STATUS REPORT OF THE MAMI CONTROL SYSTEM*

H.J. Kreidel, Institut Für Kernphysik

The basics of the MAMI[1] control system[2] were designed in 1981 and have survived some generations of computer operating systems and hardware platforms. Thereby, the control system has been developed in a way to be operating system independent and to be usable in inhomogeneous networks. It runs on many Unix-flavors, VMS and also Windows NT4 systems. This has been achieved by a message-oriented connectionless process communication system with object-name based addressing scheme, encapsulating the operating system dependencies. All the control system software has been built on this basis forming a "distributed computing environment", making it possible to run in principle each control process on any computer of the network. The distribution of the processes in the network is online re-configurable, without interference with the accelerator operation. The MAMI control system contains among other things a control GUI, based on a commercial package for animated graphics, fast touch-panel and knobs systems, an interpreting control language to program complex actions and a flexible supervising tool, generating global information for status displays, warnings or emergency switch-off actions. The extension of the MAMI accelerator by a fourth stage (double-sided microtron), to be built in the years 2000 to 2002, requires a further expansion of the existing system.

[1] K. Aulenbacher et al., New Installations and Beam Measurements at MAMI, Proc. of the EPAC´98, Stockholm, p.523[2] H.-J. Kreidel, C. Klümper and K.W. Nilles, ICALEPCS´93, NIM A352(1994)354