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iBOS connect –
Smart building management

24/7 remote access to buildings

Cost effective, Secure remote access to your buildings data and systems

Executive summary

As digital transformation accelerates across every industry, building management is also being reimagined. At the core of that transformation is the secure access to the building and its data.

Remote access to buildings offers tangible, wide-ranging benefits: improved operational efficiency, lower costs, heightened security, and higher tenant satisfaction. Through centralized dashboards, facility managers can remotely control HVAC, lighting, access, and alarms across one or multiple properties. They can diagnose issues instantly and ensure real-time responsiveness— saving time and cutting travel-related emissions and expenses. Eliminating unnecessary trips significantly reduces costs, minimizes downtime, and frees up technical staff to focus on high-impact work. But remote access is not without its challenges. Legacy systems, high license costs, cybersecurity concerns, and interoperability issues remain obstacles.

The need for a solution is urgent. iBOS Connect is a cloud-based platform designed to meet this shift head-on. It empowers facility managers with real-time, remote access to buildings systems, delivering seamless visibility and control across entire property portfolios, accessible from a single, secure platform.

Powered by the iBOS Nexus, iBOS Connect ensures end-to-end encryption, multi-site management, and real-time communication while enhancing operational efficiency and regulatory compliance.

This paper outlines the current challenges in the building management space, the opportunities created by remote access, and how iBOS Connect addresses both through a scalable, and future-ready approach.

Let's optimize, automate and enhance!

The Case for Remote Access

Remote access is no longer a luxury for facility managers—it is a strategic necessity. The ability to manage systems in real time, without being physically present, transforms how buildings are maintained, optimized, and secured.

In addition to efficiency, remote access improves service quality. Issues can be addressed before they are even noticed by tenants. Adjustments can be made on the fly in response to occupancy or environmental conditions. This results in more comfortable, better-performing buildings and a more proactive facilities team.

The future of building management will be defined by intelligence adaptability, and resilience. Buildings will be capable of self-optimizing based on internal and external systems and datapoints. Systems will be able to predict failures before they occur, adjust environments dynamically, and protect themselves against threats—all with minimal human intervention. To achieve all this – remote access should not only be a way to access your building remotely, it is also a way for transporting data securely to and from your building, making sure your building is prepared for future optimization and atomization.

Industry Context and Market Evolution

The traditional approach to building management has long been defined by complexity. Systems were typically vendor-specific and lacked interoperability, requiring facility managers to rely on cumbersome VPNs, manual processes, and siloed platforms just to perform basic remote tasks. For multi-site operators, managing a fragmented ecosystem meant juggling access credentials, proprietary software, and disconnected infrastructure—often with limited visibility or control.

Today, facility managers face mounting pressure to reduce operational costs, meet regulatory and sustainability targets, and deliver personalized occupant experiences. At the same time, they must do more with fewer resources as portfolios expand and teams shrink. Modern demands require modern solutions.

The goals are clear:

- Enhance security against rising cyber threats
- Enable remote access without exposing sensitive data
- Improve tenant satisfaction with customizable controls for lighting, climate, and automation
- Comply with evolving regulations

- Reduce maintenance costs through AI-driven automation and predictive analytics

Yet despite the market's evolution, major barriers remain. Legacy systems, often running on protocols like BACnet, Modbus, or vendor-specific controllers, can be difficult to integrate into modern cloud platforms. Cybersecurity concerns are growing, especially as connected buildings become frequent targets for attack. And while cloud computing, IoT, and AI now offer powerful tools for centralized oversight, many current solutions were never built for building management. Common limitations include:

- Reliance on VPNs, TeamViewer-style solutions, or remote desktop tools—none of which were purpose-built for facilities
- Costly licensing models that scale poorly across large portfolios and multiple users
- Continued dependency on siloed systems that can’t communicate effectively
- Managing remote access across sites often means configuring and maintaining separate VPNs, gateways, or firewall exceptions
- Disjointed infrastructure drives up maintenance costs and limits responsiveness

