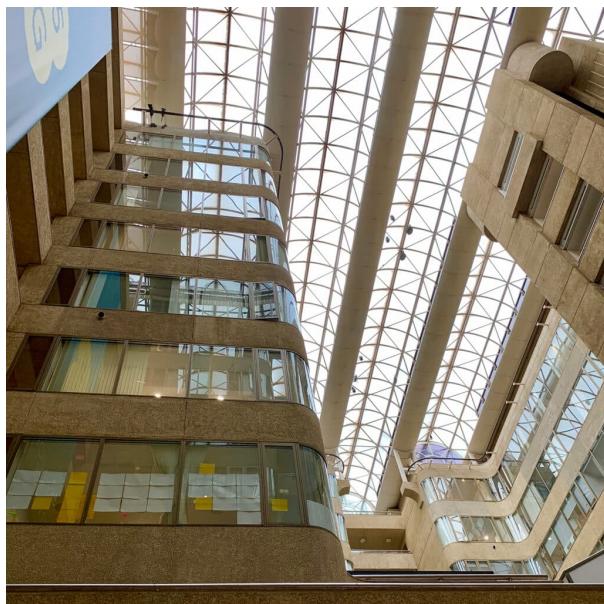


Johnson Controls acquires Tempered Networks to bring zero trust cybersecurity to connected buildings worldwide

4 years ago



Johnson Controls has acquired zero trust cybersecurity provider – Tempered Networks, based in Seattle, Washington.

Tempered Networks has created 'Airwall' technology, an advanced self-defense system for buildings that enables secure network access across diverse groups of endpoint devices, edge gateways, cloud platforms and service technicians. It represents a step-change in operational technology built on secure transmission pipelines to ensure buildings data exchanges and service actions can only take place between people and devices that are continuously authenticated.

The acquisition gives Johnson Controls the capability to provide zero trust security within the fabric of its OpenBlue secure communications stack, advancing its vision of enabling fully autonomous buildings that are inherently resilient to cyberattack.

How Airwall Works

Tempered Networks Airwall technology uses the Host Identity Protocol and a cloud-based policy orchestration platform to create new overlay networks built on encrypted and authenticated communication. The policy manager (a.k.a. the conductor) enforces configured digital policies that control connections within the cloaked overlay system. The default position for the policy manager is 'zero trust', i.e., only allowing connections between continuously authenticated and authorized entities. Once a communicating device authenticates itself correctly, an encrypted tunnel is created through which data flows. The advantages of this cybersecurity technique are as follows:

- The creation of an always-on and software-defined security perimeter protecting device-to-device, device-to-cloud and device-to-user interactions.
- Airwall achieves this by using Host Identity Protocol to create a cloaked and micro-segmented network which overlays a building's existing network infrastructure, making the solution also highly cost-effective.
- A new level of authentication for connected building systems is created, allowing for greater system automation of functions such as heating and cooling, lighting, security and airflows.

"When it comes to buildings, we must create easily implementable cybersecurity defenses as we're often dealing with critical infrastructure, including assets such as data centers and hospitals," said Vijay Sankaran, vice president and chief technology officer, Johnson Controls. "Tempered Networks Airwall approach is purpose-built for our sector as it's designed around principles of zero trust, securing device communications as data moves between devices and the cloud – so enabling remote building optimization in the most trusted way possible."

Technology Integration

Tempered Networks Airwall technology is being integrated into [Johnson Controls OpenBlue platform](#) which is increasingly recognized as a leading smart building software platform with advanced AI-enabled building management capabilities¹. OpenBlue provides a flexible computing approach for converging building technologies and making those technologies more insightful, powerful, and optimized through edge AI and through full machine learning in the cloud. The ultimate goal is to make all buildings smarter, healthier and more sustainable.

"Digital transformation is the primary way we'll make the world's buildings more autonomous and resilient," said Bryan Skene, chief technology officer, Tempered Networks. "Being acquired by Johnson Controls allows us to fully integrate our Airwall technology into their software stack, providing an advanced security platform for a range of edge to cloud applications. Our ambition, now that we're part of Johnson Controls, is that building systems everywhere can be managed from anywhere and remain secure from cyber threats."

The acquisition of Tempered Networks builds on the [previously announced](#) selection of the company as a core component of Johnson Controls OpenBlue platform and services. The integration of Tempered Networks' security technology further builds on other recent acquisitions including [Foghorn](#) whose technology is taking the company's [edge AI capability](#) to new levels for compute-constrained devices. It also complements partnerships with [Pelion](#) and [DigiCert](#) to provide advanced secure device management and digital trust for smart building technology.

Financial terms of the transaction were not disclosed.

To learn more about Johnson Controls' approach to cybersecurity, please visit www.johnsoncontrols.com/cybersolutions.

See an explanation video for Tempered Networks Airwall technology [here](#).