EcoStruxure™ Building*

Real smart. Real simple. Real performance.

Solution Overview | April 2017

Confidential Property of Schneider Electric

*formerly SmartStruxure™ solution

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Megatrends are driving opportunity

EcoStruxure™ Building* solution delivers results

- **Real Smart:** Protect building investment
- **Real Simple:** Maximize efficiency
- **Real Performance:** Increase productivity

Scalable, open and secure platform provides foundation

- **Proven Software:** StruxureWare™ Building Operation
  - Ease of use and simplification features
- **Harware Innovation:** SmartX Controllers – AS-P and AS-B & AS-BL

StruxureWare v1.9.1 new offer highlights

EcoStruxure™ Innovation At Every Level Building

*formerly SmartStruxure™ solution

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Today, megatrends are changing needs of buildings markets

Digitization

Number of connected devices in buildings

1.7bn

2014

5.5bn

x3

2020

World Urban Population

+2.5bn

2014 - 2050

Climate Change & Regulations

Electricity consumption in buildings will grow by

80%

by 2040

Driving new opportunities for more…

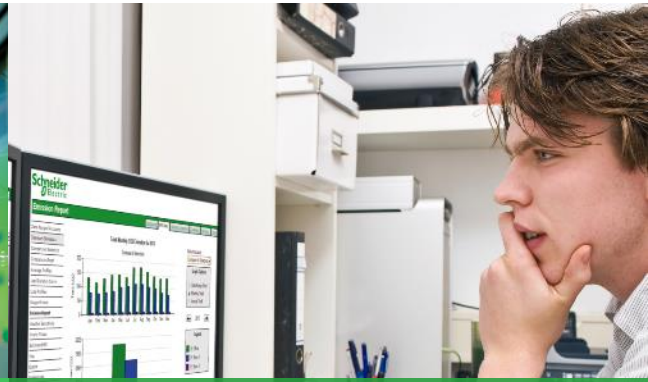
People Productivity & Experience

- **Employee productivity** (People cost is 10-40x building maintenance cost)
- **Patient satisfaction** (top concern)
- **Guest room problems in hotels represent 42% of complaints & decrease loyalty by 11.6%**

Operational Efficiency

75% **go to maintenance & operations of a building's lifetime costs**

Lifetime ROI
different approaches to maintenance



Energy Efficiency

30-50%

Energy efficiency potential

through active control of the building space

Faced with growing challenges and greater bottom line responsibilities, enterprises demand a comprehensive building solution that breaks through traditional information silos to:

> ensure comfortable, productive environments
> update aging facilities and simplify day-to-day operations
> optimize energy consumption
> provide anytime, anywhere access to building information

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EcoStruxure™ Innovation At Every Level Building combines proven software and hardware innovation with engineering, installation and services to make buildings:

Smarter.
Gain insight across systems and access actionable information for ROI-driven decision making

More Efficient.
Increase building efficiency to reduce energy consumption and costs

More Sustainable.
Create a comfortable environment that boosts productivity and improves facility value

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Schneider Electric's comprehensive **EcoStruxure™ Building** solution was designed with occupants' needs and comfort foremost in mind.

- Combines proven building management software and hardware innovation with services to **future-ready buildings**
- Provides a **scalable, open and secure IoT platform** to proactively solve today's challenges while preparing for tomorrow

EcoStruxure™ Building
Innovation At Every Level

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Real Smart

Streamline integration across your enterprise to drive efficiency

Deploy scalable, open and secure architecture

- Integrate any building management application or system
- Leverage native support for open protocols including LON ®, BACnet™, Modbus® and Web Services

Breakdown traditional information silos

- Monitor and manage building systems and devices on one network
- Easily incorporate Web Services to access external data – such as weather and utility costs
- Integrate and optimize across multiple enterprise domains with Schneider's Power, Data Center and other offers

Protect against the most malicious attacks

- Protect investment with best-in-class cybersecurity to keep building systems up and running

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Real Simple

Access the right information when, where and how you want it

Gain 24/7 access to building information

- Manage your facility on the go with intuitive mobile user apps and a full-function, browser-based WebStation user interface

Allow users to personalize their workspace

- Organize interface by individual users to suit assorted needs and roles

Simplify day-to-day operations with user-friendly functionality

- Optimize building operations with drag-and-drop trending, one-click reporting, interactive graphics, calendar-like scheduling and easy-to-use alarms

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Real Performance

Optimize building performance to maximize energy efficiency

Realize significant savings

- Speed installation and enhance building operation and maintenance

Create a healthy, sustainable environment

- Attract and retain employees and occupants
- Ensure your facility meets government efficiency requirements and qualifies for tax-based incentives

Turn data into actionable intelligence

- Leverage out-of-the box reporting and trending tools that provide actionable intelligence

Save up to
30%
on energy costs

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Proven Software: StruxureWare™ Building Operation

Integrate energy, lighting, HVAC and fire safety systems to automate, control and monitor buildings

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StruxureWare™ Building Operation software integrates multiple systems and devices to collect, analyze and manage data across the enterprise.

