



Why modernize?

Reasons to keep your Metasys system up to date



Avoid the risks of aging components—and help enhance cyber security, productivity and building performance.

The power behind **your mission**





You can't afford an out-of-date BAS

As the Metasys Building Automation System commemorates its 30th year, it's time to look closely at your system. Technology has evolved, and continuing Metasys enhancements offer capabilities unheard of just a few years ago. Now is the time to start building an upgrade path to help enhance cyber security, improve operator productivity and optimize building performance.

Designed for the way you actually work

The Metasys BAS is designed and continually enhanced to help your building perform better and make your job easier. Here's a quick look at key innovations and exciting new features.

Cyber security

- Award-winning Cyber Health Dashboard
- HTTPS with TLS 1.2 protocol (encrypted communication)
- IT security best practices

Next-generation hardware

The growing family of Metasys network engines and equipment controllers helps enhance system performance and security.

Metasys BAS

Troubleshooting

- Fault Detection and Fault Triage suite
- Show Involvement feature
- Alarm Manager enhancements

Productivity

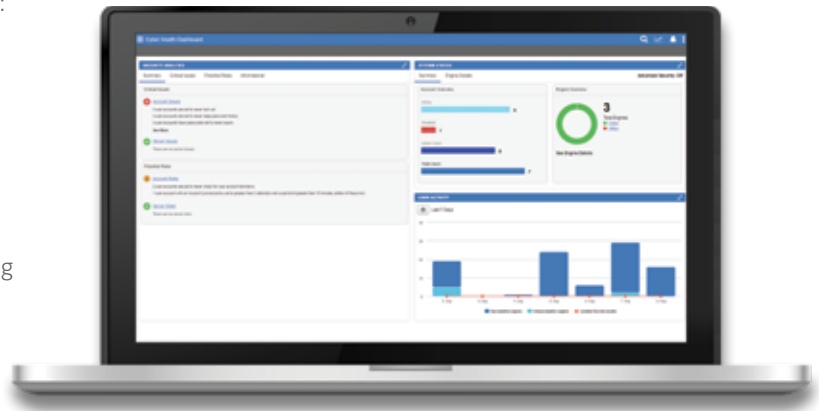
- Space-based navigation
- Photo-realistic graphics
- Built-in graphics manager

Help reduce cyber security risk

Software and hardware upgrades can help you prevent unauthorized access, meet IT standards and stop depending on security patches. In fact, updating and upgrading software immediately is #1 on the U.S. National Security Agency's top 10 cybersecurity mitigation strategies¹.

The latest Metasys cyber security features and capabilities include:

- Award-winning Cyber Health Dashboard, with clear information to highlight potential security concerns
- FIPS 140-2 Level 1 certification/compliance for network engines & Metasys Server software, to help prevent unauthorized access to systems and data
- Linux operating system (OS) in latest network engines, with secure boot to help prevent malicious software from downloading at system startup
- Secure, encrypted communication to help keep messaging confidential and data protected
- Continuous adoption of cyber security best practices like secure password management, inactivation of unused ports, identification of dormant accounts and password hashing



See a demo on the easy-to-use Cyber Health Dashboard at <http://on.jci.com/metasyscyberdashboard>

Boost building performance with next-generation hardware

The latest Metasys network engines and equipment controllers reduce installation costs and enhance building performance

- New equipment controllers create a flexible N2-to-BACnet MS/TP migration path and feature updated protocol standardization and system interoperability
 - New VAV box controller model with position feedback simplifies troubleshooting
- Metasys MRP ring-enabled IP controller solution delivers resiliency cost-effectively
- Growing family of Metasys network engines offer sleek, compact design for easy installation, high-capacity memory and processing to enable future upgrades, and essential features like the Linux OS and secure boot feature described above
 - Models with an onboard interface let you monitor equipment status, view alarms, see trends, issue overrides, and change setpoints and parameters

