

# WMS/G-PBox integration: overview & testing

JRA1 ITCZ Cluster meeting.  
Turin, Nov. 2005.

M. Cecchi (CNAF)

F. Giacomini (CNAF)

- **G-PBox is now a GLite subsystem: `org.glite.gpbox`**

## It unfolds into 5 components:

- `org.glite.gpbox.core` (Java)
- `org.glite.gpbox.server` (Java)
- `org.glite.gpbox.admin` (Java, administration GUI)
- `org.glite.gpbox.gsilib` (C)
- `org.glite.gpbox.pep` (C++)

*Excerpts from  
the ATLAS  
meeting*

**11/04/2005**

**Authors:**

**A. Caltroni,  
V. Ciaschini,  
A. Ferraro,  
G. Rubini.**

- A LCG CE LCAS/LCMAPS plug-in has been developed (tested at CNAF, to be ported in GLite)

## Job submission test policies expressed in pbox1.cnaf.infn.it

**Tag based (no prior knowledge about rsrc):**

**Group A** (/atlas/production) :  $CE_{HIGH}$  and  $CE_{LOW}$

**Group B** (/atlas/analysis) :  $CE_{LOW}$

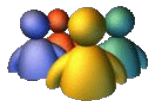
**VO/Rsrc specific:**

**VO** (/atlas) : deny access on a given CE (Roma1...)

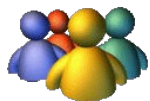
GLUE Tag:

*GLUECEPolicyPriority*

### VOMS



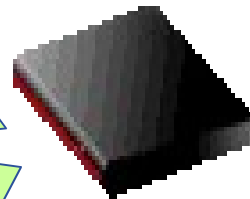
Group A



Group B

### Resources

### G-PBox



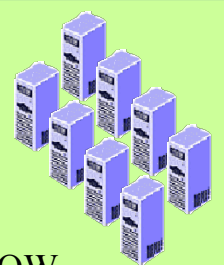
Actions on policies:

Accept,  
Deny,  
Indeterminate,  
Unapplicable

$CE_{HIGH}$



$CE_{LOW}$



denied CEs



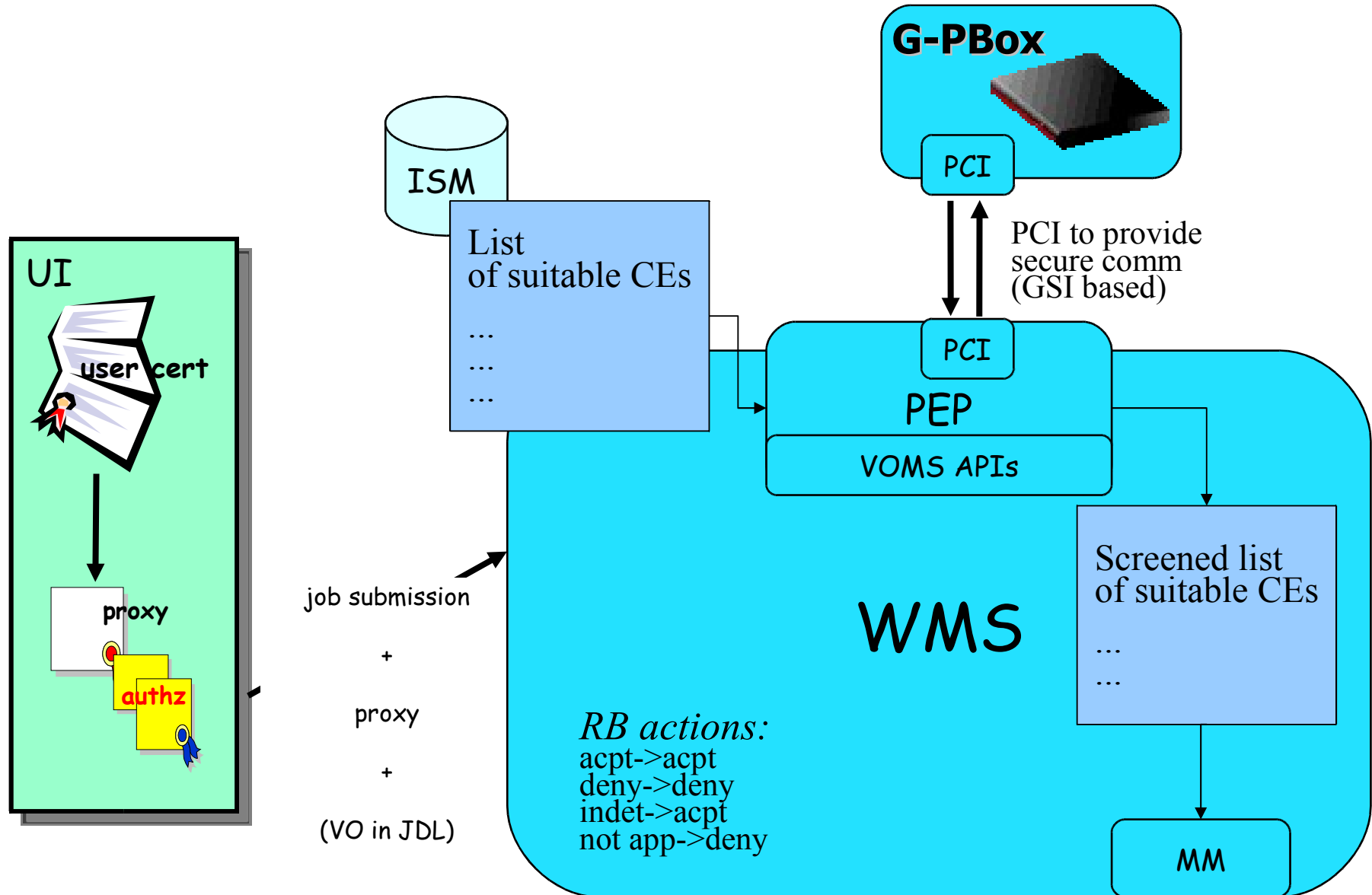
- **Functionality Test with LCG CEs** (first days of October): carried out successfully with 8 policies defined on the pbox server
- 
- WMS gLite 1.4 (G-PBox patched)
- 3 LCG sites with a total of 10 queues
- 3 VOs (atlas, cms, infngrid)

