

Contribution ID: 17 Type: not specified

Renewal of the remote maintenance system for the SPring-8 control system

Sunday 6 October 2013 11:45 (25 minutes)

We present renewal of the remote maintenance system for the SPring-8 control system, named "WARCS" (Wide Area Remote Control System). The WARCS (version 1, WARCSv1) was assembled using open-sourced database and tunneling applications in 2003.[1] However, we had faced problem of connectivities, blocked by the recent network policies. We also found that the WARCSv1 has Man-In-The-Middle vulnerability in the authentication process. Therefore, we decided to renew the WARCS using standard AAA framework and VPN technologies. In 2012, we installed the new WARCS (version 2, WARCSv2) in both the SPring-8 control system and the SACLA control system.

In this talk, we present overview of the WARCSv2 compared with the WARCSv1, with special emphasis on the vulnerability of the WARCSv1.

[1] A. Yamashita and Y. Furukawa. "WARCS: WIDE AREA REMOTE CONTROL SYSTEM IN SPRING-8". In Proceedings of ICALEPCS 2005, Geneva, Switzerland, 2005.

Primary author: Dr SUGIMOTO, Takashi (Japan Synchrotron Radiation Research Institute)

Co-author: Mr SAKAMOTO, Tatsuaki (Japan Synchrotron Radiation Research Institute)

Presenter: Dr SUGIMOTO, Takashi (Japan Synchrotron Radiation Research Institute)