http://srtrill.oa-cagliari.inaf.it`



Figure 1: The SRTrill web interface.

# 3  Features

The SRTrill application consists of two distinct modules: the EmailParser and the web interface.

## 3.1  The EmailParser module

EmailParser is a C++ program that accomplishes the following tasks. It listens for incoming e-mails continuously and as soon as a new e-mail arrives, the program parses the header and the body of the message extracting all the relevant information. In particular, EmailParser checks a white list to ensure that the message has been submitted by a valid user and eventually stores the new message in a local database. The database is updated at regular times to sort the messages accordingly to their age and to format their content for the web interface.

EmailParser runs on the server and users do not need to interact directly with the program.

## 3.2  The web interface module

The SRTrill web interface is very simple and intuitive to use, please refer to Fig. 2 for the naming of the various components.
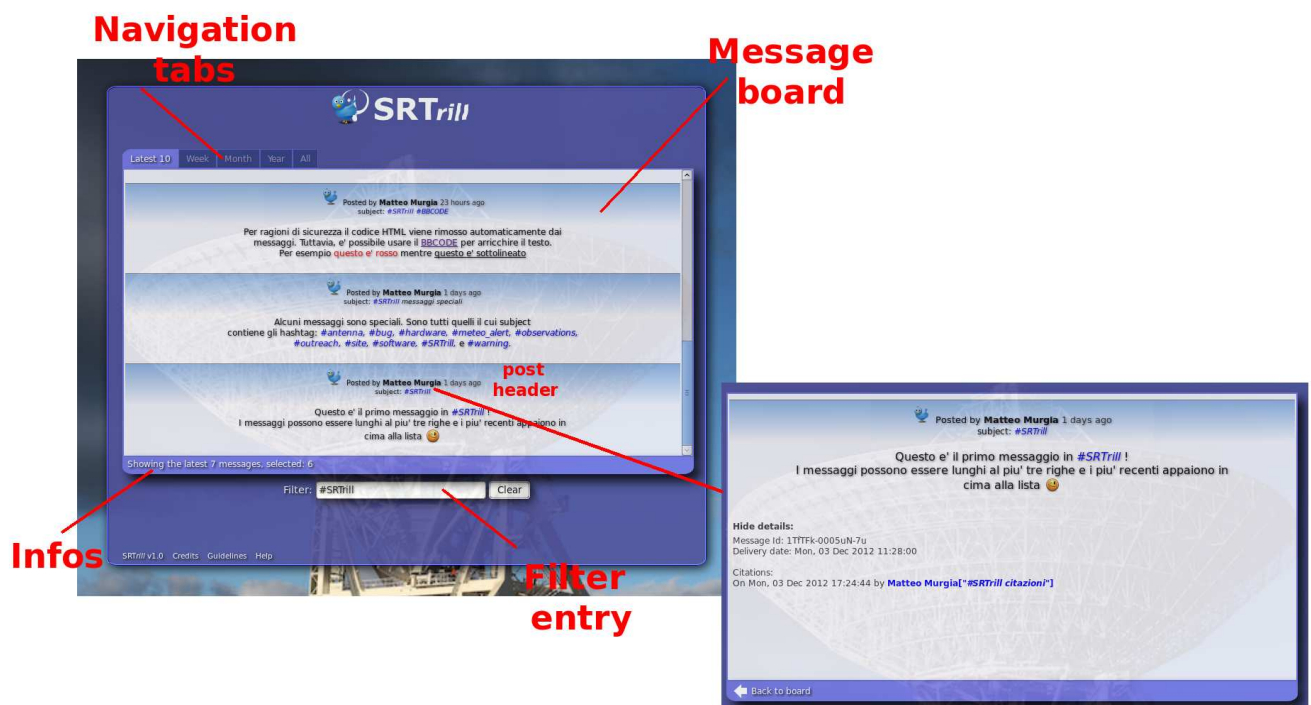


Figure 2: The main components of the SRTrill web interface. By clicking the post's header it is possible to display a larger version of the message.

The "navigation tabs" allow the user to select the messages accordingly to their age. By default the latest 10 messages are shown, but the user can select also messages more recent than a week, a month or a year. The "All" tab shows all messages in the database. The "board" occupies the central part of the widget and it is used to display the messages in a vertical layout, starting with the more recent on the top. The "infos" label provides a few message counts while through the "filter entry" it is possible to select the messages containing a given string.

