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## CMS Multicore Scheduling Strategy

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In the next years, processor architectures based on much larger numbers of cores will be most likely the model to continue “Moore’s Law” style throughput gains. This not only results in many more jobs in parallel running the LHC Run 1 era monolithic applications. Also the memory requirements of these processes push the workernode architectures to the limit. One solution is parallelizing the application itself, through forking and memory sharing or through threaded frameworks. CMS is following all of these approaches and has a comprehensive strategy to schedule multi-core jobs on the GRID based on the glideln WMS submission infrastructure. We will present the individual components of the strategy, from special site specific queues used during provisioning of resources and implications to scheduling; to dynamic partitioning within a single pilot to allow to transition to multi-core or whole-node scheduling on site level without disallowing single-core jobs. In this presentation, we will present the experiences made with the multi-core scheduling modes and give an outlook of further developments working towards the restart of the LHC in 2015.

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