

LMEprism Web GUI User Guide – Contributor Users

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Table of Contents

1	Introduction	4
2	Login	5
3	Contributions	6
	3.1 View Contributions	6
	3.2 Edit	9
	3.3 Upload	9
	3.4 Export	10
	3.5 Chart	10
4	Submission Status	12
	4.1 View Submission Status	12
5	Reports	14
	5.1 Object	15
	5.2 Chart	17
	5.3 Export	18
6	Objections	19
7	User Admin	20
	7.1 View Users	20
	7.2 Create new user	21
	7.3 Edit	22
	7.4 Delete	22
	7.5 Disable	22
	7.6 Reset Password	23
	7.7 Change Password	23
	7.8 Submission Permissions	23
	7.9 Email Notifications	25
8	Activity Log	27
	8.1 View Activity Log	27

9	Glossary	28
10	Appendix A – Role Permissions	28

1 Introduction

This document provides a user guide to the Web GUI of the LMEprism system for Contributor users.

The LMEprism Web GUI allows users to submit data, view reports and make objections. It also allows for the management of users.

This document outlines the pages and functions available to Contributor Users.

This document contains the following sections which correspond to the pages in the application:

- Login
- Contributions
- Submission Status
- Reports Contributions
- Objections
- User Admin
- Activity Log

Minimum user PC requirements for using the Web GUI are:

CPU	Modern processor (less than three years old)	
RAM	4 GB	
Operating System	Microsoft Windows 7	
Browser	Internet Explorer 11 or Google Chrome*	

^{*} The Web GUI may work on other browsers or versions but these are not officially supported.

2 Login

The login page is shown in the following screen:



The User must enter a valid username and password to access the application.

If the user has forgotten their password then they should contact LME IT Service Desk or their own Primary User to reset it.

If the user enters an invalid password more than 5 times their account will be disabled. At this point the User will need to contact LME IT Service Desk to reset the account.

Once logged in all users will have their session terminated automatically at a configured time at the end of the day (e.g. at 20:00). The user can then re-start a new session if required.

All Users are assigned a Role when they are created which controls which functions they can access. For more on assigning a Role see section 7. Appendix A gives details of the functions available to each role.

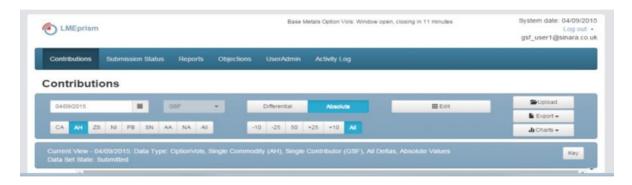
3 Contributions

This page allows the user to view contributions made and edit data if necessary. It can be accessed from the *Contributions* menu item.

3.1 View Contributions

By default the screen shows the contributions for the current day for Copper.

There are a number of ways to alter the content of the data shown by selecting values from the filter controls shown below:



The available filter controls are:

- Contribution Date up to 90 days prior to the current contribution date
- Differential/Absolute controls whether the wing vols are shown in differential or absolute values
- Commodity single specific commodities or all commodities
- Delta one of the five deltas or all deltas

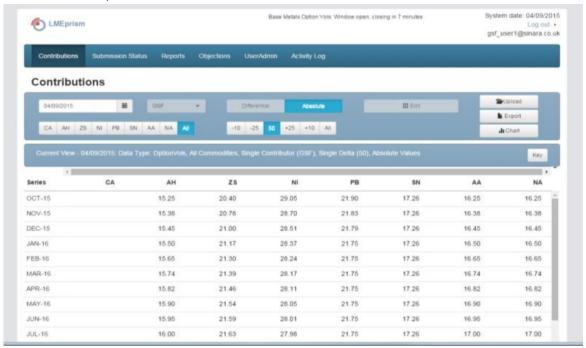
Only certain combinations of filter are valid, with there being two basic different views corresponding to these combinations as outlined in the table below.