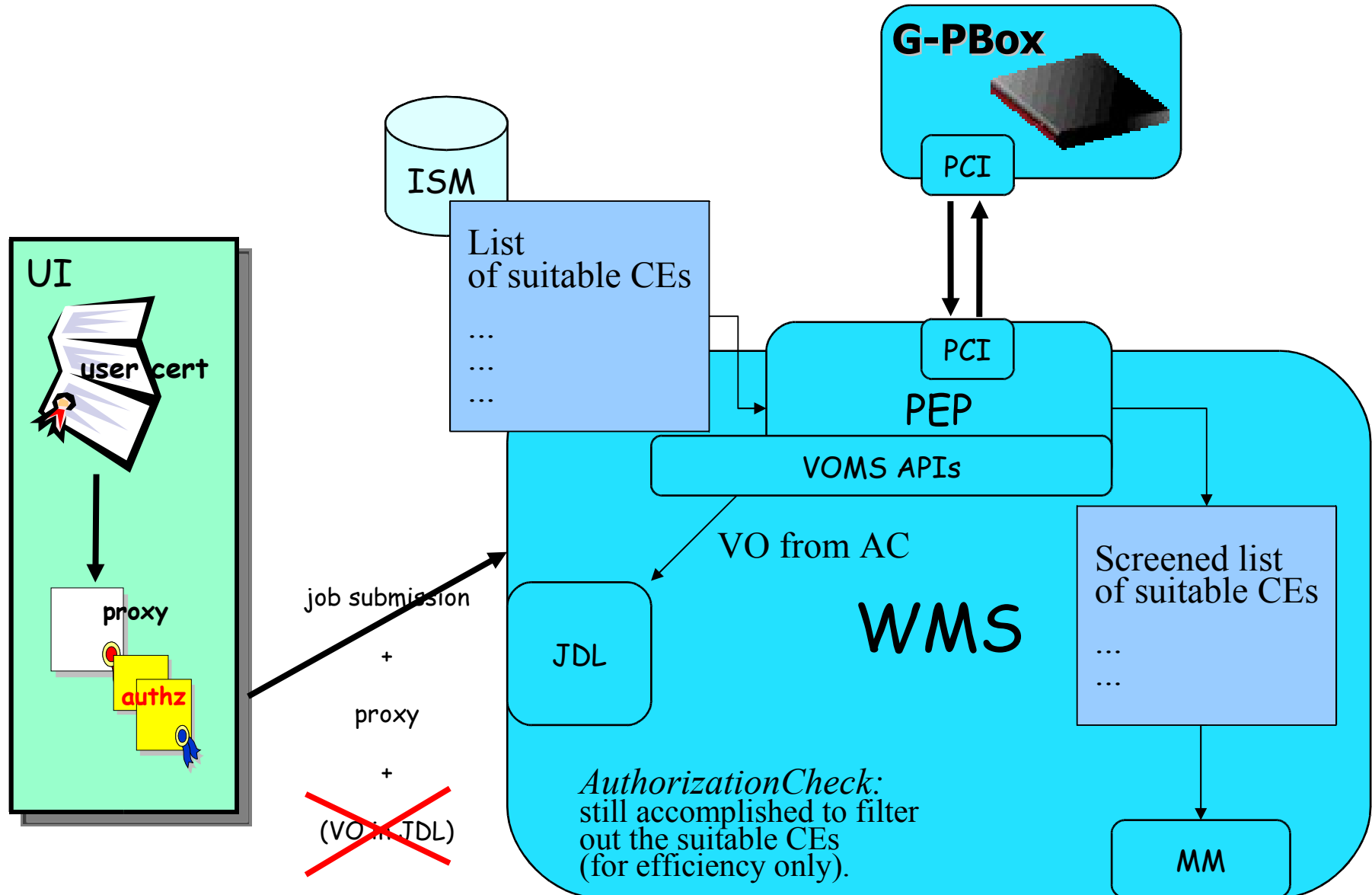
Reported on the last Atlas phone conference (Perini et al.)

