

ALS Online Log

November 2002

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Background

- Review Existing Work
 - Operations Conference Papers, etc
 - About a half dozen products
- Evaluation Summarized
 - Complex User Interfaces (site specific), and
 - Complex programming environments
- How Simple can it be??

ALS Olog = Online Log

- Purpose
 - Make Log more useful, accessible, legible, searchable
 - Use it to Actively Notify people (email, text paging)
- Requirements
 - Simple for User & Developer
- Design
 - Web, Database
 - PHP, MySQL, Apache

Implementation

- Less than 800 lines of PHP
- Most of which is simple HTML
- A few MySQL Tables
- Attachments stored in Files
- Built in a weekend
- Extend as needed (about 50 hours in now)

**User Operations Shift underway:
1.9 GeV, 276 buckets, 10 mA in bucket 312
Refills at 9:00 AM, 5:00 PM, and 1:00 AM**

394.8	Sun, Nov 17, 2002 9:32:02 AM	ID GAP (mm)
mA		4U 183.58
SHUTTERS ARE CLOSED		4Z -10.84
7.2		5W 187.65
Life(Hrs)		7U 187.77
1.9		8U 189.30
GeV	9U 188.41	10U 188.81
Beam loss at	due to:	11U 181.59
		11Z 0.00
		12U 188.96

<u>ALS OnLine Log</u>				
DateTime	Category	Level	Subject	From
021117.0918	Operations	Info	0915: Storage Ring Refill	mdwolfe
021117.0857	Operations	Info	User Requested Extension BL4 and BL7 request extension of 9am SR refill.	mdwolfe
021117.0849	Operations	Info	Found GTL SHB2 off. Reset and turn on ok.	mdwolfe
021117.0842	Operations	Problem	SR12 IP4 is flashing an "error 5" condition. Advise EM group.	mdwolfe
021117.0839	Operations	Info	0800: Operator Shift Change ALS is operational for users at 1.9GeV, 276-bkts, 10mA in bkt312.	mdwolfe
021117.0115	Operations	Info	Light to Users	djbrothers
021117.0101	Operations	Info	Storage Ring Refill	djbrothers

User Operations Shift underway:

1.9 GeV, 276 buckets, 10 mA in bucket 312

Refills at 9:00 AM, 5:00 PM, and 1:00 AM

391.6	Sun, Nov 17, 2002 9:35:02 AM	ID GAP (mm) 4U 22.05 4Z -10.84 5W 13.26 7U 15.32 8U 32.86 9U 27.58 10U 38.24 11U 35.00 11Z 0.00 12U 40.35
mA LIGHT IS AVAILABLE 6.2 Life(Hrs) 1.9 GeV		
Beam loss at due to:		

ALS OnLine Log				
Date/Time	Category	Level	Subject	From
021117.0934	Operations	Info	Light to Users	mdwolfe
021117.0918	Operations	Info	0915: Storage Ring Refill	mdwolfe
021117.0857	Operations	Info	User Requested Extension BL4 and BL7 request extension of 9am SR refill.	mdwolfe
021117.0849	Operations	Info	Found GTL SHB2 off. Reset and turn on ok.	mdwolfe
021117.0842	Operations	Problem	SR12 IP4 is flashing an "error 5" condition. Advise EM group.	mdwolfe
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021117.0101	Operations	Info	Storage Ring Refill	djbrothers

