

Tosibox offers simple and secure centralized access management solution for leading retail chain's IoT devices

Remote connection solution solves IT/OT convergence



Challenge

As all other large organizations, even a retail chain with hundreds of outlets has to allow external partners access to its IT network and systems, such as building automation, camera surveillance, freezers, bottle recycling machines and access control. Hacking of these devices could cause significant damage. The retail chain wanted to ensure the security before anything regrettable happened.

Each user is a potential risk from IT perspective, which is why remote access rights are extremely carefully managed. However, the careful access management of 2,000 devices was extremely laborious and time consuming, causing a chronic headache on operations.

The retail chain was looking to execute an extensive Internet of Things (IoT) security project. Retail business faces the same problems as many other industries: devices that are not originally designed to withstand threats from open networks are being connected. The retail chain wanted to build secure connections to its devices.

Solution

TOSIBOX® remote connectivity technology was first piloted in a few outlets to improve cyber security and test remote connections. TOSIBOX® Lock industrial routers were then installed to stores to be remotely connected with a TOSIBOX® Key, creating a fully secure VPN tunnel between the devices. Tosibox helped create a controlled IoT network of always-on VPN connections for remote maintenance, continuous monitoring, real-time data collection and data logging.

After a successful implementation, the solution was easily scaled to hundreds of outlets. The retail chain was thus able to build a network that corresponded to the challenges of operative business, independent of IT. TOSIBOX® Virtual Central Lock enabled combining IT and OT network without users being able to access devices or any other parts of the network than those that they have been granted access to. The Virtual Central Lock cut centralized access management work time from days into minutes, enabling easy management of big networks without special IT skills.

Now the retail chain is able to build a secure network comprising the devices and outlets that also external users can easily access in a cyber secure fashion. Thanks to TOSIBOX® Virtual Central Lock, they can limit the external contractors' visibility and access to devices in an efficient way that saves time and effort, while also guaranteeing a cyber secure IoT infrastructure.

Benefits

- Create and manage access groups: Limit access, add new users and objects simply by drag & drop
- IT/OT convergence solved
- Secure solution: One TOSIBOX® Lock protects all devices behind it.
- Unlimited expandability and flexibility
- Two-way communication offers the benefits of IoT plus remote maintenance with one technology.

“With TOSIBOX® solution, a new variable online with access rights takes a few minutes, whereas with old-fashioned IT networks completing the same task took days or weeks.”