- **Monitor, manage and control** building operations on one network to increase efficiency
- Turn system data into actionable intelligence to **optimize building performance**

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Enterprise Server

The core of the enterprise system

Proven Software

Powerful

- Collects site-wide data
- Scalable to manage multiple Automation Servers

Secure

- Fully secure integration into Windows Domain user accounts
- One less IT admin tool
- Ensures policy adherence

Traceable

- Complete audit trail

Open protocol support

- Provides seamless gateway to extensive range of Schneider Electric and many third-party devices

Store and archive alarm, trend and event data

- Virtually unlimited data storage

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WorkStation

Dedicated machine software for programming, engineering and operation functions

Proven Software

User friendly

- Individual personalized workspaces
- Simple alarms, events and schedule configuration
- Intuitive address bar contains simple screen navigation commands

Efficient

- Mass change/multi-select functionality
  - Implement changes across many points with one click
  - Enforce policy site-wide with one click

Powerful alarm management

- Prioritize, filter and group

Licensing based on number of concurrent users

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WebStation

Web browser operator interface for system access anywhere, anytime

Proven Software

Direct access using a standard web browser

- No additional software needed

Delegate responsibilities and perform everyday operations

- Same customized Workspaces as configured for WorkStation
- View graphics, trends, schedules and reports
- Change values (e.g. temperature set points)
- Update schedules
- Manage alarms and users

Secure access

- WebStation requires user name and password for log on
- HTTPS authentication using transport layer security (TLS)

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Mobile Apps

Expand connectivity and control to building occupants

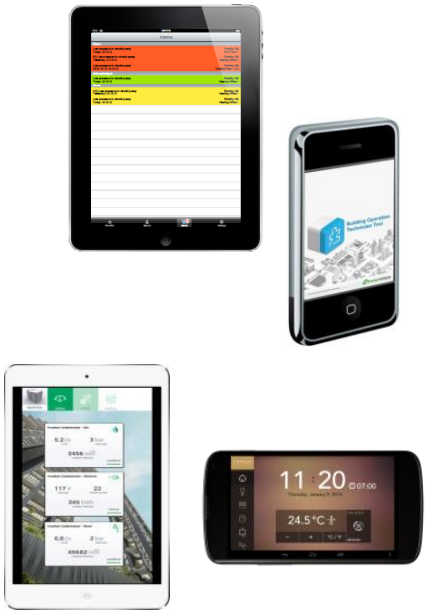
Proven Software

Technician Tool

- Convenient access using a single app from mobile devices (iOS ® and Android®)
  - View and manage values, alarms, schedules and trend log lists

AdaptiApps

- Custom user app development kit to design apps specifically for site occupants and their individual roles
  - Simplify user experience while providing an additional level of control to help improve operational and energy efficiency



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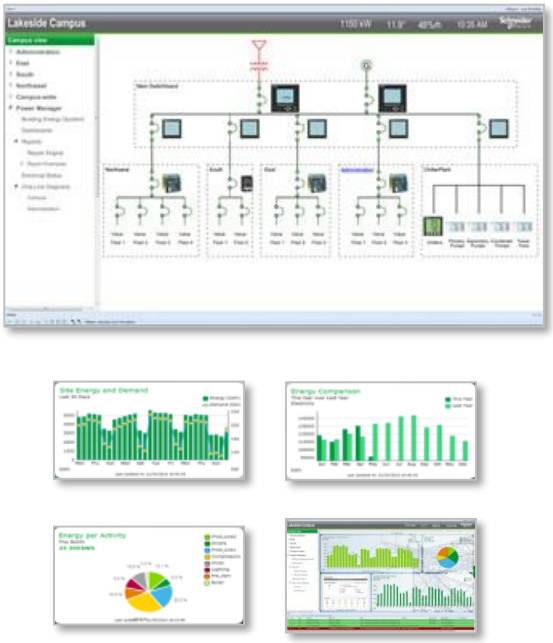
Software modules

Gain additional control of your enterprise with embedded software modules

Proven Software

Power Manager

- Monitor, measure and optimize your building's non-critical power in the same way as HVAC, lighting and fire safety systems – and gain insights through a single view to:
  - Ensure electrical network health
  - Increase power quality awareness
  - Improve energy accountability
- Content is accessible through WebStation and WorkStation
- Designed for non-electrical experts



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New Access and intrusion security offers

Keep building occupants safe, assets protected, information available, and cyber risks reduced

EcoStruxure™ Security Expert *(available globally, except US & Canada)*

- Best-in-class access control and intrusion detection from purpose-built field controllers, RFID Smartcard Reader technology and application software that meets regional certification and | localization requirements
- An autonomous solution that integrates with StruxureWare Building Operation software to deliver visualization and control of the entire building

AccessXpert Enterprise Security Solution *(available in the US & Canada only)*

- AccessXpert evolves security operations, enabling personnel to operate with maximum efficiency in today's constantly changing, mobile environment
- A simplified user interface, open protocol support, mobile device options, and Web- and cloud-based architecture options deliver new capabilities without complex learning curves

Learn more about EcoStruxure Security Expert here, and more about AccessXpert here

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Enhanced cybersecurity features

Reduce cyber threat risk as technology evolves

StruxureWare Building Operation software

Secure Development Lifecycle (SDL) policy

- Processes assure resilience and formal customer response

Advanced encryption and authentication

- Secure communications throughout system

Secure by default features

- Assure out-of-the-box protection

IT system integration

- Enable IT management of user and password policies
- Enable IT monitoring of system events

Full system backup, recovery and reconstitution

- Minimize downtime

Technology highlights:

- TLS 1.2 support
- CA Certificates
- Secure email
- Password policies
- Change password on first use
- Auto logoff timers
- Role-based access control (RBAC)
- Object level security
- Active Directory integration
- Audit logs
- System information and event monitoring (SIEM) integration

