

TRIUMF Electronic Logbook System

Broadcasting Activities Beyond the Control Room

Eric Lee | ISAC Operator | TRIUMF

Accelerating Science for Canada
Un accélérateur de la démarche scientifique canadienne

Owned and operated as a joint venture by a consortium of Canadian universities via a contribution through the National Research Council Canada
Propriété d'un consortium d'universités canadiennes, géré en co-entreprise à partir d'une contribution administrée par le Conseil national de recherches Canada



- History of the logbook evolution from paper to web-based electronic logbook in the ISAC facility at TRIUMF.
- Motivations for the electronic logbook.
- Features for more detailed and accurate documentations.

- TRIUMF started with paper logbooks for documenting shift activities.
- Useful for incoming shifts to know exactly what happened before.
- Eventually became useful for support groups as well.

Paper Logbook Limitations

- Stylized handwriting.
 - Can become easier to read through experience.
- Single copy.
 - Everyone has to come to the Control Room to read the logbook.
 - Introduced additional traffic in the Control Room.
 - Led to potential distractions to operators.

ISAC Electronic Logbook

- ISAC started with a goal for an electronic logbook (elog) system.
 - Initially, paper logbook was used along the elog.
 - Eventually phased in documenting completely in the web-based electronic logbook.

ISAC Logbook - I

		Friday, November 17 th		9
of the	my	1600	Fixed a bent pin in the CGI socket - now OK	
		1611	all ITW turbos up to speed	
3 module		1613	ITW AVs closed - start roughing DBD.	
units		1616	TBD started	
key		1640	TPO at speed - open IVD.	
		1647	All ITW turbos pumping at speed.	
		1650	Range out ILE1 between IV6 & IV12 IMS: IG1 = 1.5×10^{-5}	
west		1703	PNG1 = 1.07×10^{-5} PNG2 = 1.20×10^{-5}	
from				
will				
Monday, 18th Nov. 1, 1999				
		0650	PNG1 = 1.35×10^{-6} , PNG2 = 1.06×10^{-6} IMS: IG1 = 7.1×10^{-7}	
ITW.		0652	Turn on ITW IG1 & IG5	
			ITH CG6 = 1.6 Torr, ITH CG5 = 4.8 Torr.	
		0900	ICH has transferred the ITH exhaust to the operating storage TKS.	
			Home is changing an ITW disconnected on the THT - it is weeping.	
150				
is ready				
id				

ISAC Logbook - II

23:25 checked ITW TGH and ITW TBHT systems for target. Cool down. Shut off ITW BIAS and ITW EE. still there is a force on ITW:IV5 and IAS:IV1 from last shift. Reboot ODCPC. [redacted] is here.

SUNDAY JULY 16, 2000

0015 MAINTENANCE WEEK.

0630 BUILDING ENTRANCE AND SERVICES CHECK:

POINT	STATUS	POINT	STATUS
EPIC HEALTH MON	OK	IND-10 OUTSIDE AIR	25.00
EPIC IN-10 ROOM	OK	IND-10 FAN CURRENT	18.20
IND-10 FAN CURRENT	18.20	IND-10 FAN CURRENT	17.20
IND-10 FAN CURRENT	17.20	IND-10 FAN CURRENT	16.20
IND-10 FAN CURRENT	16.20	IND-10 FAN CURRENT	15.20
IND-10 FAN CURRENT	15.20	IND-10 FAN CURRENT	14.20
IND-10 FAN CURRENT	14.20	IND-10 FAN CURRENT	13.20
IND-10 FAN CURRENT	13.20	IND-10 FAN CURRENT	12.20
IND-10 FAN CURRENT	12.20	IND-10 FAN CURRENT	11.20
IND-10 FAN CURRENT	11.20	IND-10 FAN CURRENT	10.20
IND-10 FAN CURRENT	10.20	IND-10 FAN CURRENT	9.20
IND-10 FAN CURRENT	9.20	IND-10 FAN CURRENT	8.20
IND-10 FAN CURRENT	8.20	IND-10 FAN CURRENT	7.20
IND-10 FAN CURRENT	7.20	IND-10 FAN CURRENT	6.20
IND-10 FAN CURRENT	6.20	IND-10 FAN CURRENT	5.20
IND-10 FAN CURRENT	5.20	IND-10 FAN CURRENT	4.20
IND-10 FAN CURRENT	4.20	IND-10 FAN CURRENT	3.20
IND-10 FAN CURRENT	3.20	IND-10 FAN CURRENT	2.20
IND-10 FAN CURRENT	2.20	IND-10 FAN CURRENT	1.20
IND-10 FAN CURRENT	1.20	IND-10 FAN CURRENT	0.20

12:17 Target cool down has been finished.

