



24x7 Support and VOBoxes SLA Milestones

19 February 2008

ID	Date	Milestone	ASGC	CC IN2P3	CERN	FZK GridKa	INFN CNAF	NDGF	PIC	RAL	SARA NIKHEF	TRIUMF	BNL	FNAL
24x7 Support														
WLCG-07-01	Feb 2007	24x7 Support Definition Definition of the levels of support and rules to follow, depending on the issue/alarm				Mar 2008								
WLCG-07-02	Apr 2007	24x7 Support Tested Support and operation scenarios tested via realistic alarms and situations	Jan 2008			Apr 2008			Feb 2008	Jan 2008				
WLCG-07-03	Jun 2007	24x7 Support in Operations The sites provides 24x7 support to users as standard operations				Apr 2008			Mar 2008	Mar 2008				
VOBoxes Support														
WLCG-07-04	Apr 2007	VOBoxes SLA Defined Sites propose and agree with the VO the level of support (upgrade, backup, restore, etc) of VOBoxes												
WLCG-07-05	May 2007	VOBoxes SLA Implemented VOBoxes service implemented at the site according to the SLA						Nov 2007						
WLCG-07-05b	Jul 2007	VOBoxes Support Accepted by the Experiments VOBoxes support level agreed by exp.	ALICE	n/a					n/a			n/a	n/a	n/a
			ATLAS											n/a
			CMS						n/a		n/a	n/a	n/a	
			LHCb	n/a					n/a				n/a	n/a

ASGC (TW-ASGC) – Di Qing

24x7 Support

Jan 2008:

- * testing 24x7 service and refining procedures
- * engineers are on-call

Feb 2008:

- * expanding on-call rotation to more engineers
- * Feb 25: starting on-site coverage from 17:00 to 02:00 M-F

VOBoxes Support

For VOBox SLA, ASGC is planning to finish it at the end of March.

CC-IN2P3 (FR-CCIN2P3) – F.Hernandez

24x7 Support Milestones completed.

VOBoxes Support

Although the VO boxes are fully supported by the site (currently we operated them for Alice, Atlas and CMS), the formalization process for producing a Service Level Agreement document and implementing it has been deferred several times for devoting the available manpower to other task considered of higher priority.

However, we are currently focused on producing a version of the SLA document by the end of February. The necessary exchanges with the involved experiments will start after that and we expect to reach agreement with them by the end of March. Taking into account the experience gained operating those services during the last 18 months, we are quite confident that the implementation of the agreement will be finalised soon after.

CERN – T.Cass

24x7 Support Milestones completed.

VOBoxes Support

There has been progress in that a formal SLA is being discussed with the experiments now. But this is actually something to protect us: the original spirit of the milestone was to agree an SLA such that VO box services could be provided. We have always run such services, but just with an informal SLA.

FZK (DE-KIT) – H.Marten

VOBoxes Support Milestones completed.

24x 7 Support

Currently, site administrators (experts) are working at GridKA during normal working hours. Additionally we've implemented the role of experiment admins. These are dedicated experiment representatives working under the control of the GridKa Technical Advisory Board (i.e. LHC experiment representatives) which - provided with special administration rights - support the GridKa staff with testing VO software and operating VO specific services. Since more than year we have furthermore implemented the role of

operators (not necessarily experts) that watch the system and intervene during weekends and public holidays.

During the last year much effort has been spent into the preparation for 24x7 operations. Several services were rebuilt with multiple, DNS load balanced machines and hardened by introducing more reliable, server class machines (see examples presented during the LHCC review in November 2007), a service dashboard has been developed for operators and customers (<http://www.gridka.de/monitoring/main.html>) and service components and operational procedures were documented at a central wiki. One of the main tasks of the above defined operators was to test and improve these centrally documented operational procedures.

Most parts of the GridKa environment are internally monitored with Nagios v2, and an SMS system has been set up and tested for several services. Still, this work (milestone WLCG-07-02) is not fully completed as (a) not all of the services are implemented through SMS systems yet, and (b) it was found that the use of Nagios v2 is limited by the fact that SMS could only be generated to the whole team instead of individual operations teams and/or experts. The latter can be realized with Nagios v3, the respective migration at GridKa is currently carried out and will be finished during March 2008.

Since 24x7 operations involves a possible change of peoples' contracts, a respective discussion with the FZK administration and the FZK board of directors took place in January 2008 to clarify respective administrative boundary conditions. The operational model will be a mixture of operations shifts likely extending normal working hours and supplemented by on-call circles during night and weekend. Respective operational procedures will be documented in March 2008 (milestone WLCG-07-01) and go into operation in April 2008 (milestone WLCG-07-03).

VOBoxes support

The VO-Box Service Level Agreement has been developed in collaboration with the experiment representatives, respective feedback from the experiments was taken into account, and the document was made available on a central web page of the WLCG MB (milestone WLCG-07-04). The SLA is implemented at the site according to this document (milestone WLCG-07-05).

All the hardware for the MoU resources in April 2008 is available on site, partially currently being installed or already running burn-in tests. On request of Alice and CMS, GridKa will install an additional fraction of resources in October 2008 (CPUs and disk for Alice, tape for CMS). This was negotiated and communicated during 2007 and is completely documented in the MoU for 2008.

