Contribution ID: **398**   Type: **Talk**

The Cherenkov Telescope Array Observatory Production System Status and Development

Thursday 24 October 2024 13:48 (18 minutes)

The Cherenkov Telescope Array Observatory (CTAO) is the next-generation instrument in the very-high energy gamma ray astronomy domain. It will consist of tens of Cherenkov telescopes deployed in 2 CTAO array sites at La Palma (Spain) and Paranal (ESO, Chile) respectively. Currently under construction, CTAO will start operations in the coming years for a duration of about 30 years. During operations CTAO is expected to produce about 2 PB of raw data per year plus 5-20 PB of Monte Carlo data as well as very high processing needs of the order of hundreds of millions of CPU HS06 hours per year. These computing resources will be distributed across the 4 official CTAO Data Centers. To handle these simulations and data processing, we have developed a production system prototype based on the DIRAC interware. We will present the current status of this prototype, the underlying infrastructure and the used technologies, as well as recent developments regarding workflows interface and failure management, along with future perspectives.

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Session Classification: Parallel (Track 4)

Track Classification: Track 4 - Distributed Computing