
Contribution ID: **7** Type: **not specified**

# Planning for Future Scales and Complexity of HTCondor Pools in the CMS Experiment

*Wednesday, 25 September 2019 17:45 (35 minutes)*

The resource needs of high energy physics experiments such as CMS at the LHC are expected to continue to grow significantly over the next decade, and will be more and more satisfied by computing capacity with non-standard characteristics. This presents challenges not only of scale but of complexity in resource provisioning and allocation. In this contribution, we will present results of recent HTCondor scale tests we have conducted using the CMS Global Pool Integration Test Bed (ITB) employing the multi-threaded Negotiator, where we have pushed the size of the pool to the maximum limits with currently-available hardware and explored effective performance limitations of the submit nodes in our infrastructure with realistic payloads. We will also discuss recent integration of resource-specific job matching conditions to satisfy HPC and Cloud use cases, where resources may not be suitable for running all kinds of workflows. Finally, we will review some specific use cases that we have difficulty solving with the current implementation of HTCondor.

## Desired slot length

20 minutes, unless you want to give us more.

## Speaker release

Yes

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**Session Classification:** Workshop presentations

**Track Classification:** HTCondor presentations and tutorials