INFN-CNAF (IT-INFN-CNAF) – L.Dell’Agnello

24x7 Support

All services at INFN-T1 are controlled by the monitoring system which, besides mail system, is interfaced, for most of the services, to a GSM modem. An SMS is sent in case of failure of the most critical services (e.g. cooling, LSF); this work has yet to be completed to cover all services. Moreover, all critical services (e.g. CEs, srm end-points) are composed by multiple servers balanced via dns. For off business hours, an on call coverage for infrastructural issues (i.e. cooling, network, power) is operational (with an on site intervention time limit of 30 minutes).

VOBoxes Support

The document describing the SLA for the VOBOXes at CNAF has been approved by the LHC VOs and it is now effective. It has been published in the appropriate MB web area.

NDGF – O.Smirnova

24x7: service definitions are in place, tested and implemented according to the document provided last year to the MB. This document implies gradual ramp up in service levels, with the current arrangement of having operators on-call during non-business hours. By the time of LHC coming into operation, NDGF will make use of actual 24/7 shifts for the critical services. All this is described in the document.

VOBoxes Support

VOBoxes: NDGF provides VOBox services to ALICE and ATLAS. There are delays with establishing SLAs, for the following reasons:

- For ALICE, NDGF provides 7 VOBoxes situated in different administrative domains; we intend to have the same SLA that will be endorsed by every local operator, and this takes time, purely logistically.
- For ATLAS, there have been changes in the production system in late November 2007, involving transition to the pilot-based job submission. This put the SLA on hold, as implications to the VOBox were not immediately clear. In end-January, there was a meeting between ATLAS developers and NDGF, and the technical details have been sorted out.

We thus expect the VOBox SLAs to be in place by March 2008.

PIC (ES-PIC) – G.Merino

24x7 Support

After having sorted out the bureaucratic to perform the extra payment for staff taking on-call shifts, the 1st phase of the 24x7 on-call weekly shifts started on 19-Dec-2007. During this 1st phase we plan that the people on shift will proactively collaborate with the service experts to ensure that all the relevant alarms are deployed, and there is no alarm without its associated procedures documented.

The status of milestone WLCG-07-02 (24x7 support tested) is currently "in progress". We plan it to complete it by the end of February 2008. Since we started on-call shifts for Christmas, and we are facing now the Feb-CCRC08 test, we think a realistic date for declaring the system tested is after 2 months of experience, including one month of CCRC08.

The following milestone WLCG-07-03 (24x7 support in operations) we plan to complete it one month later: end of March 2008. VOBoxes support.

VOBoxes Support

The status of the milestone WLCG-07-04 (VOBoxes SLA defined) at PIC is different for each of the experiments supported: -LHCb: Done.

Last year we were told by LHCb that they were trying to converge internally in a "vobox-sla template" to propose to all the sites. On the beginning of October 2007 we received a

proposal for the VOBox SLA from LHCb. After some iteration we finally signed a definitive version on January 2008.

-CMS: In progress. Last year we tried, through the CMS liaison at PIC, to get from CMS some vobox-sla proposal which would set the requirements from CMS, common to all the Tier-1s. This process did not converge, so now that we have a vobox-sla for LHCb at PIC we are trying the opposite approach: we will try to sign a vobox-sla for CMS as similar as possible to the LHCb one. PIC will send a proposal in this line to CMS during February.

-ATLAS: Our understanding is that currently the ATLAS VOBoxes are still being run at CERN, not at the Tier1s (at least the European ones). Until the schedule for deploying the VOBox in production at PIC is clarified from ATLAS, we have the SLA paused.

RAL (UK-RAL) – A.Sansum

RAL is actively working on deploying an on-call service. We have completed WLCG-07-01 and have made good progress towards 07-02 and 07-03 although they are not yet complete. The full project plan/milestones for the on-call service are at:

http://www.gridpp.ac.uk/wiki/RAL_Tier1_OnCall_Milestones

We have the end to end technology in place to raise callouts and are currently inserting the full host/critical alarm list into the escalation/callout system so that we can test real life examples. This (WLCG-07-02) was due to be completed at the end of January, but is running a little late but is expected to complete this month.

WLCG-07-03 should be on track at least for an initial callout service, although its scope may grow over a few months.

NL-T1 – J.Templon

24x7 Support

There is a plan. Fine details are still being worked out, for example we have chosen to use the TRAC system at SARA for Tier-1 issue tracking, but we still need to work out the details of getting the NIKHEF people in the SARA-based system. Also details of where to host the email entry to the service, since email becomes a critical service as well.

Since the installation of the Nagios server at NIKHEF in the latter part of 2007, the plan has been under test at NIKHEF. SARA had not yet fully installed their Nagios as of last writing; however based on preliminary testing, SARA has made significant changes in their grid operator coverage plan.

We note here that plans from the experiments and from the service coordination, to implement various "elogs", are not accounted for in our plan, which is based as much as possible on Nagios as a local dashboard. Experience has shown that having to look at multiple systems does not work, neither does multiple notification paths. Anything flagged critical by the experiments should be trivially accessible by a Nagios probe (e.g. SAM tests).

VOBoxes Support

An advanced draft document exists; it has been circulated amongst all parties nationally. It has not yet been discussed with the VOs.

TRIUMF (CA-TRIUMF) – R.Tafirout

24x7 Support and VOBoxes SLA Milestones completed.

BNL (US-T1-BNL) – M.Ernst

24x7 Support and VOBoxes SLA Milestones completed.

FNAL (US-FNAL-CMS) – I.Fisk

24x7 Support and VOBoxes SLA Milestones completed.