

Using SNMP for a Ethernet-Based Home Automation System

2010-07-14

Location / Country :Europe

Product Solutions:

[ioLogik E2210](#)

Ethernet Micro RTU Controller with 12 digital inputs and 8 digital outputs

Introduction

Project Introduction

Home automation is a fast-growing trend that is increasingly a part of people's daily lives. In home automation, most devices can be controlled remotely by a computer and users only need to pre-define specific rules governing behavior in a computer. The most successful home automation solution providers combine expertise from two fields: building automation, for familiarity with field bus and PLC deployment, and information technology (IT), for experience with friendly human-machine interfaces (HMI) and IT technology.

A startup company was developing a product which provides service partners with an integrated e-services platform that allows customers to remotely monitor and control devices in their home or business. In order to complete their project, the startup needed a control system that could monitor and control the many different devices used by their potential customers, preferably with an open protocol for greater flexibility. SNMP was their first choice, as it is commonly used and well understood in the IT field. The next step was to choose an I/O server to connect to the sensors in a home automation system.

The customer is a startup company which provides service partners with an integrated "e-services" platform that allows customers to monitor and control devices in their home or business remotely. In this system, the customer has to develop a control system to monitor and control all devices. In order to keep the flexibility of it, they would like to use open protocol for control system. SNMP is their first choice which is the easiest and popular protocol in IT field. Finally, they chose Moxa ioLogik Active Ethernet I/O as their I/O server to connect to sensors for home automation system.

System Requirements

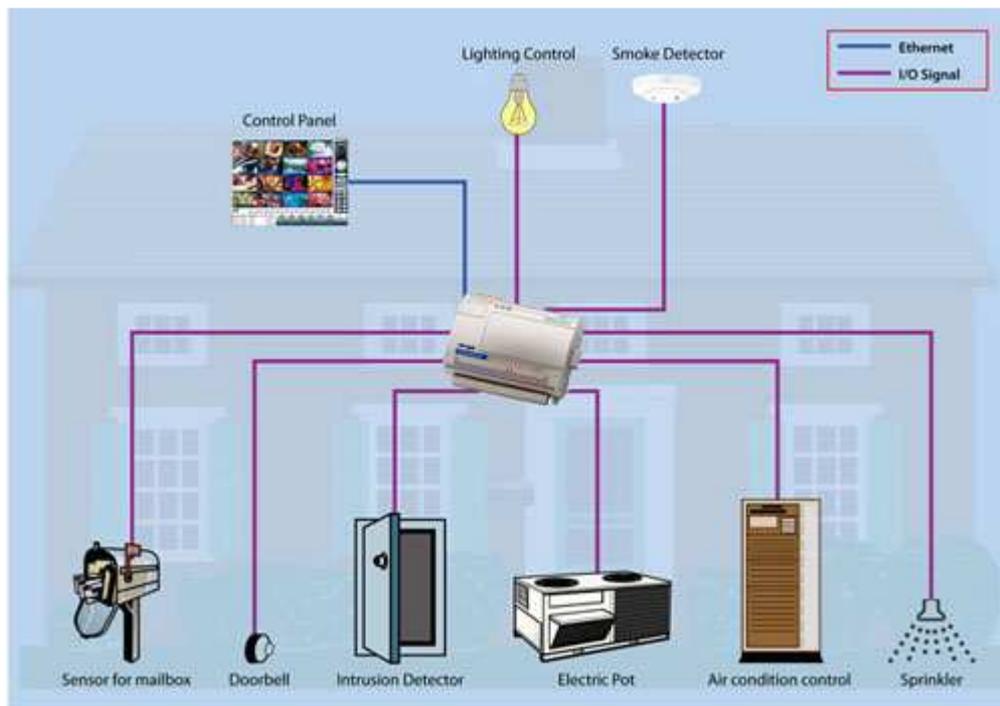
- Open Ethernet-based protocol - SNMP protocol for I/O control
- Compact size to save space
- Long-term support and services

Moxa Solution

This startup chose Moxa Active Ethernet I/O products as their I/O server to connect the sensors in their clients' houses and facilities to the home automation system. Moxa's broad technological expertise is reflected in the ioLogik Active Ethernet I/O product line, which

sports features appreciated by both IT and automation professionals. SNMP protocol support makes it easy to write software for the control system, and the thorough collection of 12 DIs and 8 DOs provides abundant connectivity options. The MXIO library of VB, VC, BCB, .NET, and C code helps programmers deploy their own software. For even easier deployment, Moxa's Click&Go™ setup uses simple IF-THEN-ELSE statements that IT professionals without any specialized training can quickly configure in just minutes.

System Diagram:



Product Applied:

ioLogik E2210

- Active alarm message with SNMP Traps
- Control and monitor I/O status via the SNMP protocol
- Compact size for space savings

Why Moxa

- Open protocol for easy integration
- Hassle-free implementation
- Moxa's professional support and service