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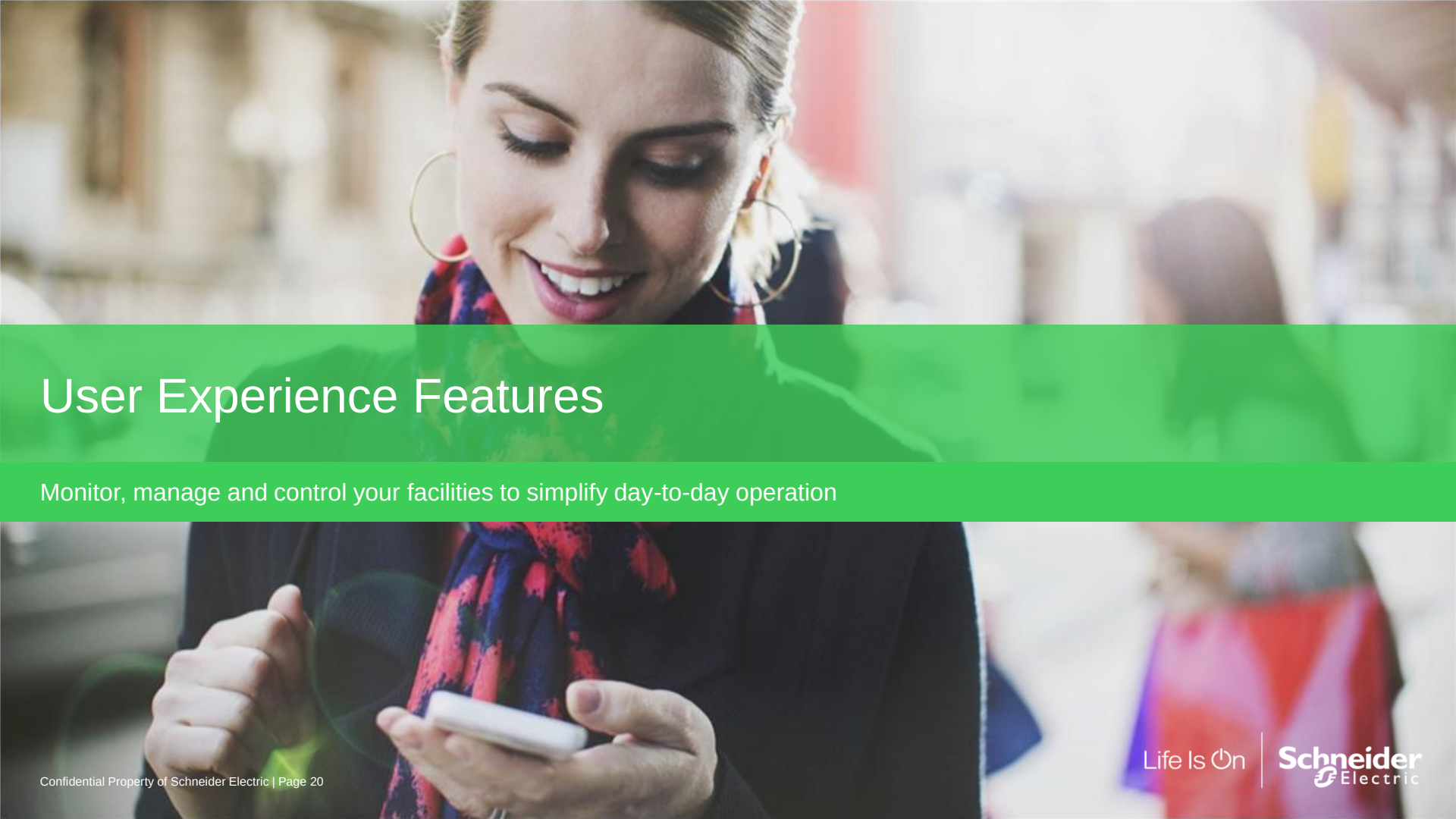

User Experience Features

Monitor, manage and control your facilities to simplify day-to-day operation

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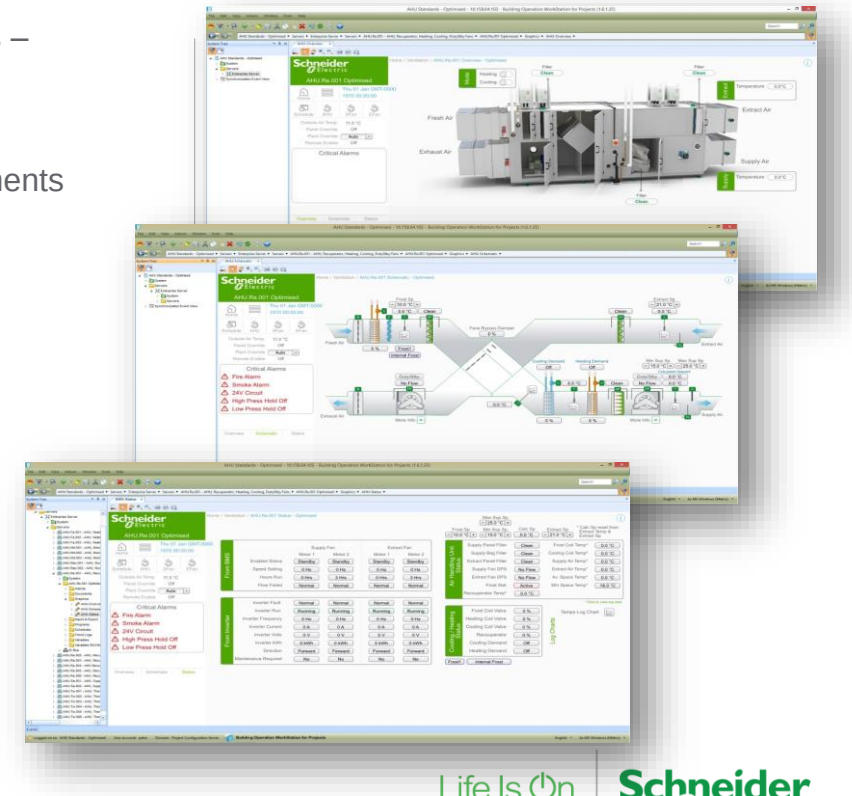
Graphics

