

SELECTING AND EVALUATING SCADA SYSTEMS FOR THE SLOW CONTROLS OF THE CERN LHC DETECTORS.

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Considering its continuously shrinking resources, CERN focusses its efforts more on physics activities at the cost of more technology oriented developments. Along this line, commercial SCADA (Supervisory Controls and Data Acquisition) systems are now given serious consideration for the so-called "Slow Controls" of the LHC detectors. Indeed, such systems are generally used for industrial processes whose characteristics in terms of scale, distributed nature and functionality resembles those of detector controls to a significant extent. Therefore an in depth analysis of such systems is currently being carried out at CERN in the experimental sector. This paper describes this procedure and shows how the initial definition of the user requirements (à la ESA-PSS-05) led to a detailed set of criteria against which SCADA products are being checked. The successful products are then undergoing a sequence of more detailed evaluations in terms of scalability, openness, development facilities, etc. It will also be highlighted that the use of such SCADA become only beneficial if complemented by a proper engineering activity.