

ICALEPCS 2007

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ICALEPCS

- **International Conference on Accelerator and Large Experimental Physics Control Systems**
- **Affiliated Meetings**
 - EPICS
 - TANGO
 - Computer/Cyber Security

What you see in the Control Room

- **Operator Interfaces, High-level applications:**
 - So far: **Unix, X-Windows, C, C++**
 - Little interest in continuing their support.
 - **New developments: Java**

Java

- **Operating system no longer matters**
- **Great development tools**
- **Remaining arguments, leading to quite some polarization:**
 - **Develop everything yourself based on pure Java/AWT/SWING to reduce dependencies?**
 - **Or build on existing frameworks, especially Eclipse?**

Web-Based GUIs

- **The only client tool is the web browser**
- **Prime choice for relational database access (logbook, ...)**
- **Initial usage for 'life' data.**
- **Only matter of time until all GUI applications will be web-based?**

What's in the field: Front-end controllers

- **So far, and still: VME crates with one CPU and many I/O boards.**
- **New developments: Much more logic in FPGA, combined with embedded CPU as a "networked device".**
 - Sometimes the CPU is just a core inside the FPGA.
- **Initial investigations of Java Virtual Machine inside FPGA.**
 - Will we end up with only Verilog/VHDL and Java?