



ECL

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ECL - Why are we here?

Should SCD continue to support ECL, close this software over time, or relocate responsibility for it within CCD?

- ECL (Electronic Control Log) was created ~2009 as a replacement for CRL
 - CRL (Control Room Log) was Dzero's 1995 Java based, desktop, file based application with no database and no web access
- Today, there are 50+ actively supported instances.
(https://dbweb0.fnal.gov/redirector/ecl_instances.html)
 - About 20 or so archived instances
- Used by virtually all experiments.

New instances of ECL are still being creating on request.

ECL - What it is and Provides

Generally speaking ECL is a documentation database which provides a non-editable logbook and shift scheduling.

Logbook

Supports recording observations and data about beamline operations.

- Experiment defined forms requiring specific data from shifters which can include
 - Required point in time data, plots, images
 - Allows comments and conversations
- Cross-log entry referencing
- Tagging of entries
- Email notifications of log entries based on forms, categories, tags...
- Word and Complex Searches
- RSS Feed

ECL - What it Provides

Shifts

Provides the calendar based interface for organizing, coordinating and maintaining the shift schedule intervals, *shift quotas*, and individual shifts with reminders

- ** Shifters time is tracked back to the individual's university to ensure experiment contribution requirements are met.
- Shifts are organized by time intervals and are typically created by an admin.
- Multiple shifts can be defined for each day and multiple roles for members to enroll.
- A user can enroll to the shifts from the Calendar page. The user can also request a swap in case is needed.
- A user can view also a summary of available shifts to enroll to.
- A user can view a summary of all the shifts s/he has taken and also view a report for all the Institutions and the users.
- Shifts are assigned points so each user and each Institution can be accounted for.
- Shifts can be defined in a csv file and then uploaded to automatically populate the Calendar.

ECL - What it Provides

Members

- Provides the admin interface for the users/institutions/skills maintenance.
- Tracks who can be on shifts, be an admin,...
- The user may update the personal profile providing the contact information.

Projects

- A simple app for the project maintenance. Doesn't seem to be actively used.

ECL - Current State

- RITM1438414, Opened 2022-06-17
 - Opened by Greg Rakness, Terry Tope (Under PPD Muon Operations)
 - Requesting support for Cross Posting between ECLs for use between common areas of mu2e and g-2
 - This is a good idea, but requires ~3 months FTE as ECL instances were designed to be stand alone.
- Active development was stopped ~4-5 years ago.
 - We do provide fixes, and updates to underlying 3rd party products.
- We have also receive other requests which the users have not pressed us on.

ECL - Possible support solutions

- Stop accepting new instances. Overtime, shutdown ECL and recommend experiments utilize OTS software. (Dune does have a rarely used instance.)
 - https://docs.google.com/spreadsheets/d/1ISS5ReGQeIYUsR6Z9-M1blC_3aIPs6OOeVOb37LmrP4/edit?usp=sharing
 - Electronic Lab Notebooks
 - Largely designed for Biological research.
 - Require varying per-user fees - some quite high. (The closer they are to physics needs, the higher the fee.)
 - Shift Calendar
 - Targeted to restaurants, cafes and some for hospitals.
 - Some support multiple “teams” but how this transfers to fulfilling university support requirements we don’t know.
 - Fees required from single digits to \$100 per user.
- Continue to Support
 - Advantage:
 - It has what the experiments want.
 - Disadvantage:
 - It does not support newer GUI features and could use a face lift.
 - It is not reasonable to expect DUNE to use it as-is for the next 25 years.
 - Transfer to CCD
 - ECL is essentially a document database. Transfer to a group which manages document databases.
 - SCD continue to support

Appendix, ECL Feature Set - Logbook (detail)

Logbook

- has username/password LDAP based authentication, the Shibboleth SSO authentication is prepared
- allows to create the entries either in plain text or formatted using markup language (Textile), organized into a hierarchical tree structure of categories
 - Entry is read-only, once created cannot be amended
 - Entry has
 - a subject line (optional), may be set later
 - a unique ID
 - creation date
 - an author
 - a body built using one of the predefined templates (forms)
 - Entry may have
 - The files or images attached during creation
 - emails list to be sent to
 - a set of tags assigned later
 - multiple related entries created or attached later
 - multiple comments attached later
 - An entry list is presented in collapsed form by default, the entries may be expanded/collapsed individually or all at once
 - has pagination
 - can be filtered by category/subcategory
 - a word search is provided
 - for complex searches a dedicated interface is available
 - a search rule can be saved for later use
- provides RSS feeds for various criteria: everything/category/tag/form
- has an email subscriptions for various criteria: each entry/daily/weekly for everything/category/tag/form