

Recent developments: is PPS now used?

Angela Poschlad (PPS-FZK), Antonio Retico (CERN_PPS)

EGEE 08
Istanbul - 24 Sep 2008

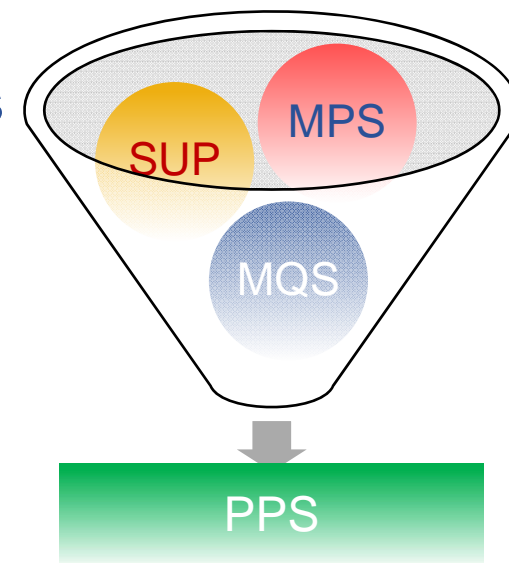
- **Last year's developments in PPS (quick overview)**
- **Bulletin of PPS recent usage**
- **The glxec testing in the "classic" PPS**
- **The Cream Pilot (Angela)**

- **Promote Usage**
- **Optimise Work**
- **Reduce Costs**
- **(... and make it faster, please !!)**
 - Improve the elapsed time-to-production of the middleware updates (without losing quality)

- **Changes to the Mandate**
- **New Structure**
- **New Services**
- **New Procedures**
- **+ a lot of the “old things”**

- The EGEE Pre-Production provides early access **on-demand** to grid services to **interested** users, in order to test, evaluate and give feedback to changes and new features of the middleware.
- In addition to that, the pre-production extends the middleware certification activity, helping to evaluate deployment procedures, [inter]operability and basic functionality of the software against operational scenarios reflecting real production conditions

- **Three synergetic service areas:**
- **Middleware Pilot Services**
 - Provisioning and operation of grid pilots
- **Middleware Quality Services**
 - Deployment Testing
 - Release Testing
 - Monitoring Utilities
- **Support Area**
 - SW Release Coordination
 - Activity Management



- **Pilot Services in Production (within MPS)**
- **Production Release Testing (within MQS)**

- **Enhanced Release Procedure to cover pilot services**
- **Activity Management Tools (next talk)**

(within PPS-Support area)

- **A number of PPS sites still running as public infrastructure**
- **Not easy to decommission without providing the users with alternatives for some features**
 - E.g. A space to test new version of clients on WNs

- Many things to talk about, but we have to focus
- So, we focus this talk on our users
- What changed in “PPS Users’ World” since last year?

- **The Diligent project is over → the VO stopped its PPS activity ; good luck to its successor D4Science**
- **Three pilot services formally started with LHC Experiments between April and June 2008**
 - Amga, with LHCb (in progress)
 - WMS SL4, with CMS and Atlas (Apr08 → May08)
 - Cream, with Alice and CMS (in progress)
- **glxexec mechanism tested on the “classic” public PPS infrastructure**
 - Test in progress with LHCb and Atlas
 - One of the reasons why we cannot just “shut it down”

