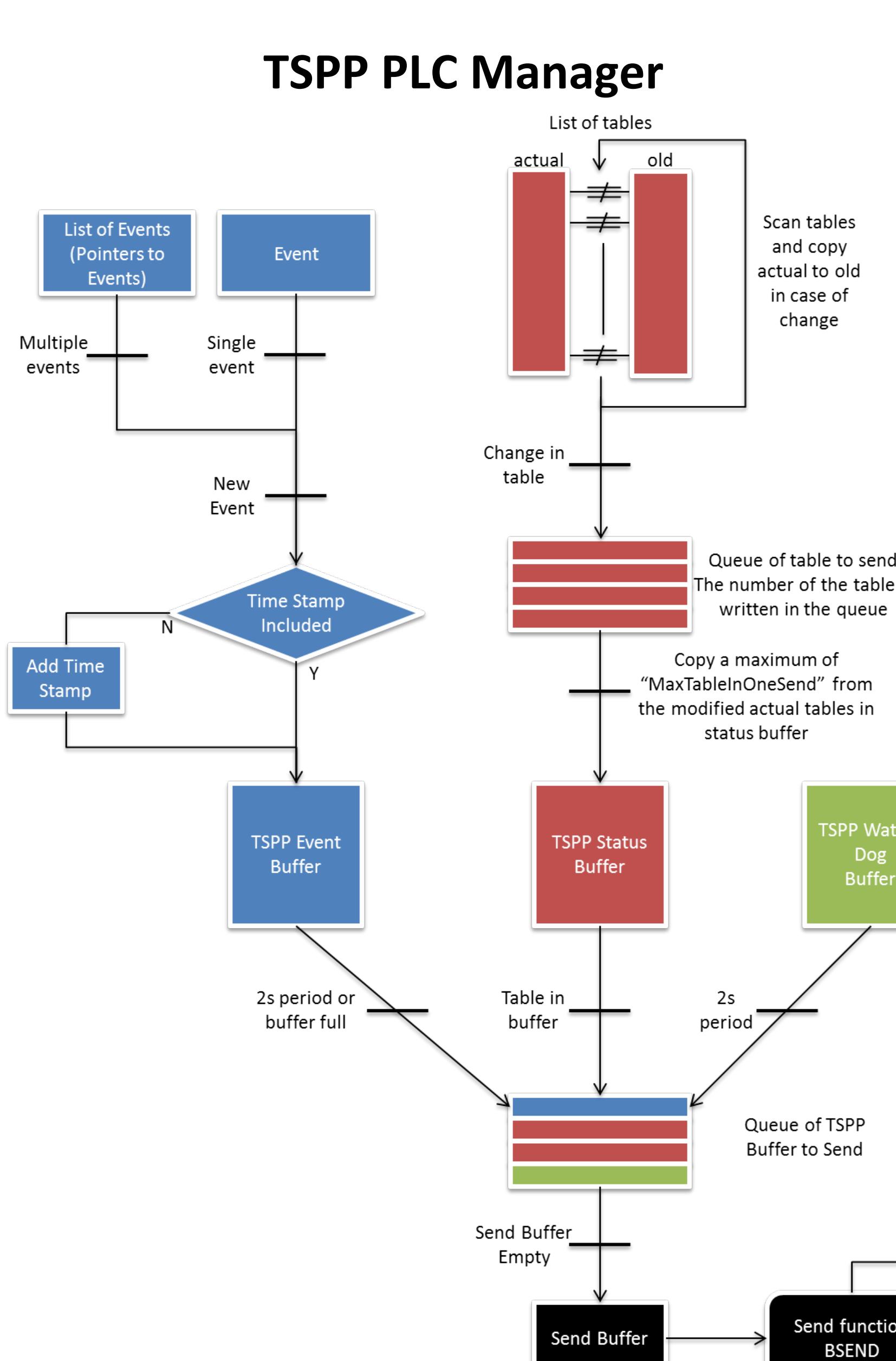
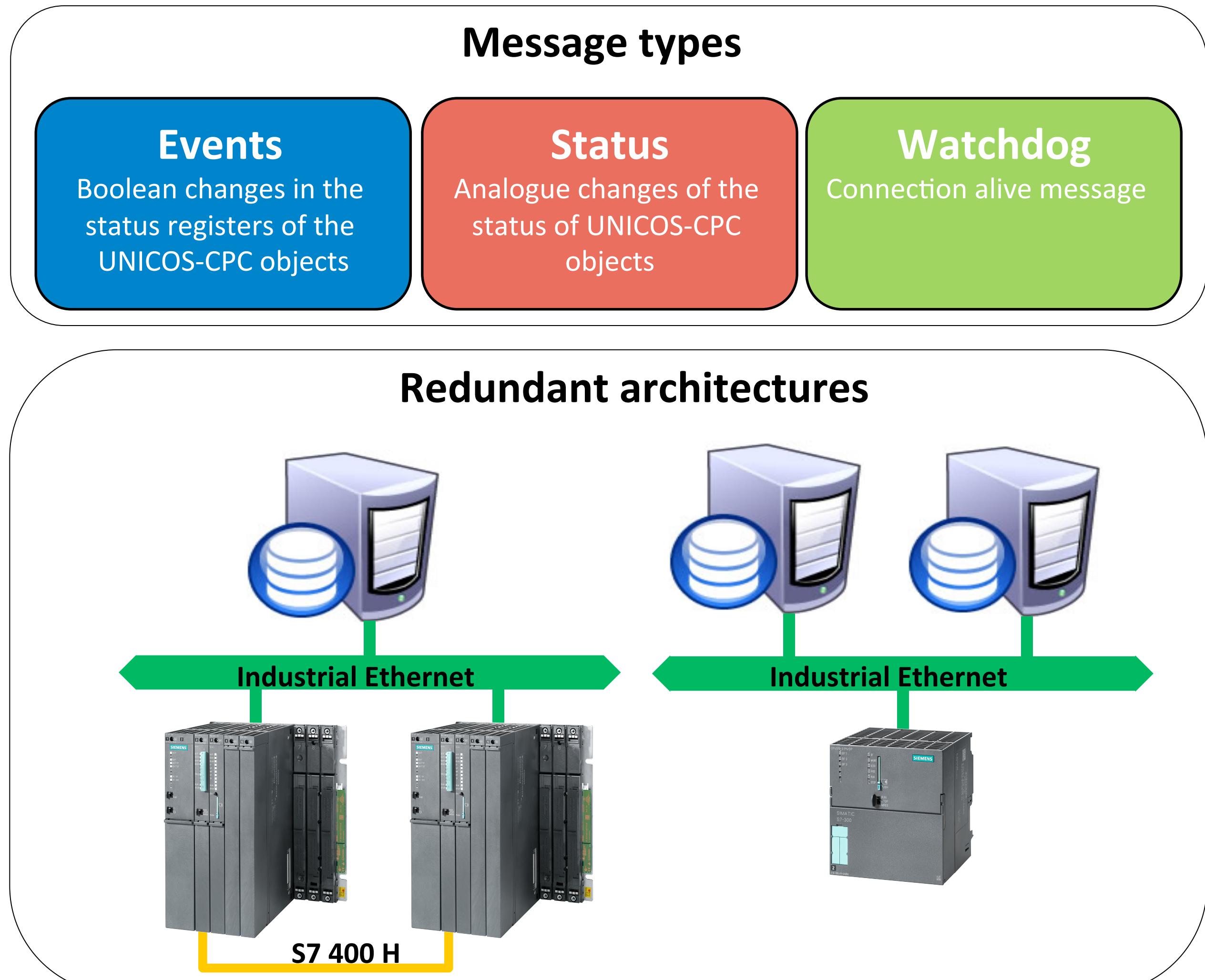


The CERN UNified Industrial COntrol System framework (UNICOS) with its Continuous Control Package (UNICOS CPC) is the CERN standard solution for the design and implementation of continuous industrial process control applications. The in-house designed communication mechanism, based on the **Time Stamp Push Protocol (TSPP)** provides event driven **high performance** data communication between the control and supervision layers of a UNICOS-CPC application. This poster presents the TSPP design, **redundant architecture** as well as a comprehensive evaluation of its performance for SIEMENS PLCs in different test scenarios.