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ALS OnLine Log

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021117.0101	Operations	Info	Storage Ring Refill	djbrothers
021116.1753	Operations	Info	1727: Light to users	dbrichardson
021116.1722	Operations	Info	1719: Stacking beam	dbrichardson
021116.1722	Operations	Info	1710: Shutters closed for refill	dbrichardson
021116.1647	Operations	Info	10 min extension granted at the request of BL 10.3.2	dbrichardson
021116.1647	Operations	Info		db
021116.1629	Operations	Info	Toured Facilities ok	jlpusina
021116.1018	Operations	Info	Complete EPBI Test #1. All t.c.s tested respond to heat.	mdwolfe
021116.0933	Operations	Info	0903: Complete processing of two ALS users.	mdwolfe
021116.0926	Operations	Info	Light to Users	mdwolfe
021116.0913	Operations	Info	0905: Storage Ring Refill	mdwolfe
021116.0912	Operations	Info	0855: BL10 requests 5 min extension (John Bozak).	mdwolfe
021116.0909	Operations	Info	0800: Operator Shift Change ALS is operational for users at 1.9GeV, 276 bkts, 10mA in bkt 312.	mdwolfe
021116.0138	Operations	Info	EPU 4 is operational	DABentsen
021116.0131	Operations	Info	EPU 4 is hung ... resetting bin	DABentsen
021116.0129	Operations	Info	Light to Users	DABentsen
021116.0110	Operations	Info	Storage Ring Refill	DABentsen
021116.0058	Operations	Info	10 minute extention granted for refill	DABentsen
021115.2357	Operations	Info	Operator Shift Change	DABentsen
021115.1832	Operations	Info	Toured Facilities	dbrichardson
021115.1738	Operations	Info	Light to Users	jlPusina

021115.1714	Operations	Info	SR11 gap prob Won't open in IDGap program. Reset SRIOC11 bin. Beam dumped. Cycling SR mags.	jlpusina
021115.1558	Operations	Info	Complete EPBI Test #1. All t.c.s tested respond to heat.	mdwolfe
021115.1115	Operations	Info	SR slow beam phase adj. application found "not responding".	mdwolfe
021115.1027	Operations	Info	slow orbit feedback Suspect SR slow orbit feedback was off from 6:47am until it was turned on at approx. 9:30am after SR refill. (ID gap & BPM readout application and error msg. on ALS storage ring control application.	mdwolfe
021115.0941	Operations	Info	0940: Light to Users	mdwolfe
021115.0929	Operations	Info	0830: User Requested Extension BL4 requested 15 min extension beyond scheduled 9am refill.	mdwolfe
021115.0926	Operations	Info	0915: Storage Ring Refill	mdwolfe
021115.0828	Operations	Info	Operator Shift Change ALS is operational for beamline users at 1.9GeV, 276-bkts, 10mA in 312.	mdwolfe
021115.0723	Operations	Info	0100: fill	djbrothers
021115.0722	Operations	Info	0100: fill	djbrothers
021115.0721	Operations	Info	0100: fill	djbrothers
021115.0710	Operations	Info	SR4 EPU was not responding to IDgap program had to power cycle the SRIOC04 EPU crate in the SO406 rack	djbrothers
021115.0119	Operations	Info	Light to Users	djbrothers
021115.0119	Operations	Info	0100: Storage Ring Refill	djbrothers
021114.1647	Operations	Info	Light to Users	jlpusina
021114.1625	Operations	Info	Stacking	jlpusina
021114.1616	Operations	Info	EM reset breaker, QF 1 on, cycling lattice.	jlpusina
021114.1611	Operations	Info	SR04C QF tripped off: EMs en route for inspection	dbrichardson
021114.1610	Operations	Info	ALS is recovering from water flow trip	dbrichardson
021114.1536	Operations	Info	1525: SR off due to Water Pump failure. PMT's notified	eidiaz
021114.1314	Operations	Info	Alarm handler further info If the alarm handler should sound, click on the button (that should be flashing) in the small application window on cr01u and a large window will open. Finding the alarming channel from this point should be obvious (burrow down by clicking the flashing buttons). You can silence the alarm using the buttons in the lower right corner.	tom_scarvie
021114.1153	Operations	Info	1145: Alarm Hadler. Alarm Handler is back, it lives on cr01u. The application alarms on the storage ring magnet ready or on/off status the area rad monitors and superbend temps.	Ojjones

ALS Shift Log

021116.1600 (Sat 16 November 2002 Swing Shift)