Commodity	Delta	View Mode
ALL	One	All Commodities, One Delta
One	ALL	One Commodity, All Deltas

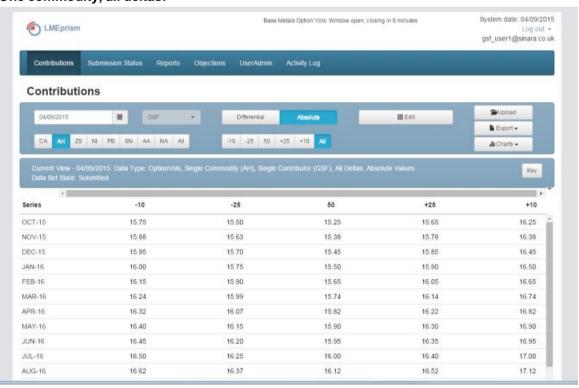
As soon as the user selects a valid combination of values then the screen will refresh to display the data. If the user has selected an invalid combination then "Invalid Combination" will be displayed on screen. The view will refresh automatically whenever new data is received from the Contributor.

An example of each view is shown over the page.

All commodities, one delta:



One commodity, all deltas:



On the first view, only those Data Sets (commodities) that are in a state where they are used for calculations are shown, i.e. only "good" data. For more on what constitutes "good" data and "bad" data see the section on Submission Status (section 4).

On the second view (where a single commodity is being viewed), a Data Set in any state is shown (to allow editing if required).

Colour coding is used on screen as follows (a key to this is available on screen by clicking the *Key* button):

- Red text value is lower than the previous contribution day for the equivalent date series and
 Data Set
- Green text value is higher than the previous contribution day for the equivalent date series and Data Set
- Black text value is same as the previous contribution day for the equivalent date series and
 Data Set (or the date series was not in the previous day's data)
- Grey cell value has been omitted by the LME
- Cyan cell value was previously omitted by the LME and has been provided in this data set with the same value as was omitted previously
- Purple cell invalid value

There are a number of functions buttons on the page, depending on what has been selected for viewing.

- Edit
- Upload
- Export
- Chart

These are discussed in more details in following sections.

The page also displays the current status of the contribution window at the top of the page:

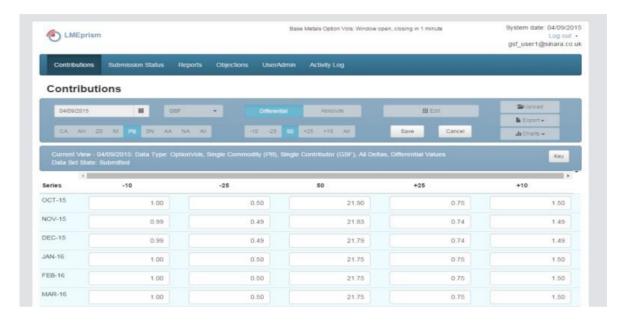


Base Metals Option Vols: Window open, closing in 11 minutes

The time until the contribution window closes will count down until the window closes. If the window is closed then submissions are not permitted. The LME can be contacted to re-open the window or give permission for a late submission if this is required.

3.2 Edit

Edit is only available when viewing the data for a single commodity and if the User has the appropriate role and submission permission assigned to them. If the User clicks the *Edit* button the screen will be put into edit mode as shown in the screen shot below.



In this mode the users can edit contribution values. The process of editing is:

- Click Edit
- Edit values
- Click Save (or Cancel to discard edits)

3.3 Upload

This feature can be used to upload contribution files. These are the same format files that would be uploaded via FTP and are described in the Contributor Interface Specification document.

The contribution window must be open to upload a file (or a late submission permission have been granted by the LME) and the user must have an appropriate role.

To upload a file:

- Click Upload
- Browse for the file on the local file system
- Click Submit

This will submit the file for processing by LMEprism. Processing may take a few seconds at which point the new data should be displayed on the screen (if the file contained the commodity currently being viewed).

3.4 Export

A User can use the *Export* button to export the currently viewed contributions to a csv file format compatible with Excel.

There are two exports available:

- Export Selection just the currently viewed metal
- Export All all metals

On selection of one of the above, a pop window will appear and ask whether to open the file with a selected application or save on the machine. Note that the user's browser settings can mean that the file will automatically be saved to a specific location without prompting the user.