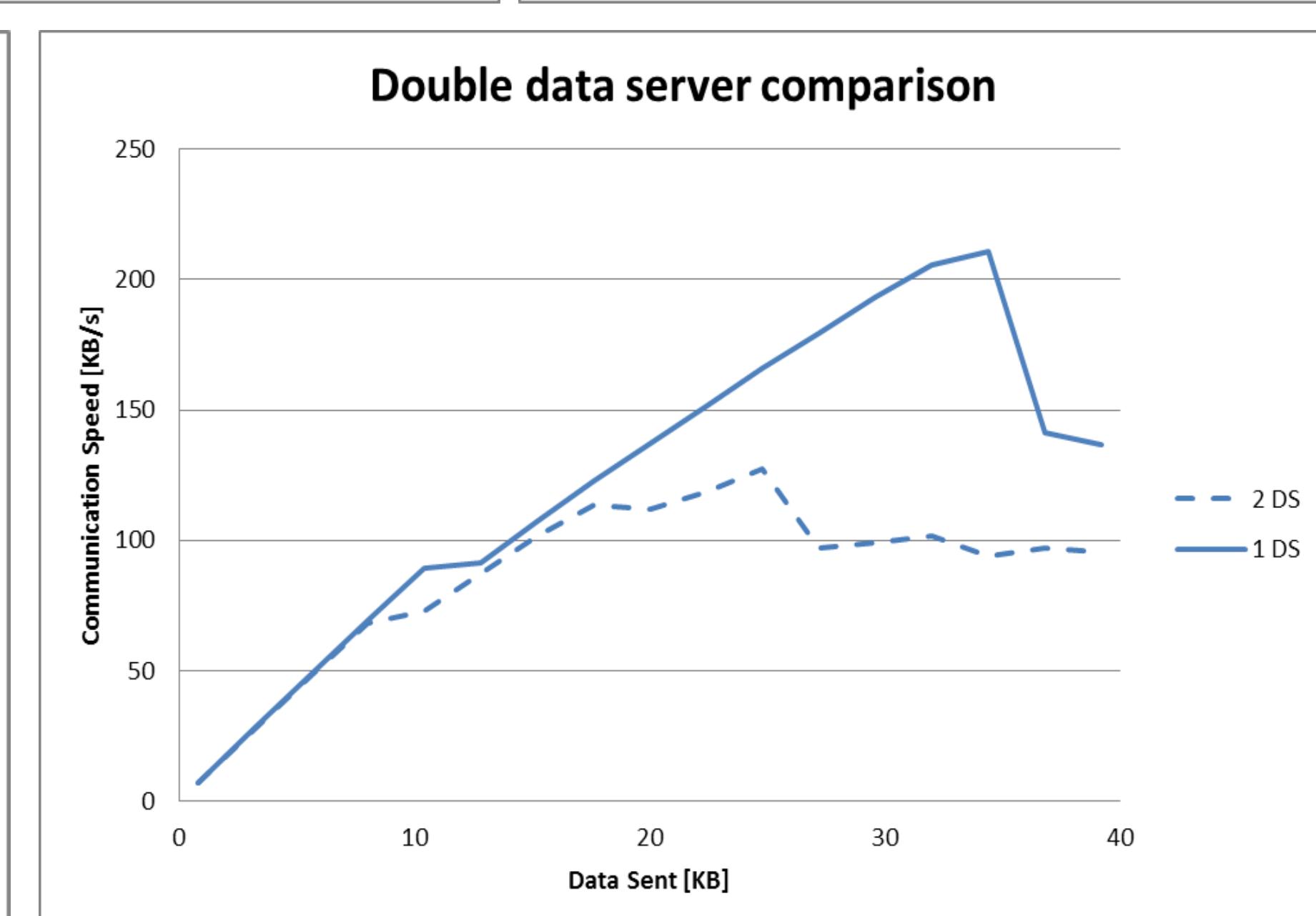
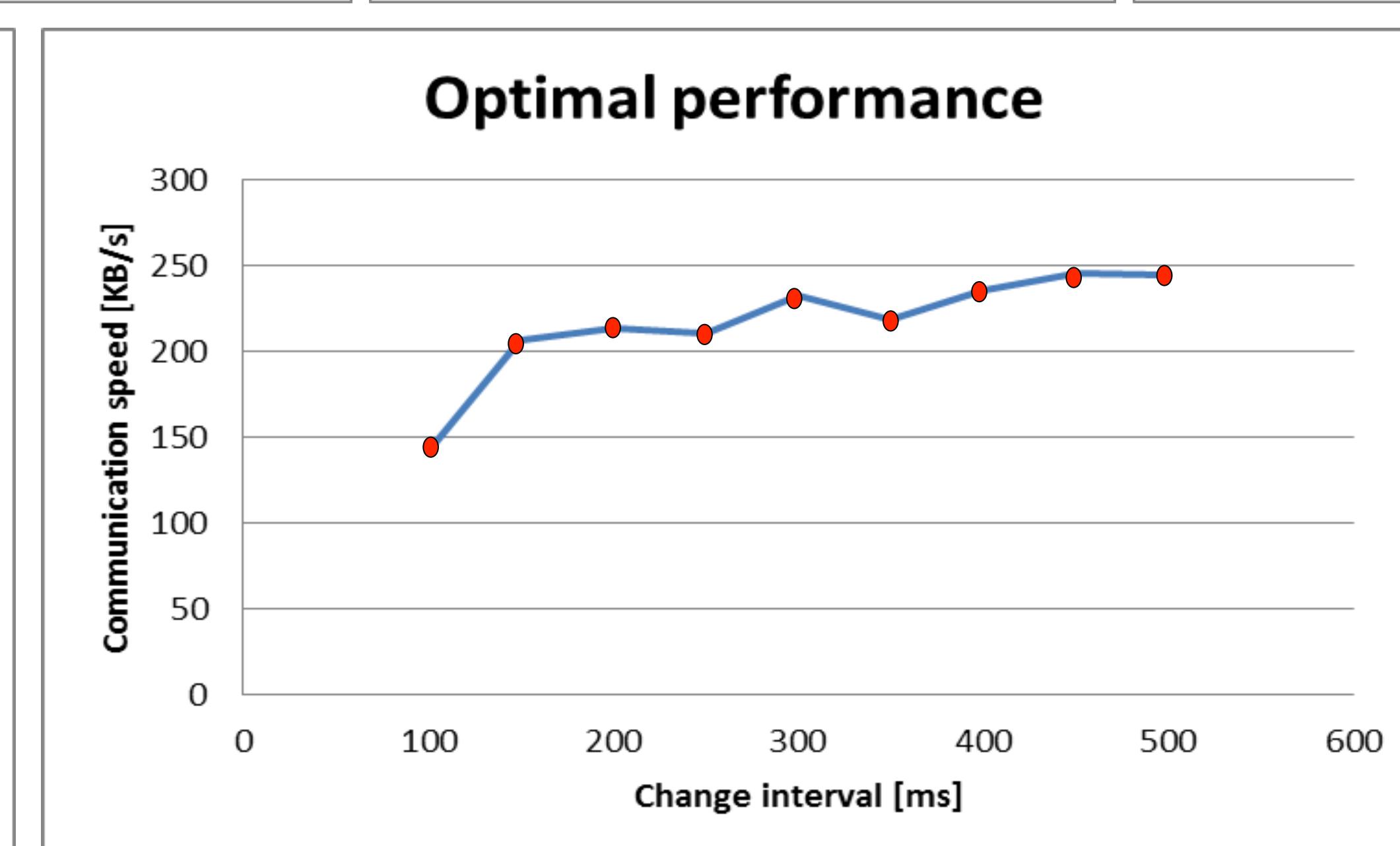
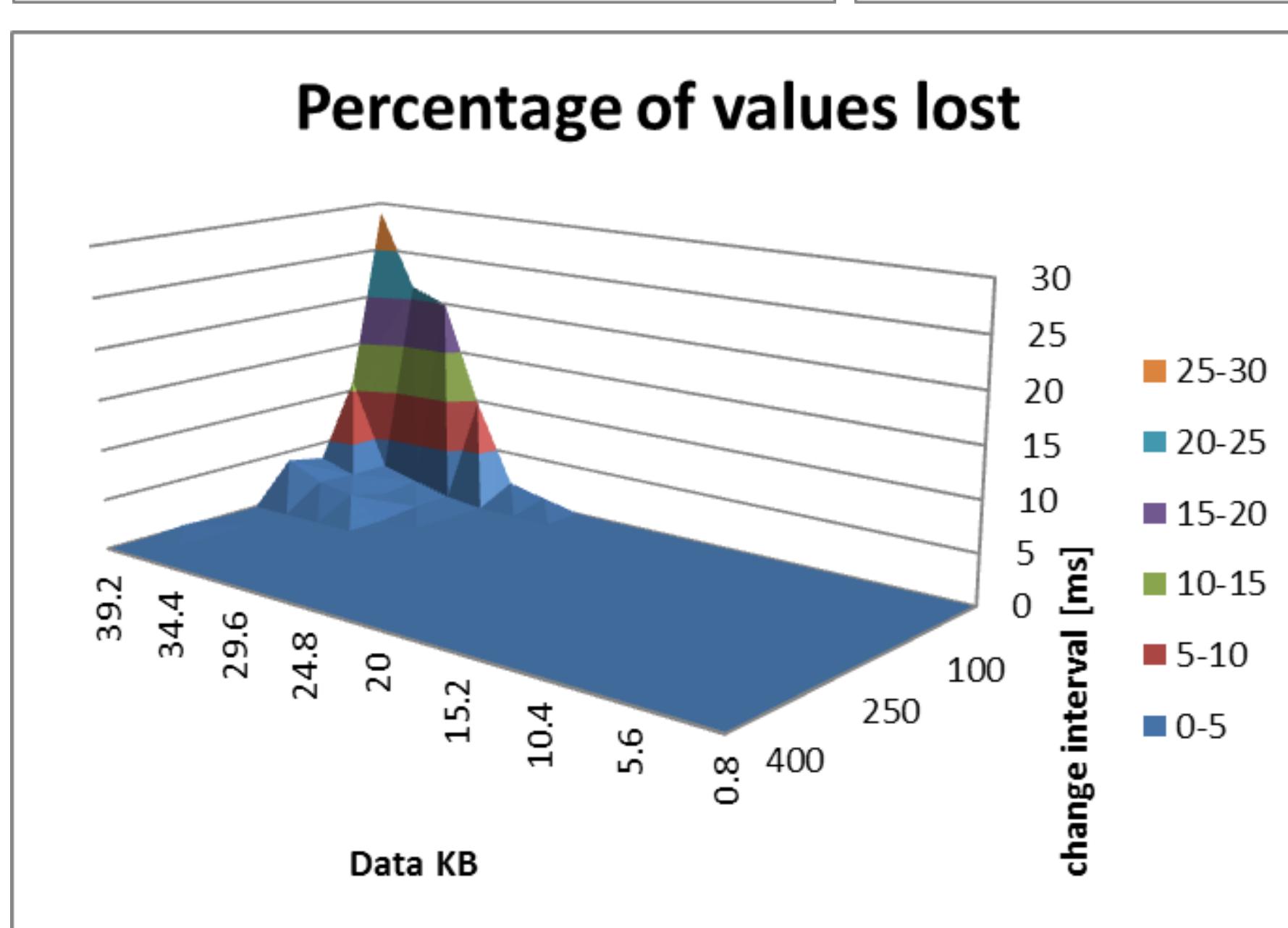
