



Case Study

Bakery Refrigeration Integration to BMS over BACnet

OVERVIEW

A bakery had a series of refrigeration units using a Danfoss AK-255 Device which had a web interface that produces an XML document.

The client wanted to read the values from the Danfoss devices downstream and export them as BACnet IP. Then this BACnet would be connected to the Building Management System (BMS) and accessed through the HMI.

From here, the Client wanted to monitor the refrigerators and take actions based on different parameters. For Example, when the cooling system was turned on, the lights would turn on as well as tracking for power management and resource consumption.

THE SOLUTION THAT CHIPKIN PROPOSED

The clients Danfoss refrigerators could not communicate with BACnet IP, and the clients existing Building Management System (BMS) only communicated via BACnet IP. Chipkin proposed to create a bridge between the Danfoss refrigerators and the BMS by building a custom driver for a QuickServer to read data from Danfoss XML interface and provide that data as BACnet IP objects that could be read by the BMS.

OUTCOME

Chipkin was able to solve the customer's needs and simplified their process of monitoring and controlling the Danfoss Refrigerators. Chipkin created the XPath driver that can integrate the Danfoss XML data by reading HTTP XML API data from the refrigerators to the BMS.

Having this new product on hand, Chipkin can now integrate any Danfoss XML interface to BACnet, Modbus or just about any other industrial protocol. Not only that, but Chipkin can also push Danfoss XML data to cloud for processing through power savings analytics and control.