To change these settings on Chrome:

- 1. Click the Chrome menu = on the browser toolbar.
- 2. Select Settings.
- 3. Click **Show advanced settings** and scroll down to the "Downloads" section.
- To change the default download location, click Change and select where you'd like your files to be saved.
- b. If you'd rather choose a specific location for each download, select the "Ask where to save each file before downloading" checkbox.

To change these settings on IE:

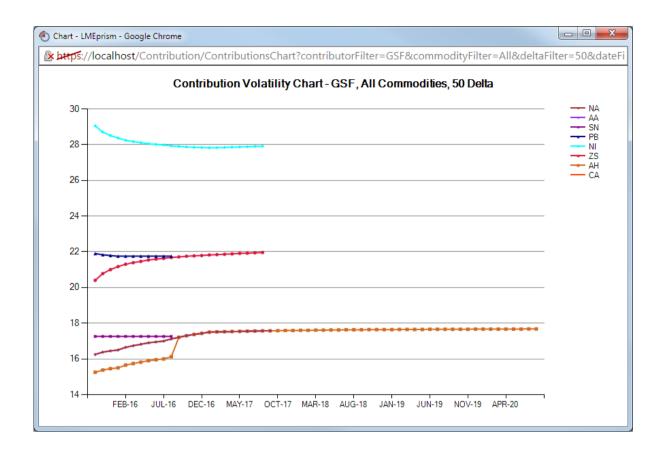
- 1. Open Internet Explorer and click Tools > Internet Options > Security tab
- 2. Click Custom level... to open the Security Settings dialogue
- Scroll down to the Downloads heading and select Enable for automatic prompting, files, and fonts
- 4. Click **OK**, and if asked whether you are sure, click **Yes**

3.5 Chart

A chart of contributions can be seen by clicking the *Chart* button on the page. The chart will show volatilities on the y-axis against date series on the x-axis.

If the user is viewing all commodities then the chart will only show data sets (commodities) in one of the "good" states will be shown on the chart (the same as on the screen). In all cases only valid and non-omitted data points will be shown.

An example of this chart is shown below. All charts are images and can be saved by right-clicking on them and using "Save Image As...".



If the user is viewing a single commodity then they can select from two charts to view:

- Current Day series for each delta
- Previous Day Comparison series for:
 - Today's contributions for the selected delta (or all if all selected)
 - Previous day's contributions for the selected delta (or all if all selected)
 - Mean for the selected delta (or all if all selected)

Note that the mean shown is the last published mean, so if this chart is viewed before the report has been published for the current day then this will be the previous day's mean.

4 Submission Status

This page shows the state of contributions for the current day. The User can access this page by selecting the *Submission Status* menu item.

4.1 View Submission Status

An example of this page is shown below:



The view will refresh automatically whenever a state changes.

Each Data Set (commodity) can be in one of the states described below. There are "good" states where the Data Set is being used in calculation of the report and "bad" states where it is not.

The "good" states are:

- **Submitted** the entire Data Set if valid and is being used for calculations.
- Partially Omitted one or more of the values in the Data Set has been omitted by the LME, but the rest are ok and being used for calculations.

The "bad" states are:

- Omitted the LME has omitted this Data Set in its entirety.
- Partially Valid there are one or more errors in the contributed data. Note none of the values will be used from this Data Set.
- Waiting Acceptance the LME needs to approve these contributions. A Data Set will be in this state if it was previously omitted or if it is supplied after the contribution window has closed but a late submission permission was given.
- **Invalid File** a file was uploaded but failed basic file format validation rules.
- **Disallowed** a file was uploaded but disallowed outright (e.g. because the window was closed)
- Awaiting Submission the contributor hasn't provided a submission yet

The page displays a colour-coded cell in a grid for each Contributor and Data Set. The colour coding is as follows (a key to this can be viewed by clicking the *Key* button):