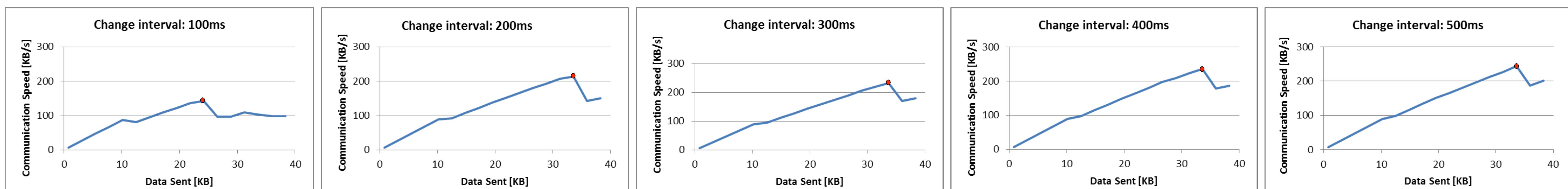
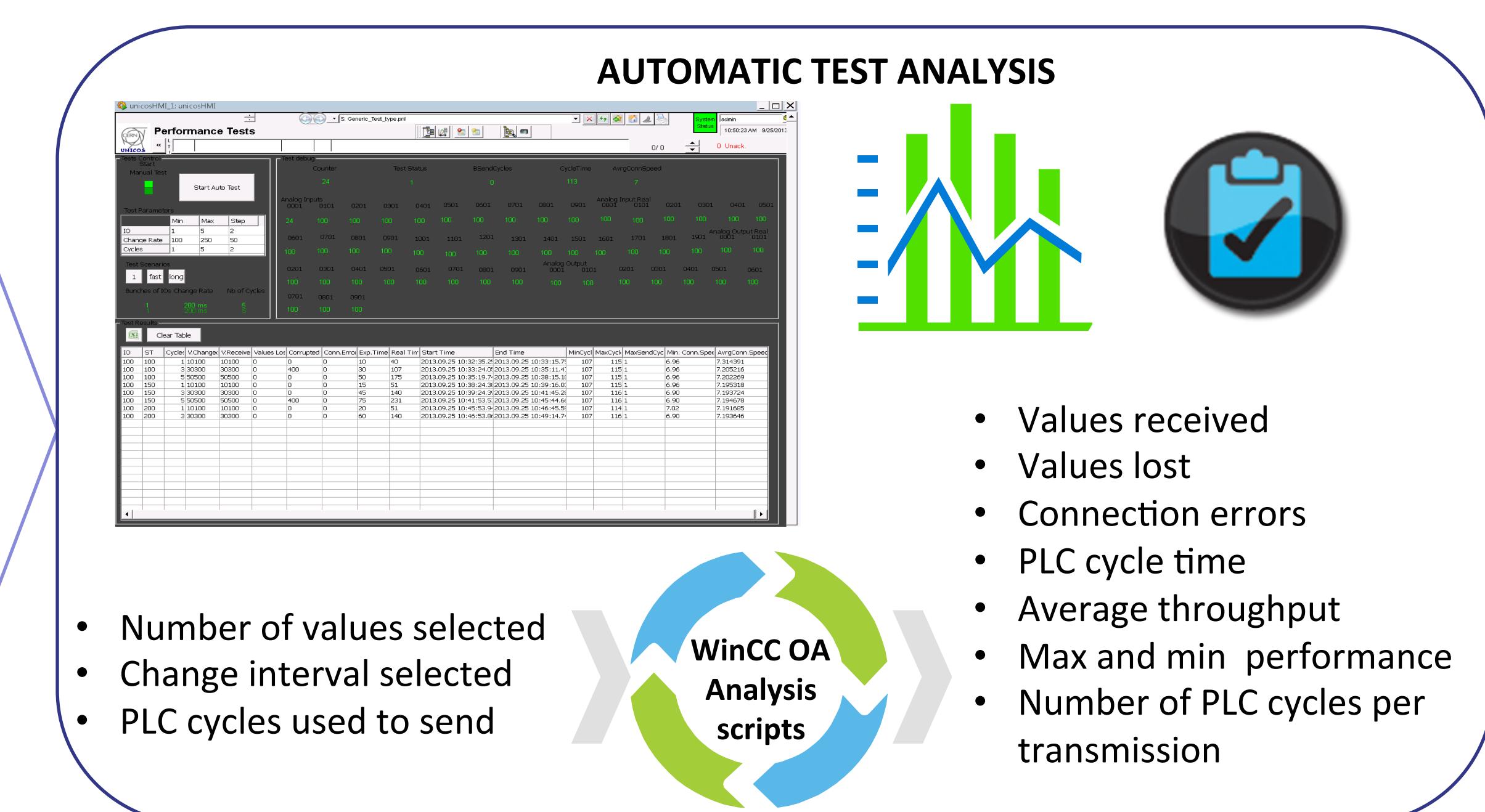
