# ATF report

WP4 workshop / CERN / 12-2002

German.Cancio@cern.ch

# Last ATF meetings

- 4/5 meetings since last WP4 workshop
  - 3 meetings @ cern
  - Budapest conference
  - This week (RAL)

- Focus on understanding the application work packages requirement documents, and how they are addressed in R1 and R2
  - WP8: Common Use Cases for HEP Common Application Layer (HEPCAL)
  - WP9: WP9.4 Use Cases
  - WP10: Medical Data Storage and Retrieval on the DataGrid

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Steps:

- For each Use Case, assess which middleware Work Packages are affected
- Clarify potential grey areas with application WP's
- On selected use cases, draw *UML sequencing diagrams,* using CRC techniques
  - CRC == Class/Responsibility/Collaboration

Draft Architecture Document presented at the EDG retreat is being reworked from scratch

- Most likely, new version will be based around the UML sequencing diagrams

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## WP4 related issues:

- Zambo Scratch Manager (aka local footprint):
  - The WP2 proposal for controlling the consumption of local disk space on WN's has been discussed in the ATF.
  - No decision has been taken, but it seems that Zambo comes with a series of inconvenients eg.:
    - requires a daemon running as root on every worker node
    - Jobs get killed by a signal when they overuse disk space, but they won't know the reason
  - Consider first applying standard techniques (partitions for job working directories, enable quota management)

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## WP4 related issues:

- Info Providers: Publishing Access Control information via the CE
  - We don't want to publish the authorized user list to everybody
  - VOMS will solve this problem. Info Services publish the list of VO's authorized to run on each CE. The VO info is inside the user proxy credentials (got with voms-proxy-init –vo VO)
  - Still there is the possibility to kick out at the fabric level (LCAS banned user list). There seems no need to publish this list (at least for R2). The RB will then try another CE.
- Information providers: How to calculate 'how busy is a fabric'
  - Usage of history (statistics) vs.
  - Using current queue status info
  - Considering VO information for getting the estimations
- … not clear yet how to do it better …

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## WP4 related issues:

- Dynamic Software distribution
  - WP8 would like to see software replicated 'on demand'
  - SW packages== set of files -> '*Use WP2/WP5 tools for this*'
  - Reality is that replicating and managing software is much harder than replicating data sets… think of meta-data, filetypes, pre/post installation actions…
- Alternative packaging systems
  - *'RPM is too complex, and you have to be root'*
  - RPM is not complex but insists on an exact specification of what you are packaging
  - Software is never installed by an user, but by system administrators. Possible exception: User interfaces on interactive nodes where the user has no root privileges.

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- Homepage, minutes, mail list archives etc:
  - http://cern.ch/eu-datagrid/ATF