## Stress Tests:

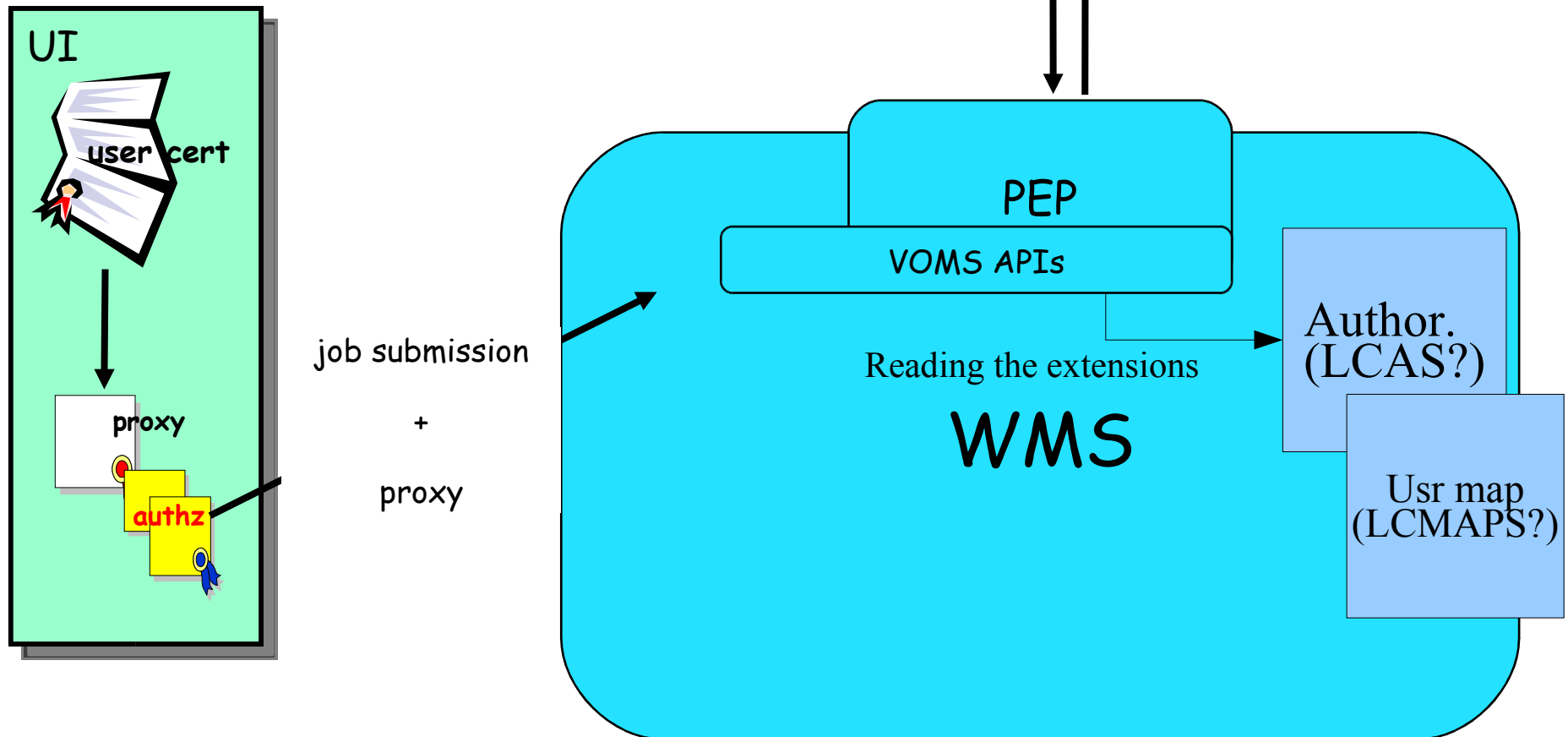
- **high number of queues** — huge amount of queues on a small number of LCG CE (5), about 120 queues with 8 policies.
- Preliminary results on the WMS/G-PBox interaction time affecting the listmatch time:
  - listmatch time without pbox/wms: 6.44
  - listmatch time with pbox/wms: 6.65 (overhead 0.2 secs, ~3%)
- **high job rates** — ongoing week
- **high number of policies (~100)** — next week

# The present architecture (1.5): the RB is now policy 'aware'





Interpreting the AC eventually providing VO-level granularity for what relates policy decisions.



- **CNAF availability to provide a properly installed and configured G-Pbox server for the 1.5 testbed.**
- **Proposal: to show a demo in the project review.  
Previewed last October on a teleconference with CERN**