

List of online jobs to be proposed to other/new institutes

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Dataflow simulation (being done by University of Split, Croatia and COMSATS, Pakistan)

Take over the Netsim simulation and make it work for the following cases:

- Take into account the updated requirements
- Take into account the measured performance of the individual elements such as the FLP to EPN data transfer

Load balancing & dataflow regulation

Design and develop the load balancing and dataflow regulation system:

- Design document including: the overall architecture of the subsystem, the list of metrics used, the way to measure them
- Development of a standalone demonstrator
- Development of a prototype using ALFA and performing the load balancing of the synchronous data processing between the EPNs
- Addition to the prototype of the dataflow regulation in case the EPNs are not able to absorb the data fast enough
- Release V1 of the load balancing and dataflow regulation system
- Release V2 with the addition system with the addition of the load balancing of the asynchronous data processing

Benchmarking of different solutions considered for the data management in the O² facility

- Define the user requirements and the data access patterns
- Study the different solutions considered for the O2 data management (CERN EOS, IBM GPFS, Lustre, Object Store)
- Benchmark them in realistic conditions and compare them with the requirements.