

Trendi v distribuiranih nadzornih sistemih - Siemens Simatic PCS7

dr. Gerd-Ulrich Spohr
Siemens AG, München

Trends in distributed process control systems

Abstract:

Distributed process control systems are available since 1980 and have already reached a pretty high degree of maturity, but there are some technological trends, which will influence future developments. Due to the progress in microprocessor- and communication-technology an increasing amount of intelligence is transferred from central controllers to distributed field instruments. This causes a change in field communication, from traditional 2-wire 4-20mA to HART, Field busses, and for the future Ethernet and WLAN (wireless LAN). The additional computing power in the field can be used for self diagnosis and calibration of the field instruments, which are prerequisites for plant wide asset management systems and applications like condition monitoring and predicted maintenance. In general the use of management execution systems (MES) in the process industry will increase rapidly and therefore the interoperability between MES and process control systems will be essential.