



QRESERVE INNOVATION HIGHLIGHT



Q·RESERVE

COMPANY OVERVIEW

Resource tracking and management is QReserve's specialty. Since its inception in 2014, QReserve has helped thousands of users share, track, manage, and schedule various resources including equipment and rooms through their resource management platform. QReserve is rapidly revolutionizing the industry by providing better and more modern solutions with their product.

LOCATION: HAMILTON, ON

TECHNOLOGY



Internet of Things

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AN OUTDATED EQUIPMENT MANAGEMENT PROCESS

Finding an institution's list of available resources can be a complicated process. If you're looking to book a specific piece of lab equipment, you may not even know where to begin since most institutions don't have an available tracking system or even list their inventory. If they do, the process is usually not optimal, having you wait in line to book lab equipment across campus. This outdated model makes it nearly impossible to find what you're looking for. At the same time, institutions are losing out on potential collaborations by not connecting with internal and external end-users.

EQUIPMENT MANAGEMENT MADE EASY

QReserve's platform makes it easy to connect end-users and equipment owners, simplifying the process and helping organizations better track, share, and manage their valuable resources and assets. Using an optimized search engine linked to resource maps, users can instantly browse and book a wide variety of resources. Every piece of available equipment or location can be monitored using sensor technology ensuring real-time information. With the addition of various administrative tools for resource owners, managing the booking and scheduling for any resource is easy, saving hours of work.

FROM A GOAL OF 6000 TO 1,000,000

QReserve wanted to test their newly developed sensor which allows the platform to track the usage of equipment and locations. The company scale tested end-to-end, measuring if both their Sensor Aggregator and API could handle up to 6000 sensors in burst and continuous traffic modes. To test the functionality and scalability of its API, QReserve set up an OpenStack environment on CENG N's testbed to mimic real-world scenarios and simulate various workloads. As a result of the scale testing and guidance from CENG N engineers, QReserve improved their platform to support up to 1,000,000 simultaneous sensors without losing performance.

"As a direct result of this project, our core platform has been optimized to provide faster response times to users and reduce our future costs in scaling."

**Brandon Aubie, Founder &
CEO, QReserve**