Get attractive and user-friendly graphics that make the system easy to use and manage

User Experience Features

- Scalable vector graphics high-quality in all sizes and on all devices – supports HTML5 (WebStation only) for graphics and trend charts
- Quickly and easily create, modify, replicate and edit graphical elements
  - Graphics Support Services also available
- Graphics can change color for intuitive views of temperature variation and/or alarm status



Use a wide variety of high quality graphics to create different schematics

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Personalized user interface

Organize workspace views to meet your individual or project needs

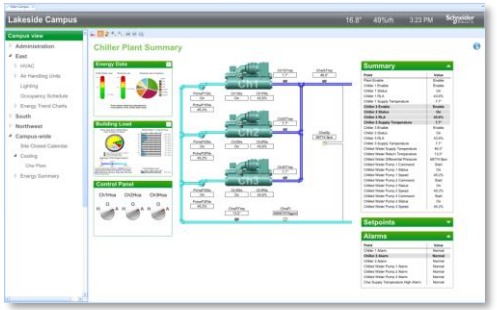
User Experience Features

Create an individualized view for each user or group of users

Ability to focus on what is important different users

- CEO
- Facility Manager
- Occupants

Preferences follow the user so they see their layout wherever they log in



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Alarms and events

Identify issues immediately to mitigate risks and gain insight to the source of system concerns

User Experience Features

Active alarm and event management

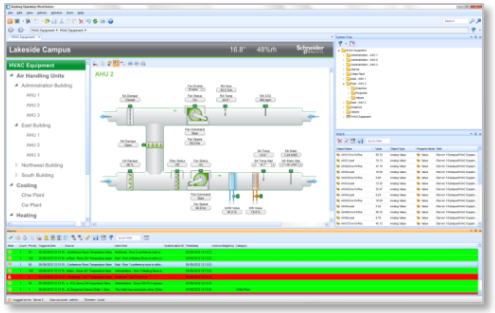
- SNMP alarming notification option
- Integrated email notification, scheduled assignments, notes and checklists
- Virtually all services can be flagged for early detection and warning capability
- View and manage values, alarms, schedules and trend log lists

Graphical alarms

- Attach graphics to alarms for a picture perfect display of system status during and leading up to the alarm

Protection

- Choice of single or double acknowledgement of alarms, per company policy



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Schedules

Conveniently manage sites 24/7 by building or by floor based in your specific needs

User Experience Features

Master schedule

- Manage multiple building effectively

Easy to use

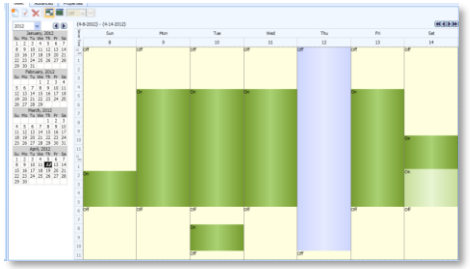
- Text or graphic based functionality
- Simple to configure special events using Microsoft® Outlook-like recurrence
- Change set point values directly from the schedule

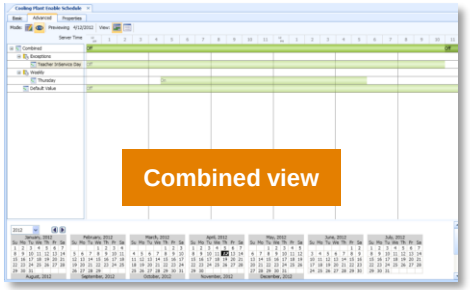
Prioritize events

- Assign priority level to events
- Use “combined view” to see resulting schedule

Calendars

- Holiday exceptions entered once and then reflected in all schedules





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Reports

Understand building data for insights and to share with stakeholders

User Experience Features

Powerful graphical reporting tool

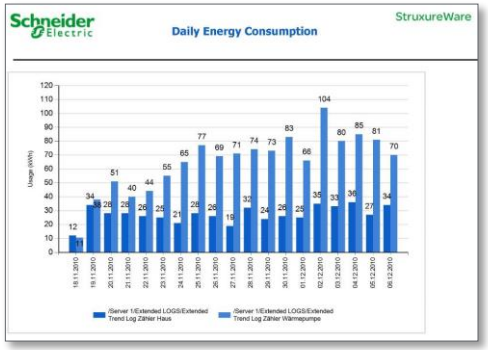
- Customized reports
- Out-of-the-box reports
  - Energy consumption reports
  - Alarms and trends comparison

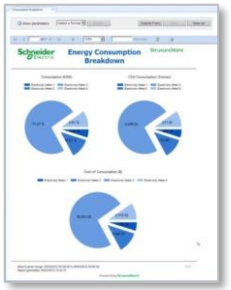
Easy configuration

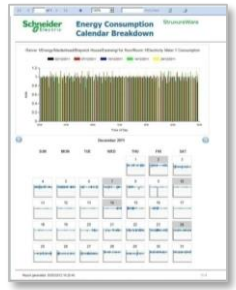
- Based on any pre-configured or ad hoc criteria including date range, cost, consumption and CO_2 emissions

Viewable through WorkStation or WebStation

Simplify user experience while providing an additional level of control to help improve operational and energy efficiency







