

# Elog status

Stefano Lacaprara

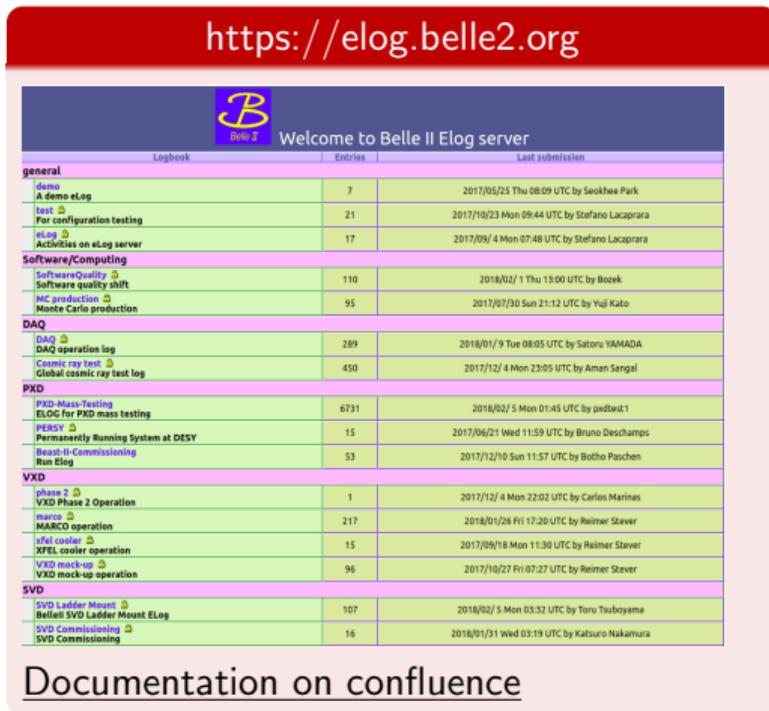
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B2GM meeting - Soft/Comp session,  
KEK, 6 Feb 2018

Since > 1 year a ELOG server is available at DESY, as part of B2 collaborative services

- $N > 10$  ELOG's actually active
  - ▶ Comp/Soft, DAQ, Detectors (PXD, VXD, SVD)
  - ▶  $\mathcal{O}(1000)$  entries as of today
- System provided by DESY
  - ▶ operated in XEN virt env (as all other B2CS)
  - ▶ hypervisor operated by DESY IT, including monitoring and alarm, dead-time free migration, etc
  - ▶ service is secured by https and a service certificate
  - ▶ run in DMZ
  - ▶ plenty of disk space, full backup
  - ▶ now support in working hours, will negotiate 24/7 for critical services (hypervisor, ELOG?)
- ELOG installation, configuration and maintenance our responsibility (easy task)
  - ▶ DESY IT don't have expertise on it
  - ▶ they are asking for instructions for shift crew for intervention in case of problem (to be done)

<https://elog.belle2.org>



The screenshot shows the Belle II Elog server logbook interface. At the top, there is a red banner with the URL <https://elog.belle2.org>. Below the banner is a header with the Belle II logo and the text "Welcome to Belle II Elog server". The main content is a table with columns for "Logbook", "Entries", and "Last submission". The table is organized into sections: "general", "Software/Computing", "DAQ", "PXD", "VXD", and "SVD". Each section contains a list of log entries with their respective counts and submission dates.

