ABSTRACT

This work describes the development of a tool for analyzing the positioning of nodes in wireless networks applied in industrial automation. Using the information gathered from the network, the tool is able to evaluate the coverage, the amount of potential critical nodes, the availability of alternative paths for all devices, and the latency. If it is necessary, it also suggests the smallest number of additional nodes (routers) and their locations to insure that the resulting network will reach safety's requirements, reliability and efficiency.

Keywords— Wireless Network, router placement, Industrial Automation.