

# Update on StoRM

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# Summer StoRMs

- At the last GDB Atlas complained about a great number of problems related to StoRM 1.6 and 1.7 (this one at CNAF only apparently)
  - Tail of the problems (the CNAF ones) due to a bug (hard to trace) in the GPFS version used for Atlas
    - workaround provided by IBM 2<sup>nd</sup> half of September
    - patch not yet released, but the workaround already plays the same job as the patch → no problem
  - The SRM service (i.e. StoRM) itself was not responsible of the major difficulties encountered at CNAF by ATLAS summer time
    - Things are not always as they seem...

# StoRM releases

- StoRM 1.6 EA release only
  - First porting to SL5/64 bits
  - Installed at CNAF to speed migration to SL5
  - Main bug: memory leak discovered in the BE
    - Problem controlled via nagios w/o serious problems
  - But also installed at other sites ☹️
- StoRM 1.7.0 released (end of June) under EMI and UMD
  - First release in this framework
  - CNAF upgraded on 7/7/11 (the GPFS problems started in August!)
    - Many bugs solved but BE memory leak still present
    - Also new bugs discovered: crash of the FE, memory leak in the FE (multiple causes)
- StoRM 1.7.1 released under EMI only
  - better version than the previous one 😊
  - Memory leak in BE still present
  - problem in the info published by the BE (patch provided)
  - Most of causes of the memory leak in the FE removed
    - Still present one due to an external library (XMLRPC-C) distributed with RH 5

# A new strategy

- A review of StoRM release process was done in July
  - Improvements in the internal testing phase
    - Now the final certification is performed by Tier1-staff on a dedicated (permanent) test-bed reproducing ATLAS load
  - Priority schedule revisited
    - Bug fixes have now a higher priority with respect to the development of new features, as compared with previous attitudes of the team
- A new coordinator of the StoRM project has been appointed with the mandate of ferrying the product to more quiet seas
  - Skilled user (V. Vagnoni, LHCb INFN computing coordinator) with clear view of WLCG requirements
- The debug and the fixing process started immediately
  - Several patches applied already late August both at CNAF and other sites
- This process will be preserved (with some adjustments where needed) also after the transition of the StoRM development team from INFN to IGI

# Present status

- Code for next EMI release (1.8.0) frozen at the end of September
- All the previous bugs solved
- Basic tests OK
  - installation and functional tests
- Stress tests performed at the INFN-T1 OK
  - No issues observed under load
- INFN-T1 is being upgraded the Atlas end-point today 😊
- This release is planned to be available for other sites with EMI 1.9 (Nov. 3 2011)
  - Timescale for UMD?