

Tools and procedures for high quality technical infrastructure monitoring reference data at CERN



M. Braeger, J. Salmon, **R. Martini**, A. Suwalska, CERN, Geneva, Switzerland The monitoring of the technical infrastructure at CERN relies on the quality of the definition of numerous and heterogeneous data sources. In 2006, we introduced the MoDESTI procedure for the Technical Infrastructure Monitoring (TIM) system to promote data quality. The first step in the data integration process is the standardisation of the declaration of the various data points, whether these are alarms, equipment statuses or analogue measurement values. Users declare their data points and can follow their requests, monitoring personnel ensure the infrastructure is adapted to the new data, and control room operators check that the data points are defined in a consistent and intelligible way. Furthermore, rigorous validations are carried

out on input data to ensure correctness as well as optimal integration with other computer systems at CERN (maintenance management, geographical viewing tools etc.). We are now redesigning the MoDESTI procedure in order to provide an intuitive and streamlined Web based tool for managing data definition, as well as reducing the time between data point integration requests and implementation. Additionally, we are introducing a Class-Device-Property data definition model, a standard in the CERN accelerator sector, for a more flexible use of the TIM data points.



| | | If data is in error the requestor must start again. | | Several days can elapse before the datapoints are configured. | | |
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| Separate application for registering request. | Manual form maintenance for entering data. VB code in Excel for some data checks. | All requests pass by TI operators, who then determine cabling step. | Validation errors halt the process. Request must be restarted. | | Configuration launched manually. | Separate application for testing requests. |