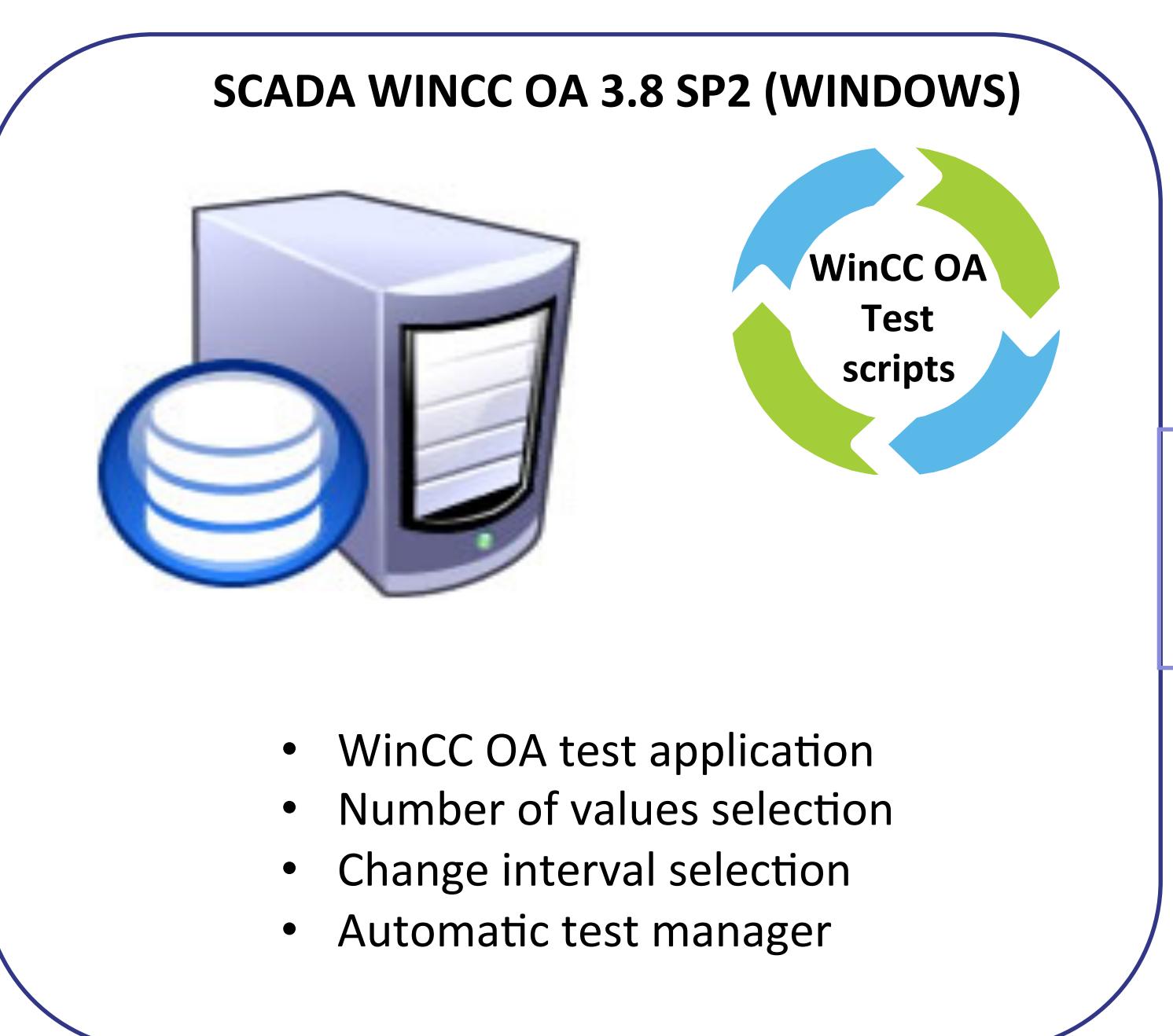
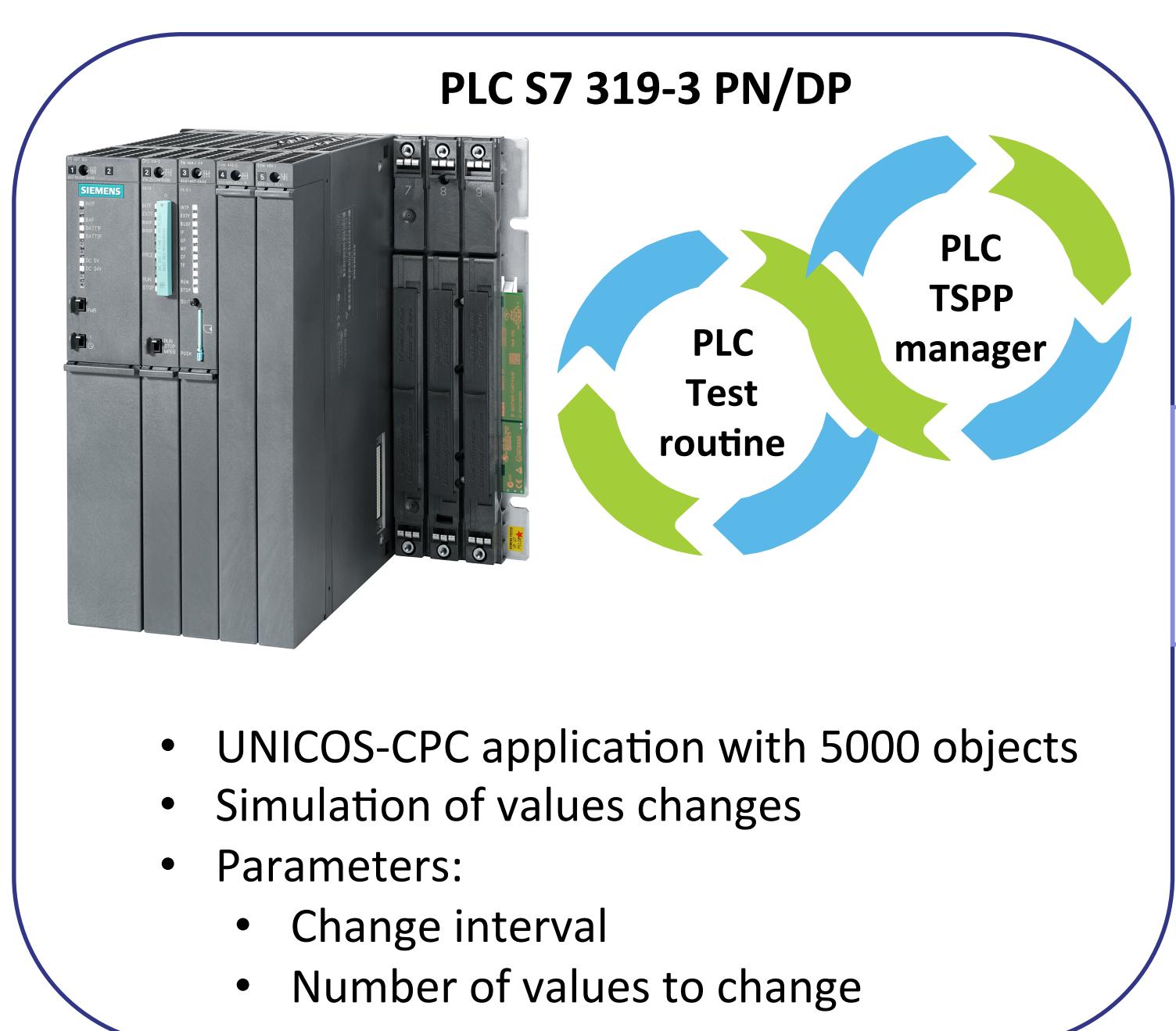


TIME STAMP PUSH PROTOCOL (TSPP)

- ✓ Event driven
- ✓ From PLC to data server
- ✓ Time-stamped data at source
- ✓ Communication optimisation



PERFORMANCE TESTS



- ✓ High performance, stability and robustness
- ✓ Transfer rates up to 250 KB/s
- ✓ Automated data analysis scripts
- ✓ High availability
- ✓ Permanent test bench for future versions validation