- **The glexec testing at CERN_PPS and PPS-CESGA**

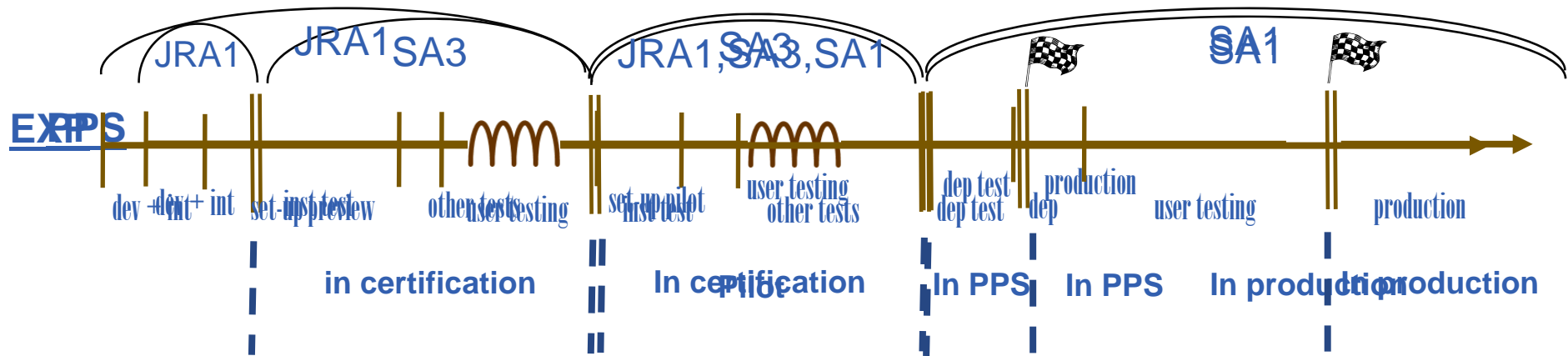
- A program used on the WN to implement traceability and intra-VO accounting for pilot jobs (or glide-ins)
- Full functionality not delivered yet, but VOs can test the basic mechanism
- More Info about “pilot jobs” and glexec mechanism
 - http://www.sysadmin.hep.ac.uk/wiki/Pilot_Jobs
 - <http://www.sysadmin.hep.ac.uk/wiki/Glexec>

- **LHCb ready to run low-level testing on WNs at CERN_PPS**
 - Set-up done in July
 - Tests not started yet, but about to
- **VO more interested to test the full chain as soon as available**

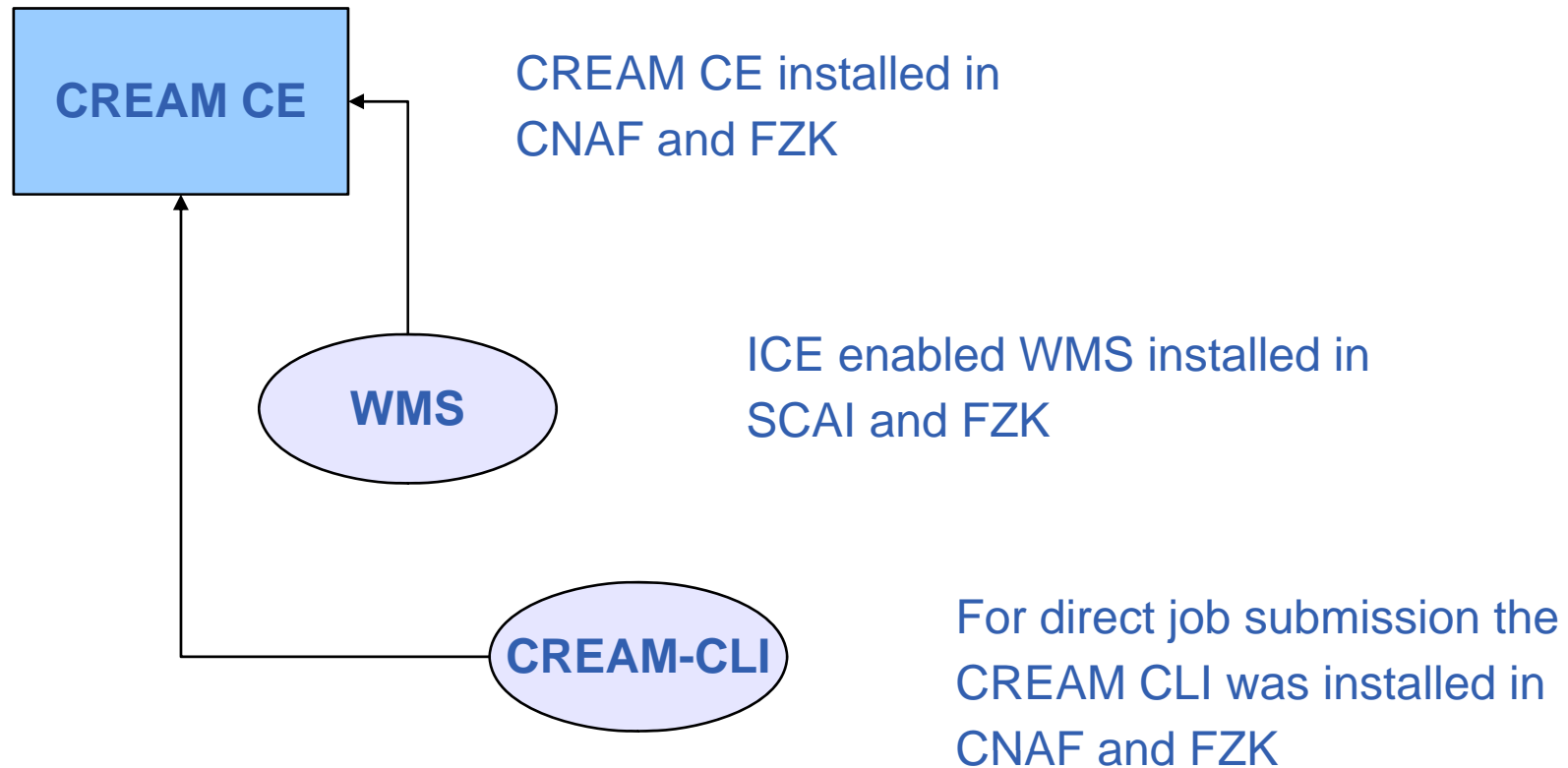
- **Two PPS CEs (CERN_PPS and PPS-CESGA) run glxec in setuid mode (enabling the credentials of the real submitter)**
- **The configurations are special (e.g. the WN needs a host certificate), but that does not matter for testing**
- **ATLAS tested glxec within their PanDA pilot job framework and uncovered various bugs (7 so far, 3 of them major for deployment):**
- **ATLAS tests succeeded after LCMAPS was upgraded and its configuration was adapted**
- **Working in PPS the tester profited of conditions rapidly adapted and special access arrangements for debugging**

