



Discussions

**for EPICS2010 at IHEP/Beijing
March 5, 2010**





Windows





Windows

◆ Linux is better than Windows?

❖ Performance

✧ No difference

❖ Management

✧ Virus protection

❖ I/O Interface

❖ Compiler choice

❖ Windows embedded oscilloscopes





F3RP61 and PLC





F3RP61 and PLC for Controller

◆ PLC is better than VME?

◆ F3RP61 (Embedded Linux) is better than Sequence CPU?





F3RP61 and PLC for Controller

◆ PLC is better than VME?

- ❖ Density
- ❖ Performance
- ❖ Module availability
- ❖ International standards
- ❖ 16bit analog and density

◆ F3RP61 (Embedded Linux) is better than Sequence CPU?

- ❖ Severe interlock
- ❖ Logic management
- ❖ Single vender





VME, CompactPCI, μ TCA, ATCA VxWorks, RTEMS, Linux





VME, CompactPCI, μ TCA, ATCA VxWorks, RTEMS, Linux

- ◆ Present module availability
- ◆ Future module availability
- ◆ Performance, expandability, flexibility, ...
- ◆ Hot swap, redundancy,
- ◆ Realtime response
- ◆ EPICS support





Ethernet-based or Embedded-IOC

- ◆ Linux ?
- ◆ Asynchronous ?
- ◆ Ask channel access to solve the issue instead of writing your own





CSS

- ◆ is being used for XFEL cryogenic controls
- ◆ is mature now





Scripting languages

- ◆ Python/Tk
- ◆ Perl/Tk
- ◆ Tcl/Tk
- ◆ SADscript
- ◆ Ruby ...
- ◆ (Java)





Accelerator Operations

- ◆ XAL
- ◆ SAD & SADscript
- ◆ MAD, Elegant, ...
- ◆ Matlab, Labview, ...





Thank You

谢谢您









EPICS Meeting Seminar & Training

- ◆ This meeting was the last in this series of Core university program
- ◆ We, all Asian friends, received benefits from this program since 2000
- ◆ This is not the end of our Japan-China, Asian, collaboration. Core university program triggered our collaboration. And we realized the collaboration importance, benefits and fun.
- ◆ Let's continue the collaboration



朋あり遠方より来る、また楽しからずや

◆ 有朋自远方来，不亦乐乎

◆ yǒu péng zì yuǎn fāng lái , bù yì lè hū

◆ 学んで時にこれを習ふ。亦説（よろこ）ばしからずや。朋あり遠方より来る、亦楽しからずや。人知れず、而（しこう）して慍（いか）らず、亦君子ならずや





Thank You

谢谢您

