



Conserv and TEKTELIC Collaborate to Provide Indoor Monitoring Solutions to Protect and Maintain Valuable Artifacts and Collections Around the Globe

IoT for Smart Buildings

One of the primary use cases that has evolved from the emergence of the Internet of Things (IoT) is the automation and analysis of building and facility management. IoT Networks can provide tenants, building operators and facility managers with invaluable information that can be analyzed and acted upon to provide direct cost savings, increased operational efficiencies, enhanced security and improved comfort for building occupants. A successfully deployed IoT Network for the purpose of building and facility management can be referred to as a Smart Building system. A Smart Building will contain a network of end devices or sensors strategically deployed to collect specific information that will enhance the end user's knowledge of the building and therefore give visibility to potential issues or inefficiencies allowing for smart decisions to be made

While the benefits to individuals from the implementation of an IoT Smart Building System is evident, IoT integration can also be essential in the protection and maintenance of valuable assets located inside the building. Conserv (www.conserv.io) is driving innovation in this space by deploying wireless IoT solutions for indoor environmental monitoring in buildings which require very specific conditions to be met. These environments include museums, galleries, archives and science centers located worldwide.

Conserv Overview

Conserv is a US based company who has become an industry leader by providing real-time monitoring and valuable indoor environmental information about collections in museums, archives, science centers, galleries and many other unique environments around the globe. Conserv provides its clients with continuous monitoring and alerts of key environmental conditions such as temperature, humidity, light and vibration in these distinct environments to ensure the valuable items on display do not sustain damage or breakdown. Conserv partners with these organizations to



preserve the cultural heritage of the valuable assets both on display and in storage, by offering a comprehensive IoT platform that integrates wireless sensors with analytics tools to mitigate the risks arising from poor environmental conditions.

As the items being monitored in these environments are extremely valuable in nature, a wireless IoT network designed for immense reliability and continuous operation was needed to be implemented to collect and transmit the data being obtained. Conserv selected LoRaWAN® as a technology of choice due to its long-range, low power capabilities and impressive indoor penetrative coverage. LoRaWAN® has emerged as a leading IoT technology for those looking for a cost effective, secure and reliable solution to collect, transmit, manage and monitor data while keeping operating expenses low. The wireless LoRaWAN® devices being utilized in these networks can remain deployed for significant lengths of time without intervention being needed for battery replacement or re-charging, a key differentiator when evaluating various IoT technologies for wireless deployments.

Conserv understood the wireless connectivity requirements needed to successfully deploy and operate the IoT network for valuable asset monitoring, and selected TEKTELIC as their partner to provide many of the hardware pieces required for these deployments.

TEKTELIC LoRaWAN® Solutions

TEKTELIC Communications Inc. (www.tektelic.com) is global End-to-End IoT technology solution provider with a strong focus on helping customers achieve the lowest Total Cost of Ownership (TCO) by providing hardware and software solutions that are designed for Carrier Grade reliability, mass scalability and seamless deployment. The technology of choice that TEKTELIC has successfully been deploying for customer

projects worldwide is LoRaWAN®, which made for an ideal partnership with Conserv for their indoor monitoring platform.

To support Conserv in their efforts to provide monitoring solutions for some of the world's most unique and valuable artifacts, TEKTELIC is providing some of the hardware infrastructure required for the LoRaWAN® network connectivity and asset monitoring. In particular, the TEKTELIC KONA Micro Gateway and Smart Room Sensors are being utilized in for this application. The TEKTELIC KONA Micro Gateway and Smart Room Sensors was chosen by Conserv thanks in part to their "Always On" connectivity, long battery life and excellent indoor RF performance. These products can be quickly and cost-effectively deployed in the intended location and will provide the reliable LoRaWAN® connectivity required for Conserv's IoT Platform.

Conclusion

TEKTELIC and Conserv have partnered to provide a reliable, scalable and secure wireless solution to assist Conserv's clients in monitoring and managing some of the worlds most unique artifacts, collections archives and exhibits. IoT is once again proving itself to be a key driver in improving operational efficiencies in the world



around us, and the collections industry is reaping the benefits by having better insight about their assets and therefore maintaining the cultural integrity of important artifacts so they can continue to be shared by generations to come.

To learn more about Conserv please visit
<https://www.conserv.io>

To learn more about TEKTELIC's complete End-to-End IoT solutions, please visit <http://www.tektelic.com> or contact info@tektelic.com