- Grey the Contributor is not allowed to submit this Data Set
- Red the Contributor has a Required permission on this Data Set but does not have contributions in one of the "good" states.
- Orange the Contributor has an Optional permission on this Data Set but does not have contributions in one of the "good" states.
- Light Green this Data Set is in the Partially Omitted state (i.e. a good state)
- Green this Data Set is in the Submitted state (i.e. a good state)

A given Data Set is "locked" whenever it is being edited using the Web GUI. This means that no other Users can update this Data Set until the User who is editing saves or cancels editing. If a Data Set is locked then a lock symbol is shown next to it:

NA



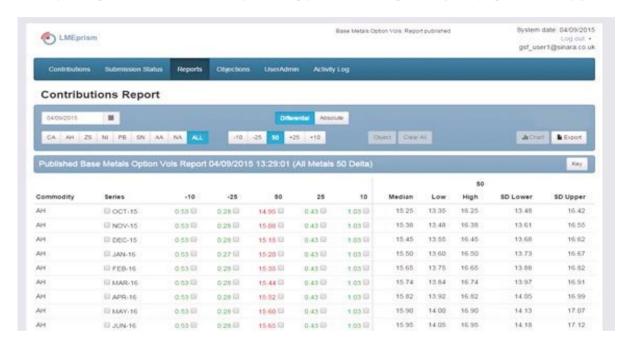
If a Data Set becomes locked and cannot be unlocked (due to a system error), then the LME should be contacted to unlock this Data Set.

5 Reports

This page allows a User to view Contributions Reports. A User can access this page by selecting the *Reports* item from the menu.

A Contribution Report is a set of calculated data based on contributions from all Contributors which can be published each day by the LME.

An example of the report page display is shown below. The view will refresh automatically whenever a new report is generated. Prior to the report being published on a given day this page will be empty.



There are a number of ways to alter the content of the data shown by selecting values from the filter controls. The available filter controls are:

- Contribution Date up to 90 days prior to the current contribution date
- Differential/Absolute controls whether the wing vols are shown in differential or absolute values (the above example has differentials shown)
- Commodity single specific commodities or all commodities
- Delta one of the five deltas

The display will feature colour-coding on the mean columns (a key to this can be viewed by clicking on the *Key* button):

- Red text lower than previous day's report value
- Green text higher than previous day's report value

- Black text same as previous day's report value
- Grey cell interpolated value. These values also have a letter in brackets to indicate the type
 of interpolation used:
 - o (I) interpolated using the interpolate between or across method
 - o (R) interpolated by repeating values up or down
 - o (P) interpolated using the previous day's value

There are three other function buttons available which are described in the following sections:

- Object
- Chart
- Export

5.1 Object

Objections can be lodged from the Report screen if:

- The report has been published by the LME
- It's before the end of the day
- The user has an appropriate role

If all of the above are true then the Contributions Report screen will display with check boxes next to each of the mean values (i.e. for the 50 delta and each of the wings).

Users can object in any of the following ways:

- · Using check boxes for individual data points
- Using check boxes for the date series rows to select an entire date series
- Using check boxes for the delta columns to select an entire delta

Note that the last method is only available when viewing a single metal. Once the user has selected a delta check box then they will not be able to switch back to the all metals view until they have lodged that objection or cleared the check box.

The user will be able to select one or more of these check boxes at once, e.g. they could select all of the following:

- 50 Delta column for CA
- -25 Delta column for CA
- Feb-16 date series for CA
- Jul-16 date series for CA
- 10 Delta and 25 Delta in the Dec-15 date series for CA

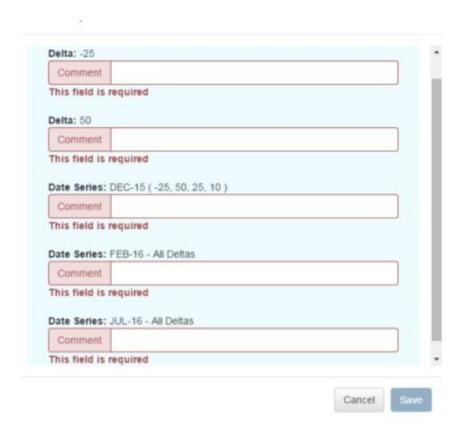
There will be two buttons at the top of the page:

- Object will lodge objections for any of the selected items
- Clear All clears all selected items.