Adding to this complexity is the need for data compliance. Facility operators must balance transparency with security, ensuring their systems meet strict requirements while remaining operationally flexible. Reliability concerns also persist, a lack of local redundancy can bring cloud-based systems to a halt during outages without failover systems, even minor disruptions can escalate into serious operational challenges

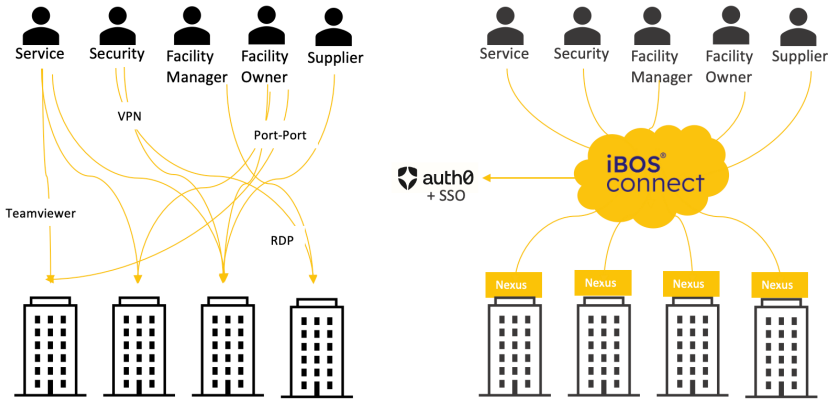
Challenges Facing Facility Teams Today

Modernizing building operations is no simple task. Facility teams are tasked with evolving aging infrastructure while keeping up with digital demands, sustainability goals, and cybersecurity standards—all under pressure to reduce costs and maintain high service levels.

Scalability also becomes a hurdle as organizations grow or expand their property portfolios. Managing multiple buildings, each with different vendors and interfaces, creates operational inconsistency and limits visibility across sites. Without a centralized platform, it's nearly impossible to apply standardized processes or enforce security policies uniformly.

Compounding these issues is the high operational cost of disconnected systems. Manual data entry, redundant technician visits, and the lack of automation lead to inefficiencies that impact both budgets and tenant satisfaction.

These challenges reinforce the need for a streamlined, purpose-built platform that bridges legacy infrastructure with modern operational demands—securely, consistently, and at scale.



This is where iBOS Connect stands apart. Built specifically for modern building management, it bridges the gap between outdated systems and digital-first operations. By offering a unified, secure, and scalable platform, iBOS Connect enables real-time remote monitoring, one-click access, and proactive maintenance—all without the downsides of legacy solutions.

The iBOS Connect Solution

iBOS Connect was purpose-built to address the real-world challenges of modern facility management. It offers a vendor-agnostic, secure, and scalable platform that is easy to deploy and simple to operate. At the heart of the solution is the iBOS Nexus, a plug-and-play gateway. Its cloud-native architecture eliminates the need for VPNs and complex integrations, allowing facility managers to oversee all buildings through a single interface.

Installation is remarkably straightforward. Facility teams can onboard a building in minutes using the Plug'n'Scan process: plug in the Nexus device, scan a QR code, and activate the iBOS Portal. From that moment, real-time visibility and control are unlocked, across every system you choose to connect.

Once deployed, iBOS Connect provides a centralized platform through its unified cloud portal. Whether managing a single site or an international portfolio, facility managers gain real-time access to system data, performance insights, and actionable alerts—all from one intuitive interface. The core components of the iBOS Connect Ecosystem are:

- **iBOS Nexus Gateway**
  Provides secure, real-time connectivity between building systems and the cloud. The gateway supports extensions into Edge BMS, iBOS Energy, IoT device integration, and advanced energy management—without needing additional infrastructure.

