

THE LHC FUNCTIONAL LAYOUT DATABASE AS FOUNDATION OF THE CONTROLS SYSTEM

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Abstract

For the design, construction, integration and installation of the LHC, the LHC Layout database manages the information on the functional positions of the components of the LHC. Since January 2005, the scope of this database has been extended to include all electronics racks in the tunnel, underground areas and surface buildings. This description of the accelerator and the installed controls topology is now used as the foundation for the on-line operational databases, namely for controls configuration and operational settings. This paper sketches the scope of the Layout database, and explain the details of data propagation towards the respective controls data consumers. The question whether this approach is applicable to the rest of the accelerator complex at CERN is addressed as well.

