



## Paint Facility Control System Support

### Introduction

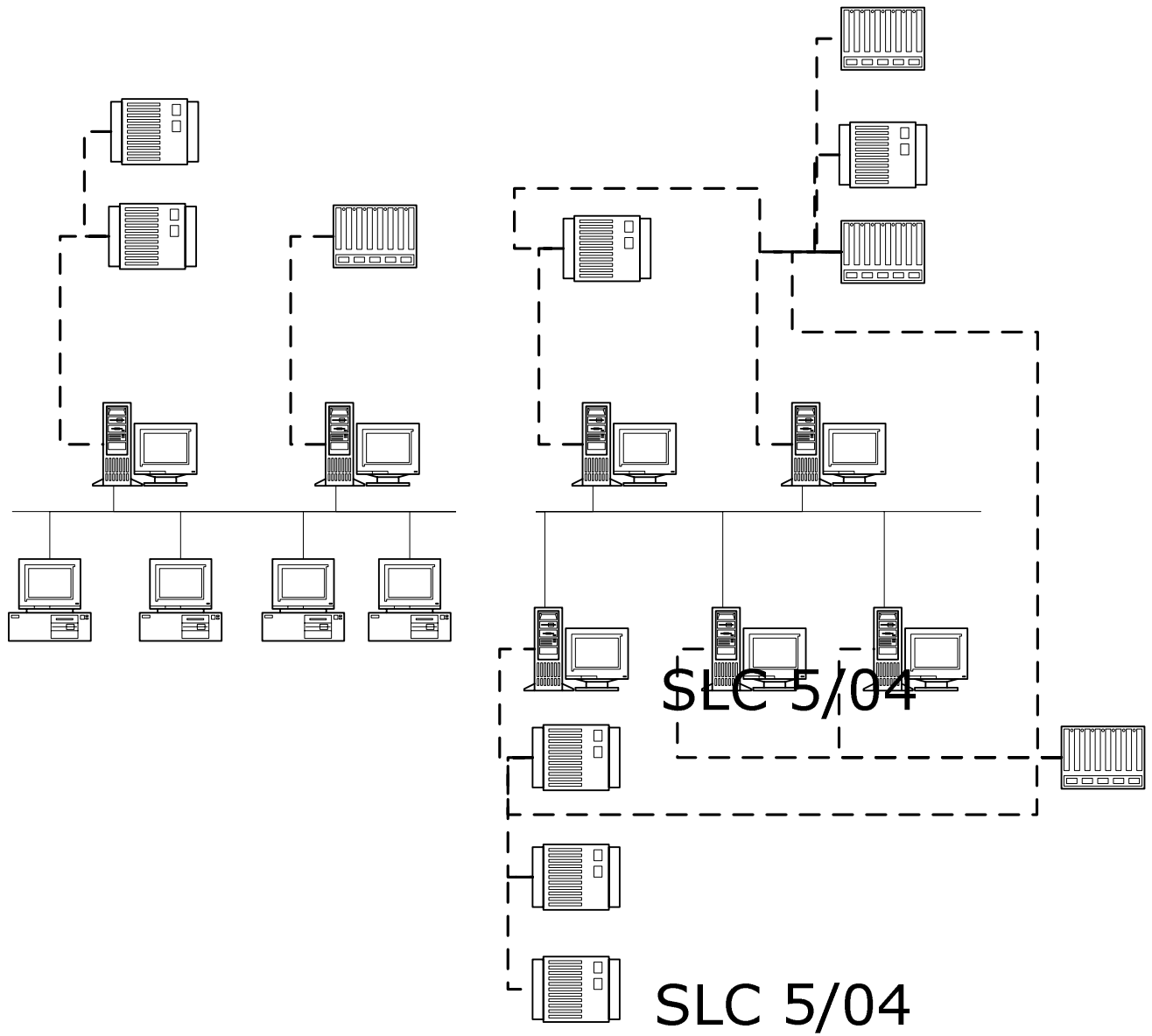
The client's facility produces resins, solvents, and other coating materials, which frequently change to meet the changing market demands. MAAK provided on-going support to their maintenance personnel for various software changes and upgrades required by the ever-changing products the facility produces. The PLCs are a combination of Allen-Bradley PLC-5 and SLC, operating on both Ethernet and DH+ (Data Highway Plus) networks, and their SCADA system is Intellution's FIX32.

### DH+ Network Assessment

The existing DH+ network was becoming overloaded as the number of nodes and the amount of data transfer grew. There were also concerns about update times on the FIX32 SCADA system.

MAAK provided a full network assessment of the plant's PLC-to-PLC and PLC-to-SCADA communications. The assessment included the analysis of baud rates at every DH+ node in the system, as well as assessing PLC to PLC messaging instructions and FIX32 polling rates to determine the causes of the above mentioned issues.

The analysis showed the issues and the bottlenecks. MAAK provided detailed network topology change recommendations to overcome the bandwidth limitation of DH+. Additionally a new network design was proposed, one that the plant is evolving towards.



## SCADA Node