12:20 Target change and maintenance week. ITW EE & ITW BIAS are off.

16:29 Walked around ISAC Facility, everything seems OK.

16:50 checked odcpc it is OK.

17:00 checked EPICS Health Monitor, OK.

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IND-10 FAN CURRENT	18.20	IND-10 FAN CURRENT	17.20
IND-10 FAN CURRENT	17.20	IND-10 FAN CURRENT	16.20
IND-10 FAN CURRENT	16.20	IND-10 FAN CURRENT	15.20
IND-10 FAN CURRENT	15.20	IND-10 FAN CURRENT	14.20
IND-10 FAN CURRENT	14.20	IND-10 FAN CURRENT	13.20
IND-10 FAN CURRENT	13.20	IND-10 FAN CURRENT	12.20
IND-10 FAN CURRENT	12.20	IND-10 FAN CURRENT	11.20
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IND-10 FAN CURRENT	10.20	IND-10 FAN CURRENT	9.20
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IND-10 FAN CURRENT	7.20	IND-10 FAN CURRENT	6.20
IND-10 FAN CURRENT	6.20	IND-10 FAN CURRENT	5.20
IND-10 FAN CURRENT	5.20	IND-10 FAN CURRENT	4.20
IND-10 FAN CURRENT	4.20	IND-10 FAN CURRENT	3.20
IND-10 FAN CURRENT	3.20	IND-10 FAN CURRENT	2.20
IND-10 FAN CURRENT	2.20	IND-10 FAN CURRENT	1.20
IND-10 FAN CURRENT	1.20	IND-10 FAN CURRENT	0.20

ISAC Operations Logbook viewed by shift - Mozilla Firefox

ISAC Operations Logbook viewe... | triumph.ca | https://web.accel.triumf.ca/isac_eelog/shifts.pl

ISAC Ops | ISAC e-log | 520MeV e-log | 520MeV Ops | tmail | Travellers&Visitors | TRIUMF Phone List | TRIUMF email list | Phone | Google

Logout | Currently logged in as Eric Lee | To multi-frame version Elog

Previous Next | Start Shift | Make Entry | End Shift | Latest | Search | Calendar | New e-Fault

ISAC Operations Logbook -- Eve shift on Sat Jul 21, 2012

Op	Op	Op	Op	Op	Op	Op
Eric Lee						


Start of Shift Notes: 8Li to bNMR with Kicker on. IRIS taking 18O(2+)(4+)8+ @ 11.8 MeV/u.

ITW: 40uA P+ on target with separator magnets set for 8Li 2 20kV bias.
 ITW:EE = 1.04kV, ITW:TGHT = 380A, ITW:TBHT = 235A.
 ITW:PNG1 = 6.58e-7 torr, ITW:PNG4 = 1.23e-6 torr, ITW:IG1 = 5.75e-7 torr, ITW:IGIS = 4.05e-7 torr.


ITE: Heater conditioning in progress.
 ITE:BIAS = 28kV, ITE:EE = 1.41kV, ITE:EL = 13.64kV, ITE:TGHT = 500A, ITE:CHT = 250A.
 ITE:PNG1 = 1.74e-6 torr, ITE:PNG4 = 2.19e-7 torr, ITE:IG1 = 2.80e-7 torr, ITE:IGIS = 5.46e-7 torr.

OLIS: MWS producing 18O2+ for IRIS. Beam is stripped to 4+ at MEBT, and again to 8+ at HEBT. Final beam energy to IRIS is 11.8 MeV/u.

