

Revamp of High Energy Physics Laboratory's Computer Systems

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Milestone 6
Goals

GEM
Computers

Compute
Cluster

Muon
Tomography
Station

Existing MTS
Development MTS

Documentation

Future Work

Questions

Milestone 6 Progress

Milestone 6 Goals

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Task	Progress	Notes
Polish Cluster Documentation	100%	NAS-0 must be included helping out with general problems as they arise issues with hardware requirements
Polish MTS Documentation	100%	
Create MTS Automation Script	70%	
Integrate Remainder of Cluster Components	50%	
Assist Researchers	100%	
Create GEM computer Backups	50%	

GEM Computers

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- RAID array optimized for storage, preventing redundancy.
- Package and software installation problems.

Compute Cluster

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- NAS-0 hard drive issues have been slowing its integration into the cluster.
 - Confusing drive labels makes replacing several drives challenging.
- SE software installation and configuration is being used for training.
 - The sysadmins need to get used to working without me.
 - They will gain valuable, first-hand knowledge about how the cluster is put together.

Existing MTS

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- The MTS is being operated in a degraded state.
 - Not all sides of the detector are operational.
 - Data can still be collected.
- User-friendliness script is being written.
 - Packaging provided operation instructions into an easy-to-use script.
 - Ease workload of MTS researchers.

Development MTS

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Questions

- Attempted to build AMORE from source
- Makefile 'Makefile.arch' was not found during build configuration, but we did find the file in another directory, and made AMORE reliant on that Makefile instead.
- Build got further, but a few header files weren't found. The configuration seems to not know the proper location to find some files.
- Continued attempting to get the previous build of AMORE working, manually changing dependencies to our new version of root.

Documentation

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- Manuals have been created for:
 - the rebuild of the computing cluster.
 - the construction of the development MTS machine.
- These manuals are incomplete, but they are living documents to be lengthened as the two projects develop.

Future Work

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Existing MTS
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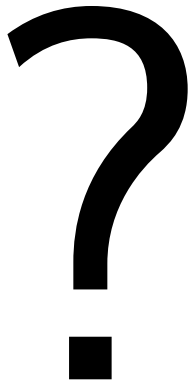
Documentation

Future Work

Questions

- Computing Cluster
 - Fully integrate remaining cluster component.
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Questions



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