

# JOB PRIORITIES WG

Dietrich Liko IT/PSS

# ACKNOWLEDGMENTS

- ◉ I am reporting on behalf of the Job Priority WG
- ◉ For the work in the last weeks I want to thank several persons ...
- ◉ Simone Camapna, Andrea Sciaba, Jeff Templon, Di Quing, Gergely Debreczeni
- ◉ And others who participated in the discussion ...

# INTRODUCTION

- ◉ We have presented last year a model to implement a simple strategy for Job Priorities based on the VOMS FAQN of the user certificate.
- ◉ While the principle seems straight forward, in the deployment several issues were found that have prevented a successful use of this model
- ◉ A strategy has been developed to address these problems

# REMINDER: VO REQUIREMENTS

- ◉ Driven by ATLAS and CMS
- ◉ Few groups
  - Example: ATLAS
    - ◉ Production, Users and Software managers
    - ◉ Simple rules ( e.g. Production 80%, Priority for Software managers etc.)
- ◉ Aim
  - Gain fast experience with a simple model
- ◉ Keep in mind that in the future a more complex model might be needed

# JPWG MODEL

- ◉ Fair share between users on the batch system
- ◉ Several shares in the batch system for different groups. VOMS FAQN is used to transmit the group
- ◉ Publication of the use of the share in the Information System using the VOView mechanism
- ◉ gLite WMS uses this information to select the best site for a job

# COMPLICATIONS

- First time use of VOMS certificate
- Interaction with the Data Management
  - Example LFC
    - Use of correct ACLs
    - Introduction of secondary groups
- Difference in the matching mechanism for VOMS FAQN used by the CE and the WMS
  - CE: LCMAPS mechanism
  - WMS: VOView mechanism
- Fixing the last problem requires not only software modification, but is also an deployment issue
  - Could not be done on the fly

# REDISCUSSION

- ⦿ What to do at this point
  - Asked for input from the experiments
- ⦿ Keep it really simple
- ⦿ Have a minimal version operational fast
  - ATLAS production needs a solution as fast as possible

# SEVERAL MEASURES

- ◉ Very short time
  - Remove all current configurations
- ◉ Short time
  - Implement an ad-hoc solution
- ◉ Medium time
  - Look into other solution
- ◉ New TCG input
  - Concentrate on the short time
  - For all other aspects the WG has been put to sleep
    - Waiting for the input from the Authorisation (Christoph)

# AN EXAMPLE

- Three shares configured in the batch system and published using the VOView mechanism
- Special share for Production
  - Access Rule: VOMS:/atlas/Role=production
- Special share for Software Manager
  - Access Rule: VOMS:/atlas/Role=software
- Catch all share for everybody else
  - Access Rule: VO:atlas

# THE PROBLEM

- For the WMS all shares enter like independent CE
- WMS does not know that they all belong together and LCMAPS will send the job to the right share
- Mismatch of the mechanism between the CE and the WMS

# THE AD-HOC SOLUTION

- ◉ Add DENY tags to the catch all share
- ◉ Production Share
  - VOMS:/atlas/Role=production
- ◉ Software Share
  - VOMS:/atlas/Role=software
- ◉ Catch all Share
  - VO:atlas
  - DENY: /atlas/Role=production
  - DENY: /atlas/Role=software

# CRITISISM

- Evidently its not nice to introduce such an ad-hoc tag
  - We do not know how long we have to live with it
- But it is the only reasonable strategy
- The better solution requires a significant modification of the CE matching implementation
  - That cannot be done on a short time scale
  - The timescale would be very uncertain
- An document describing this solution and other aspects can be found on WG Wiki
  - [Latest version with some updates](#)

# PRACTICAL ISSUES

- ◉ Modification the Dynamic Information provider
- ◉ Modification of yaim scripts to generate complex configuration scripts
- ◉ Careful testing of the full configuration

# HOW ARE WE FOLLOWING UP

- ◉ Tight loop between the yaim developers, grid deployment and the WG
  - Thanks for their effort!
- ◉ Test on the certification test bed are progressing
  - Several persons involved
  - Holiday, conferences etc ...
- ◉ If we are satisfied with the state on the certification testbed, we will move to preproduction

# FINAL ISSUE

- Experiments are interested in a reasonable default batch system configuration
  - For example:
    - Production share: ATLAS 80 %, CMS 50 %
  - If the sites accept, it would be great if also the batch system would be configured automatically
  
- Here we are crossing the border between Deployment and Operation
  - An understanding has still be obtained on how to achieve that

# SUMMARY

- The aim is still to obtain the model described last year
  - Uncertainties have been clarified
- Close work with grid deployment to obtain a proper configuration of sites
- Its clear that we have to move carefully
  - Certification testbed
  - Preproduction testbed
  - Production
- Each step has to be followed up with actual tests of the functionality