ABSTRACT

In the days of modernization, the progress of information technology is growing rapidly. Data communication requires a conducting medium in order that information which want to be delivered can run to the destination well. To be connected from a medium of communication to another, it is necessary to build a good internet network. One of the device that used in medium of communication network is the IP (Internet Protocol).

One of the system that will be implemented is using integrated automation process. In its application, the PLC program is integrated into a mini-plant that will be a controller of that mini plant. The mini plant will serve as simulation of a plant in a state of integrated automation process. The integrated automation process is using a control and monitoring that using a centralized system. Designig of integrated automation system aims to ensure the processes in each work station or an existing machine to keep it running and can be interconnectedwith each other without being limited by distance or location of the plant that are far from each other. With an increasingly complex plant, the generated data will be increased so that the company needs an automatic and accurate data reporting to be able to analyze the data efectively. The automation of data reporting system is known as SCADA (Supervisory Control and Data Acquisition).

Keywords : Automation, Network, Mini Plant, PLC, Integration, SCADA