



Summary of the ARDA Meeting December 3-4, 2003

SC2

December 12, 2003

Frédéric Hemmer



Participants

- Predrag Buncic (Alien)
- Steve Fisher (CLRC)
- Frédéric Hemmer (CERN)
- Peter Kunszt (CERN)
- Erwin Laure (CERN)
- Miron Livny (Wisconsin/VDT)
- Francesco Prelz (INFN)
- Torre Wenaus (LCG AA)

Two days of intense and though discussions



Summary

- Acknowledged the value of Alien as an end to end, simple solution satisfying the needs of at least one LHC experiment
- Better knowledge of how Alien works and what ideas are proposed to enhance it and “refactor” it has been gained.
 - Although not captured in writing
- Participants agree some of the Alien principles and ideas are indeed appealing
 - Although not necessarily new
- Some of these ideas are actually matching work scheduled to take place in other software for which providers have a long standing experience, in particular
 - The model of pulling work out of a “database”
 - The resource allocation mechanism by which “jobs” report back their remaining available time share
 - The subsequent matchmaking allowing for more predictable scheduling
 - Just in time scheduling
 - File transfer queues



Summary (II)

- Provided more knowledge and information is gathered on the *semantics*, methods and interfaces of the proposed “refactored” services
 - Wisconsin (VDT) is ready to commit work on the workload management system
 - INFN is ready to commit work on Resource brokering actually resolving long standing problems with GRAM
 - LCG AA is ready to commit work interfacing POOL to the file cataloging mechanism
 - CERN is ready to commit work on bringing RLS experience in improving the file cataloging mechanisms
 - CLRC is ready to commit work in interfacing Grid Monitoring with R-GMA
 - CERN/CS is ready to validate QA processes and (SPI) tools within this framework



Summary (III)

- This would be done within the context of a 6 months prototype
 - Which would not be a complete solution, rather targeted as a framework for implementing “refactored” services
 - Some aspects will need more work, such as
 - Security model
 - Not ignored, but a critical point
 - Efficiency of unanticipated Event Navigation
 - Identifying clearly which use case are supported, which are not
- The participants are ready to engage their reputation in the ARDA prototype
- The prototype is an opportunity to skim efforts that would otherwise be used to (re)do work on different projects



Summary (IV)

- Additional work is now needed in collecting detailed information on semantics, methods and interfaces so that:
 - Middleware detailed planning and funding can be done
 - the first pass interfaces can be discussed at the January workshop
- An proactive editor of an ARDA Services and Interfaces definitions document is needed, as a prerequisite for building a plan
- A physical prototype needs to be proposed, funded and setup, which might be turned into an EGEE testbed
- OGSF is not perceived as being the main argument, rather an envelope of services
- Additional momentum has been gained, it is important not to loose it.



Next steps

- Provide a proactive editor for the services documentation
 - Already the summer version of ARDA provides many of those details
 - Aim to understand where and how different parties can “plug-in” an timescales
 - Clarify issues with the security model in the mean time
- Discuss those services at the Workshop with Experiments (& others) on January 21/22’04
 - Aim at defining the limits of generic Middleware, HEP specific and experiment specific
 - Aim at defining the prototype scope, priorities & timeline
- Detailed work plan should be available by end of January’04
 - Compatible with LCG Internal Review recommendations