Belle II Collaborative Services & Tools (B2CS) @ DESY



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- > Collaborative services and tools are essential for (HEP) experiments
- As the result of a fruitful discussion initiated by Hara-san and Th. Kuhr, the Belle II Computing Steering Group (B2CSG) decided on 02 Feb 2016 to migrate all B2CS into the existing IT infrastructure at DESY
- > This proposal was approved by the Belle II bodies in the last month
- > The migration must be finished before the KEK summer shutdown
- > Due to the tome constraints a risk assessment for the migration is needed soon



B2CS @ DESY: Arguments and Issues



- The DESY IT infrastructure is built to be reliable and highly available and has been providing sustainable services for many scientific groups such as CFEL and EXFEL as well as for HEP
- > It includes fail-over mechanisms, back-up and archiving options for all services
- > As for all scientific sites, security is major issue at DESY, it includes regular software updates and dedicated firewall rules
- > Replication of data and services can be implemented
- The Belle II members will be register with DESY by way of Grid User certificates; as a back-up paper-based registration is possible





- **>** Time is short until the KEK shutdown in summer!
- > The experts at DESY have looked through all single items on the list
- > For all services and tools prototypes were prepared for Belle II
- > The process of hiring additional manpower has started.
- > As a back-up a 1-to-1 copy of existing services into virtual machines (VM) will be considered (as temporary and unsupported solution)



B2CS: belle2.org DNS



- > DESY purchased the domain 'belle2.org'. It is in operation and can be used.
- DESY also purchased/reserved 'belle2.de' and 'belle2.info'. They are used as forwards.
- > Open: -
- > Next: -
- > Risk: -
- > Belle II: Takanori Hara
- > DESY: Renate Roude <weboffice_AT_desy.de>



B2CS: member database, authentication



- > The DESY registry is capable of hosting the Belle II users and manages the access to the web pages and the Atlassian tools.
- A registration procedure based on User Grid Certificates is in operation for the DESY analysis facility (NAF) and was used for a few Belle II members as a prototype.
- Takanori Hara (KEK), Thomas Kuhr (LMU), Markus Prim (KIT), Thomas Hauth (KIT) registered by way of Grid certs.
- > A group structure can be defined by collaboration.
- > Open: Fall back procedure for users w/o Grid cert. Define groups (within Belle II namespace).
- > Next: Develope registration procedure. Automatically assign resources.
- > Risk: -
- > Belle II: Thomas Kuhr, Chris Hearty
- > DESY: Thorsten Kluever <weboffice_AT_desy.de>



B2CS: public web page / internal web page



- > A web page was set up as a prototype.
- > Access with DESY credentials only for now.
- > www.belle2.org
- > Open: Migrate and edit content. Allow for public access.
- > Next: Migrate and edit content.
- > Risk: Availability of manpower to do the work (Belle II).
- > Belle II: Takanori Hara, Chris Hearty
- > DESY: Renate Roude <weboffice_AT_desy.de>



B2CS: public web page / internal web page





RESEARCH FIELDS
→ Physics

➔ Detector

➔ Software

➔ Computing

[More]

COMING EVENTS

✦ Flavor Physics with High-Luminosity Experiments (Oct 24-Nov 18, 2016, MIAPP, Munich, Germany)

→ 25th B2GM (Oct 17-21(Mon-Fri), 2016, KEK, Japan)

US Belle II Summer School (Aug 15-19, 2016, PNNL, USA)

→ 24th B2GM (June 20-24 (Mon-Fri), 2016, KEK, Japan)

→ 4th Belle II Theory Interface Platform (B2TiP) Workshop (May 23-25, 2016, Pittsburgh, USA)

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B2CS: wiki



- > DESY supports 'confluence' which is part of the Atlassian Tools.
- > Access via DESY credentials.
- > The contents of the KEK Twiki were migrated. Structure must be built up.
- https://confluence.desy.de/display/BI/Belle+II
- > Open: A one-to-one migration is not possible.
- > Next: Work on setting up and re-linking contents.
- > Risk: A 1to-1 migration is not possible. Work is needed!
- > Plan B: Static web archive of the KEK Twiki.
- > Plan Z: Run twiki on VM (unsupported amd mot recommended!).
- > Belle II: Thomas Kuhr, Markus Prim
- DESY: Bastian Vennemann <weboffice_AT_desy.de>







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B2CS: issue tracker

- > DESY supports 'agira (JIRA)' which is part of the Atlassian Tools.
- > Access via DESY credentials.
- https://agira.desy.de/projects/BELLEII
- > Open: The starting point is open.
- > Next: Experts should start to test.
- > Risk: Old contents might get lost (redmine is not supported).
- > Belle II: Thomas Kuhr
- > DESY: Bastian Vennemann <weboffice_AT_desy.de>





B2CS: svn repository / code browser

- > DESY supports 'stash' which is the GIT implementation of the Atlassian Tools.
- https://stash.desy.de/projects/B2
- > Open: Migration of contents.
- > Next: Test by experts.
- > Risk: Not achievable in time.
- > Plan B: Stay with svn (unsupported).
- > Belle II: Thomas Kuhr
- > DESY: Oliver Frost <Oliver.Frost_AT_desy.de>





B2CS: build server / build slaves

- > A VM was set up and scuccessfully for tested.
- b2-master.belle2.org, b2-slave-ubu144.belle2.org, b2-slave-sl6.belle2.org, b2-slave-el7.belle2.org
- > Open: Final set up.
- > Next: Final set up.
- > Risk: -
- > Belle II: Thomas Kuhr
- > DESY: Andreas Gellrich