15:13:37 **Summary:** ISAC RF overview.
Detail: (No additional detail) Make Comment - Eric Lee



15:15:27 **Summary:** OLIS overview.
Detail: (No additional detail) Make Comment - Eric Lee



16:04:13 **Summary:** SCC1:CAV4 lost cavity OK.
Detail: Auto-On restored the cavity.
 Downtime = 1 minute. Make Comment - Eric Lee

16:18:14 **Summary:** SCC1:CAV3 lost cavity OK.
Detail: Auto-On restore it immediately. Make Comment - Eric Lee

2012-07-21 17:29:16 **Summary:** SCC1:CAV3 lost cavity OK again. Make Comment - Eric Lee
Detail: Auto-On brought the cavity back immediately.

- Accessibility
- Searchability
- Storage



- Web-based.
 - Eliminated the single copy physical limitation.
 - Accessible through a browser.
 - No need to visit the Control Room to read the logbook.

- Off-site access.
 - TRIUMF personnel may log in to the external elog.
 - Further reach for reporting shift activities and machine status.

ISAC Status
(as of Sun Jul 22 19:21:08 2012)

BL2A Energy (2A/723)	479 MeV
BL2A Current (2A/724)	39.9 uA
West Target	Active Beam to
East Target	No Beam
Olis	Stable Beam to
Exp Rate signal <small>(OPS:ASSIGNEDRATE.INP)</small>	"OPS:CALC5 "
Exp Rate Value <small>(OPS:ASSIGNEDRATE)</small>	2.119530000000000e+06

Beam line 2A current (red) and experiment rate (green) shown in graph at right.

Stats above from code provided by Rolf Keitel's page [here](#)

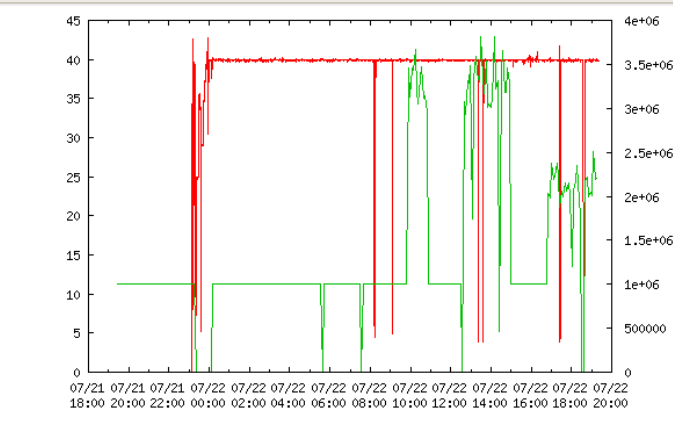
Autogenerated copy of: ISAC Operations Logbook

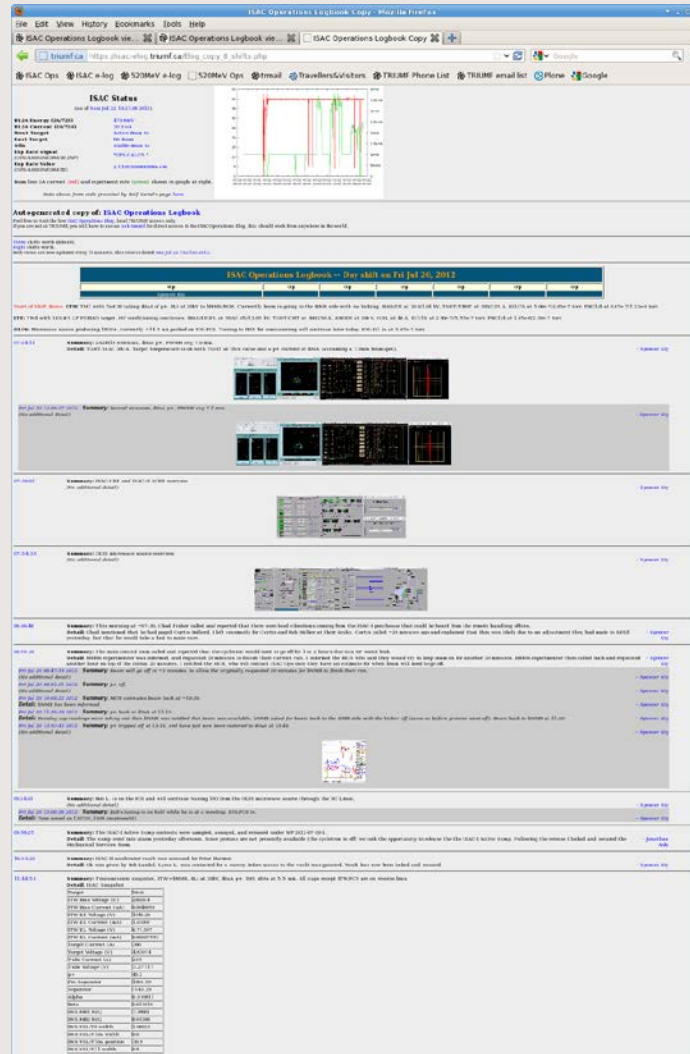
Feel free to visit the live [ISAC Operations Elog](#), local TRIUMF access only.
If you are not at TRIUMF, you will have to use an [ssh tunnel](#) for direct access to the ISAC Operations Elog, this should work from anywhere in the world.