On clicking the Object button the user will be prompted for a comment for:

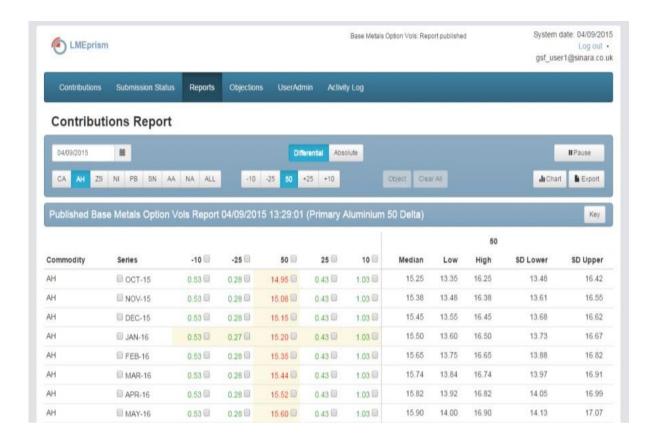
- Each delta column selected
- Each date series row selected (including those where individual data points rather than the whole row have been selected)

An example is shown for the above case.



The user must enter a comment of a configurable number of characters before they can save the objections.

Once objections are lodged the objected to rows/columns/points will be highlighted on screen. They will also be visible on the Objections screen (discussed in the next section). An example of highlighting is shown below (here the user has objected to the 50 delta and the Jan-16 series for AH):

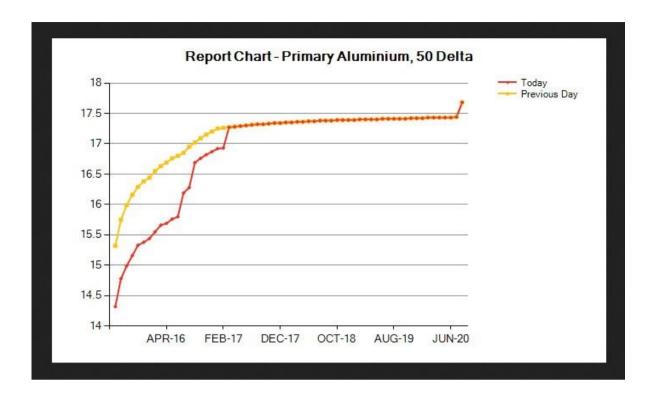


If the LME subsequently re-publish the report after an objection was lodged then this objection will no longer be highlighted on the Report screen. I.e. only those objections lodged since the last report was published are highlighted.

5.2 Chart

The User can view a report chart by clicking on the *Chart* button. This chart shows today's mean and the previous day's mean for the selected metal and delta.

An example is shown below.



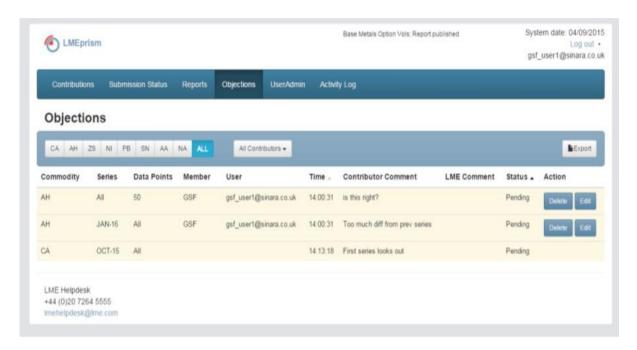
5.3 Export

The *Export* button on the report page allows the User to export the displayed report into the standard report format file as specified in the Contributor Interface Specification. The User can browse for where to create the file in the file system on their local machine.

As noted in section 3.4, the user's browser settings may lead to the file being saved to a default location without prompting. See that section for details of how to change this.