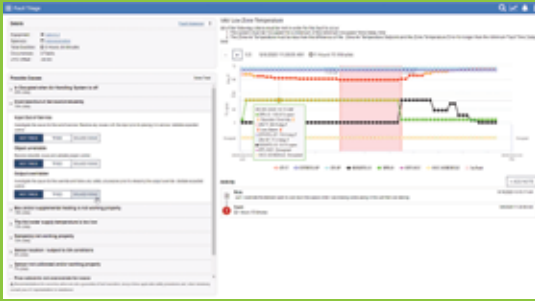
Next-generation equipment controllers



Next-generation network engines



Prepare for the upcoming end-of-support phase of legacy network engines. Your Johnson Controls rep will help you develop a cost-effective path to upgrade to the newest models of engines as well as controllers.



Amplify troubleshooting with fault detection and triage

While alarms tell you that system points have reached preset thresholds, fault detection uses more system points, delays and thresholds to highlight issues faster. Metasys Fault Detection requires minimal configuration and automatically categorizes to help you address the most pressing issues first. Fault detection also helps minimize nuisance reporting, further enhancing team productivity. Fault Triage is a valuable add-on that shows details, possible causes and activity—enabling both experienced and inexperienced staff to find and fix issues fast.

Improve productivity with the world-class Metasys UI

The Metasys user interface (UI) lets your team spend less time navigating and more time taking action. It sets the standard for an intuitive UI, shortening the learning curve so your team can work more efficiently. It clearly organizes relationships between spaces and equipment—or the equipment serving a space—enabling users to zero in on the area of the facility that needs attention. And it's accessible from anywhere, on any device—no apps or software downloads required.



Start now to prepare for the eventual phaseout of SMP. Talk with us about a Metasys UI migration plan.

Key Metasys UI features include:

- Intuitive navigation by building space, for faster troubleshooting and less time on task
- Alarm Manager to quickly identify and prioritize alarms, for faster troubleshooting
- Photo-realistic graphics, for cleaner visualization right from your mobile device
- Built-in graphics manager, eliminating the need for separate tools to create or edit graphics
- New Show Involvement feature identifies what an object is serving and what serves it, to help operators quickly identify an issue's root cause
- Add, delete and configure objects from within Metasys, creating a familiar experience for legacy Site Management Portal (SMP) users

Contact your Johnson Controls representative today for more information. Or visit <https://www.johnsoncontrols.com/buildings/campaign/metasys-upgrade>.

¹ [https://media.defense.gov/2019/Jul/16/2002158046/-1/-1/0/NSA Info Sheet: Top 10 Mitigation Strategies \(March 2018; posted August 2019\)](https://media.defense.gov/2019/Jul/16/2002158046/-1/-1/0/NSA%20Info%20Sheet%20Top%2010%20Mitigation%20Strategies%20(March%202018;%20posted%20August%202019).pdf)

Operate strategically

To get the greatest return on your Metasys system, think strategically about operations and maintenance. It's more cost-effective to regularly ensure system components are working than to face sudden unplanned downtime. Johnson Controls will work with you to develop a maintenance strategy that includes:

- Check all HVAC components associated with a piece of mechanical equipment to make sure devices are working.
- Inventory networks and controllers for conformance to security and manufacturer's standards, ensuring your BAS network is as secure as possible.
- Check control sequences and points associated with a piece of equipment, identifying common issues and energy-wasters.

Additional Johnson Controls support services like remote monitoring, onsite training and technical support all enhance operator productivity. A software subscription keeps your Metasys system up to date over a specified term. Exclusive promotions for current Metasys customers help create an affordable path to modernization.

With the phase-out of aging BAS components, the urgent need to protect data and buildings, and more pressure than ever to get measurable results, you can't afford an out-of-date BAS. Let us help you set the path to cost-effective upgrades—and gain the benefits that lead to a better bottom line. Talk to our Metasys experts today about modernizing your BAS.