

Minimal-Disruption BMS Modernization for a Novotel in France

Enabling Centralized Control and Smarter Operations with LoRaWAN Thermostats and PMS Integration



Milesight Partners SCORP-IO, SPARWAN	Location PACA Region, France	Applications Temperature & Humidity Control, HVAC Control	Devices Deployed WT401/ WT303/ UG65/ TS302
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Background

A 170-room Novotel in France, spanning approximately 7,300 m², faced the challenge of modernizing aging building infrastructure in a fully operational environment. With legacy controllers in guest rooms, electric convectors in common areas, and multiple technical systems in place, the hotel required a modern Building Management System (BMS) to improve comfort, reduce energy consumption, and enable centralized control – all without disrupting daily operations or requiring costly renovations.



Challenges

Integration with Existing Infrastructure
Legacy controllers and third-party sensors made deployment more complex, limiting flexibility and increasing costs.

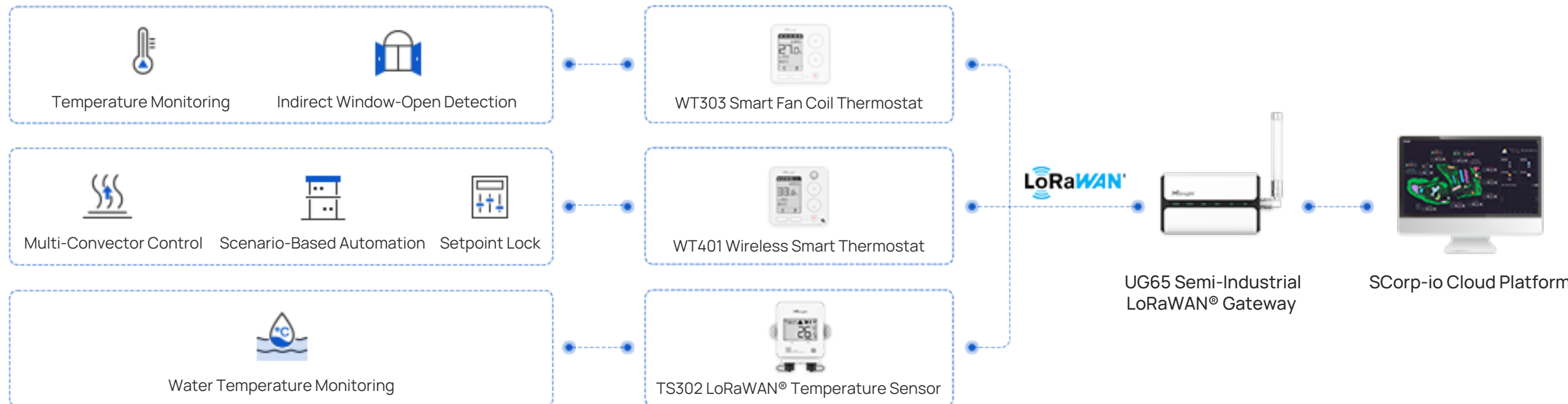
Non-Disruptive Deployment
The upgrade had to be completed quickly and discreetly, without disrupting daily operations or affecting guest experience.

Fragmented Building Systems
Different systems operated independently, limiting visibility and preventing centralized control.

Guest Comfort & Safety Challenges
Multiple devices were required per room for control, sensing, and communication, making deployment time-consuming and difficult to manage.

Solution

To address these challenges, a LoRaWAN-based solution was deployed, combining Milesight IoT devices with the SCORP-io BMS platform. The platform enables centralized monitoring, control, and integration with hotel systems.



Deployment Overview
Novotel · 170 rooms · 7,300 m²

- 2 Milesight UG65 LoRaWAN® gateways covering the entire site
- Around 250 LoRaWAN® devices installed
- Around 50 devices from other manufacturers
- The SCORP-io cloud platform

Guest Rooms – One Device Replacing an Entire Architecture

To upgrade the guest room HVAC systems without complex rewiring, the solution reuses existing wiring and replaces the original Siemens wall controllers with Milesight WT303 Smart Fan Coil Thermostats. By integrating temperature sensing, fan coil control, and wireless communication into a single device, it significantly reduces hardware requirements and deployment complexity.

To further minimize installation impact, no additional occupancy sensors were installed. Through its BMS platform, SCORP-io integrates PMS data with HVAC control, enabling contextual and automated management—without adding extra IoT devices in guest rooms.



Common Areas – One Thermostat Controlling Multiple Convectors

In shared spaces such as lobbies, restaurants, and meeting rooms, Milesight WT401 Wireless Smart Thermostats were deployed to control 3 to 5 electric convectors within the same zone, simplifying system architecture while reducing the number of required devices.

SCORP-io's BMS platform enables automated temperature adjustments based on usage scenarios, such as meeting schedules or operating hours, improving both energy efficiency and operational convenience.



Technical Systems – One Platform Unifying All Building Systems

Milesight TS302 LoRaWAN® Temperature Sensors were deployed to monitor domestic hot water supply and return temperatures, a critical parameter in hotel operations. In addition, all building systems—including HVAC, heat pumps, air handling units, and sub-metering—are integrated into the SCORP-io BMS platform, where it enables centralized monitoring, control, and system integration.

Supported by Milesight UG65 Semi-Industrial LoRaWAN® Gateways, the solution ensures reliable, long-range connectivity across the entire hotel, enabling seamless data transmission between field devices and the SCORP-io platform for centralized management.



Results

Minimal Renovation with Reduced Operational Disruption

By reusing existing wiring and infrastructure, the project avoided heavy construction work. With a single device per room and no additional occupancy sensors required, the deployment was completed faster and with minimal disruption to daily operations.

One Device Replacing an Entire Architecture

The use of integrated LoRaWAN® devices eliminates the need for multiple devices per room, reducing installation complexity while simplifying long-term operation and maintenance.

Unified Building Management System

By integrating PMS data with HVAC control, the system enables automated and centralized management across guest rooms, common areas, and technical systems, improving operational visibility and efficiency.

Why Choose Milesight



“ Milesight enables efficient BMS modernization in fully operational buildings by combining a LoRaWAN® architecture with an open and interoperable platform.

By reusing existing infrastructure, reducing device complexity, and supporting seamless integration across multiple systems, the solution minimizes renovation work while ensuring centralized and scalable management.

This approach allows system integrators to deploy reliable and future-ready building management systems—without disrupting operations or starting from scratch.

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Partner

About SPARWAN

SPARWAN is a France-based B2B distributor specializing in industrial hardware and IoT solutions for demanding environments. Headquartered in La Roche-sur-Yon (Vendée), the company provides robust and reliable technologies across three core areas: embedded computing, 4G and network connectivity, and LoRaWAN IoT.

About SCORP-io

SCORP-io is a provider of cloud-based building management solutions, specializing in the digitalization and optimization of building operations. Its platform enables centralized monitoring and control of HVAC, energy, and technical systems through open and interoperable architecture.

By integrating IoT technologies with existing infrastructure, SCORP-io helps deliver scalable, data-driven building management for improved efficiency, comfort, and operational performance.