



# EcoStruxure<sup>™</sup> Building Operation 2023 Release

Introducing a software-only AS-P, increased architectural flexibility, unparalleled access to information, engineering-focused efficiencies, and much more.

Schneider Electric announces EcoStruxure Building Operation 2023, available for download effective immediately. This version follows EcoStruxure Building Operation 2022.

Building management is more complex than ever, balancing operational priorities with net-zero carbon goals, an energy crisis, and a seemingly permanent hybrid work model. EcoStruxure Building Operation 2023 is focused on access to data and insights to make that balancing act as easy as possible. With data integration from a wide range of systems, such as power, on-site energy generation, and electric vehicle charging, your building management system will drive energy and sustainability decisions like never before.

#### EcoXperts<sup>™</sup> and other System Integrators

- Deploy and commission projects faster with new tools and engineering efficiencies
- Deliver projects faster with a new software-only server, leveraging containerization for standalone operation or as an alternative to SpaceLogic AS-P.

#### **Facility Managers**

- Access even more information with an open system that provides insight into all systems and sub-systems in a central place, so you can meet your energy and sustainability goals with ease
- Ensure occupant well-being with increased flexibility to manage indoor environmental quality and airflow
- Enjoy peace of mind and compliance with enhanced cybersecurity

#### **Building Owners**

- Understand and monitor building energy use from power and other systems to meet sustainability and netzero carbon goals, and ensure compliance requirements
- Ensure tenant needs are met with enhanced services and flexible building zoning options.

#### This announcement is structured in the following order:

- EcoStruxure Building Operation 2023 new features and benefits:
  - Improved architectural flexibility and engineering efficiency
  - Increased access to information 0
  - Enhanced cybersecurity & compliance
- Availability & release materials
- Product support & contacts

# **PRODUCT AT A GLANCE**

#### **Product Announcement**

#### # PA-00914

All materials can be found in the online sales enablement and launch kit on the EcoXpert Extranet or use these quick links to select release materials:

- **EcoStruxure Building Operation Release Notes**
- SpaceLogic IP Controller Firmware ٠ Release Notes
- Software Support Policy
- Sales Enablement Kit •

Technical documentation is available on WebHelp.

Ask, learn and share: subscribe to the **EBO** Forum



# **EcoStruxure Building Operation 2023 New Feature Highlights**

# ARCHITECTURAL FLEXIBILITY AND IMPROVED ENGINEERING EFFICIENCY

EcoStruxure Building Operation Edge Server

The EcoStruxure Platform now offers an exciting alternative to a physical AS-P, called the Edge Server, which is a software-only product that architecturally meets many of the same needs as the physical hardware platform. No hardware means faster installation and commissioning while still benefiting from the software features and IP protocol capabilities of the SpaceLogic AS-P.

# "From weeks to seconds"

Containerization is a modern application deployment technology that allows for very fast and simple download, installation, and startup of one or many instances of software applications such as Edge Server, with just a few simple commands in the container runtime environment.

- New software-only server for standalone or as an alternative to AS-P
- Scale up projects faster than ever
- Download, installation, and orchestration as Linux Docker container
- Multiple instances on the same OS host
- Can run on any OS with Docker x86\_64 support

Edge Server container images are published on the Schneider Electric Buildings site on GitHub: <u>https://github.com/SchneiderElectricBuildings</u>

# WorkStation Enhancements

Engineers can take advantage of new features and improvements in WorkStation focused on improving efficiency as well as providing new capabilities. Key engineering enhancements include:

- Timed Forced Overrides: Without additional engineering, all EBO points and values now allow users to force a value for a specific amount of time.
- Folders for b3 (and i2) controllers: Maintain user experience through modernizations by creating folders in b3 & i2 controllers that support standard & native objects
- Improved S-Link support: Increased flexibility by allowing users to manage S-Link properties directly from EBO without the need for WorkPlace Tech
- Browser Choice: Provide choice for your users by allowing hyperlinks to open using the internal Workstation browser or open externally using the user's default browser.



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## Modbus Device Integration

As the Internet of Things (IoT) continues to evolve, there continues a growing need to integrate more and more devices. EBO 2023 evolves that capability to include simplified methods to integrate popular Modbus devices. This capability makes it quick and easy to include Modbus devices in your EBO solutions:

- Provides an evolving Library of Modbus device types that speed onboarding and integration (energy and power meters, EV chargers, sensors, smart actuators....)
- Easily download these Modbus "device types" and import them into EBO. A growing list of Modbus device types is available on the BMS Applications Library
- Once downloaded, easily import them into WorkStation and now easily add from "New" menu like native devices with little engineering effort.

