



IoT Firm Partners with Callibrity on Development in Customized Solutions for Clients

INDUSTRY: IoT • HEADQUARTERS: CINCINNATI



Since 2019, Callibrity and Losant have maintained a mutually beneficial partnership. Callibrity helps companies solve complex problems by providing software best practices, expertise in scaling emerging technology, and building superior user experiences.

ABOUT LOSANT

The Losant Enterprise IoT Platform is an application enablement platform which allows enterprises to effectively build applications that securely scale to millions of devices. With real-time stream processing and batch processing capabilities, users can create dynamic experiences and perform complex analytics. All of Losant's components, from Edge Compute to End-User Experiences, work seamlessly together to transform data into tailored IoT solutions.

INITIATIVE: FULLY TAILORED CLIENT EXPERIENCES

Many IoT clients are looking to normalize and view device communication and store data for future analysis. The telemetry data created requires normalization to be viewed in a meaningful way, in a custom solution to the client.

The objectives of this project were to:

- > Combine the strengths of Losant and Callibrity to get Losant's client into market quickly.
- > Deliver a solution on Losant's scalable, flexible, secure and easy-to-use platform that connects, tracks, and monitors smart devices and equipment.
- > Provide a platform to developers that is a central source of truth for data storage, communication, back-end logic, and visualization of device telemetry.

CHALLENGE

Losant's in-house Solutions Team helps enterprises supplement their existing development teams with IoT expertise to achieve ROI and utilize data. In order to deliver a uniquely branded client experience within the allotted timeline, Losant tapped Callibrity to assist.

APPROACH

Typically, most enterprise clients do not have the time and agility to create the heavy workflows, UI, and visualization required to make use of their data. In these cases, they will lean on the Losant Solutions Team to build out custom solutions. This team manages multiple clients, creates custom data visualization, develops tailored applications, tests, and refactors to an end solution. These projects are managed in an Agile framework. Callibrity was able to manage Losant's request for supplemental development assistance and provide front-end and back-end development for the following:

The objectives of this project were to:

- > Device communication management
 - > Tracking of proprietary assets
 - > Data storage
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SOLUTION

The opportunity to partner and collaboratively build a solution for the client was mutually beneficial for both teams. Losant and Callibrity were able to partner to expand the Solution Team's bench with highly skilled engineering talent. In exchange, Callibrity staff learned the full functionality of the Losant IoT platform which can be used to assist future clients.

Callibrity helped develop the fully tailored solution and experience for Losant's client. Through the use of the Losant platform, developers are able to create dynamic webpages leveraging either the Losant API or workflows created on/hosted by the platform.

In creating a bare-bones UI experience for a client the relevant Callibrity development experience put to use is:

- | | |
|---|---------------------------------------|
| > HTML/CSS | > Modbus TCP/IP |
| > Javascript (or React in more intricate user experience solutions) | > MQTT (pub/sub) |
| > IoT communication protocols: | > Docker |
| > Modbus RTU | > Kubernetes (container orchestrator) |

The main role of the Losant solution is to provide a bridge for communication. IoT hardware is generally provided by a third-party vendor. Callibrity acts as a development expert to help bring custom solutions to life.

RESULTS

The Callibrity team assisted Losant to provide large scale deployment for Losant's end user within the desired timeline and including the following features:



FULLY SCALABLE, PRODUCTION-READY REACT APPLICATIONS:
Custom for each client



HIGHLY COMPLEX APPLICATION SOLUTIONS:
A React bundle created to serve particular pages with device data—these can be shown to customers of clients to demonstrate Losant's platform capabilities



SCALABILITY:
Leveraging IoT device communication for a client



REAL-TIME TELEMETRY UPDATES:
Propagated to some meaningful user experience



HOSTING LARGE SETS OF DATA ON THE CLOUD TO BE USED AND MANIPULATED BY IOT DEVICES:
All in one place, for one source of truth



Callibrity came in and was able to rapidly support our efforts through supplemental engineering and allow us to execute our timeline effectively. Their Losant developer experience and insight were key to allow a quick ramp-up and delivery of production-level development.

> BRIAN CERCHIO, SOLUTIONS MANAGER AT LOSANT

ABOUT CALLIBRITY

Callibrity is a developer owned and managed custom software development firm that is dedicated to providing clients with quality software, improved coding practices, and modernized tech stacks. We provide subject matter expertise and solve complex problems with simple solutions for our clients, ranging from midsize to Fortune 100 companies.

WHAT'S IN A NAME?

The name Callibrity comes from two different roots, calli, and caliber. Calli means 'beautiful' in Greek, as in Calligraphy - beautiful writing. Caliber means 'a degree of merit or excellence.' We strive to do beautiful work with a high degree of merit and excellence.

STRATEGIES:

- > Agile
- > Cloud
- > DevOps
- > IoT
- > Test Automation
- > Machine Learning

SERVICES:

- > Custom Software Development
- > Digital Transformation
- > Tech Audit
- > Training

INDUSTRIES:

- > eCommerce
- > Financial Services
- > Insurance
- > Retail
- > Technology

WE ARE ARTISTS.
WE ARE ENGINEERS.
WE ARE INNOVATORS.
WE ARE CALLIBRITY.

Learn more about Callibrity
Callibrity.com

