RESULTS OF THE OPC EVALUATION DONE WITHIN THE JCOP FOR THE CONTROL OF THE LHC EXPERIMENTS.

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The construction of the LHC experiments control systems will require the integration of a wide range of COTS or custom components: hardware such as instruments, controllers, fieldbuses and sensors as well as applications, for example, for operator control and visualisation or for sub-system supervision.This integration may require a non negligeable effort if no standard interfaces or integration mecanism are available.OLE for Process Control (OPC) is a recently defined set of interfaces designed to allow windows applications to access control data. OPC is based on microsoft DCOM and is developed by the OPC foundation.This paper presents the result of an evaluation done in the context of the Joint COntrols Project. The aim of this evaluation was to study the usability of OPC for the LHC experiment control systems. In particular it presents the benefit and limitations of the specifications, the availability of OPC compliant COTS and the usability of OPC developement kits to develop accesses to custom devices or non Windows platforms.