

LHCOPN Operations update

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LHCOPN meeting, 2010-03-09, London

- **LHCOPN meeting, 2009-12-11, Bologna**
 - <http://indico.cern.ch/conferenceDisplay.py?confId=68011>
 - Outcomes
 - Tools and processes are ok
 - Only 25% of “significant” events seems reported within GGUS
 - Need to take lessons from first production period to improve Ops
- **Ops phoneconf, 2010-01-14**
 - <https://twiki.cern.ch/twiki/bin/view/LHCOPN/14thJanuary2010>
 - Detailed reports about GGUS tickets requested (NL-T1)
- **Ops WG6, 2010-01-21, CERN**
 - <http://indico.cern.ch/conferenceDisplay.py?confId=76925>

- **Ops model deployment status**
- **Tools**
 - GGUS
 - Twiki
- **Processes**
 - KPIs
 - Improving LHCOPN Operations

	Trained	R/W Access to the twiki verified	Access to the TTS verified	Started Ops production mode	Review of twiki
CA-TRIUMF	2009-04-08	2009-04-30	2009-04-30	2009-04-30	Partial 2009-06-19
CH-CERN	2009-04-02	2009-02-04	2009-02-04	2009-02-04	
DE-KIT	2009-04-02	2009-02-04	2009-02-04	2009-02-23	2009-09-14
ES-PIC	2009-04-02			2009-02-04	2009-08-12 (Twiki access issue)
FR-CCIN2P3	2009-04-02			2009-02-04	2009-12-07
IT-INFN-CNAF	2009-12-10			2009-02-14	
NDGF	2009-06-16			2009-07-14	
NL-T1	2009-06-16	2009-06-19		2009-06-19	2009-10-07
TW-ASGC	2009-04-08	2009-06-03	2009-04-08	2009-06-03	2009-10-30
UK-T1-RAL	2009-06-16	2009-06-23	2009-06-19	2009-06-23	2009-11-04 Postponed 2009-11-23
US-FNAL-CMS	2009-04-08	2009-06-22	2009-05-04	2009-06-22	Started 2009-11-23
US-T1-BNL	2009-04-08	2009-05-27	2009-05-08	2009-05-27	2009-10-20 (twiki access issue)

Deployment completed
~10 months



- **Twiki review is really taking too long (started 2009-06)**

Review of information within LHCOPN twiki

Detailed description:

Dear all,

Information in the LHCOPN twiki (<https://twiki.cern.ch/twiki/bin/view/LHCOPN/WebHome>) previously appeared to be not fully accurate or updated and a review process was needed as agreed during last LHCOPN meeting. This review is done site by site to avoid concurrent editing issues. Some key changes and updates were still done on the twiki.

Key information to be checked or completed about your site stand on these pages:

<https://twiki.cern.ch/twiki/bin/view/LHCOPN/OverallNetworkMaps>

<https://twiki.cern.ch/twiki/bin/view/LHCOPN/LhcopnIpAddresses>

<https://twiki.cern.ch/twiki/bin/view/LHCOPN/ImplementationDetails>

<https://twiki.cern.ch/twiki/bin/view/LHCOPN/RoutingPolicies>

<https://twiki.cern.ch/twiki/bin/view/LHCOPN/NamingConventionAndLinksIDs>

<https://twiki.cern.ch/twiki/bin/view/LHCOPN/TechnicalContacts>

<https://twiki.cern.ch/twiki/bin/view/LHCOPN/OpsContacts>

https://twiki.cern.ch/twiki/bin/view/LHCOPN/TTSdetails#Authentication_on_GGUS

Please have a quick look on them (Are all your links correctly presented with correct IP addresses? Is your whole network team allowed to access the TTS?), feel free to edit anything remaining inaccurate about your site and then close this ticket (please with a summary of any key change you may have done).

Closing this ticket means you are fine with the information about your site in all the aforementioned pages.

Please do not take too much time as the review is serialised site by site, to avoid any interference, and objective is to have twiki completely reviewed y all sites before next LHCOPN meeting (2009-12).

Do not hesitate to contact me directly for any detail or issue.

Regards and thank you,

Guillaume

- **Twiki review**
 - Serialised
 - Thought to be important
 - Why this is not going ahead? Is the process not ok?

