BioMedical COMPUTING LTD

Corintech Ltd
FilesThruTheAir

corintech

"BioMedical has proven to be an excellent software development partner. Their wide-ranging expertise has been invaluable, and helped to place us at the leading edge of a demanding market."

Tim Waterman
Technical Director

The Brief

Corintech have produced a "FilesThruTheAir" range of WiFi-enabled humidity and/or temperature logging sensors.
They are experts in designing and manufacturing such electronic devices and had great ideas for this particular range that we were able to help them with – cloud based services for logging and analysing the data from the devices.

The Solution

Corintech's plan for FilesThruTheAir consisted of 5 elements in addition to the devices themselves:

1. A PC software application that allows users to set up their devices and associate them with a cloud account.
2. A "listener" service that communicates with all the active devices and logs the data at regular (user defined) intervals into a database then responds to the sensor to confirm acceptance using a proprietary protocol.
3. A web app enabling users to monitor the status (signal strength, battery life, current reading, alarms, etc.) of their devices, view alerts & events and analyse historical data.
4. A service that monitors when a sensor is in alarm state (when its readings are beyond a defined level) and sends out emails to email addresses set up via the web app. Such events are also logged and are viewable via the app.
5. A RESTful API enabling other developers to create their own interface leveraging 90% of the functions of the web app. This has led to the creation of a companion mobile app.

In what has proved to be a great working relationship, for the initial rollout and each subsequent new feature the team at Corintech have provided us with the specifications and interface designs, allowing us to concentrate on the code and database scripts.

The system is hosted on cloud servers to allow for rapid scaling up of resources as needed. This has also enabled us to set up copies of the system for distributors with comparative ease.

All of the FilesThruTheAir elements are continually evolving to improve the service. The underlying architecture is currently being updated to provide scalability for future growth.

The Conclusion

The cloud components are an essential part of the FilesThruTheAir product range. They turn data logging into a multi-user, global service with live updates and analysis tools including the ability to graph and export the data in a variety of formats.

The architecture was designed from the outset to accommodate new devices as they are developed and added to the range and the updates in progress will expand this capability to cope with all the products currently in the pipeline and beyond.

Many customers rely on this service to monitor critical environments in real-time and we are pleased to be continuing to develop the service into the future.

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