

## Update on the CTLab4ET deployment

The CTLab4ET (Computing Technology Laboratory for ET) is one of the laboratories funded by the ETIC (ET Infrastructure Consortium) project. Its purpose is to provide the ET Collaboration with a playground where the most recent computing technologies can be tested and benchmarked. Since ET will become operational in about ten years and computing software and hardware evolution is very fast, it is mandatory to keep up with the latest available possibilities in this field and to be able to make an educated guess on their status at the time they will be used. Moreover, by the end of 2025, the first draft of the ET computing model is expected and this requires a careful evaluation of the computing needs and desiderata for a successful and efficient operation of the experiment. These are the reasons why a laboratory such as CTLab is necessary for ET Preparatory Phase and for ET R&D in general.

The procurement of the machines was completed last year and the implementation of the management layer is in progress: it foresees the setup of a Kubernetes cluster with different access models, with a system of authorization/authentication based on ET IAM AAI. It will be tested and further developed to adjust to the community needs during Mock Data Challenges. In this contribution, a description of the laboratory, inaugurated on April 14th 2025, will be given, focusing on the available hardware infrastructure and describing the software framework which is under implementation to make the cluster available for the collaboration.

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**Track Classification:** ET Infrastructure (EIB): EIB