6 Objections

Objections can be lodged by contributor users from the *Report* screen as discussed in the previous section. Objections can then be viewed from the *Objections* screen. An example of this screen is shown below.



The objections screen shows a list of all objections from all contributors for the current day. If the objection is from another contributor then this will be anonymised (contributor code and username are not visible).

The list can be filtered on contributor or commodity. The view will refresh automatically whenever new data is received.

Each objection can be in one of the following states:

- Pending lodged by a user but not accepted or omitted by the LME yet
- Accepted accepted by the LME
- Omitted omitted by the LME

There are two function buttons for objections from the user's own contributor:

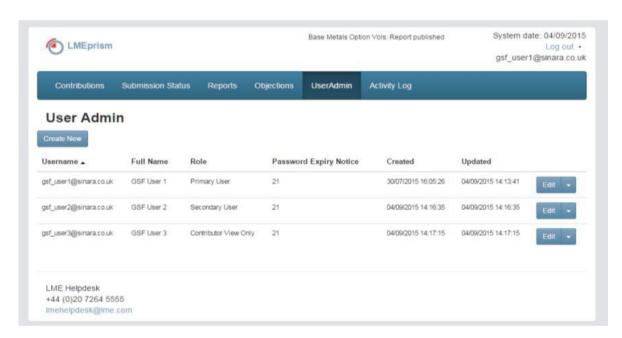
- Delete deletes the objection
- Edit allows the user to edit the comment for one of their contributor's objections
- Export exports to a csv file

7 User Admin

This page allows users to administer users. All users can access this page by selecting the *User Admin* menu item, though if the user does not have the *Primary User* role then they will only see their own user displayed.

7.1 View Users

An example of the view for a user with the *Primary User* role is shown below.

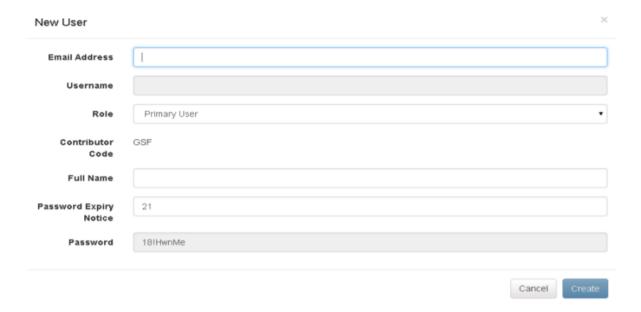


Depending on the current user's role some of the following functions will be available each of which is described in the following sections (Appendix A provides details of which functions are available to which roles):

- Create new user
- Edit
- Drop down next to Edit:
 - o Edit
 - o Delete
 - o Disable
 - o Reset Password
 - o Change Password
 - Submission permissions
 - Email notifications

7.2 Create new user

This is only available to Primary Users. A new user can be created by clicking on the *Create New* button at the top left of the page. This will bring up a separate screen allowing user details to be entered:



- Email Address/Username the username field will automatically populate based on the email address entered
- Role Each user must be assigned a role. The permissions granted to each role are given in detail in Appendix A, but in summary the different roles available are:

Role	Intended For	
Primary User	The primary contributor user who is responsible for adding other users for that contributor and can also submit data	
Secondary User	Secondary contributor users who need to submit data but should not be able to add other users	
Contributor View Only	Anyone who may need to view data but does not need to carry out functions that alter data or settings	

- Full Name user's first name and surname
- Password Expiry Notice this value controls if and when a user will get a warning email that
 their password is due to expire. If this is set to 0 then no such email will be sent. If it is set to a
 positive number then a user will get an email warning them their password is about to expire at
 the given number of days before expiry. They will get this email once a day until such time

- as they change their password (even if the expiry date then passes). For example if the Email Days is set to 5 then the user will get a warning email 5 days before their password is due to expire, then 4 days before, then 3 days before etc until they change their password.
- Password this is auto-generated by the system for a new User. On first login the User will
 be required to change the password. The password requires at least 1 lower case, 1 upper
 case and 1 non-alpha and at least 8 characters.

