



Office and Warehouse

Company: Diffusair

The team was tasked with delivering a modern HVAC zoning and automation upgrade for a 140,000 sq. ft. office and warehouse facility in Laval, Quebec, with different needs while meeting the following objectives:

- Optimize occupant comfort throughout the building
- Replace obsolete control systems
- Modernize both mechanical systems and building automation technology
- Deliver a cost-effective solution
- Reduce installation workload and commissioning time

They needed more than a traditional controls replacement, they required a modern, wireless-ready versatile BACnet platform that simplified installation while improving performance.

Key Numbers

- **Square footage:**
 - 140,000 sq. ft.
- **56 devices:**
 - OCN+ Server
 - 42 BZ122 VAV controllers
 - 7 BP848 controllers
 - 7 OPENSTAT

The Solution

Diffusair implemented a complete Strato Automation ecosystem, from the OCN+ Server to zone-level controllers, creating a flexible and efficient HVAC automation system.

This deployment included:

- OCN+ Server for centralized control and system visibility
- 42 BZ122 VAV controllers for precise zoning
- 7 OPENSTAT Wi-Fi thermostats
- 7 BP848 controllers for equipment integration
- Wireless connectivity eliminating network cabling requirements

By leveraging Wi-Fi technology, Diffusair reduced installation complexity, minimized work at height, and accelerated deployment.

Why Strato?

Diffusair chose Strato Automation because the platform delivered:

- **Wi-Fi-enabled controls** reducing installation labour and infrastructure costs
- **Open and flexible architecture** using both MSTP and Wi-Fi
- **OCN+ web-based zoning system** enabling data visualization for building operations
- **Simplified deployment** vs traditional wired systems
- **Scalable platform** ready for future building upgrades

Results & Benefits

Improved occupant comfort through modernized zoning control

Data visualization through dashboards to improve building operation performance

Reduced installation costs by eliminating network wiring

Less work at height, improving installation efficiency and safety

Approximately **6 hours saved** per thermostat, totaling nearly **40** labour hours saved

With this particular project in an existing and occupied building, using Strato's Wi-Fi platform allowed us to optimize the transition more efficiently and quickly, minimizing disruptions to workers and reducing installation time and costs.

 **Éric Dussault**, Project Manager

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