The messages are shown in a form of posts with a header (containing information about sender, time, and subject) plus a body (containing the message itself). By clicking the header it is possible to

display a larger version of the post and to access to few more details. In particular, it will be possible to recover the message id (a unique string identifying the message) and to show which other posts are citing this one.

# 4 User's reference

## 4.1 Submitting messages to STRrill

You can submit messages to SRTrill using your preferred e-mail client. You only have to take care of the fact that *only the first three line of your message will be considered.* No intervening empty lines are admitted in between these three.

## 4.2 Removing messages from STRrill

To remove an old message from the board you first need to recover its *msgid* (see Sect.3.2) and then to send a new e-mail with

```
subject: \remove{msgid}
```

Example:

```
subject: \remove{1TZeKU-D23wK-ra}
```

You can only delete your own posts.

## 4.3 Citing messages

To cite another message use

```
\cite{msgid}
```

Example:

```
\cite{1TZeKU-D23wK-ra}
```

The citation can be inserted at any point in the message.

## 4.4 Attachments

It is possible to send attachments along with the e-mail to SRTrill. The documents are copied to the server and became available through the web interface.



Figure 3: Example of post with attachments.

## 4.5 Special messages

Some messages are special. They are all those whose subject contains one of the following hash tag: *#antenna, #bug, #hardware, #meteo_alert, #observations, #outreach, #site, #software, #SRTrill,* or *#warning*. Special messages have an icon preceding their header and they may have a background color different from default. A few examples are shown in Fig. 4.
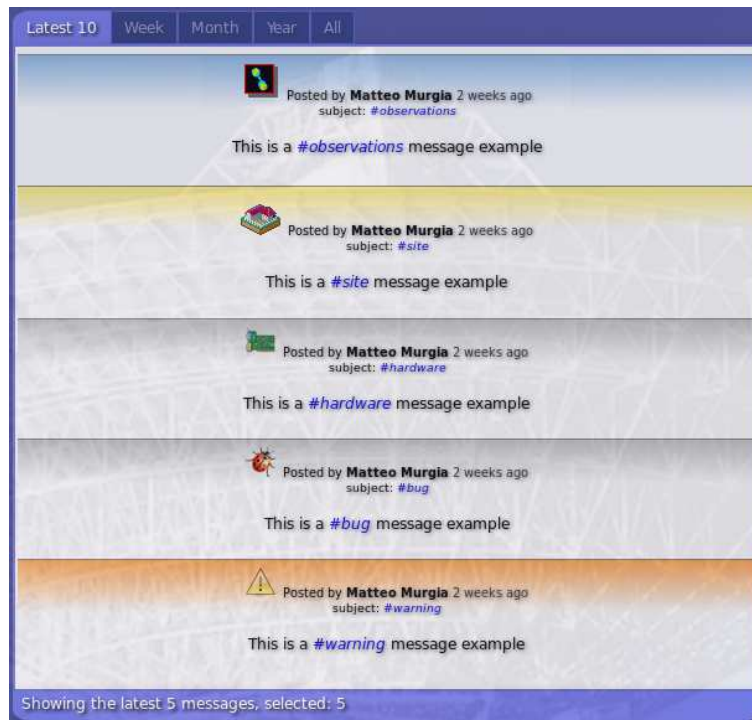


Figure 4: SRTrill examples of special messages.

## 4.6 Icons and emoticons

Icons from can be inserted in the text using

```
\iconname
```

Example:

```
This is a smile \face-smile
```

The list of available icons is shown in Fig. 5.



Figure 5: SRTrill available icons and emoticons.

## 4.7 The BBCODE markup language

For security reasons, the SRTrill message board does not allow the users to include HTML formatting in the e-mail since malformed HTML could disrupt the page's layout. In fact, all the HTML tags eventually present in the original message are stripped out by the EmailParser. However, it is possible to use a sort of Bulletin Board Code (BBCODE) as a lightweight markup language to format posts. A summary of the BBCODE is shown in Fig. 6.



