HVAC Use Case

Ayla enables manufacturers of HVAC systems to create cloud-connected versions of their products

The Challenge

When talking about connected buildings, HVAC is a must have topic for any discussion. Accounting for about half of a commercial building’s energy usage, and as a leading contributor of occupant comfort, HVAC represents not only a massive opportunity for cost savings, but also the creation of a comfortable and efficient environment. However, the challenge for many property managers looking to cash in on this opportunity comes in architecting a cost effective solution, both in regards to implementation and ongoing maintenance, that supports an open communication across all systems and devices, provides insights into product usage, and more importantly, the flexibility and control to implement changes based on this data.

The Ayla Solution

Ayla enables HVAC manufacturers to create cloud-connected versions of their products that are part of the Internet of Things (IoT). Ayla’s IoT Platform provides comprehensive device, cloud, and mobile app connectivity. It allows HVAC manufacturers to bring secure, reliable connected products to market quickly, easily, and cost-effectively.

HVAC stands to benefit, like many use cases, from Ayla’s ability to support:

• Basic and advanced rules.
• Role based access control, allowing for the customization of views and limiting not only who has access to your data, but for how long.
• Cloud to cloud integrations to import and export data, creating more powerful applications.
• A flexible architecture that is connectivity agnostic.

Benefits

HVAC manufacturers and dealers can:

• Leverage role based access control to provide a personalized user experience.
• Gain insights into product usage data that is typically siloed.
• Develop an offering that is device and system agnostic.
• Offer a cost effective product that leverages proven, industry standard technology.
• Develop a flexible system that can be configured to support many different channels.
The Results

Ayla’s Agile IoT Platform overcomes the challenges faced by HVAC manufacturers and property managers, delivering a cost effective solution that supports the integration of various systems and leverages industry standard communication protocols to provide a platform that is connectivity agnostic. By virtualizing these devices in the Ayla Cloud, users can more efficiently monitor and control their systems, leveraging the full power of their data.

HVAC manufacturers and dealers can:

- Leverage role based access control to provide a personalized experience for property managers and maintenance staff.
- Gain better insights into product usage which is typically siloed in traditional building automation systems (BAS).
- Develop an offering that is device and system agnostic.
- Offer a cost effective product that leverages proven, industry standard technology.
- Develop a flexible system that can be configured to support the requirements of many different channels; i.e. retail vs. dealer-installer channels.

Property managers of the connected HVAC products using Ayla IoT technology can:

- More accurately identify hot and cold spots in a building to optimize usage.
- Enable cloud to cloud integrations to leverage expertise of 3rd party service providers to increase utility; i.e. weather data and demand response systems.
- Store and analyze actual usage data to determine areas of potential optimization.
- Integrate with other sensor technologies and systems to better manage usage; i.e. occupancy and vacancy sensors.
- Remotely monitor and control multiple systems across many different locations from a central point, for the very first time.
- Leverage role based access control to provide a personalized experience for occupants and maintenance staff.
- Proactively identify and resolve potential maintenance issues before they happen through the use of enriched data.