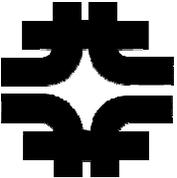


Runjob Project Status

Greg Graham

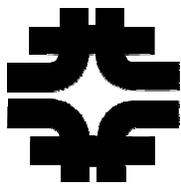
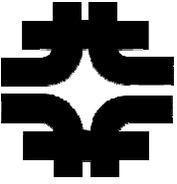
FNAL - CD

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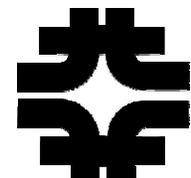
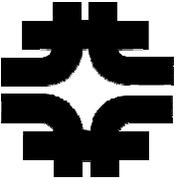
Core Development Phase

- The core development of the Runjob software is finished.
 - We are ready to go into maintenance mode.
 - Small %-age of “Eric Wicklund”-ish person and “Greg Graham”-ish person doing bug fixes and releases is needed.
- Done according (mainly) to the plan of last February
 - <http://projects.fnal.gov/runjob/documents/RunJobProjectOutline.pdf>
- Architecture diagrams updated
 - <http://projects.fnal.gov/runjob/architecture.shtml>



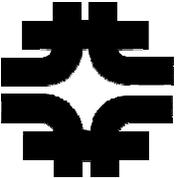
Core Features

- Old interfaces were cleaned up and improved.
 - Code was organized into subpackages
- XML Specification of the basic unit of workflow modeling in Runjob (configurators)
- RunjobAPI in Python as an alternative to macro language.
 - Existing macro language can still be supported.
 - RunjobAPI is easier to provide expressions, online help, and programming constructs; too expensive for macro language.
- Reference resolution algorithm specified and cleaned up.
 - Further work on it is just about the last thing we are still working on.
- Basic APIs for using ScriptObjects developed and deployed.
- Basic syntax for workflow contexts defined and deployed.
 - This still needs work IMHO, but adequate for stakeholders



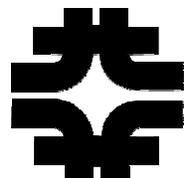
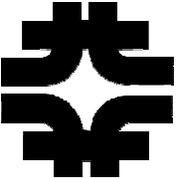
Core Features (cont'd)

- ShREEK
 - Package depended on by D0runjob
 - potentially adds instrumentation to the runtime environment for fault tolerance, speaking to many different monitoring systems, speaking to many different batch systems.
 - If used in place of a Runjob framework call, then Runjob becomes a better workflow manager.
- Basic API for file meta brokers (moving files from head node or storage element to worker) was developed and deployed.
- pylint coding standards
 - The Runjob project was brought up to coding standards in December 2004.
- See http://projects.fnal.gov/runjob/release_notes.html for a timeline of when various features became available.



Integration Projects

- Runjob is currently in use by
 - MCRunjob (CMS)
 - to create jobs for official “big” MC production and for user (unofficial) MC production and as a Service (CMS) to automate production of datasets for analysis
 - D0Runjob (DZero) to create jobs for official “big” MC production and reprocessing.
 - This has fallen behind and it is up to stakeholders to determine to continue project until this is done.



Conclusion

- With exception of a few loose ends that are being wrapped up now, core development is finished.
- Integration with CMS is strong
 - CMS developers outside of the core Runjob group work with Runjob (and submit bugs and feature requests periodically.)
- Integration with DZero is in progress
 - Met with representatives of the the CPB (Gustaaf, Gavin, Amber) and have list of current milestones. Peter Love to be resident at Fermilab starting this month til the Q1-Q2 milestones are met.
 - We need closer collaboration to close this.
- Integration with CDF never took place.
 - They were interested in ShREEK, but no manpower materialized.