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Evaluating the Control Software for CTA in a Medium Size Telescope Prototype.

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CTA (Cherenkov Telescope Array) is one of the largest ground-based astronomy projects being pursued and will be the largest facility for ground-based gamma-ray observations ever built. CTA will consist of two arrays (one in the Northern hemisphere and one in the Southern hemisphere) composed of several different sizes of telescopes. A prototype for the Medium Size Telescope (MST) type of a diameter of 12 m will be installed in Berlin by the beginning of 2012. This MST prototype will be composed of the mechanical structure, drive system, mirror facets mounted with an active mirror control system. Four CCD cameras and a weather station will allow measurement of the performance of the instrument. The ALMA Common Software (ACS) distributed control framework is currently being considered by the CTA consortium to serve as the array control middleware. In order to evaluate the ACS software, it has been decided to implement an ACS-based readout and control system for the MST prototype. The design of the control software is following the concepts and tools under evaluation within the CTA consortium, like the use of a UML based code generation framework for ACS component modeling, and the use of OPC Unified Architecture (OPC UA) for hardware access. In this contribution the progress in the implementation of the control system for this CTA prototype telescope is described.

Student? Enter 'yes'. See <http://goo.gl/MVv53>

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