# Modernized Programming Enhancements

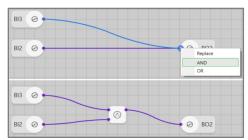
### New Features in Builder for Function Block

EcoStruxure Building Operation 2022 introduced Builder for Function Block which provides a greatly enhanced, integrated, and efficient function block program editor. EBO 2023 builds on those improvements and continues to improve your programming experience with efficiency-rich features such as:

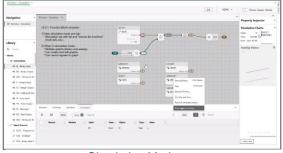
- Easily replace and edit Bindings:
- Automatically addition of data type conversion
- Improve layouts with Swap bound input ports
- Filters on lists views for quick access to information •
- Automatically update Modules and their internal components
- New keyboard shortcuts .
- Improved navigation of remote bindings
- Automatically add an operator (AND or OR) on existing or new bindings
- Automatic labeling of operators when public

In addition to all the improvements to speed up your programming in Builder for Function Block, EBO 2023 also adds the capability to do a Simulation of your Function Block programs. Engineers can now easily start simulation mode and examine how the current program will perform, verifying operation and test scenarios while helping assure your programs run as expected at deployment. This new mode offers:

- Perform program simulations of all Function Block programs.
- Multiple graphs to visualize both binary and analog values
- Full range of options to step, execute "N" times, set date & time



Replace Bindings



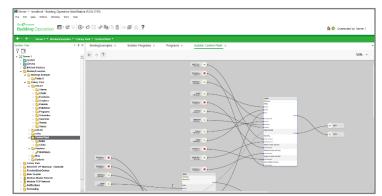
Simulation Mode



#### Navigating Workstation Graphically with Builder View

WorkStation applications can be complex and understanding the relationships between all the objects in an application can be challenging. A new method to navigate objects called Builder View has been introduced to allow users an additional graphical method of navigating through applications.

This capability is the first step in extending modernized programming capability from only Function Block to an entire system. Additional functionality to follow in future releases but today you can use Builder View to navigate and visualize objects and their bindings. This graphical navigation aids and enhances the understanding of objects and their relationships.



Workstation - Builder View

### Engineering Tool Updates

#### Automated Engineering Tool

The Automated Engineering Tool (AET) continues to provide engineers with features and functions to gain efficiency when engineering solutions for EcoStruxure Building servers or transitioning existing legacy installations. An updated version of the AET (v5.0.1.259) is now available on the Exchange and provides full support for all the new features and functions in Building Operation 2023.

#### **Project Configuration Tool**

A new server package for EcoStruxure Building Operation 2023 will be available on the EcoXpert Extranet for the Project Configuration Tool (PCT) shortly after release. This server package will require an upgrade to PCT which will be released at the same time. You will then be able to upgrade your PCT and quickly take advantage of offline engineering for your Building Operation 2023 projects.

### Licensing Improvements

The license handling for AS devices using Device Administrator has been updated with a range of improvements to make the management of licenses far easier. The activation flow (online as well as offline) has been simplified and guides you through the process, with minimal need for manual input. The tool is now able to prevent the user from accidentally applying the wrong type of license e.g., mistakenly applying a secure boot license on a non-secure boot AS or vice versa. It is now possible to return a license in online mode, and issues concerning demo licenses and certificate handling have been resolved.

It is now possible to handle entitlements with a mix of embedded & non-embedded licenses. Previously there was a limitation on this which has been resolved for EBO 2023 as well as EBO 2022 and 3.x.

# **INCREASED ACCESS TO INFORMATION**

#### Semantic Tagging

The semantic functionality of EcoStruxure Building Operation is now enhanced to suit customers with multiple tenants and users of varying language preferences, even better. Also, you can now make visual representations of semantic items using Building Operation graphics or dashboards and view them in the semantic view for even clearer context.

- Support for localization of schema class names, descriptions, and relations.
- Support for multi-tenant installations the semantic model can be segmented per user group

• Support for associating a presentation view (graphics, dashboards) to semantic entities and automatic availability of those in WebStation.

#### WebStation Enhancements

For end-users, WebStation is charged with enhancements that boosts productivity; alarm limits in trend charts for added context, diagnostics that find otherwise hard-to-spot problems, extended Settings section, and new backup management are a few examples, so an installed WorkStation is no longer needed for common tasks.