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Trends

Turn building data into actionable intelligence for better system performance and insight

User Experience Features

Historical data

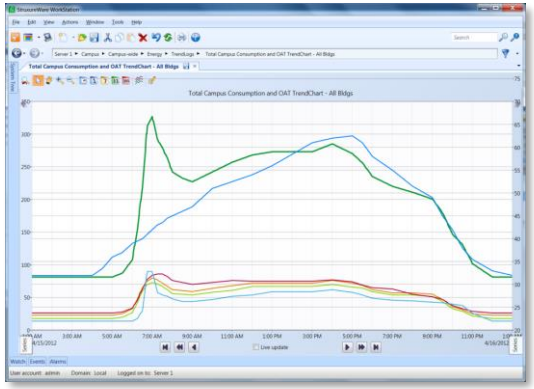
- Business performance data based on history, people, locations, etc.
- Internal, External, Implicit, Meter Logs

Export logs

- Variety of standard reporting formats including .csv and .xml

Flexible

- Data presentation in table or chart view
- Create an ad hoc trend chart from any point
- Drag and drop points onto trend chart
- Roll over to highlight values



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Localization

Accommodate global enterprises with versatility across geographies

User Experience Features

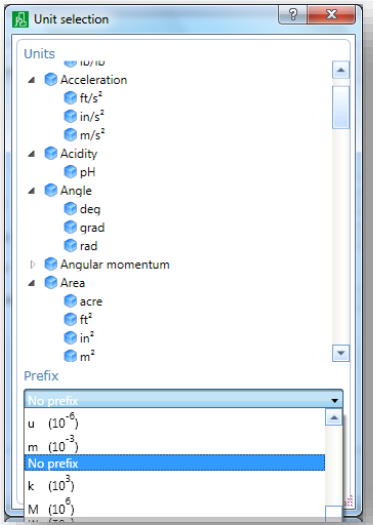
Flexible

- Seamless unit conversion across multiple geographic locations and measurement systems
  - *Example: User can log into the application in France and see U.S. measurements*

Supports multiple time zones for servers and clients

Standardized support for 10 languages

- Chinese (simplified), Danish, Finnish, French, German, Italian, Portuguese, Russian, Spanish, Swedish
  - Translation tool available for others
- Easily change language from WorkStation



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WebHelp

Get convenient, secure, intelligent online help for users

User Experience Features

WorkStation machines with Internet access automatically link to up-to-date information

Powerful search and filtering capabilities

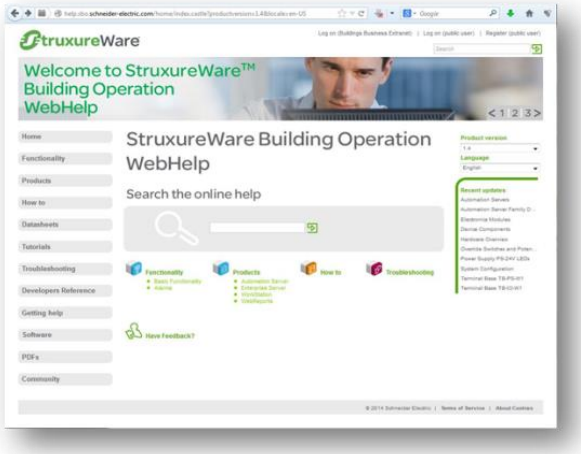
- Context specific search menus
- Linked to where you ask for help

Rank and comment on WebHelp

Linked to community portal

- Find and share resources

Create, store and email PDF files



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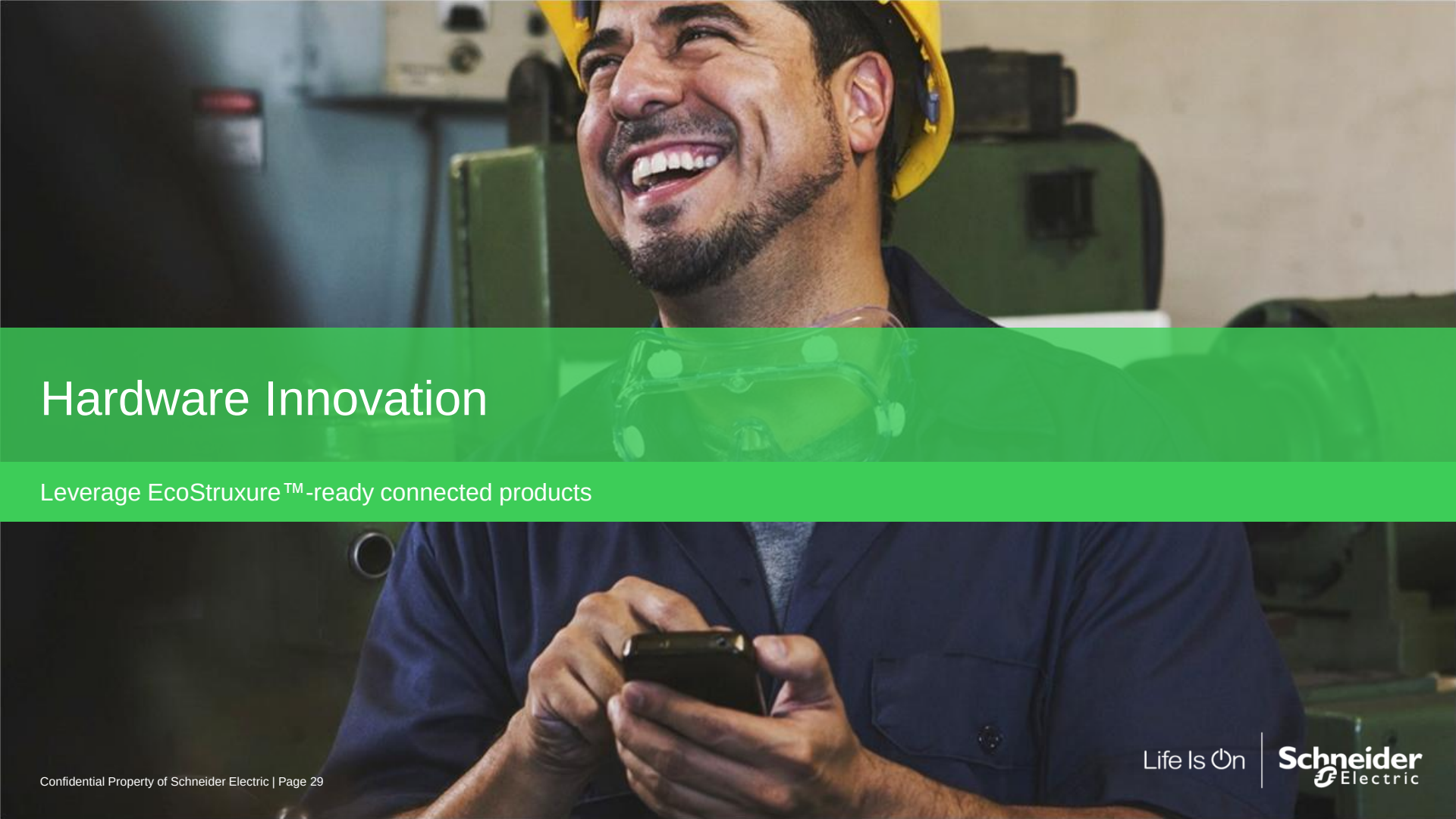

