

Case Study

Integrating Devices which provide 4-20 mA to PLC

CHALLENGE

The company which is a major public utility service provider in India and was facing an issue with the integration of various devices. Most of their devices were working in Isolation. Utthunga was approached for a possible solution to the said problem.

SOLUTIONS

To resolve the challenge, all the Valves and flowmeters are integrated to a central monitoring station. Data from all the equipment are published in the server, through MQTT and Ethernet IP. To facilitate a good integration, the equipment is retrofitted with 4-20 mA or Rs- 485 module.

TECHNOLOGY USED

- PLC based automation is used
- Analog card interfaces through 4-20 mA
- MQTT based gateways
- Edge computing
- SCADA
- Ladder diagrams

BENEFITS

- Centralized monitoring is a major benefit as it helps to maintain a complete control
- Any tampering with the devices is detected instantly
- Less manpower is required now and ultimately it results in cost saving for the company
- Centralized alarms and alerts help greatly in avoiding mishaps
- Now the cost of implementation is low, compared to before
- The return on investment is faster

ARCHITECTURE -

