



Contribution ID: 538 Contribution code: THPS006

Type: **Poster Presentation**

## Applications of SNMP and syslog monitoring at the TPS control network

*Thursday 5 June 2025 15:30 (2 hours)*

The Taiwan Photon Source (TPS) is the third-generation synchrotron and serves higher brilliant light source with 3 GeV storage ring. The accelerator system consists of a storage ring with a circumference of 518.4 meters and a booster ring. The control system equipment is widely distributed across different rooms along the ring, with many devices scattered across a large spatial area. Due to the distributed nature of these devices, it is crucial to implement an effective monitoring system to detect abnormalities in the equipment, ensure system stability, and reduce troubleshooting time. Therefore, a centralized monitoring system is required to manage and monitor network equipment efficiently.

SNMP is employed for remote monitoring, management, and configuration of network elements. Additionally, syslog is used to transfer and store log information. The monitoring system helps track device status and activity, providing realtime insights into the overall system health. This paper will describe the system architecture and implementation details, focusing on how these technologies are integrated to ensure the stable operation and efficient fault handling of the TPS control system.

### Footnotes

### Paper preparation format

Word

### Region represented

Asia

### Funding Agency

**Author:** HSU, Lin-Pin (National Synchrotron Radiation Research Center)

**Presenter:** HSU, Lin-Pin (National Synchrotron Radiation Research Center)

**Session Classification:** Thursday Poster Session

**Track Classification:** MC6: Beam Instrumentation and Controls, Feedback and Operational Aspects: MC6.T04 Accelerator/Storage Ring Control Systems