- Now alarm limits can be plotted in trend charts
- Improved UI for system settings, user management, alarm configuration
- Extensive diagnostics easily find common configuration problems
- Logged-on users ability to log off others
- New dashboard widget Search for dynamic dashboards
- Download backups, and restore local backups
- Support for type library and type version updates
- Quick filter for alarms "assigned to me"

#### System Enhancements

EcoStruxure Building Operation is continuously enhanced to deliver best-in-class efficiency, flexibility, openness, and reliability. With those goals in mind, EcoStruxure Building Operation 2023 includes:

- More flexible scalability now up to 50 Enterprise Servers under Central\*
- Timed force releases after configurable duration or date/time
- IPv6 support in server-to-server and client-to-server communication
- Saving of values configured to be retained are periodically saved to disk
- MQTT now has support for milliseconds timestamp resolution, websockets , and UDMI standard.
- Now, TimescaleDB compression is supported saves disk space

\* Maximum total number of Automation Servers is 2,500

### Microsoft SQL Server

For customers with high expertise in Microsoft SQL Server that are hesitant to invest in PostgreSQL infrastructure, Microsoft SQL Server is now also an option for high capacity and open historical data storage.

- External Log Storage is now compatible with Microsoft SQL Server, in addition to TimescaleDB.
- Similar functionality and architecture with Microsoft SQL Server as with TimescaleDB.

### **ENHANCED CYBERSECURITY & COMPLIANCE**

EBO 2023 continues to improve cybersecurity & support multivendor interworking allowing customers to implement Defense in Depth strategies and deploy architectures that cost effectively fit their OT and IT needs.

#### BACnet / SC

- Secures BACnet traffic without the need for BBMDs and VLANs
- Ensures only devices authorized to be on a BACnet /SC network can operate on that network
- BACnet /SC node, hub and router functions, and support for large-scale BACnet /SC networks (features introduced EBO 2022 ver 4.0.3, July 2022)



• Improved key logging function- allowing Administrators to grant privileges to individuals or groups, and ensures logging information is not lost when the controller restarts

#### BACnet PR 16

- BACnet PR 16 for EBO (ES, AS-P, AS-B) and Space Logic MP / RP controllers
- BTL listings and certificates are expected to be available in 2Q23

#### Modbus Support for SpaceLogic Multi-purpose Controllers

The SpaceLogic MP-C and MP-V controllers have one configurable RS-485 port, which can now be configured to support Sensor bus or Modbus network. The Modbus RTU (RS-485) subnetwork allows standard Modbus devices to be connected to the MP controller. See the SpaceLogic MP-C and MP-V Specification Sheets for more information on the new Modbus feature.



# SpaceLogic Wireless Connectivity – Advanced

With EcoStruxure Building Operation 2023, SpaceLogic Wireless Connectivity - Advanced comes with new features for Zigbee network backup and restore, Zigbee channel of operation change, standardized lighting control, and 48-bit metering values support to increase flexibility and efficiency of the wireless network. The SpaceLogic Wireless Adapter - Advanced communicates over the Zigbee wireless protocol with more wireless devices, including:

- Wiser™ Radiator Thermostat
- Danfoss Ally<sup>™</sup> Radiator Thermostats
- Leviton Decora Smart<sup>™</sup> Zigbee 3.0 switch

See the Zigbee Adapter Specification Sheet for more information on the new features and the supported wireless devices for the SpaceLogic RP controllers and/or SpaceLogic servers.

# **Availability and Release Materials**

The upgrade from EcoStruxure Building Operation 2022 to EBO 2023 is available at no charge and it is possible to upgrade the software without the need for upgrade licenses. Licenses previously purchased for EBO 2022 can also run a EBO 2023 system.

All release materials are posted on the <u>EcoXpert Extranet</u> in the Product Offering section, including Building Operation 2023 Release Notes, technical documentation summarizing the new features and improvements, and service pack installation instructions. Use the submenu located on the left and the filters on each page to narrow the results. Use Google Chrome as your browser for the best results.

Edge Server container images are published on the Schneider Electric Buildings site on GitHub: <u>https://github.com/SchneiderElectricBuildings</u>

# **Product Support**

For support inquiries contact your local Customer Care Center by visiting the Schneider Electric <u>website</u> and selecting your country of origin within the "Support" section tab. Or access Customer Care directly from your mobile device by installing the "mySchneider" mobile application onto your <u>Apple</u> or <u>Android</u> device.

Access Product Support contact information any time on the Product Support Exchange page.

#### For North America (NAM) Product Support

Building Management Systems: <u>www.nampss.com</u> Field Devices: <u>productsupport.NAM-HVAC@schneider-electric.com</u>

# **Regional Contacts**

For more information, please contact your local sales or marketing representative in your country/region. If you don't have a local representative, contact your corresponding regional category manager:

- Americas: <u>Americas.EcoStruxureBuilding@se.com</u>
- EMEA: <u>EMEA.EcoStruxureBuilding@se.com</u>
- Asia Pacific: <u>AsiaPac.EcoStruxureBuilding@se.com</u>