CENTRALIZED REMOTE VENDING MACHINE POS SYSTEM MANAGEMENT

SUMMARY

Vending machines have been around for centuries. Although they naturally changed over time and became more and more automated and started offering a wider variety of products, the main principle of operation stayed the same. In the current day, the popularity of vending machines is still on the rise, and there are several reasons for that. First, it does not require human presence and saves time in fast-paced environments, like stations, offices, or other public places. They also offer better availability being open 24/7, and do not need a lot of space, hence lower upkeep costs.
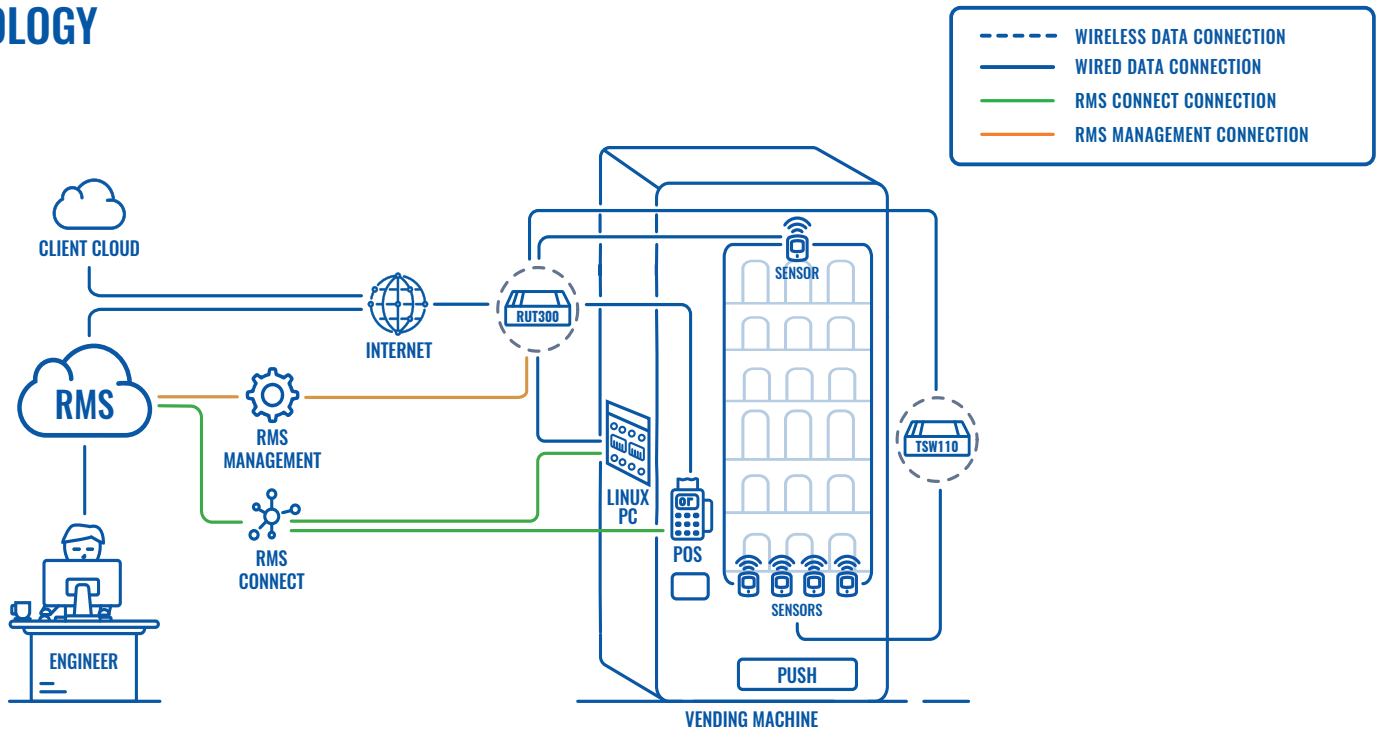
CHALLENGE

Vending machine operators need to be adaptive and creative to keep up with shifting consumer behaviors and preferences. The changing consumption rates made the sellers adjust their offering to accommodate more varied needs not only product-wise but also regarding payment flexibility. A high percentage of consumers in Western countries are becoming "cashless," which means the old coin-operated model is no longer sufficient. However, accepting card payments comes with another layer of security-related maintenance. Payment terminals require constant firmware updates to ensure top-level safety, but how to perform them without incurring incredibly high costs of an engineer travel time and hourly rates to attend to each machine?

SOLUTION

Usually, vending machines use third-party cashless payment terminals. Opting for expert solutions offers many benefits, like accepting multiple payment options to enable impulse buys or leveraging loyalty programs to collect data. But most importantly - they ensure high-level security of financial transactions. An essential element for these systems is having uninterrupted and secure internet connectivity. In this case, the RUT300 Ethernet router connects the POS, Linux PC, and various sensors to the networks using five available Gigabit Ethernet ports. To connect more sensors, we may use the TSW110 gateway enabling a plug-n-play ecosystem expansion.

However, internet connectivity has another vital benefit besides enabling sensor data tracking: remote management capability. Vending machine operators look after hundreds or thousands of machines in varied locations all around the country. As payment gateway providers have stringent security policies and require frequent firmware updates, the vending operators must regularly carry out this task. That is where the RMS comes in to save the day of engineers and support specialists. Not only may they connect to Teltonika Networks routers for diagnostics, updates, and troubleshooting via RMS Management, but they can also reach third-party devices, including the POS terminal, via RMS Connect to carry out whatever tasks they need to. To better illustrate the gain of RMS, let's multiply the number of vending machines by the hourly rate of an engineer and the fuel consumption required to travel multiple remote locations. With RMS Connect, users can update thousands of POS terminals simultaneously within minutes from anywhere they are at that moment.

TOPOLOGY

LEGEND:
- ----- WIRELESS DATA CONNECTION
- ––––– WIRED DATA CONNECTION
- ––––– RMS CONNECT CONNECTION
- ––––– RMS MANAGEMENT CONNECTION

BENEFITS

• Remote management of Teltonika Networks devices via RMS Management for router diagnostics, maintenance, troubleshooting, and more.
• Remote accessibility of third-party devices via RMS Connect to complete various tasks just as if in front of them.
• Possibility to set up real-time alerts to stay on top of your solution operation and prevent costly downtime.
• Periodical or on-demand activity reports for process optimization.
• Compatible with various OS, including Linux, Windows, and Mac.
• Hosted on AWS, RMS complies with rigorous security requirements and aligns with the latest cyber threat data.
• Friendly payment plans: pay only for the services you need and for the amount of data you use.

WHY TELTONIKA NETWORKS?

Teltonika Networks creates products with a core focus on reliability, security, and ease of use, which applies to software products too. Maintaining these qualities requires constant updates and developments. Although RMS initially started as a platform to reach compatible Teltonika Networks devices remotely, it excelled into something much bigger with growing client needs. It can now offer access to third-party computers and machines within just a few clicks while keeping the highest level of protection and saving businesses' resources.