



CASTOR SRM Status Report

06/09/2005



Status of CASTOR SRM V1.1



- CASTOR SRM in Production since 2003
Fulfills SRM V1.1 spec
- Upgraded in May 2005 to support the new
CASTOR Stager
- Feedback from Service Challenge 3
 - After a setup/debug phase, the CASTOR SRM
now works satisfactorily
 - The new features to allow for better load
balancing/direct disk server access were useful
- SRM V2.1 is required for SC4
 - RAL proposed their help in writing the new
CASTOR-SRM



SRM Meeting at RAL (27/28th July) (1)



- 2 day meeting with RAL SRM dev team (3 people) to agree on the CASTOR SRM Design
- Took into account SRM V2.1 Spec and Experiments requirements
- Issues with the new implementation
 - For pin/unpin, a new interface to the new CASTOR stager will be written to change the Garbage Collection Weight of the files
 - ACL implementation will require work on CASTOR Name Server
 - Global Space Reservation is difficult to implement. In any case it will target reservations on the Storage System as a Whole (i.e. disk + tape) and will be managed by the SRM



SRM Meeting at RAL (27/28th July) (2)



- Technical Design

- Use of gSOAP for the SOAP stub Generation
- Use CGSI for security

➔ Both already used by CERN and RAL; this makes development and support easier

- Use of Umbrello for modeling and DB code generation

- RAL team therefore acquires knowledge of CASTOR2 DB interface
- The CASTOR team would be able to take over development and support of SRM V2.1 if needed



Project Milestones



- Project Plan

- Aug 5 – Aug 15

- Delivery of Architecture design → Done
 - Delivery of detailed SRM table structure → Done

- Sep 26th

- 1st release with full GET/PUT cycle, support for relative paths

→ Joint CERN/RAL go/no-go decision taken at the end of september

- Oct 31st

- Second release with pinning/storage reservation

- Nov 30th

- Directory functions support except srmLs

- Jan 31st

- Final release fully functional



CERN-RAL Cooperation



- RAL Project Team
 - Shaun de Witt (PL), Tara Shah, Jiri Mencak
- Tight cooperation to ensure success of the project:
 - Weekly conf call to discuss issues
 - Face to face meetings at regular interval to check the status of the SRM:
 - Design Meeting at RAL on July 27th/28th
 - CASTOR/Umbrello training at CERN on August 25th/26th
 - Status Meeting at CERN on September 26-30th
- Long Term support
 - RAL Commits to support the SRM throughout 2006
 - One RAL staff present at CERN for the first 5-6 weeks of SC4
 - Remote support after that period