- **The Cream CE Pilot (by Angela Poschlad)**
 - PPS-FZK
 - PPS-CNAF
 - PPS-SCAI

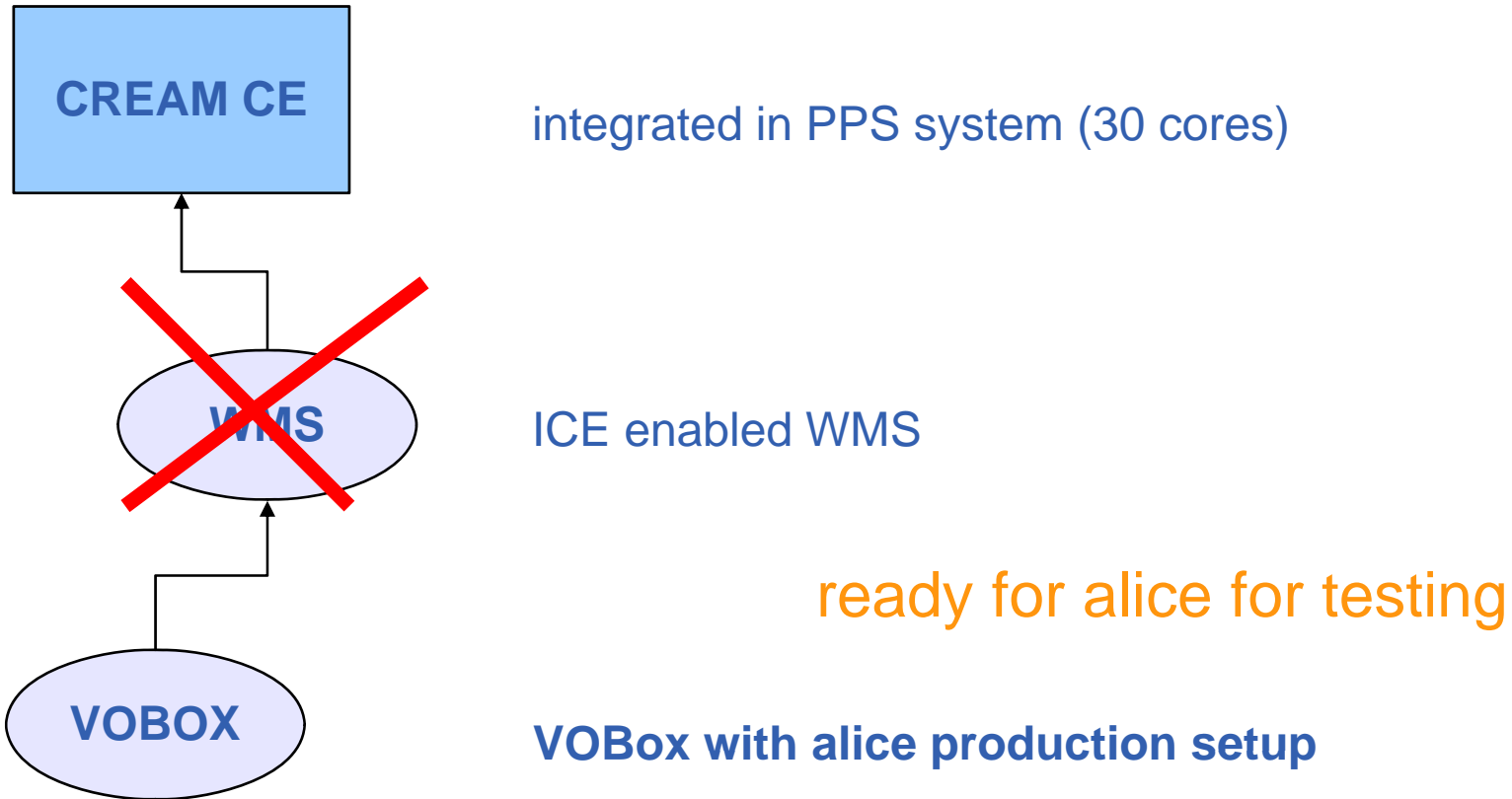
- **Started in Jun 2008**
- **General objectives:**
 - Collect feedback from the experiments
 - Enable monitoring tools and procedures for production
- **Design and duration:**
 - 2 phases initially planned: PPS and production
 - Phase1 extended until now (with Alice using production queues)
 - Phase2 to start with release of ICE WMS
- **More info:**
 - <https://twiki.cern.ch/twiki/bin/view/LCG/PpsPilotCream>



