



Enabling Grids for E-science

# Cream pilot service

*Status and short-term plans*

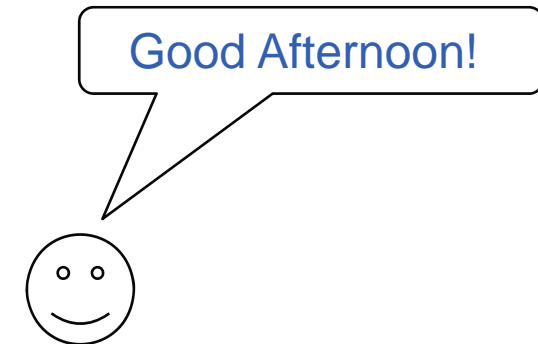
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*GDB 11-Mar-09 - CERN*

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- **Description of CREAM pilot (Phase2)**
  - Objectives
  - Partners
  - Access info
- **Recent history**
  - Development
  - Deployment
  - Operational tools
  - Users
- **Next Steps**



- **Description of CREAM pilot (Phase2)**
  - Objectives
  - Partners
  - Access info

- **Focus on ICE submission**
  - A good number of CE needed to test scalability
- **Integration of operational tools**

- **Coordination: Antonio Retico (CERN)**
- **JRA1: Massimo Sgaravatto (INFN-PADOVA)**
  - Development, support
- **SA3: Alessio Gianelle (INFN-PADOVA), Gianni Pucciani (CERN)**
- **SA1: Angela Poschlad (FZK), Christian Neissner (PIC), Daniele Cesini (CNAF), Sara Bertocco (INFN-PADOVA) Danilo Dongiovanni (CNAF)**
- **CMS: Andrea Sciaba', Enzo Miccio**
- **Alice: Patricia Mendez**

- **Home Page**

- <https://twiki.cern.ch/twiki/bin/view/LCG/PpsPilotCream>

- **Contacts**

- [eg ee-pps-pilot-cream@cern.ch](mailto:eg ee-pps-pilot-cream@cern.ch)

- **Recent history**
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- **high failure rate observed, analysed and causes fixed.**
  - Now the system sustains correctly a submission rate of 40 jobs/min.
  - Performance issues with long lasting jobs due to the way proxy renewal is handled in ICE ([\*bug #47911\*](#))
- **However better that the version currently in PROD**



- **# of CREAM instances in production growing faster**
  - ~20 nodes
  - Effect of SA1 recommendations
  - Pro: direct pilot coordination not needed for that
  - Con: the version of CREAM deployed has known flaws interacting with ICE
- **Pilot WMS for CMS already reconfigured to use production CREAM**
- **What about PIC? What about FZK?**
  - PIC publishing now pilot version both in PPS and production
  - FZK maintains two separate instances at two different versions

- **SAM**
  - Icg-CE sensor cloned for CREAM
  - Direct submission tests added
  - Results available for PPS → <https://pps-sam.cern.ch:8443/sam/sam.py>
- **Nagios tests under development**

- **Alice working with both production and PPS CREAMs**
- **CMS now testing ICE**
  - Difficult interaction with PPS BDII
    - Need to publish PPS CEs in production
    - Not all sites like it

- Bring CREAMs in pilot and production to run roughly at the same version
- Move PIC and FZK from pilot mode → production mode
- Close phase 2
- Open phase 3
  - CMS testing “pilot” ICE WMS using production instances of CREAM
  - INFN testbedB (~ 30 CEs): Shall we use them to test Nick’s performance criteria?
    - Could be done by SA3 using the pilot infrastructure at PADOVA for a fixed time-slot
    - Focus on fixing [bug #47911](#): *Performance problems in ICE when there many (thousands) proxy files to manage*

- **Set of patches identified that:**
  - Fixes known weaknesses of the ICE+CREAM system currently in production
  - Corresponds to a version of Cream validated by Alice in the pilot
  - Fixes part of the performance issues experienced so far in ICE
- **Accelerated certification/deployment for these patches**
  - functionality tests (e.g. SAM , Nagios)
  - not to insist on performance tests (the results are known)
  - improves the ice→cream submission chain currently available

- **patch #2845**: Second update of CREAM and CEMon Clients for slc4/i386 platform
  - Ready for integration
- **patch #2459**: First update of ICE
  - Update of ICE, to be installed "on top" of WMS patch #2562
  - Ready for integration but suffers for new bug bug #47996: Apparent database corruption when ICE exits → fixed by developers
  - Probably will be obsoleted and released again
- **patch #2748**: Third update of CREAM CE for slc4/i386 platform
  - various fixes for CREAM e BLAH - affecting the CE
  - With Provider → expected within this week
- **patch #2750**: YAIM-CREAM-CE 4th update
  - Certified
- **patch #2830**: [ YAIM-WMS ] New yaim-wms to properly configure the ICE section
  - Ready for integration

