

# Storage Resource Manager Project Status Report

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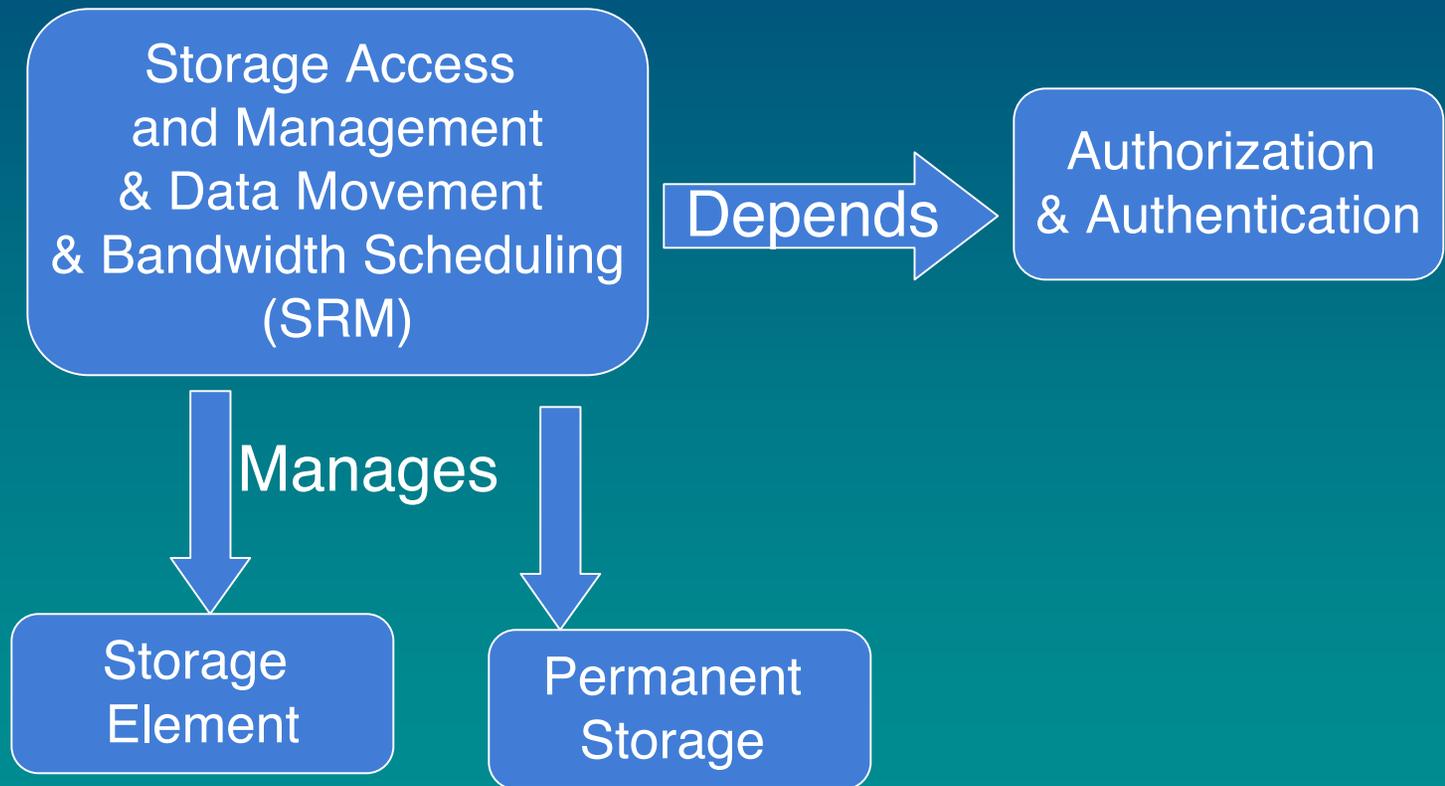
Timur Perelmutov

# Scope

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- SRM Provides
  - Storage Access and Management
  - Data Movement and Bandwidth Scheduling
- SRM Depends on:
  - dCache Storage Element
  - Site Authorization and Authentication

# Scope Diagram



# Objectives

- Provision of support and continuous improvements of the dCache srm v1 already in production use by US-CMS, and various other sites participating in building US-CMS Software and computing project including palliatives to support integration of the experiment.
- Development of SRM V2 client and server in order to satisfy the emerging needs of Fermilab and LHC experiments in Grid Enabled Storage, features need to be delivered ahead of, or in tandem with, other SRM implementations.
- Participation in SRM Collaboration to develop SRM v3 standard, which would resolve all the issues and defects in srm V2, help develop a world class specification which will lead to wider acceptance of SRM as standard grid interface to a storage on the Grid.
- Participation in collaboration with DESY, Vanderbilt University and any other organization willing to contribute to the development of dCache and SRM for the mutual benefits of all participating parties.
- Development of OSG Storage Element

# Stakeholders

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- Stakeholders:
  - US-CMS
  - OSG
  - Potentially Trex, other experiments

# Milestones

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- Milestones (SRM V2 development related):
  - SRM V2 Initial Version. SRM V2 client prototype -January 15, 2006
  - SRM V2 Production Deployment, demonstrated SRM V2 compatibility with Castor SRM
  - SRM V2 Explicit Space Reservation
  - SRM V2 Implementation complete
- Milestones (OSG )
  - Srmcp a part of standard OSG Software Distribution System
  - dCache a documented and supported OSG Grid Storage Element

# Effort Plans

## Initial Budget Request:

Budget/Effort Categories	Budgeted Effort (FTE-years)
SRM v1 improvements	0.5 person x 12 months = 0.5 FTE
SRM v2 Development and Deployment	1.5 person x 12 months = 1.5 FTE
SRM support	1 person x 12 hours per week x 1 year = 0.3 FTE
Collaborations	1 person x 12 hours per week x 1 year = 0.3 FTE
Project management and training	1 person x 8 hours per week x 1 year = 0.2 FTE
New issues	0.5 person x 12 months = 0.5 FTE

### ■ New Tasks:

- OSG Storage Element Development and Support: 0.5 FTE
- CMS dCache T1/T2 Support: 0.5 FTE

# Plans

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- Improvement of CMS SRM and dCache Support is a highest priority
- Continuous SRM V1 improvements and bug fixes
- Initial SRM v2 implementation by Jan 15, 2006
- Global Space Reservation
- More active participation in SRM V3 definition

# Issues

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- CMS Support needs more formalization
- Uncertainty with architecture of Global Space Reservation
- Compatibility between implementations
- Scalability
- Lack of effort

# Resources

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- <http://srm.fnal.gov>