[Three](#) shifts worth (default).
[Eight](#) shifts worth.
Both views are now updated every 15 minutes, this view is dated Sun Jul 22 19:21:03 2012.

ISAC Operations Logbook -- Day shift on Fri Jul 20, 2012

Op	Op	Op	Op	Op	Op	Op
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The screenshot displays the ISAC Operations Logbook interface. At the top, there is a navigation bar with options like 'File', 'Edit', 'View', 'History', 'Bookmarks', 'Tools', and 'Help'. Below this is a search bar and a list of active sessions. The main content area is titled 'ISAC Status' and includes a graph showing various parameters over time. Below the graph, there is a section for 'Add operations of copy of ISAC Operations Logbook'. The central part of the page features a timeline for 'ISAC Operations Logbook - Ops - 08/09/2012'. The bottom section contains a list of log entries, each with a date and time, a summary, and a link to view the full entry. Some entries include small thumbnail images of the logbook interface.

Accessibility Benefits

- Easily accessible to a large audience on or off site.
- Global access.

- Difficult to search in paper logbook.
- Accompanying database for the elog.
 - Search parameters may include:
 - Date
 - Author
 - Keywords
- Speed up finding details for reference or investigation.

ISAC Operations Logbook Search

[Back to elog](#)

Summary/Detail ▾	Containing: All ▾	<input type="text"/>
Summary/Detail ▾	NOT containing: All ▾	<input type="text"/>
Author	<input type="text"/>	
Filters	<input type="checkbox"/> Case Sensitive	Both Images or Not ▾
<input checked="" type="radio"/> All dates	<input type="radio"/> Exact date 2012 ▾ 07 ▾ 22 ▾	<input type="radio"/> Date range From : 2012 ▾ 07 ▾ 15 ▾ to : 2012 ▾ 07 ▾ 22 ▾
<input type="button" value="Search"/> <input type="button" value="Reset"/>		

Searchability Benefits

- Searching for past events and details requires less time and became more effective.

- Physical logbooks require large storage space over time.
- Long term preservation considerations:
 - Fireproof
 - Water-proof
 - Flood-proof
 - Insect-proof
- Additional costs for storage solutions.

Storage Benefits

- Electronic logbook information stored digitally.
- Takes up less physical space.
- Backed up regularly.
 - Multiple back-ups are possible.
- Low cost for digital storage expansion.

Unintended Side Effects

- Instructions may be overlooked among the entries.
- Misinterpreted criticism.

- History of the logbook evolution from paper to web-based electronic logbook in the ISAC facility at TRIUMF.
- Motivations for the electronic logbook.
- Features for more detailed and accurate documentations.

Thank you!

Merci

TRIUMF: Alberta | British Columbia |
 Calgary | Carleton | Guelph | Manitoba |
 McMaster | Montréal | Northern British
 Columbia | Queen's Regina | Saint Mary's |
 Simon Fraser | Toronto Victoria | Winnipeg
 | York