7.3 Edit

This is only available to Primary Users. By clicking on *Edit* the User can edit certain items related to the user as shown in the screen shot below:



7.4 Delete

This function is available from the drop down in each row on the users list and is only available to Primary Users.

If a user is deleted this will mark their account and any associated permissions as deleted (across all contribution sets). The user will no longer be visible on the front end and will no longer have access to the system.

7.5 Disable

This function is available from the drop down in each row on the users list and is only available to Primary Users.

If a user is disabled they will not be able to login to the Web Application or FTP file area. The user will still be visible on the users list (to allow them to be re-enabled).

7.6 Reset Password

This function is available from the drop down in each row on the users list and is only available to Primary Users.

This will launch a pop-up where the user can select to generate a new random password that meets the complexity rules. It can be used in the case where a user has forgotten a password.

7.7 Change Password

This function is only accessible for the user's own user. The user must enter their old password and new password.

The password is subject to validation with the password requiring at least 1 lower case, 1 upper case and 1 non-alpha and at least 8 character.

7.8 Submission Permissions

This function is available from the drop down in each row on the users list.

Submission permissions control whether a user can edit data for a data set. Note that a user cannot be given a submission permission on a data set that the Contributor is not permitted to contribute. It should also be noted that these user-level permission are not applied to files uploaded using the Web GUI or FTP (only contributor permissions are applied to files).

The can be set as Allowed or Not Allowed as shown below:

Update User Submission Permissions bch_user1@sinara.co.uk Username CA Allowed ΑН Not allowed ZS Allowed Allowed NI PB Allowed SN Allowed AA Allowed NA Allowed Edit Close

7.9 Email Notifications

This function is available from the drop down in each row on the users list. Clicking on this item takes the user to another screen for editing the type of email notifications a user can get. The display screen is shown below:



Using the *Edit* button user can put the row in to edit mode and use the check boxes to enable or disable a particular notification to this user. This is only available to Primary Users.

The LME would like to draw your attention to LME Notice 16/031: A/031 and specifically points 13 to 15, 'Reporting of Option Volatilities'. LMEprism users are required to receive the relevant email notifications that may assist in any investigations arising from any breaches in their reporting requirements.

All LMEprism users should have both the non-submission and omission email notifications selected.

The email notifications available are:

Name	Trigger
File Upload Success	File has been processed and all data sets were correct
File Upload Error	File has been processed and at least one data set was in error
Report Published	LME user has selected to publish the report
Report Re-Published	LME user has selected to re-publish the report
Contributions Omitted	LME user has omitted a whole data set
Contributions Partially Omitted	LME user has omitted some specific data points
Web App Submit	User has used the web front end to submit a data set
Objection Accepted	LME user has accepted an objection
Objection Omitted	LME user has omitted an objection
Submission Reminder 1	Configurable time before contribution window close [1]
Submission Reminder 2	Configurable time before contribution window close [1]
Non-Submission	Configurable time after contribution window close ^[1]
Waiting Acceptance	Contributor uploads a Data Set that goes into Waiting Acceptance state

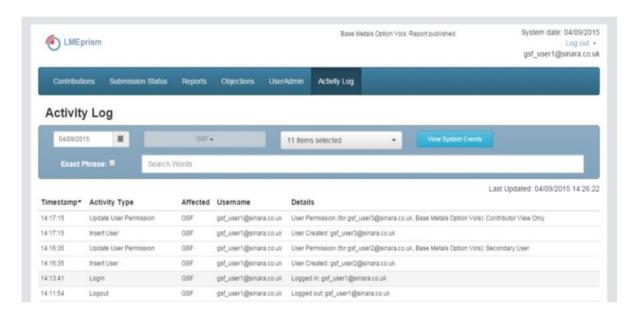
^[1] The window close time used will be the extended window close time if this has been set by the LME, otherwise it will be the normal configured window close time (could be standard or half day configured close time depending on the day). If the LME extend the window after the reminder email has already been sent, the reminder email will not be sent again. E.g. if the normal close time is set to 16:30 and the submission reminder 1 email configured to be sent 30 minutes before close time then this email we be sent out at 16:00. If at 16:05 the LME then extends the window to close at 16:40 then submission reminder 1 will not be sent again at 16:10 (30 minutes before the new close time).

