

WHAT IS SCADA ?

A. Daneels, CERN; W. Salter, Anite Corp.

SCADA are widely used in industry for Supervisory Controls and Data Acquisition of industrial processes. Generally developed by companies that are member of standardization committees (e.g. OPC, ...) and therefore setting the trends in matters of IT technologies, these systems can no longer be ignored by the experimental physics community. Indeed, they are now also penetrating the experimental physics laboratories for the controls of ancillary (?) systems such as cooling, ventilation, power distribution, etc. More recently they were also applied, although to a lesser extent, for the controls of smaller size detectors such as the L3 muon detector, the NA48 experiments, to name just two examples at CERN. This paper describes the SCADA systems in terms of their architecture, the functionality and configuration facilities they provide as well as the way they are interfaced to the process proper. Some attention will be paid to the industrial standards to which they abide as well as their planned evolution.