EPICS Workshop Summary
ICALEPCS 2009, Kobe

Overview of the meeting

- Approximately 80 people attended.
- 1 day meeting with 16 Talks in:
  - Version 3 release plans
  - Low Level Applications
  - Engineering Tools for Operations
  - Java IOC Project
- Many related talks / posters given throughout the ICALEPCS

Version 3 release

- 3.14.11 highlights
  - August 28th
  - Many bug fixes especially in CA and CAS, which will particularly improve the CA Gateway (new version needed).
  - Many new features, including several developed at the EPICS Codeathon held at Brookhaven in April
- 3.15.0
  - Spring 2010
  - Server side event filtering on record processing (protocol implementation ongoing
  - JSON encoding in Channel specification

Low Level Applications

- FPGA running EPICS on PPC Cores
  - Embedded devices such as vibration measurements or beam position monitors
  - Low cost I/O Controllers for integrating Ethernet and serial instrumentation
  - Standard drivers implemented for DDR memory
  - Boot loader from network or flash memory
- Building test suites to provide regression tests
  - Reduces the risk when deploying new releases of the control system
- EPICS running on Yokogawa PLC Processor
  - PLC as I/O Controller

Engineering Tools for Operation

- Control System Studio
  - Eclipse Environment with tool interoperability
  - Synoptic Display Support
  - Alarm management
  - Data Archiver
  - Many other applications
- Python Binding to Channel Access
- Advanced Directory Services for search by function

JAVA IOC Project – R0.8.0

- IOC
  - Prototype has been operational for a year – records composed of PVData structures. (Marty Kraimer)
  - Second implementer creating V3 record set (Sheng Peng)
- Compatibility with Version 3
  - DDS API with serialization/ deserialization of PVData (Nikolay Malitsky)
- Channel access implementation
  - Server/Client for PVData structure is operational
  - (Marty Kraimer, Matej Sekoranja)
- Visual Database Configuration Tool operational
  - (Cosylab team)
- Implementations for physics applications are being designed
  - (Nikolay Malitsky and Guobao Shen)
- Goals for the upcoming year include
  - demonstration of this tool set on a model server
  - Start a C++ implementation for the client and server
  - 1st release Java IOC Project - TART