

Memory handling in the ATLAS submission system (Summary slides)

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Summary

- Revision and adaptation of the ATLAS pilot system to present a range of memory requirements to site resources rather than a fixed set
- Requested by sites since a long time
- Important for ATLAS to better distribute jobs with increasingly different requirements
- Important to avoid jobs being killed on the wrong memory values



Summary (2)

- Work
 - Revision of the whole chain of submission from the job definition in ATLAS → CEs (3) → batch systems (5) → OS memory definitions.
 - Introduction of a monitoring tool
 - Adapt scouts jobs to assess average jobs requirements for a task and submission system to use this to schedule jobs
 - Adapt pilot to use memory monitoring to exit cleanly if job exceeds memory requested
- Results
 - Better scheduling → less jobs killed → less wasted walltime
 - Better error reporting → less manpower to debug