Hardware Innovation

Leverage EcoStruxure™-ready connected products

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SmartX Controller – AS-P

Next generation automation server

Hardware Innovation

Ideal for enterprise installation and transition simplification

- Network controller and server in one
- Faster dual-core processor for improved performance
  - 4-6 times faster on power cycling, deploy, backup, import and export tasks
- 512 MB RAM memory size – 4 times the Automation Server
- Dual Ethernet ports, future-ready to elevate BACnet IP communication to the field controller level
- Communications hub: BACnet, LonWorks, Modbus, Web Services
- Centralized control, database, serving out to user interfaces (WorkStation, WebStation and apps)

Now with UL-864 certification for smoke control

SmartX Controllers – AS-P & AS-BL conform to the BACnet® B-BC profile at protocol revision 12

Click here to learn more about the SmartX Controller – AS-P

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SmartX Controller – AS-B & AS-BL

Compact, powerful all-in-one BMS

Hardware Innovation

Ideal for small-to-medium main plant control applications

- Powerful, compact all-in-one design
- Flexible onboard universal I/O configurations (24 or 36 points)
- Built-in power supply
- Increased serviceability: manual override option
- Lower total installation costs

SmartX Controller – AS-BL

- Serves as a BACnet IP controller when no communication with the field bus devices is required
- Single RS-485 port: available on the AS-B only

Click here to learn more about the SmartX Controller – AS-B & BL

SmartX Controllers – AS-P & AS-BL conform to the BACnet® B-BC profile at protocol revision 12

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SmartX Controllers pave the way for enhanced IP communication

Faster, more reliable communication

- IP communication is faster!
- IP communication at the field bus level removes “single point of failure”

Increases cybersecurity effectiveness

- Cybersecurity features are more effective at the field bus level – e.g. encryption

Leverages service offers

- Faster communication = greater data collection
- Greater site impact when combined with services

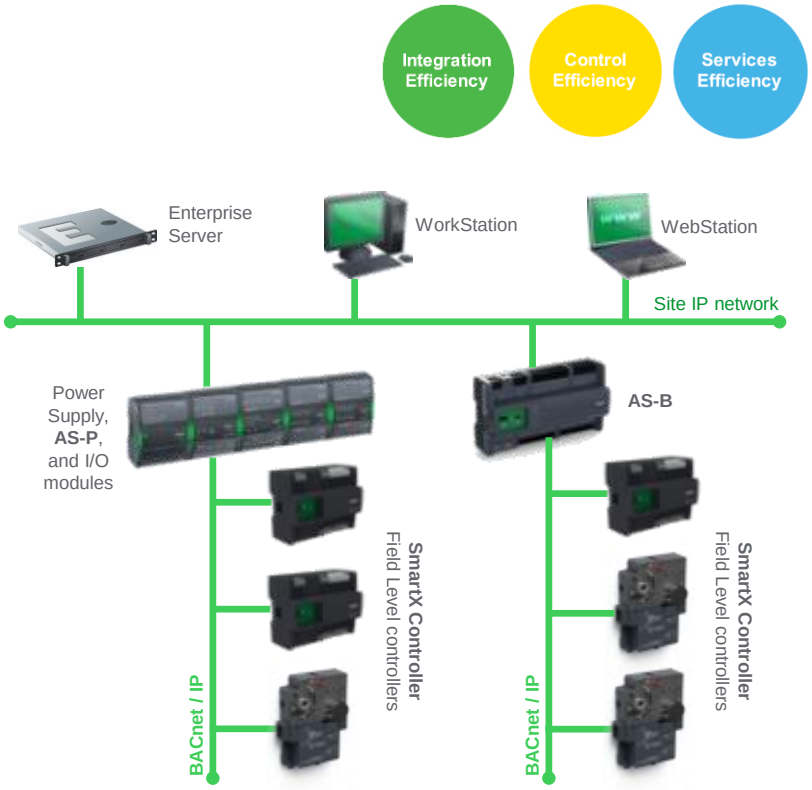
Greater architecture design flexibility

- Various architecture topologies

Easier to support, lower maintenance costs

- Easier to troubleshoot
- Faster to upgrade and apply hot fixes

Watch the video



Solution Architecture
using SmartX Controller products (to be released now through 2018)
Extends IP communication throughout the Field Controller Level