- **Unified Cloud Portal**
  Delivers a single-pane-of-glass view across multiple buildings and systems. Facility teams can perform remote monitoring, optimize operations, and enable predictive maintenance from any location.
- **Application Marketplace**
  Enables seamless integration of your chosen applications, including energy reporting, occupancy analytics, air quality monitoring, and remote commissioning. This modular approach ensures adaptability across different facility types and operational needs.
- **Advanced Security Architecture**
  Built on a Zero-Trust model, iBOS Connect includes multi-factor authentication, role-based access control, and end-to-end encryption. Integration with Auth0 allows for secure identity management and effortless Single Sign-On (SSO) via your organization's Active Directory.
- **Plug-and-Play Installation**
  Rapid deployment via Plug'n'Scan eliminates the need for disruptive retrofitting. Nexus devices integrate with existing systems and unlock future capabilities without added gateways.

Cost-Efficient and Scalable by Design

Unlike traditional platforms that charge per user or per connection, iBOS Connect offers a predictable annual cost per building—regardless of the number of users or tunnels. This simplicity makes it ideal for organizations operating lean teams across growing portfolios.

The platform also dramatically reduces the need for technician site visits by enabling remote fault resolution, system reconfiguration, and performance optimization. With each Nexus deployment, your building is not only online—but also ready to expand into additional digital services without further investment in hardware.

Supporting a More Sustainable Future

In an era where buildings are responsible for a significant share of global emissions, reducing environmental impact is no longer optional. iBOS connect contributes to sustainability in measurable ways. By enabling continuous monitoring and intelligent control, the platform helps

organizations reduce energy waste, manage peak loads, and benchmark performance across sites.
Remote operations further minimize the carbon footprint associated with travel. Every avoided truck roll not only saves money but also contributes to corporate ESG objectives. By centralizing data and enabling predictive maintenance, iBOS connect supports both day-to-day efficiency and long-term environmental stewardship.

Conclusion

Remote building access is redefining how facilities are managed. From operational efficiency to occupant comfort and sustainability, the benefits are clear. Solutions like iBOS connect provide a secure, simple, and scalable way to take full control of building systems—anytime, anywhere.
Now is the time to future-proof your buildings, reduce costs, and boost value across your entire property portfolio. iBOS connect is designed to support this evolution, providing flexible foundation for digital transformation. Its architecture is built for edge computing, AI integration, and IoT expansion. As buildings become more connected and smarter, iBOS connect will serve as the digital backbone, ensuring consistent performance, security, and control—today and tomorrow.

iBOS connect- part of the iBOS portfolio

iBOS nexus is a secure edge gateway that enables safe access to smart applications within your building - without exposure to the internet. Once iBOS nexus is installed, your building is reachable remotely via iBOS connect, an intuitive and secure portal for managing your building portfolio and its services.

iBOS connect is an intuitive and secure solution designed to elevate your building into an intelligent and smart ecosystem, filled with useful tools and services. iBOS connect securely connects your building to the cloud, giving you a new level of visibility of your building and its services, remotely and from any device. As a powerful
standalone solution, iBOS connect facilitates digitising and automising building operations. With the Nexus and Connect in your building, you are one small step away from adding smart services like iBOS energy and other future digital solutions to your building.

iBOS energy is a cutting-edge energy optimization software that integrates seamlessly with existing or new HVAC systems, helping property owners significantly reduce energy consumption 24/7, while maintaining optimal indoor comfort. IBOS energy has been on the market since 2008 and is deployed in over 1,000 buildings globally. By combining self-learning algorithms, predictive weather analysis, and thermal mass modelling, iBOS energy has been proven to deliver consistent energy savings, reaching as high as 40%. What sets iBOS energy apart on the market is its advanced edge computing, with thermal mass utilization, adaptations based on weather forecasting and zone-level control, which many legacy systems lack or underutilize. Easily accessible remotely via iBOS connect, a facility team can monitor real-time and historical impact in an intuitive dashboard.

iBOS edge is an innovative Building Management System, seamlessly installed on iBOS Nexus and designed to modernize building monitoring and control. With an intuitive user interface, users can effortlessly access controls, monitoring systems, and make desired adjustments.