

CERN SCADA Working Group Report

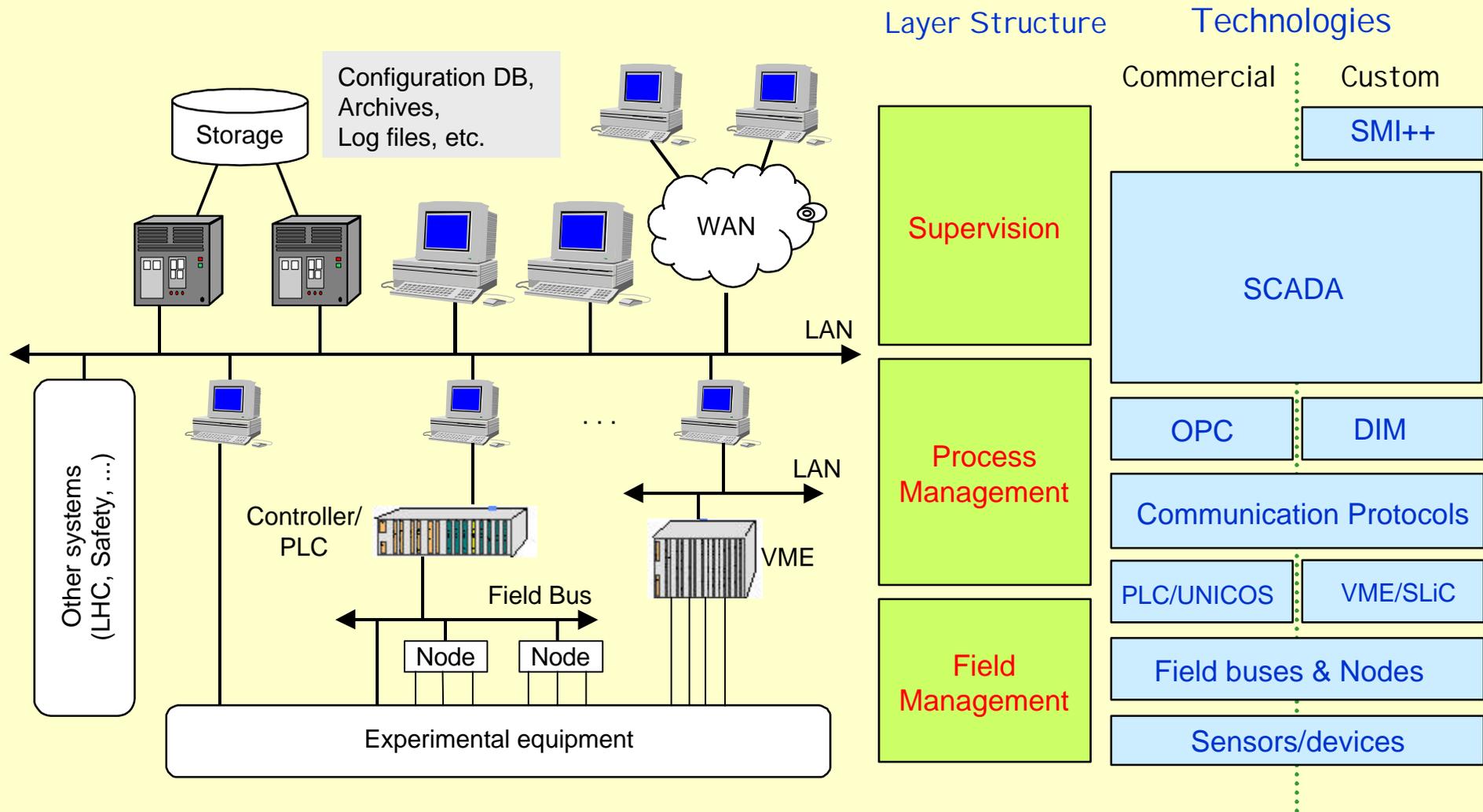
Wayne Salter IT/CO

(on behalf of Uwe Epting, Arash Khodabandeh, Eugenia
Hatziangeli, Frank Locci, Claude-Henri Sicard)

Overview

- What is SCADA?
- PVSS Status at CERN
- SCADA Working Group Recommendations
 - Licensing
 - Support
- JCOP and PVSS

Controls Technologies (JCOP)



Based on an original idea from LHCb

6th April 2001

LHC-CP Workshop II - Wayne Salter

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What is a SDADA System?

- Supervisory Control And Data Acquisition
- Toolkit to build controls applications
- Flexible, distributed and open architecture

Include:

- Development environment
 - Set of basic SCADA functionality
(HMI, Alarm Handling, Archiving, Access Control, Trending, Scripting)
 - Set of interfaces to Hardware and Software
 - API to develop other functions
- Mostly NT-based but PVSS supports Linux

Status of PVSS at CERN

- Controls Board
 - Diversity of SCADA systems at CERN
- SCADA Working Group
 - Survey usage of SCADA
 - Recommendation
- JCOP
 - Evaluation of SCADA systems
 - Tender and selection of PVSS
- Controls Board
 - SCADA Recommendation
- SCADA Working Group
 - Implementation report

Status of PVSS at CERN II

- LHC experiments
 - Special license agreement and many licenses
 - Many projects underway
- Fixed target experiments
 - Selected for COMPASS, HARP, NA60
 - Framework developed for COMPASS
 - FW being used for HARP and will be for NA60
- Other Domains
 - ST: successful prototype, CSAM, prototype for access control
 - SL: prototype for alarm system, other prototypes in planning
 - LHC: prototype for vacuum, consideration for cryogenics
 - TIS: prototype for radiation monitoring
- DESY (H1)

SCADA Working Group Report

- SCADA Working Group Recommendations:
 - CERN-wide licensing agreement
 - Covering external companies
 - Central PVSS Support Team
 - Software and license provision
 - Contact with ETM
 - First-line support
 - PVSS information dissemination
 - Based in IT-CO with appropriate additional resources

SCADA Working Group Report

- Local Application Support Teams
 - Application specific support
 - Co-ordination for the domain:
 - product change requests
 - consultancy requests
 - problem report submission
- Central Application Support Team
 - Co-ordination of joint developments
 - Provision of development guidelines
 - Standard components
 - Organisation of inter-domain discussions
- CERN Technical Training Service

JCOP and PVSS

- Development
 - Used as the basis of LHC experiment control systems
 - Framework will be developed on top
 - Developments to be performed according to Guidelines
- Operation
 - Many PVSS systems per control system
 - FSM will be integrated with PVSS
 - OPC/DIM
 - LDIWG proposed communication mechanism

Support (Sources)

- On-line help (Getting Started)
- Web site (<http://itcowww.cern.ch/pvss2/index.htm>)
- Newsgroup (cern.pvss)
- PVSS Users' Meetings
- First-line support from IT-CO^{*}
(pvss.support@cern.ch)
- Second-line support from ETM (PVSS) also with a Newsgroup

^{*}LHC Experiment Specific