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SmartX Controller – AS-P and I/O modules

Modular and scalable footprint to meet your specific needs

Hardware Innovation

Each SmartX Controller - AS-P server supports up to 32 I/O modules

- Includes AS-P, Power Supply and associated I/O modules
- Extension cable for multiple row installations (max 5 per automation server)
- Can control up to over 400 I/O points (depending on configuration)

17 different I/O modules allows for centralized control of large mechanical systems

- A variety of digital and analog input and outputs to ensure each installation is customized

Power Supply

- 24V power across a common bus

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SmartX Controller – AS-P and I/O modules

Key hardware features

Hardware Innovation

Easy to install

- DIN rail or wall mount
- Hot swap / plug and play

2-piece design with patented locking handles

Separate wiring base

- Backplane built-in
- Auto addressing

Field marking feature with protective windows

- Factory or custom label

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SmartX Controller – AD

Advanced Display empowers more users to interact based on their roles

Hardware Innovation

Dedicated operator interface; goes beyond a traditional HMI

- Hi-res 10” touch screen display
- Passcode-protected Kiosk mode ensures the AD stays on designated interface
- No special software to configure; no special user training required
- Functions are based on simple, easy-to-use apps and web interface

Uses standard solution interfaces, including:

- Tech Tool mobile app; AdaptiApps custom user app; WebStation

Versatile for different mounting locations

- Reception areas, conference rooms, plant rooms

AD Link enables direct connection to SmartX Controller AS-P or AS-B – no WiFi required

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Additional field controllers and devices

Ensure Schneider quality and reliability throughout the building

Hardware Innovation

Field devices

- Sensors and thermostats
- Valves and actuators
- Lighting control
- Energy metering
- Variable speed drives

Room controllers

SE7000 Series

SE8000 Series

Field controllers

- b3 Series
- Xenta Series
- MNL Series
- MNB Series

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StruxureWare™ Building Operation v1.9.1

New features and benefits highlights

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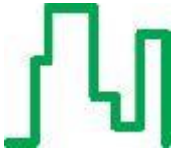
StruxureWare Building Operation v1.9.1

Summary of new features & benefits in the latest offer release

Ease transition of legacy systems

- Modernize your BMS systems to our *open, scalable and future-ready* SmartStruxure solution, the industry's #1 building energy management system!



Enjoy more user efficiencies

- Work faster and smarter with new user-focused enhancements
- Save time and simplify operations with new engineering *and project configurations* tools

Increase your peace of mind

- Experience even more best-in-class cybersecurity resilience and BACnet® BTL® certification

Plus, save time and resources: Modernize your sites at SBO v1.5 and higher directly to SBO v1.9.1 in a single upgrade process!

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Complete and easy upgrade to StruxureWare

Maintain your favorite features and experience new system functionality and benefits

Andover Continuum™

- Transition and conversion now available for sites with **Infinet controllers**

TAC Vista™

- Conversion tool enhancements allow sites with **LNS databases** to transition

TAC I/A Series™

- Native SBO experience with **Workplace Tech and MNB devices**

TAC I/NET™

- Native **SBO Schedule** support to reduce the need for I/NET host software

Satchwell Sigma™

- Over 16 transition enhancements to **reduce dependence on Sigma** software

Why modernize?

Take advantage of the **latest IP-enabled** hardware and software to ensure your systems are **future-ready today!** Gain:

- Better and faster performance
- Best-in-class cybersecurity
- Cloud and predictive services
- And turn your building data into actionable intelligence

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Enhance user efficiency

StruxureWare Building Operation v1.9.1 new functionality highlights

Important alarms now **pop** with color!

Role-based navigation delivers **the right information**

Personalized views provide important information clearly and quickly

Secure views of the system allow users access without being logged on

Get even more convenient, user-friendly benefits

> Save time and simplify tasks with customized access and information

> Increase insight and responsive-ness to building maintenance and comfort issues

> Use convenient mobile apps like AdaptiApps, Technician Tool and others, with more ease

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Alarm presentation and notifications

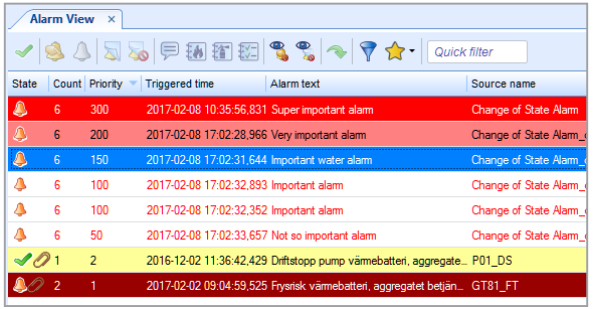
Make your most important alarms pop with color!

