

WETRAQ HEADING TO MARKET AFTER VALIDATING AI FEATURE ON LOCATION MONITORING SOLUTION

WeTraq is an IoT-based location monitoring system that uses a proprietary algorithm combining enhanced GPS with Cell-ID and WiFi allowing its users to monitor the location of family members and loved ones anytime & anywhere. WeTraq validated a new AI predictive movement feature of their solution in this CENGN project.

WETRAQ

WeTraq has developed a small and effective credit card sized device that submits coordinates to provide details on location through the WeTraq app. WeTraq is returning to CENGN for their second project. Previously the Pickering-based company completed a server migration project where they developed the process for migrating their servers and data from the USA to Canada. In this project, WeTraq successfully integrated an AI algorithm into their solution and validated it on the CENGN testbed.

WATCHING OVER THE PEOPLE WHO MATTER MOST

When caring for seniors, children and those with certain medical conditions, it is important to maintain knowledge of their location. This is especially true for caregivers and family members who don't live with the person they are responsible for. Data suggests that 80-90% of seniors want to stay in their home as they age. There's a need for solutions in the market to help caregivers support their patients remotely. What's more, special needs conditions like Alzheimer's, dementia, and autism, make those who are most vulnerable more likely to wander and become lost. WeTraq is easing the anxiety of people worried about the safety of their loved ones through remote tracking.

THE WETRAQ SOLUTION

WeTraq has designed an Internet of Things based location monitoring device and a platform with motion sensors/automatic fall detection. Their platform has the capability to provide location based on enhanced GPS/Cellular radio/Bluetooth and WiFi. Their proprietary algorithm allows the device to switch between these technologies based on the signal strength to provide maximum location precision. This is a major competitive advantage for WeTraq in the location monitoring market as traditional tools only offer GPS and Bluetooth reception.

As part of this CENGN project they tested an additional feature of predictive analysis using machine learning. This would provide extremely useful data for industrial applications. Data analytics would help them identify the danger zones based on historical data and prevent accidents.

WeTraq Features:

- Real time location visibility
- Fall Detection & motion alerts
- AI Predictive Movement Analysis
- Custom scheduled check-ins
- Geo-fencing & SOS alerting system
- Extended battery life
- Indoor location
- Permission based location sharing



WeTraq Device

CENGN MEMBERS

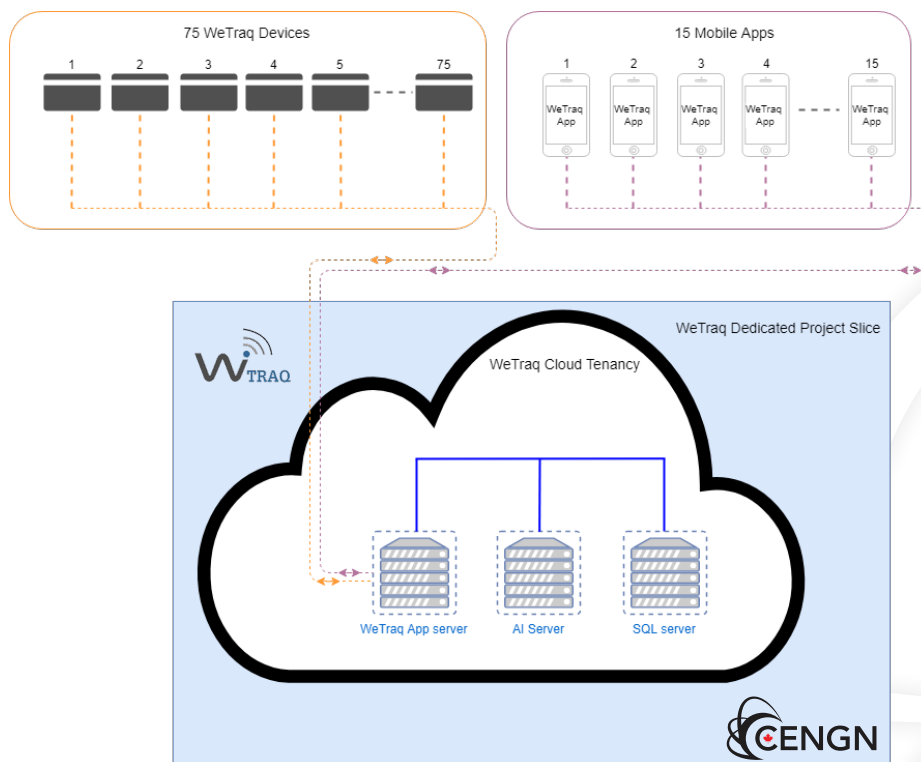


TESTING THE AI FEATURE

WeTraQ has recently implemented an artificial intelligence algorithm into their solution to provide predictive movement analysis of device holders. This feature monitors traditional movements and locations, then alerts caregivers when location data becomes out of the ordinary. Prior to deployment with a major retirement residency in Canada, WeTraQ used the services at CENGN to validate the AI feature of their solution.

To set up the CENGN project, WeTraQ provided 75 WeTraQ devices to people in the areas of Minnesota, Ontario, Saskatchewan, and British Columbia. The devices were connected to 15 mobile applications (iOS, Android) via WeTraQ's app server. Data was collected from the devices and sent through different networks to be analyzed by the WeTraQ application deployed in a CENGN cloud tenancy.

Project Layout



The major objective of the testing was to validate the performance of WeTraQ's AI feature. Collecting data from the 75 devices deployed in various parts of North America WeTraQ proved operational performance of their AI predictive movement feature. Different test cases included:

- Validating AI server functionality and performance
- Ensuring AI is accurately notifying users when a device is in a new location
- Determining full accuracy of AI after completing 500 location reports

From CENGN Project to AI Feature Implementation

This CENGN project provided WeTraQ the opportunity to test the functionality and performance of their solution's AI feature as well as identify areas of improvement prior to deployment with a major Canadian retirement residency. The results of this project have instilled confidence in WeTraQ that they are ready for commercial launch. The new AI feature will be highly beneficial to WeTraQ's end users by reducing the amount of time it takes to identify when a device holder has wandered. Now caregivers and family members will be able to rest easier knowing they can count on WeTraQ to not only monitor location but also signal them if something is amiss.