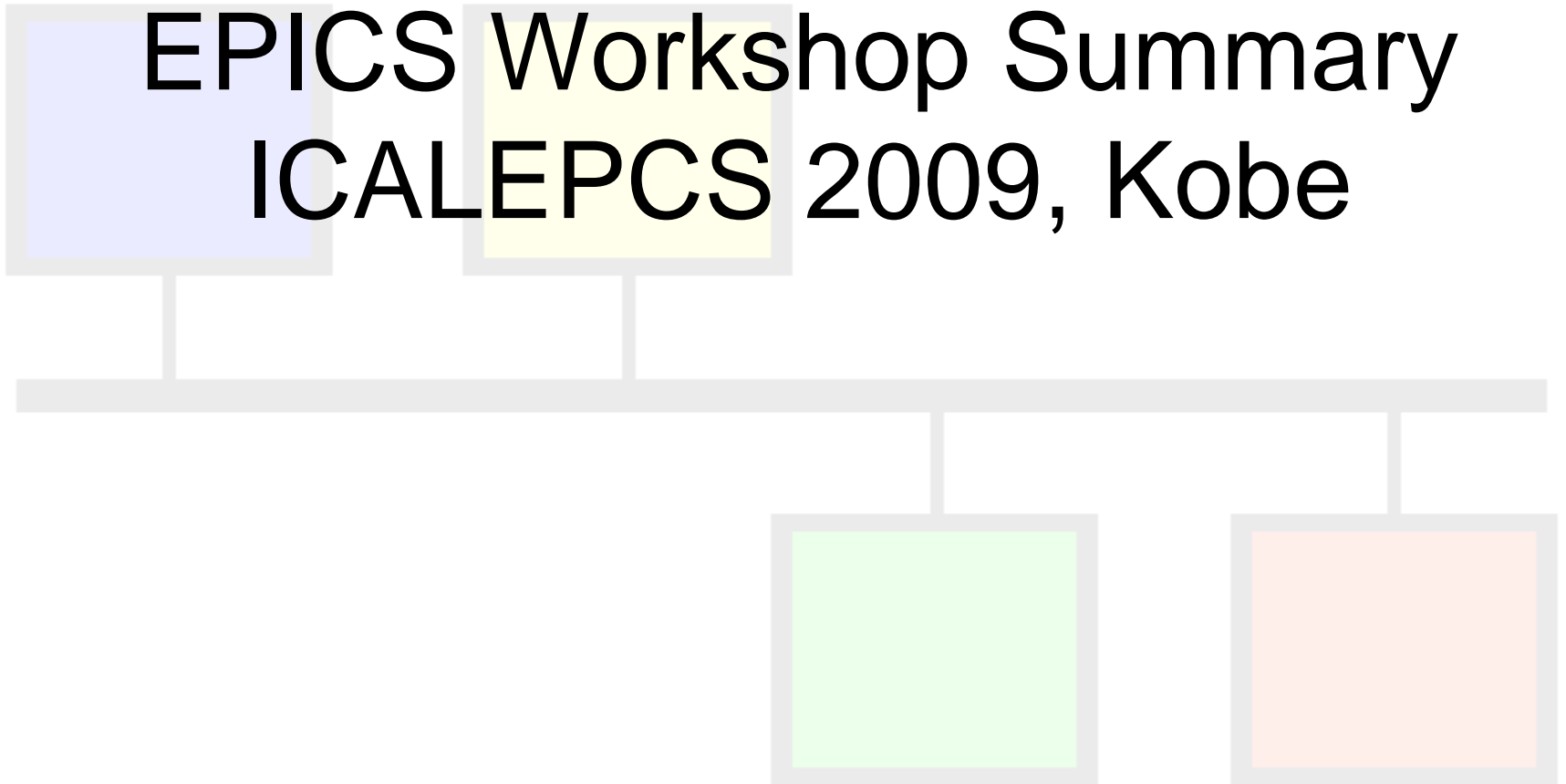


EPICS

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