



Calibration Change Alerts

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What's this??

What are Calibration Change Alerts?

- ❖ A Calibration Change Alert is a message informing the GSICS user community that a monitored instrument's calibration has changed *significantly** with respect to the GSICS community reference. (* TBD)

Why does the User Community need to know these events?

- ❖ To allow them to consider impact of the change to their processing (to correct or not)
- ❖ To make them aware of possible step changes in the GSICS Corrections

Who issues these Alert ?

- ❖ GSICS product producers are expected to actively monitor the quality of their products. Therefore it makes sense that they are the issuers of these alerts.

So how do users receive these Alerts ?

- ❖ Users of GSICS products should register with the alert service. How this service maybe implemented is discussed in the subsequent slides.



Alert Service Implementation

Where should the alert service be implemented?

- ❖ One of the GSICS Coordination Centre (GCC) responsibilities is to support the establishment of GSICS products and service definitions. The GCC portal shall provide the **Calibration Change Alert Service** where GSICS product users can register with the alert service.

How can the Calibration Change Alert Service be implemented?

- ❖ An active alert service can be implemented using a 'Email' broadcasting tool.
 - The tool provides a mechanism to manage a list of 'subscribers'.
 - Offers a "root" email account where all mails sent to this account are distributed amongst the subscribers.
- ❖ A passive alert service can be implemented using a RSS Message Feed.
 - Users can simply subscribe to any RSS Message Feed by dragging and dropping the RSS icon  to their browser toolbar menu or using a dedicated RSS tool.
 - Alerts are passively sent to the subscribers using a small XML formatted file containing a short description linked to a webpage. The description is displayed in the RSS icon and when selected, will load the webpage it is associated with.



Active Alert Service Implementation

Free tools are available to implement this service:

- ❖ MailChimp (<http://mailchimp.com/>)
 - The GSICS User Messaging Service available from the GCC portal is implemented using this tool.
 - The tool is free but is limited to 2,000 subscribers and a monthly limit of 12,000 emails. The limitation can be changed by paying for the mailchimp service, the cost is tailored to the users' needs.
 - MailChimp offers some various tools for managing the messaging service.

- ❖ Google Groups (<https://groups.google.com>)
 - The tool is free and is used to provide discussion groups for people sharing common interests.
 - Careful management of subscribers is necessary as by default, all subscribers can send a message to the 'Group' and these messages are distributed to all subscribers. A moderator/administrator option is available to vet email submissions but this means someone needs to be available to perform this task.



Passive Alert Service Implementation

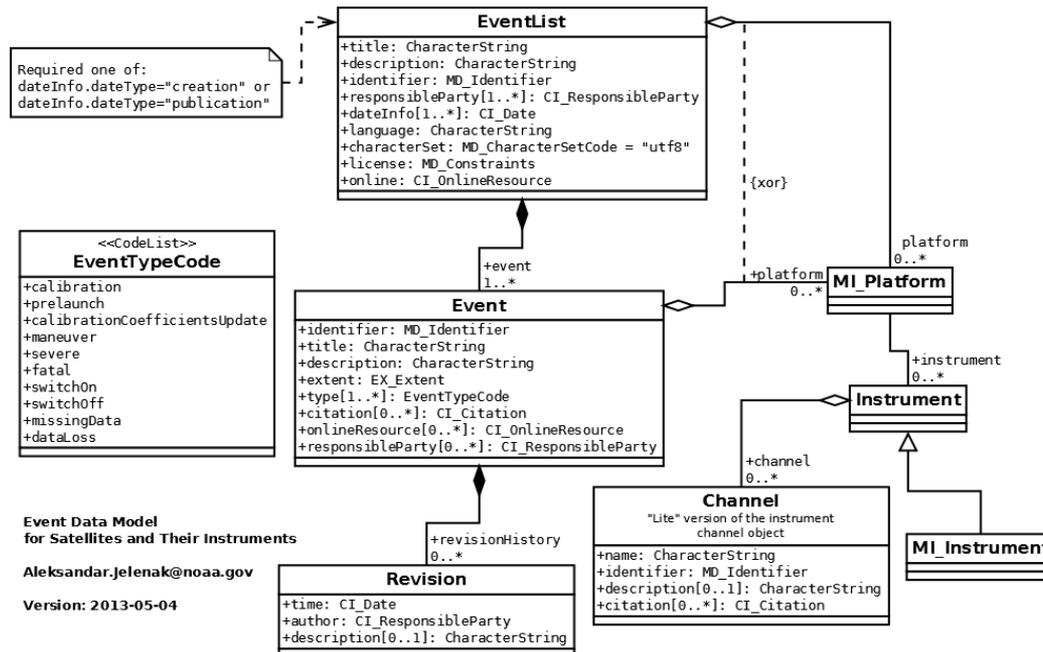
RSS implementation simply require:

- ❖ A web server where:
 - **GSICS Product Producers** can submit their alerts.
 - The alert is required to be convert into a **web page** describing the contents of the **alert**.
 - It should also be converted to a **RSS document** that can be validate by version of the **RSS XML schema**. This RSS document should contain **a title** linking it to the **web page describing the content of the alert**.
 - The RSS document should then be uploaded to the location of where your RSS feed resides. Once this is submitted, the title should appear as a **menu item** in the browsers of the users who have subscribed to your RSS feed.
- ❖ Note, users are only aware of the update if they chose to selection on the RSS feed.
- ❖ Dedicated RSS tools may be used to provide a more 'active' alert to the update.

Calibration Change Alert Schema

An Alert Schema is required to be defined to ensure that:

- ❖ All alerts contain the same information.
- ❖ Alert can be handled by automated processes. For example, an alert can define a satellite instrument event that can be ingested into a satellite event log.
- ❖ The events UML prepared by Aleksandar Jelenak provides some input to such a schema.



Event Data Model
for Satellites and Their Instruments
Aleksandar.Jelenak@noaa.gov
Version: 2013-05-04



What now?

We need a GDWG recommendation on the following:

- ❖ Do we need to implement a calibration change alert server or will the Emails sent to GSICS users via the GSICS User Messaging Service be sufficient?

- ❖ If we agree to implement then:
 - Do we host it at the GCC, if not then where?
 - Who will write the user requirements for this system?
 - Who will design the system?
 - Who will implement the system?
 - Who will operate and maintain the system?
 - Who will prepare all the documentation?



Lets Continue to **Achieve Results** !

- ❖ GSICS achievements have been through **International Partners** working together.
- ❖ We need to continue this through a **sense of urgency to commit to common agreed goals**.
- ❖ **Taking a lead to develop** a common agreed goal does not mean **you are totally responsible for work**.
- ❖ **Seeking support is expected** through the **gsics-dev googlegroups mailing list** or a dedicated WebEx teleconference.
- ❖ Just to re-literate **GSICS achievements** are a **Result of International Partners working together!**



End of Presentation: Thank you for your attention

WMO GSICS Portal

<http://gsics.wmo.int>

GSICS Coordination Centre -

<http://www.star.nesdis.noaa.gov/smcd/GCC/index.php>

GSICS Product Catalog -

<http://www.star.nesdis.noaa.gov/smcd/GCC/ProductCatalog.php>

EUMETSAT's Data and Management Server

<http://gsics.eumetsat.int>