

# LCG and CASTOR

Federico Ruggieri

INFN - CNAF



# Foreword

- CASTOR is a Hierarchical Storage Management software which has been developed at CERN on the basis of the previous experiences.
- It has been “exported” to many sites, including few LCG Tier centres: Barcellona and CNAF.
- There are other centres which may install it for various reasons:
  - Lyon has a plan of a possible long term migration to CASTOR (from HPSS).
  - Tier2’s may need a limited installation of CASTOR as a Disk Pool Manager with an SRM and GFAL on top.
  - Other Tier Sites in LCG can decide to profit of the good HEP specific architecture of CASTOR and install it in the future.

# Collaboration & Support

- CASTOR team is always very collaborative in helping for installation, bugs correction, making suggestions to solve non-CERN issues due to different hardware configurations.
- The CASTOR team is anyway limited to an handful of people which have many internal (to CERN) commitments.
- It's very difficult to follow all the possible implementations of CASTOR and CERN has not always the possibility to test it on different types of hardware (Tape Drives, Libraries, Servers).

# Proposal

- Add CASTOR to the LCG plan of work making it an effective collaboration project asking contributions to the other labs and centres.
- Extend automatically to CASTOR the scope of the existing agreements for the LCG Project with the funding Agencies.
- Increase with the help of the participating partners the number of people working on CASTOR development and support.

# Organisation and Contributions

- LCG Centres (Tier1) will support CASTOR in their respective Regions.
- CERN will make the High Level Support for the external LCG Centres.
- Each partner will contribute to the project with one or more of the following:
  - A person at CERN or an FTE with high percentages of CERN presence (50%).
  - Contributions to the software with specific responsibilities on well identified parts.
  - Global support for special hardware configurations not available at CERN.
  - Beta-tests of new releases with dedicated hw and personnel.

# Conclusion

- At least Barcelona and CNAF are willing to participate to the CASTOR project.
- A formal decision by SC2 will facilitate a smooth start of the already urgent activities needed.
- This project can have a large impact on the mass storage solutions in the LCG tiers.