

Status of the IJS Part of the ANKA Control System

B. Jeram, K. Kenda, I. Križnar, B. Lesjak, K. Mele, T. Milharcic, M. Perko, P. Pirc, U. Platiše, M. Pleško, M. Smolej, R. Šabjan, G. Tkacik, I. Verstovšek, K. Žagar



J. Stefan Institute, Ljubljana

e-mail mark.plesko@ijs.si

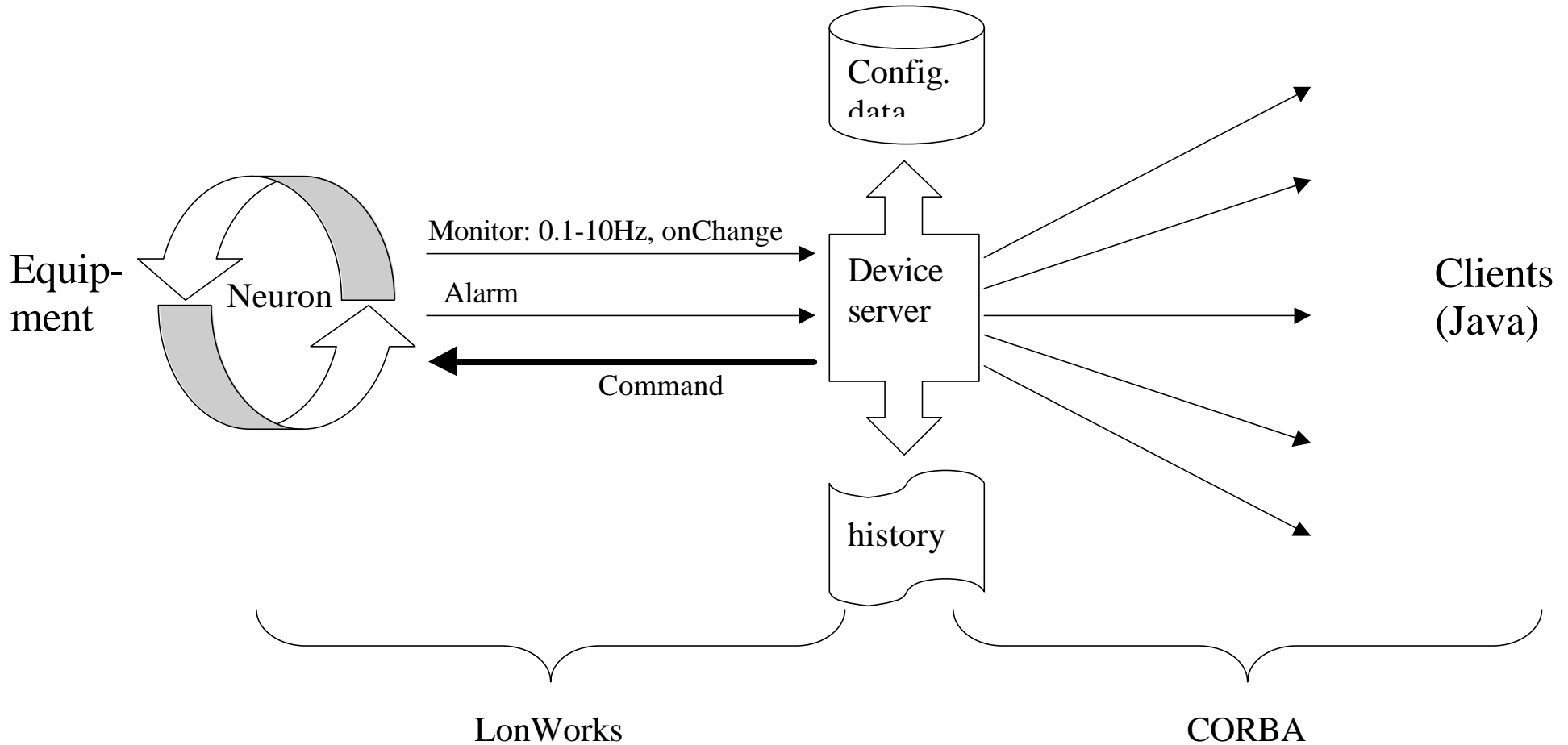
<http://kgb1.ijs.si>

ANKA MAC, September 20th, 1999

Karlsruhe

Introduction

The Data Flow in the ANKA Control System



4-th ANKA MAC, May 1998: Our Vision

The Best Control System in Terms of Maintenance



- safe & simple installation/configuration
- centralised & consistent management
- powerful & easy application creation

Installation procedure:



1. Plug in I/O boards
2. Install software with Wizard
3. Enter data in static database
4. Logically install fieldbus nodes
5. Double-click on device server

- Abeans library
- Graphic objects
- Device Beans
- IBM Visual Age
- Visually connect components



Management tools:

- Keymaster*
- Password/IP authentication*
- Management client
- Start/stop device or server
- Monitor all activities in



* already existing

Future (Injector)



Radio frequency

- 3-bit DAC
- several serial interface drivers

Ramping

- sample&hold for Zeus DAC exists
- software and hardware tested in lab (check pulses, compare DAC/ADC)
- test with real ramping curve at Danfysik tomorrow

Machine physics

- linear optics library integrates simulation and control system
- MAD file reader
- optics display, orbit correction

Future (Storage Ring)



To do

- Serial interfaces integrated into CS
- InfoServer
- BPM acquisition and device server

What have we been working on



Neuron (lowest layer)

- program: RF, ramping
- clean-up: uniformize, optimize, debug, documentation

Device Server (middle layer)

- upgrade: optimized transmission, logging, archiving, management
- organize: database, documentation

Java Clients(upper layer)

- new: RF panels, snapshot, cycling
- optimize: debugging, add many small tools, re-do GUI components

General Design

- more commercial components: Excel, Visual Source Safe, SQL
- no ANKA-specific code: data-base driven programs

Plan for September/October 1999



Finish RF installation

- check with Elettra all electric interfaces
- test device driver protocols for 3 serial devices (leaves trasmitter)

Install SR

- configure nodes, install new software releases
- use **2 weeks** for testing and performance measurements

Open Issues

CORBA Visibroker

Diagnostics

- specifications to be discussed tomorrow?



Structure of the Software Implementation

