



Disk Space on WNs

Kors Bos

CERN & NIKHEF, Amsterdam

File sizes



- ATLAS still has many small files
- Possible solution found for log files (1 MB)
- Working on TAGs (kB) and NTUPs (MB)
- MC Execution time must be within limits
 - So cannot generate too many events
 - Depending on the physics channel
 - And pile-up
- In Reco: many input files from MC
 - Output AOD files still too small
- In TAG creation: many AOD files from Reco
- Goal 1 GByte < file size < 10 GByte

On the WN



- To create a 10 GByte file need 10 1 GB input files
- Try to limit ourselves to 25 GByte now
- Looking into other solutions also:
 - Get 1 input file at the time (Wall clock time!)
 - Throw input file away when used (may not work for pile-up)
 - Not copy input file to WN
- Whatever we do, we need more disk space

Questions



- On nodes with 4 dual-core cpu's
 - Site may decide for 12 job slots
 - But then we could need $12 * 25 = 300$ GB disk
 - This is worst case scenario
 - But can we avoid 12 jobs of the same type?
- Can we detect that a WN does not have enough disk space?
- Is 2 drives better than 1?