Tomi Liias,
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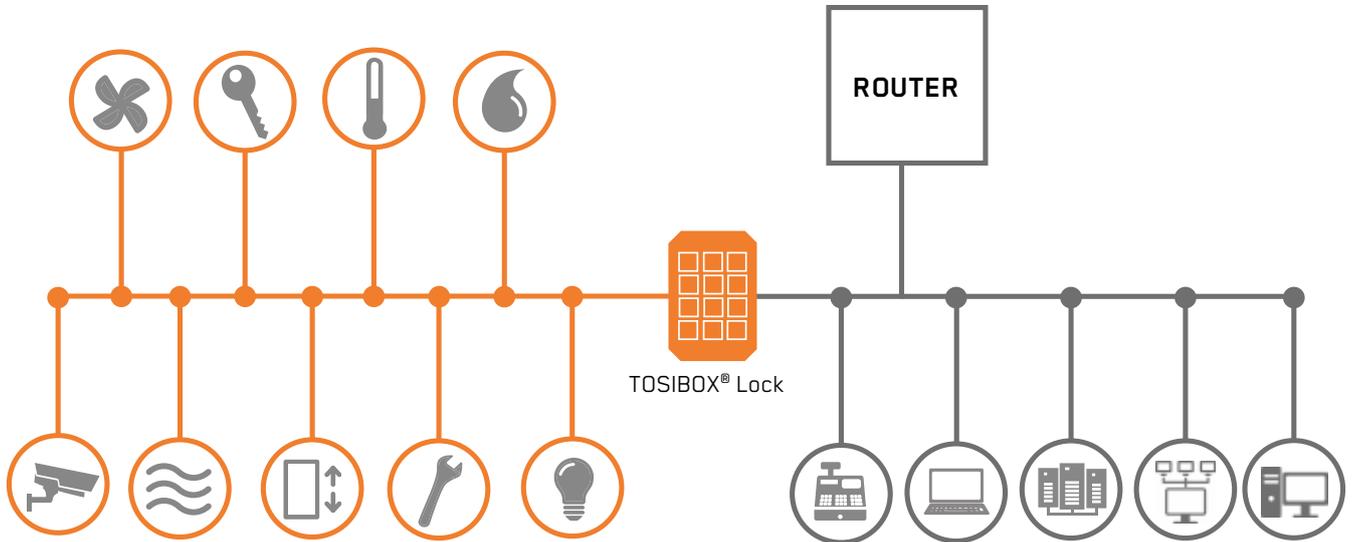
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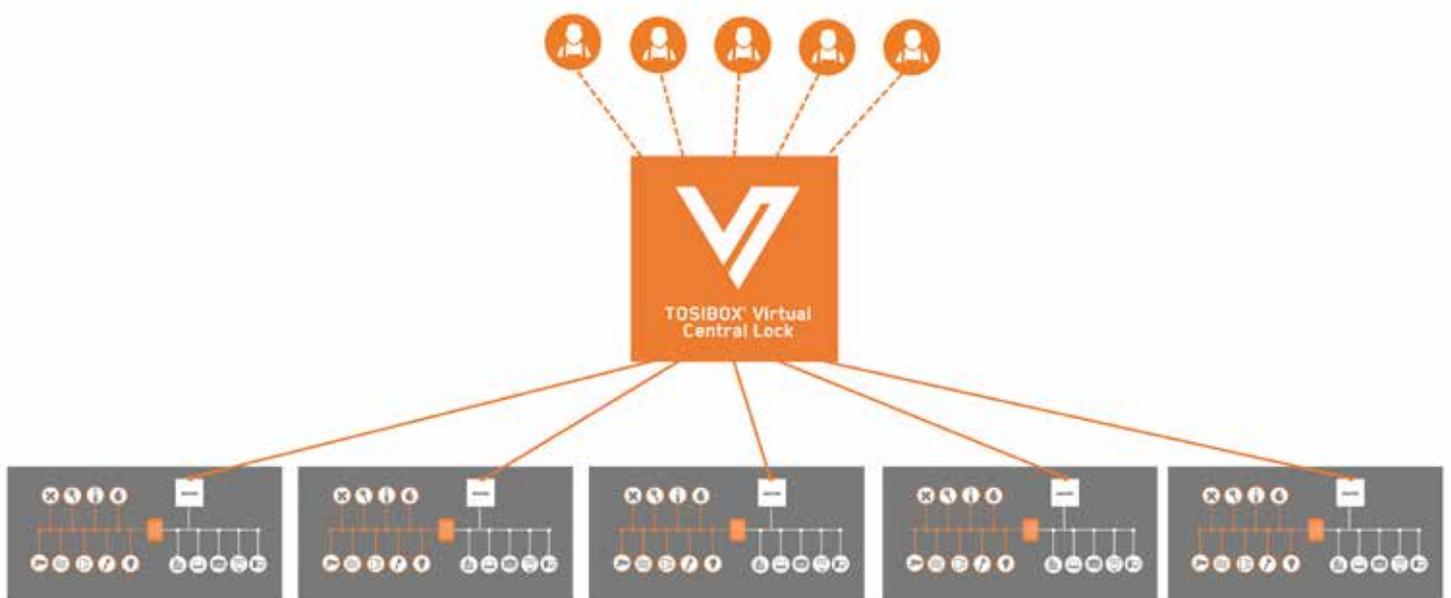
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Installation diagrams



Systems connected to TOSIBOX® Lock router device that subcontractors can connect to with TOSIBOX® Key.

Systems operating in retail chain's own private IT network.



TOSIBOX® Virtual Central Lock enables the convergence of IT and OT networks so that external users can only use those devices or parts of the network that they are given access to.