Logbook	Entries	Last submission
<b>general</b>		
demo	7	2017/05/25 Thu 08:09 UTC by Seokhee Park
A demo eLog		
test	21	2017/10/23 Mon 09:44 UTC by Stefano Lacaprra
Per configuration testing		
eLog	17	2017/09/04 Mon 07:48 UTC by Stefano Lacaprra
Activities on eLog server		
<b>Software/Computing</b>		
SoftwareQuality	110	2018/02/1 Thu 13:00 UTC by Bozek
Software quality shift		
MC production	95	2017/07/30 Sun 21:12 UTC by Yuji Kato
Monte Carlo production		
<b>DAQ</b>		
DAQ	289	2018/01/9 Tue 08:05 UTC by Satoru YAMADA
DAQ operation log		
Cosmic ray test	450	2017/12/4 Mon 23:05 UTC by Aman Sengal
Global cosmic ray test log		
<b>PXD</b>		
PXD-Mass-Testing	6731	2018/02/5 Mon 01:45 UTC by pretest1
ELOG for PXD mass testing		
PERSY	15	2017/06/21 Wed 11:59 UTC by Bruno Deschamps
Permanently Running System at DESY		
Beam-IT-Commissioning	53	2017/12/10 Sun 11:57 UTC by Botho Paschen
Run Elog		
<b>VXD</b>		
phase 2	1	2017/12/4 Mon 22:02 UTC by Carlos Martins
VXD Phase 2 Operation		
marco	217	2018/01/26 Fri 17:20 UTC by Reimer Stever
MARCO operation		
XFEL cooler	15	2017/09/18 Mon 11:30 UTC by Reimer Stever
XFEL cooler operation		
VXD-mock-up	96	2017/10/27 Fri 07:27 UTC by Reimer Stever
VXD mock-up operation		
<b>SVD</b>		
SVD Ladder Mount	107	2018/02/5 Mon 03:32 UTC by Toru Tsuboyama
BelleII SVD Ladder Mount ELog		
SVD Commissioning	16	2018/01/31 Wed 03:19 UTC by Katsuro Nakamura
SVD Commissioning		

Documentation on confluence

## ● authorization/authentication

- ▶ uses LDAP DESY server:
  - ★ access is allowed only to belle2 member with a DESY account
  - ★ **same username and password as for all other B2CS**
  - ★ access via https: if you have internet connection, you can access it.
- ▶ the login account **can** be used automatically as “author” in entries

## ● Customization of ELOG

- ▶ usual customization of fields, mandatory or not, templates, radio buttons, drop down options menu, etc, different in each eLog, following user requests
- ▶ mail notification available: each user can subscribe to any elog;
- ▶ **(multiple) attachment with automatically generated thumbnails;**
- ▶ entries uploading via script developed and run daily
- ▶ **system timezone is UTC. Other TZ (CET, JST) possible.**

## ● Installation of eLog as per user request, usually quite fast

- ▶ got generic request “need an elog for this, thanks”, as well very specific one ”need an elog with this cfg file, thx”



The screenshot shows the Belle2 eLog web interface. The top part is a form for creating a new entry, with fields for Entry Date, Author, Date, Type, and Description. Below the form is a preview of the generated eLog content, which includes a header with the entry title and a body with a path, a plot, and a histogram.

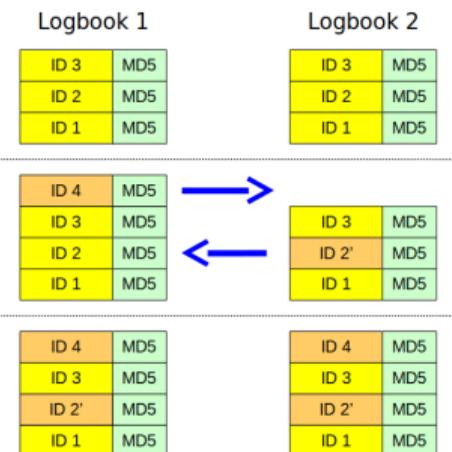
## 1 Use the eLOG at DESY

- ✓ already available
- ✓ system maintenance by professionals (DESY IT)
- ✓ authentication/authorization already in place, no new username/password
- ✓ fully accessible from anywhere
  - ★ including any machine at KEK, provided it can access internet
- ✗ not local at KEK.

## 2 Setup a new eLOG at KEK

- ✓ at KEK
- ✗ we moved all B2CS at DESY because at KEK was hard/impossible to have fully maintained server (not under Hara-san desk)
- ✗ visibility/accessibility?
  - ★ Only from within KEK or via VPN. Do we like this?
  - ★ also from outside: **what about access?**
  - ★ use same DESY account (via LDAP): possible but **LDAP server is remote**, same problem as before
  - ★ use local account: **an other username/password?** (no, please!)

