

OBJECT SCHEME DESIGN OF CONFIGURATION DATABASE OF A DETECTOR CONTROL SYSTEM

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Object categories of a detector control system (DCS) structure are presented and general-purpose object classes belonging to them are defined. The "Control Unit" concept is proposed that is a kernel entity to define an elementary functional subsystem of the control system. This is an abstraction to represent an aggregation of hardware and software entities of certain functional destination. Objects of Control Unit's subclasses hide the system implementation hardware and low level software providing instead a functional interface to operate the parameters that it is responsible for. A set of relationships binding classes and providing integrity of the object database is defined. Presented object scheme design seems to be common one for all the DCS configuration database partitions (sub-detector control descriptions). The job is performed in the frame of DCS project for ATLAS experiment at CERN. An example of the database scheme is given from domain of the ATLAS' TRT sub-detector control.