- The model we envisage for deployment of pilots
- We adopted the model of the Experimental Services instead
 - Pilot started with software not yet released to certification
 - Judgement of operability emitted by PPS instead of certifiers
 - Version in certification older than the one in pilot
 - Not formally correct, but the conditions to start were tempting
 - Glitch in transition between old and new release process

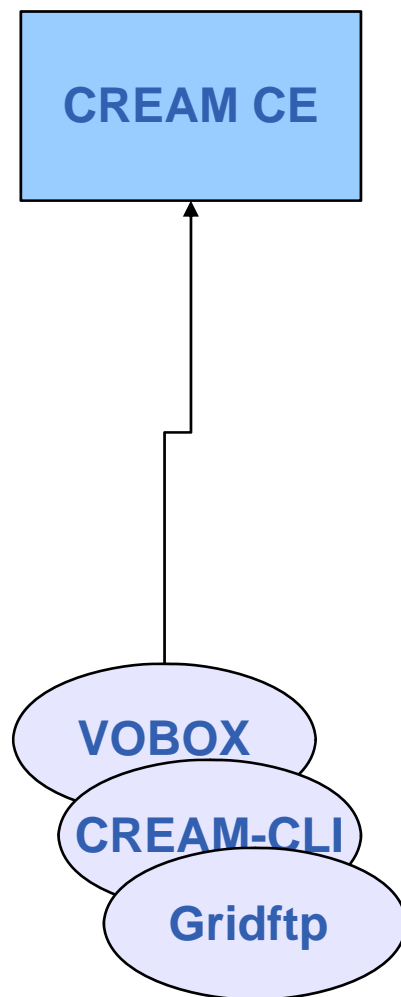


During the installation process the communication with the developers was excellent



Problem with proxy delegation
 Problem with proxy delegation setup!