8 Activity Log

The activity log displays details of all significant actions in the system including User log-on and log-off, data file uploads, data edits, report publications and objections for a given day. The User can access this page by selecting the *Activity Log* menu item.

8.1 View Activity Log

The initial display of the page is to show activities for the current day as shown below:



The Activity Log can be filtered in a number of ways using the controls at the top of the screen:

- Contribution Date
- Activity Type only activities present in the list will be shown
- View System Events this is a toggle button that allows system events to be displayed in the list as well as user triggered events. System events are events such as the contribution window opening.
- Search specific words can be searched for in the text shown (this can be restricted to an
 exact phrase by checking the Exact Phrase check box)

9 Glossary

Term	Description		
Commodity	A metal or other commodity, e.g. Copper, Nickel		
Contribution Date	A day that contributions are permitted. Weekends and bank holidays are not valid contribution dates.		
Contribution Permission	A permission for a Contributor to contribute a Data Set. A Contribution Permission can have one of three values – required, optional or not permitted.		
Contribution Set	A grouping of Data Sets for controlling workflow, e.g. base metals options volatilities		
Contribution Window	The time in which contributions are allowed for a Contribution Set, e.g. 16:00 to 17:00 for base metals option vols		
Contributor	An organisation that provides data to the system.		
CVRS	Closing Volatilities Reporting System – the old version of this system		
Data Set	A combination of Commodity and Data Type, e.g. nickel options volatilities		
Data Set Instance	An actual contributed instance of a Data Set for a given Contributor and Contribution Date.		
Data Type	Data Types are "rates" or "options volatilities"		
Date Series	A valid prompt date for which a contribution can be made, e.g. "Jan-15", "Feb-15" etc		
Firm	Another name for a Contributor		
FTP	File Transfer Protocol		
FTPs	File Transfer Protocol over SSL		
НТТР	Hypertext Transfer Protocol		
HTTPs	Hypertext Transfer Protocol over SSL		
LME	The London Metal Exchange		
LME User	A User of the system who works for the LME.		
Contributor User	A User who works for a Contributor		
Report	A collection of calculated data for one or more Data Sets.		
Report Instance	An actual instance of a report for a given Contribution Date. There can be more than one instance on any given day.		

Term	Description		
Report Type	Report Types included "Contributions" and "LMEprice"		
Role	Governs what functionality a User can access. A User can be assigned to one or more Roles on different Data Sets. The combination of Role and Data Set constituting a User Permission. The possible Roles are System Administrator, User Administrator, Data Submission and Data View.		
Series See Date Series			
SSL	Secure Sockets Layer – a transport layer protocol which provides secure communications between two computers across arbitrary intervening TCP/IP networks.		
TCP/IP	Transport Control Protocol/Internet Protocol		
User	An individual with an account to login to the system		
User Permission	A combination of Role and Data Set which gives a User access to certain functionality for that Data Set.		
URL	Uniform Resource Locator – a textual way of referring to network resources, for example http://www.lme.com		

10 Appendix A - Role Permissions

Section	Function	Primary User	Secondary User	Contributor View Only
Contribution	View contributions	Yes	Yes	Yes
	Export Contributions	Yes	Yes	Yes
	Edit contribution values	Yes	Yes	No
	Upload Contributions	Yes	Yes	No
Submission Status	View submission status	Yes	Yes	Yes
Reports	View reports	Yes	Yes	Yes
	Lodge objections	Yes	Yes	No
Objections	View objections	Yes	Yes	Yes
	Edit objections	Yes	Yes	No
User admin	View all users	Yes	No	No
	Edit users	Yes	No	No
	Reset password	Yes	No	No
	View user email permissions	Yes	Yes (own)	Yes (own)
	Edit user email permissions	Yes	No	No
	View user submission permissions	Yes	Yes (own)	Yes (own)
	Edit user submission permissions	Yes	No	No
Activity Log	View Activity Log	Yes	Yes	Yes