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## Changing the batch system in a Tier 1 computing center: why and how

*Monday, October 14, 2013 3:00 PM (45 minutes)*

At the Italian Tier1 Center at CNAF we are evaluating the possibility to change the current production batch system. This activity is motivated mainly because we are looking for a more flexible licensing model as well as to avoid vendor lock-in.

We performed a technology tracking exercise and among many possible solutions we chose to evaluate Grid Engine as an alternative because its adoption is increasing in the HEPiX community and because it's supported by the EMI middleware that we currently use on our computing farm.

Another INFN site evaluated Slurm and we will compare our results in order to understand pros and cons of the two solutions.

We will present the results of our evaluation of Grid Engine, in order to understand if it can fit the requirements of a Tier 1 center, compared to the solution we adopted long ago.

We performed a survey and a critical re-evaluation of our farming infrastructure: many production softwares (accounting and monitoring on top of all) rely on our current solution and changing it required us to write new wrappers and adapt the infrastructure to the new system.

We believe the results of this investigation can be very useful to other Tier-1s and Tier-2s centers in a similar situation, where the effort of switching may appear too hard to stand.

We will provide guidelines in order to understand how difficult this operation can be and how long the change may take.

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