**BBCODE**

- **External links.** To add a link to an external web page use [url] *URL* [/url]. Examples: [url] http://www.example.it [/url] or [url=http://www.example.it] EXAMPLE [/url]

- **Images.** To add a link to an external image use [img] *URL* [/img]. Examples: [img] http://www.mypage.it/image.jpg [/img] or [img=http://www.mypage.it/image.jpg] This is my image [/img]

- **Bold.** To mark bold text use [b] *text* [/b]. Examples: [b] this is bold text [/b] will produce this is bold text

- **Italic.** To mark italic text use [i] *text* [/i]. Examples: [i] this is italic text [/i] will produce this is italic text

- **Underline.** To mark underlined text use [u] *text* [/u]. Examples: [u] this is underlined text [/u] will produce this is underlined text

- **Strikeout.** To mark strikeout text use [s] *text* [/s]. Examples: [s] this is strikeout text [/s] will produce this is strikeout text

- **Coloured.** To mark coloured text use [color=*color*] *text* [/color]. Examples: [color=red] this is text [/color] will produce this is red text

- **Code.** To mark code text use [code] *text* [/code]. Examples: [code] this is code text [/code] will produce

  this is code text

- **Lists.** To add a list use [list] [*]Item 1 [*]Item 2 [*]Item 3 [/list] this will display
    - Item 1
    - Item 2
    - Item 3

Figure 6: SRTrill BBCODE.

The BBCODE allows the inclusion of links to external images in the posts through the [img] tag. Note that, differently from those sent in attachments, in this case the images are not copied in the server.

## 4.8 Automatic e-mail notification

SRTrill can send you an automatic e-mail notification to inform you whenever new messages have arrived. There are four possible levels:

- *immediate*, the notification is sent immediately;
- *daily*, the notification is sent every day at 08:00 am;
- *weekly*, the notification is sent every Monday morning at at 08:00 am;

- *never*, the notification is disabled.

To set the SRTrill automatic notification you can send an e-mail with subject:

`\notify{when}`

where *when* can be one of the following: *never, immediate, daily,* or *weekly*. Example:

`\notify{daily}`

# 5   Guidelines

When using the SRTrill message board please consider the following general guidelines:

- SRTrill is primarily intended for internal use by the personnel involved in the SRT activities, thus, although it is de-facto publicly accessible, should not be employed to disseminate/distribute information to the general public outside the framework of the project;
- SRTrill users should avoid the inclusion of any personal contact detail (e.g., email address) or any other sensible information in their posts. In addition, it is recommendable that users do not to make the SRTrill page link visible in their web pages;
- SRTrill is hosted by the Cagliari Astronomical Observatory (OAC) and its use is permitted only within the boundaries of the network Acceptable Use Policy of the OAC[1] ;
- SRTrill users are personally responsible for the content of the messages posted by them on the board;
- SRTrill users are asked to keep information circulated via the SRTrill confidential. In case of doubt about the opportunity to disclose or not such information please ask first to your team coordinator.

# 6   Browsers compatibility

To date SRTrill has been tested to work on the following browsers:
- Firefox/Mozilla v17.01;
- SeaMonkey v2.13;
- Chrome v18.0;
- Opera v12.11;
- Safari v5.1.7;
- Internet Explorer 9.

Please note that JavaScript must be enabled in your browser to use SRTrill. If the user has JavaScript disabled SRTrill will display a warning.

# 7   Future developments

It is likely that the version of SRTrill presented in this report will need more than one update in the future. Even if it is difficult to determine the evolution of the tool precisely, it is still possible to start reasoning about a few issues.

One issue concerns the message submission mechanism. At present, messages are submitted by e-mail and then displayed in the web interface. SRTrill eventually notifies the users about the new

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[1]http://www.oa-cagliari.inaf.it/public/biz_editor/File/ced/regolamento_ced_oac_luglio_2012_rev._3.pdf

posts by e-mail again. However, it could also be desirable to have the option to compose and submit messages directly using the web interface. This will permit to avoid the complexity of the interaction with the mail server although it will require to extend the capabilities of the web application to manage the users login and the message database.

Another issue concerns the relationship of SRTrill with the official tools that are under development at the SRT, like e.g. the bug report/ticketing systems and similar. In this context, it is important to stress the informal character of the SRTrill message board. STRrill is not by any means substitutive of, or alternative to, such systems. Rather, it is a complementary tool that offers to the people involved in the SRT the possibility not just to dispatch failures or problems but to share much information and positive results thus maintaining a know-how that helps everybody to follow the activities at the telescope. Nevertheless, it is advisable to consider the integration of the next versions of SRTrill with the other official tools in a suite of applications with possibly common styles and/or login systems.

## 8   Acknowledgments