ALS OnLine Log				
DateTime	Category	Level	Subject	From
021116.1629	Operations	Info	Toured Facilities ok	jlpusina
021116.1647	Operations	Info		db
021116.1647	Operations	Info	10 min extension granted at the request of BL 10.3.2	dbrichardson
021116.1722	Operations	Info	1710: Shutters closed for refill	dbrichardson
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Advanced Light Source Online Log								
Up	Help	Categories	Current	Last Shift	Shift-2	Ring Status	Blank Log Entry Form	<input type="button" value="Search"/>
Find in last	<input type="text" value="3 D"/>	containing words	<input type="text"/>					

Post New Log Entry	
From	<input type="text"/> (assumes @lbl.gov)
Cc	<input type="text"/> (assumes @lbl.gov)
Category	<input type="text" value="General"/> Select the appropriate Category
Level	<input type="text" value="Info"/> Pick an appropriate Level
Actual Time	<input type="text"/> <input type="text"/> Select the Actual Time if the log entry is made late
Std Subject	<input type="text"/> Pick a Standard Subject if it fits
Subject	<input type="text"/> or type one keeping it under 50 chars
	Attach a File to the entry: <input type="text"/> <input type="button" value="Browse..."/>
Details	<div style="border: 1px solid black; height: 150px; width: 100%;"></div>
<input type="button" value="Click Here to Post this entry to the Log Database"/>	

Actual Time can be selected if the event occurred some minutes before the log entry. It will be prepended to the subject line in a standard format.

Standard Subject can be selected if appropriate to reduce typing and increase the consistency of subjects. If both a standard subject is selected and text is typed into the subject line, the typed text will be moved to the details section (rather than be lost).

Short entries can be completely on the Subject line, no Details necessary.

The subject line should be kept brief, just a few words, no more than 50 characters. The cell may appear to scroll, but the database will chop them off.

Entries that require more than several words should be summarized in the Subject line and spelled out in the Details section. Reading just the Subject lines should provide an overview of the log entry without unnecessary details - a 30,000 foot view.

Select Category and Level as appropriate.

Log Entries should be submitted individually, not collected for a long period of time..

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Category List

Category	Description
Accelerator Controls	Controls Hardware and Software, Control Room Applications
Beamline Controls	Hardware and Software
Electronics Maintenance	Electronics Maintenance
Network Support	ALS and LBNL Network Issues
Operations	Accelerator Operations
PC Support	Hardware and Software
Safety	Environmental Health and Safety
Unix Support	Hardware and Software
User Feedback	User Input - Problems, Suggestions, etc
Water	Water Cooling Systems
Web Support	ALS Web Issues, www.als.lbl.gov

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DateTime [Thursday November 14, 2002 13:14:07](#)

From tom_scarvie

Category Operations

Level Info

Subject Alarm handler further info

Details

If the alarm handler should sound, click on the button (that should be flashing) in the small application window on cr01u and a large window will open. Finding the alarming channel from this point should be obvious (burrow down by clicking the flashing buttons). You can silence the alarm using the buttons in the lower right corner.

Source 131.243.71.164

Experience

- Users like
 - Legible
 - Accessible
 - Searchable
- Users Don't Like
 - Double entry into the Paper Log
 - Lack of Spell Check

DOE Log Requirements

- DOE 1035-93 guide to good practices for logkeeping:
 - all entries are timed and dated
 - highlighting or colored text is good to call attention to important entries, special problems, and critical instructions
 - standardized method to be used for correcting log errors, the original entry is preserved. a note in the margin at the location of the incorrect entry, giving time and date of the corrected entry is recommended
 - it should be impossible to alter or add to entries already in the log
 - old logs must be available for use as reference material and be easily retrievable
 - logs must be maintained for the life of the facility

Plan for Future

- Periodically make CDROM of html report
 - Several copies, to meet permanence requirements
- LDAP/SSL Login to make entries
 - Crypto-Checksummed Cookie
- Optional Signature on each log entry
 - Password, checksum thread, email copy to author
- Add highlighting capability
- Add correction facility
 - Link correction and entry

Verifiable TimeStamping

- How to show log entries are unchanged
 - Weave them together cryptographically
- Form Composite Text including
 - Log entry fields, timestamp, author,
 - (name, cksum of attached file if needed)
 - Checksums from ten most recent Entries
- Compute Cryptographic Checksum
 - Of this and store in database