-> Direct job submission



Finally the job submission succeeded ;-)

Operated through a VOBOX parallel to the already existing service at GridKa

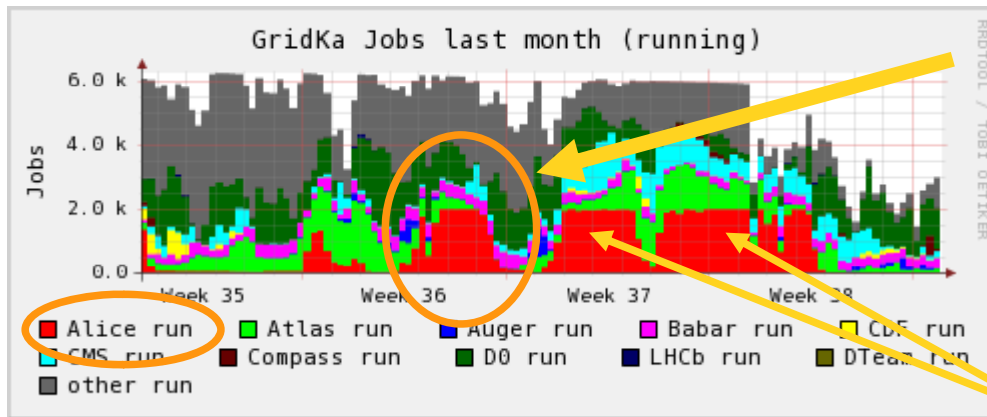
Access to the CREAM CE

Initially 30 CPUS (PPS) available for the testing

For more load temporarily raised to 300 cores

Moved later to production ALICE queue

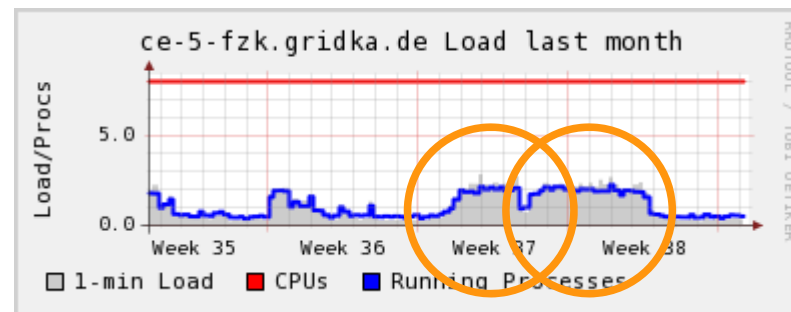
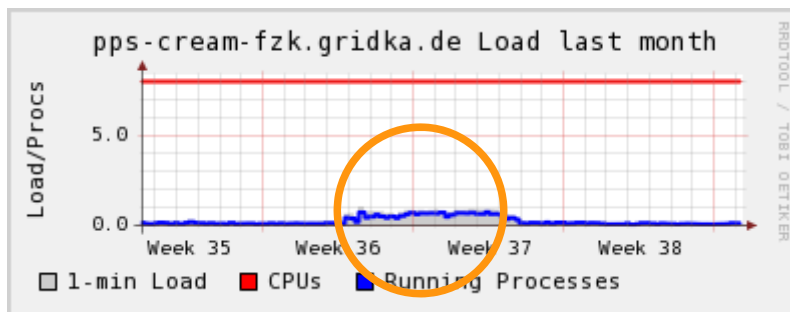
2000 concurrently jobs workmanaged by CREAM during several days



ALICE production jobs via CREAM CE (ca. 2000)

Alice jobs via Icg-CE

The two CEs used have the same hardware



- **ALICE is interested in the direct submission feature of the CREAM CE for production as fast as possible**
- **geclipse VO asks for access to test the job submission**
- **Some sites in the ROC DECH region ask for the date of release because they want to setup the CREAM CE very soon**
- **some advertisement made
Installation in the “gLite administration workshop” at
GridKa School 2008**

- **WLCG/EGEE Pre Production: Use Cases (EGEEIII)**
<https://twiki.cern.ch/twiki/bin/view/LCG/PreProductionUseCases>
- **WLCG/EGEE Pre Production: Service Description (EGEEIII)**
<https://twiki.cern.ch/twiki/bin/view/LCG/PreProductionServiceDescription>
- **The Release Procedures: From Certification to Production**
<https://twiki.cern.ch/twiki/bin/view/LCG/PPSReleaseProcedures>
- **All Available on the PPS web site**
www.cern.ch/pps