B2CS: mail server



- > No user mail boxes are available for the doman 'belle2.org'.
- > This could be implemented later if desired. Would allow for common calendar.
- > Possibly: <Takanori.Hara_AT_belle2.org> \rightarrow <takanori.hara_AT_kek.jp>
- > SPAM tagging via national academic network provider
- > Belle II: Takanori Hara, Thomas Kuhr
- DESY: Dirk Jahnke et al. <postmaster_AT_belle2.org>



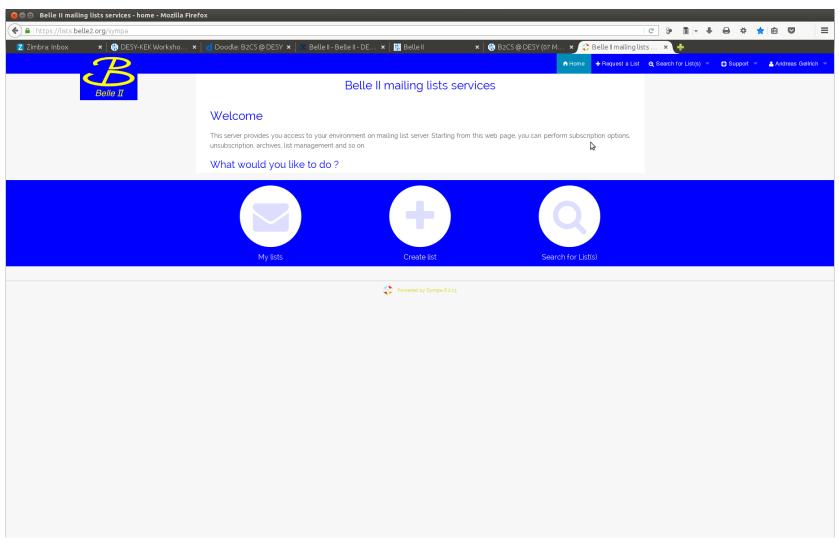
B2CS: mailing lists

- > A mailing list server based on Sympa 'https://lists.belle2.org/sympa' was set up. It is still internal.
- > A first mailing lists: <b2cs_AT_belle2.org>, <b2cs-support_AT_belle2.org>
- > The current Belle II MLs were looked at.
- > Automatic handling of Belle II members into/out of ML.
- > Open: Clean up of old mailing lists. Naming sheme.
- > Next: Set up of new MLs.
- > Risk: -
- Belle II: Takanori Hara, Johannes Grygier, Thomas Kuhr, Mikihiko Nakao
- DESY: Dirk Jahnke et al. <postmaster_AT_belle2.org>



B2CS: mailing lists







B2CS: indico

- > The DESY indico server has a category 'Belle II'.
- > Access for registered users only (not DESY registry).
- https://indico.desy.de/categoryDisplay.py?categId=428
- > Access via indico.belle2.org might be possible.

> Open: -

> Next: Editor must register with 'indico.desy.de'.

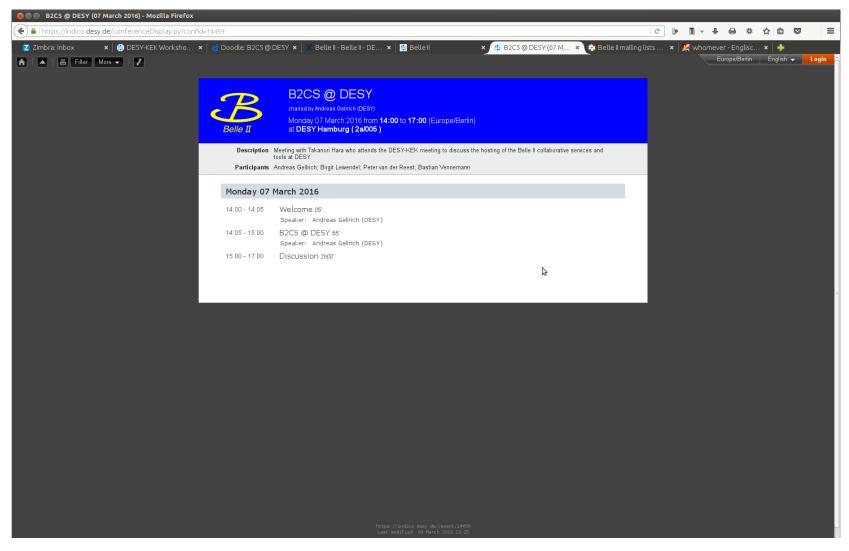
> Risk: -

- > Belle II: Takanori Hara
- > DESY: Marcus Dramburg <indico_AT_desy.de>











B2CS: invenio



- > A document server instance 'docs.belle2.org' is being set up based on 'invenio'.
- > Open: Detailed migration scenario.
- > Next: Clarify details.
- > Risk: Time.
- > Belle II: Phill Urquijo
- > DESY: Florian Schwennsen <florian.schwennsen_AT_desy.de>



B2CS: backup / service recovery

- > backup to TSM is possible on the service level
- > Open: Definiton of services and contents.
- > Next: Definiton of services and contents.
- > Risk: -
- > Belle II: Thomas Kuhr
- > DESY: Andreas Gellrich





B2CS: ganglia/nagios



- Monitoring / Alarming of DESY Belle II services will be possible via Icinga incl. alarm forwarding
- **>** Open: -
- > Next: -
- > Risk: -
- > Belle II: Thomas Kuhr, Hideki Miyake
- > DESY: Andreas Gellrich





- > All items have been touched
- > Prototypes exist
- > Work can start
- > Belle II will live at least 1-2 decades
- > Support must be guaranteed for the lifetime of the collaboration

