

# **HEC FSIO Session 6: Management and RAS Gaps Roadmap**

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## 2007 Management and RAS Gap Area

Area	Researchers	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Rankings
Automated problem analysis and modeling	Reddy							 More researchers need to look at this problem.
Formal Failure analysis for storage systems	Arpaci-Dusseau							 Good research done here. Will people use this work?
Improved Scalability	Ganger							 More research is needed here. Testbed is probably needed for this work.
	Ligon							
Power Consumption and Efficiency	Qin							 Industry is working on this problem. Storage is not a large consumer of energy at HEC sites.
Reliability	None							 Industry is working on this problem

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|--|---|---|
|  Very Important             |  Greatly Needs Research        |  Greatly Needs Commercialization |
|  Medium Importance          |  Needs Research                |  Needs Commercialization         |
|  Low Importance             |  Does Not Need Research        |  Does Not Need Commercialization |
|  Full Calendar Year Funding |  Partial Calendar Year Funding |  On-Going Work                   |

# Management and RAS Gaps

- Automated problem analysis and modeling
- Formal failure analysis for storage systems
- Improved scalability
- Power consumption and efficiency
- Reliability

# Speakers & Areas of Research

- Toward Automated Problem Analysis of Large Scale Storage Systems
  - Priya Narasimhan , CMU
    - Automated problem analysis and modeling
- Formal Failure Analysis for Storage Systems
  - Remzi Arpaci-Dusseau , Wisconsin
    - Formal Failure analysis for storage systems