

SCADA System for Air Heater

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1 Abstract

Keyword: *SCADA, LabVIEW, WindowsForms, Simulation*

2 Introduction

During the winter of 2024, the residents of Landskronaveien 49 experienced that their heating system was unable to keep up with the fall in temperature. As a result, a new air heater system must be installed, adding to the system already in effect. This system must be capable of heating the air, measuring the temperature of the environment and alert the residents if the temperature is outside the comfortable range. For this purpose, a SCADA (supervisory control and data acquisition) system has been chosen and the general structure of the product can be seen in figure 1.

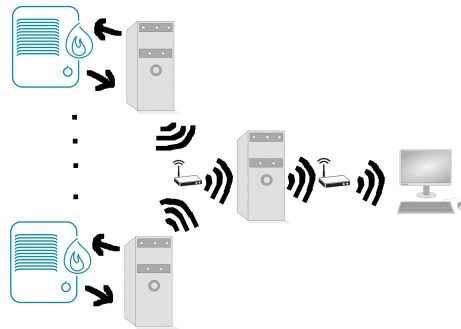


Figure 1: SCADA system sketch.

This report will outline the process which was done to create this system. First, the methods and tools used to develop the system will be presented. Then, the system will be presented, along with the most important parts of the code and the results of testing it. Finally, the usefulness of the system and its capability to solve the problem will be discussed and a conclusion will be drawn.

3 Materials and Methods

The Method section will outline the tools and methods used for development of the system. Each subsection will present a different set of tools and how they were used in this project.

3.1 LabVIEW

4 Results

5 Discussion

This section discusses the system with regard to its fulfilment of the original specification and any future improvements upon the work.

6 Conclusion