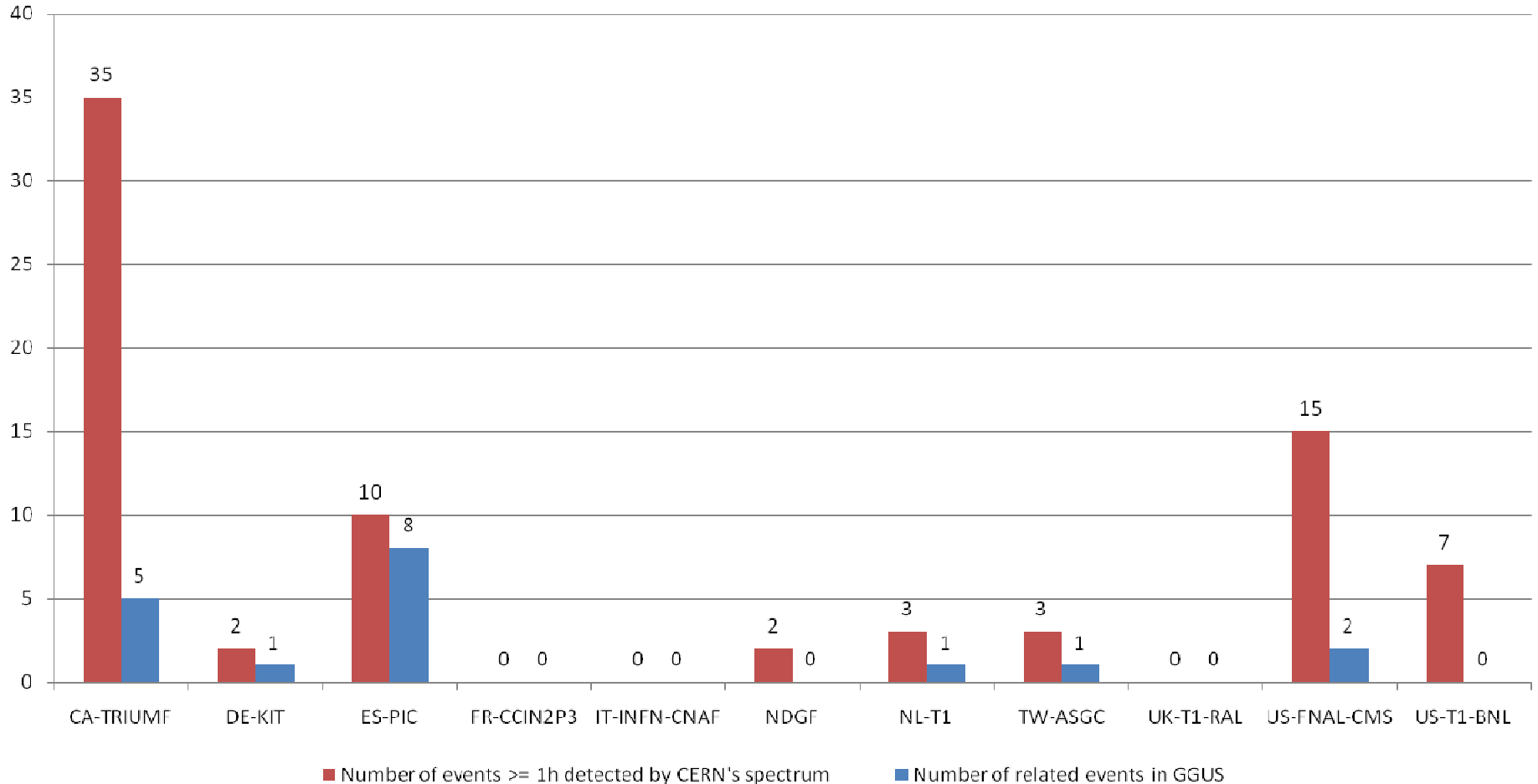
- **Benefit of ongoing review**
 - Clarified if some links are in the LHCOPN or not
 - Lot wrong content updated
 - IP prefixes, technical contacts

- **Should we integrate/merge LHCOPN helpdesk within the standard GGUS?**
 - + Consider networks like other resources (computing, storage...)
 - + Maybe better fit in reporting reports
 - + Now standard way to send enquiries to sites?
 - + Maybe some central manpower could be gained
 - + Regularly chasing pending tickets...
 - + Less specific software and support from GGUS
 - We have something stable and working
 - Previously completely tailored for us
 - Be far from interferences with Grid world
 - No strong preference from the GGUS team

