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# Construct an LHC scale national analysis facility

*Monday, 3 September 2007 08:00 (20 minutes)*

Based on todays understanding of LHC scale analysis requirements and the clear dominance of fast and high capacity random access storage, this talk will present a generic architecture for a national facility based on existing components from various computing domains. The following key areas will be discussed in detail and solutions will be proposed, building the overall architecture.

1. large scale cluster filesystems known in the HPC community. This community has shown the mature character of this technologies during the last months and evidently this success could be made usable for the demanding HEP community.
2. methods and systems for decentralized/delegated user administration. This also includes the integration with VOMS to allow seamless management with existing system.
3. data access to/from T2 (generally TierX) facilities by using SRM enabled cluster filesystems and high speed data access to local TierX storage resources if available.
4. batch process integration presenting exactly the same interface/behavious to users with resepect to their interactive ones.
5. accounting and monitoring system to enable true sharing of the single resource between all participating VOs.
6. criteria showing the scaling properties in the PB data region and more than 1000 CPUs.

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