

Some Ideas for Improving Quality of JRA1 Code

JRA1 All-Hands, CERN, 24-26 Oct 2007

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- **I am your man on the QAG**
- **Ideas follow from discussions at EGEE07 in Budapest with Alistair, Gabriel and others**
- **Job of QAG and JRA2 is to deal with quality matters**
 - Reliability of operations considered the top quality problem of EGEE-II
 - The sources of unreliability include operational and software errors
 - Looking across the activities (SA1, SA3, JRA1) to see what can be done about this
 - easy things to do which may have a quick and positive effect
 - other things to do which may take longer

- **Formalisation of the software process**
 - Patches have been a success
 - Use of PPS before the production service
- **gLite restructuring**
 - Should pay off in the long term
- **Experimental services**
 - Very light process
- **Dependency challenge**
 - Now understand dependencies

- **Procedural**
 - Make more extensive use of code reviews
 - Improve the quality and quantity of unit tests
 - Find some relevant metrics?
 - Note that we have to do something here for the reviewers
- **Reducing configuration errors**
 - Take over or at least check correctness of your YAIM configuration
 - Provide basic diagnostic interface to verify configuration and basic functioning of a service
 - Reduce configuration options to a minimum and include carefully written comments
- **Improved design**
 - Reliability by design
- **Improve programming skills**
 - Training on good practices
 - Provide an opportunity to obtain appropriate certification
- **Analyse (sample of) bugs in Savannah**
 - Was it a design issue?
 - Was it a coding problem?
 - Why was it not found in testing?