- **Items remaining on the todo list**
 - <https://twiki.cern.ch/twiki/bin/view/LHCOPN/GGUSstatusList>
 - Rejected: E-mail interface
 - Done: Improvement in e-mail notifications templates
 - Detailed reports: A CSV output of GGUS ticket's will be available
- **Support might be “slightly” reduced after EGEE**
 - Better to have all major requests in the status list before

- **We ended with only two KPIs for the moment**
 - KPIs will be computed before each LHCOPN Ops Phoneconf and reviewed during
 - Next Ops phoneconf is 2010-04-08
- **KPI-1: Number of events \geq 1 hours per site with number of corresponding GGUS tickets**
 - Main objective is to ensure we have at least tickets for “major” events
 - Only correlated KPI were said really interesting
 - <https://ccenoc.in2p3.fr/LHCOPN/report/>
 - Currently based on CERN’s spectrum BGP monitoring data
 - Link level, not service level
 - How to account work of CH-CERN?

Correlation of monitoring events $\geq 1h$ per site between [2009-09 and 2010-02]



- **Ensuring backup tests are performed**

- KPI-2: Number of missing entries in the twiki table reporting backup tests results (or demonstration of resiliency during previous failure)
 - “Any expected resilience possibility should be demonstrated once a year”
 - *Routing policies to be documented to know what is expected*
 - <https://twiki.cern.ch/twiki/bin/view/LHCOPN/LhcopnBackupTestsResults2009>

- **Results in 2009**

- No entry for CA-TRIUMF, ES-PIC, IT-INFN-CNAF, NDGF, TW-ASGC, (UK-T1-RAL) and US-T1-BNL
- Missing entries for FR-CCIN2P3, NL-T1 and US-FNAL-CMS
- **Only CH-CERN and DE-KIT seem ok**
- Unclear which resiliency is expected for pure T1-T1 links

- **KPIs are clearly showing there is a place for improvement**
 - Have we only a lack of effort around Ops?
- **Feedback is that some actions appear not vital**
 - **“We should focus on events impacting the service delivered by the LHCOPN”**
 - Issues which matter to users
- **We miss a clear service definition**
 - If a path remains up even if a link is down is this an issue requiring strong attention?
 - LHCOPN SLD activity being carried by WLCG / CERN
 - Formalise and shape operations around
- **We miss a service view “Ping view”**
 - Ops requirements were pushed to the Monitoring WG
 - We need to see what we are missing or not

- **No one was willing to take responsibility of stressing sites**
 - Then idea of a rotating representative was proposed
 - Existing people working around LHCOPN ops within sites
 - Acting on behalf of the community, not the site he/she is from
 - *Light central coordination ensuring things are done*
 - *Rotating time: 1 week?*
 - Proposed duties
 - *Chasing up pending GGUS tickets*
 - Enforce closing of pending GGUS tickets
 - *Attending WLCG daily phoneconf once a week?*
 - More only on request if really required
 - *Ensuring tickets are opened for detected events $\geq 1h$*
 - *Monthly review of the correlation with monitoring*
- **Can this be realistically working?**

- **Automatic opening of GGUS tickets from monitoring system**
 - Requirement is this need to be reliable, accurate and wise
 - Interface with the monitoring need to be clever enough
 - Nice to have but to be implemented very carefully
 - Monitoring can only wisely open tickets after a certain amount of time (e.g 1h to know we have a significant event...)
 - Fearing then some passivity from sites only waiting tickets to arrive

- **Ops WG is near to fall below a critical mass**
 - Volunteers welcome, particularly from sites
 - Meetings at CERN and EVO enabled
 - Even passive reviews of agenda/conclusions are welcome

- **Deployment of Ops model is completed**
- **LHCOPN operations are in a steady state**
 - For the good... but also the bad
- **Improvement process heavily awaiting outcomes from two areas**
 1. LHCOPN Service Level Definition - WLCG / CH-CERN
 2. Monitoring – LHCOPN Monitoring Working Group (CH-CERN)
- **Currently focus is on tightening operations around “major” network events**

- 1. Review of twiki, what's wrong?**
- 2. Merging LHCOPN helpdesk within standard GGUS?**
- 3. Rotating LHCOPN representative?**
- 4. Automatic opening of GGUS tickets from monitoring system?**