

Experience on HTCondor batch system for HEP and other research fields at KISTI-GSDC

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Global Science experimental Data hub Center (GSDC) at Korea Institute of Science and Technology Information (KISTI) located at Daejeon in South Korea is the unique data center in the country which helps with its computing resources fundamental research fields deal with the large-scale of data. For historical reason, it has run Torque batch system while recently it starts running HTCondor for new systems. Having different kinds of batch systems implies inefficiency in terms of resource management and utilization. We conducted a research on resource management with HTCondor for several user scenarios corresponding to the user environments that currently GSDC supports. A recent research on the resource usage patterns at GSDC is considered in this research to build the possible user scenarios. Checkpointing and Super-Collector model of HTCondor give us more efficient and flexible way to manage resources and Grid Gate provided by HTCondor helps interface with Grid environment. The overview on the essential features of HTCondor exploited in this work will be described and the practical examples for HTCondor cluster configuration in our cases will be presented.

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Distributed workload management

Primary Keyword (Mandatory)

Computing facilities

Tertiary Keyword (Optional)

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