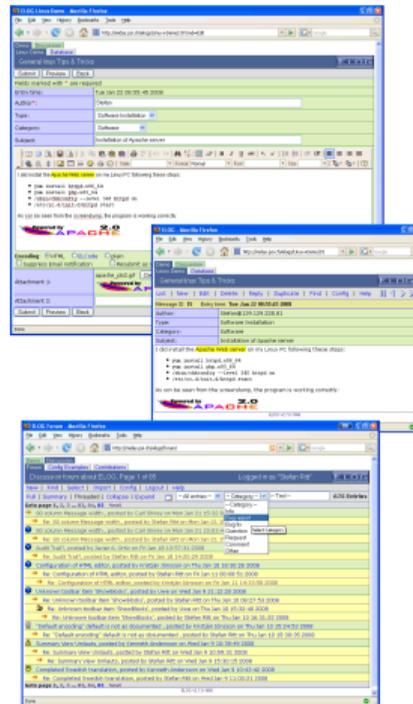
- **Synchronization** (also bi-directional) between two ELOG instances is possible. Built-in in the ELOG server software
- I believe it is also possible via a rsync, as the ELOG is a file-based system
- **If running all at DESY not viable, we can investigate a sync between DESY and KEK**
  - ▶ provided a suitable machine is available at KEK
  - ▶ Not clear yet how to deal with security restriction at DESY (namely ldap based authentication)
  - ▶ Also if second ELOG is at KEK, need to understand how to access it from outside for sync (might be not trivial)
  - ▶ Need some test
- **work plan:**
  - ▶ a second WM has been required at DESY, to setup a second ELOG and try synchronization within same network;
  - ▶ then try a sync from DESY to outside (eg, my home institute or elsewhere)
  - ▶ possibly try DESY-KEK sync provided a KEK machine is available
  - ▶ **More than happy to collaborate with anyone at KEK to this goal.**



- **A working eLOG is available at DESY and widely used**
  - ▶ No major issue so far
- **available also for data-taking**
- **if we want to have a local eLOG at KEK some problem need to be solved**
  - ▶ proper server availability
  - ▶ accessibility
  - ▶ authorization/authentication
  - ▶ (same issues addressed and solved at DESY)
- **plan to investigate more deeply the possibility of a synchronization between local (KEK) and remote (DESY) eLOG.**

Additional or backup slides

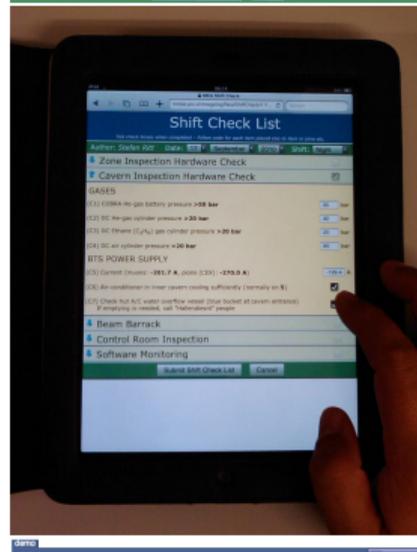
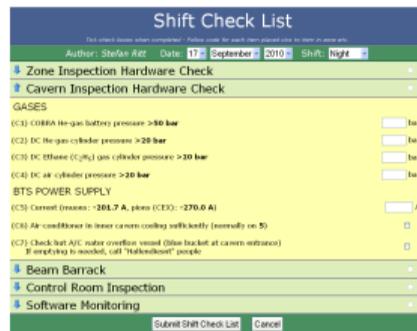
- <http://midas.psi.ch/elog/> author: Stefan Ritt
- First release 2001: latest release (3.2.1) 5/9/2016 (GNU public license)
- initial choice of LHC experiments (with [heavy] customization)
  - ▶ C, javascript, css
  - ▶ web interface
  - ▶ own web server (can work with apache)
  - ▶ very configurable
  - ▶ flat file "database"
  - ▶ form (shift check-list), categories, sub-cat
  - ▶ mail notification, with filter, attach, etc
  - ▶ access control: native, kerberos, LDAP, guest
  - ▶ two way synchronization (keep two or more logbooks in sync)



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Logbook 1

ID 3	MD5
ID 2	MD5
ID 1	MD5

Logbook 2

ID 3	MD5
ID 2	MD5
ID 1	MD5

ID 4	MD5
ID 3	MD5
ID 2	MD5
ID 1	MD5



ID 3	MD5
ID 2'	MD5
ID 1	MD5

ID 4	MD5
ID 3	MD5
ID 2'	MD5
ID 1	MD5

ID 4	MD5
ID 3	MD5
ID 2'	MD5
ID 1	MD5