New
User Experience Features

Instantly recognize alarms with messages that are clear and specific

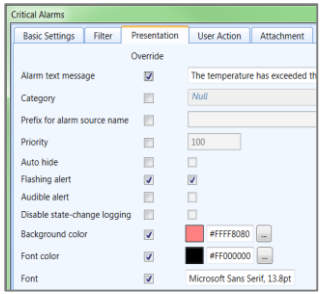
- ***New*** Alarm Decoration Rules – override alarm presentation including:
  - Message text, font color, cause note, checklist, required user actions, etc.
- ***New*** expanded alarm text substitution codes – now over 60 options!
- ***New*** apply sort order to any view
- ***New*** optional millisecond timestamps in alarm and event views

Dynamic alarm decoration and text



Deliver timely messages via email, client messages, files and SNMP

- Notification report templates now support Events, Search and Watch data types



60 alarm text substitution code options!

Alarm text **@(AlarmText)**
Assigned to ID **@(AssignedID)**
Assigned state **@(AssignedState)**
Assigned to name **@(AssignedTo)**
Assigned to domain **@(AssignedToDomain)**
BACnet alarm type **@(BACnetEventType)**
BACnet notification type **@(BACnetNotificationType)**
Basic evaluation state **@(BasicEvaluationState)**
Category **@(Category)**
Command value **@(CommandValue)**
Confirmed notification **@(ConfirmedNotification)**
Count **@(Count)**

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Efficient copy, paste and find

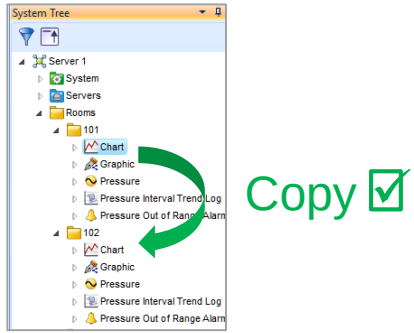
Save time during system configuration and expansion

New
User Experience Features

Copy and paste objects without configuration changes

- ***New*** enhanced Search Objects with relative search path
- ***New*** Trend Chart “Title” property permits relative binding path
- Works with WorkStation and WebStation

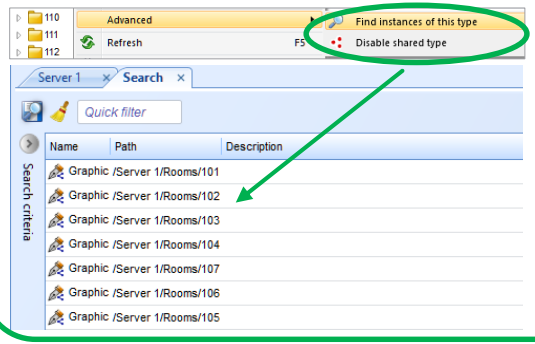
Copy/paste – relative bindings and paths



New find all instances of a given object type

- Simply click on one object and see all the others instances so you know which are affected
- Very useful with shared graphics

Find all instances



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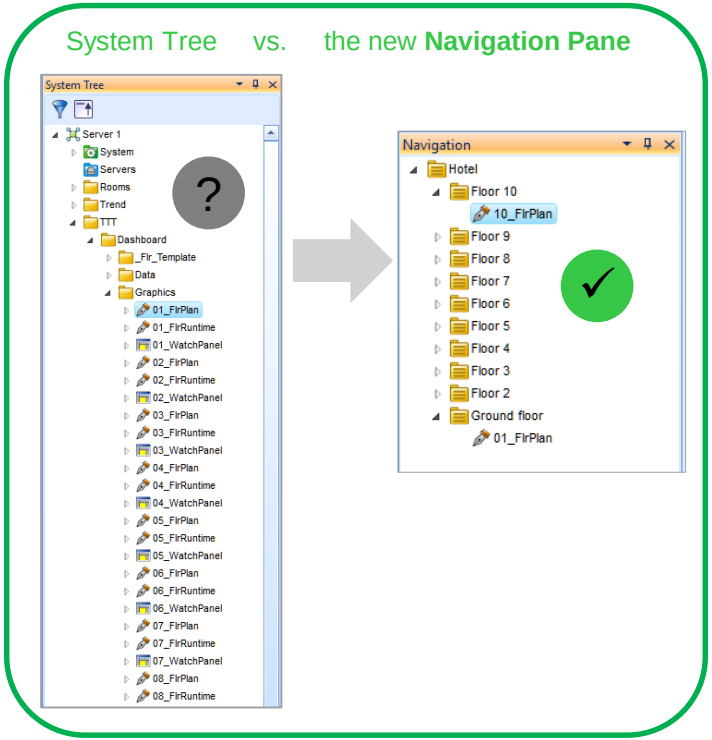
Navigation panes and panels

Personalize views to see important information clearly and quickly

New
User Experience Features

New custom tailor Navigation Panes improve usability and system views

- Display only the preferred paths as an alternative to the system tree
- Easily add new Navigation Panes types to a workspace or panel
- Works with WorkStation (WebStation coming in future version)
- Re-use existing Menu configuration to save time



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List View default and favorites

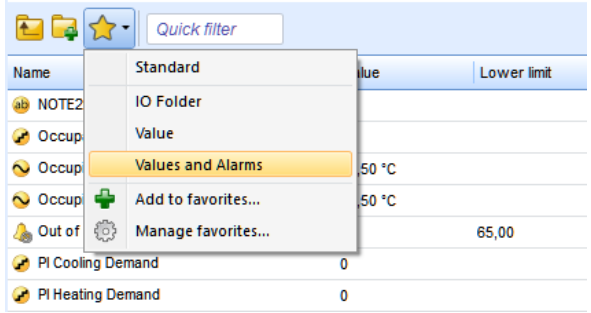
Customize access and delivery of system information and reduce risk of user error

New
User Experience Features

New easily accessible custom List View default and favorite layouts

- Similar to feature introduced with alarm and event views
- Save a List View configuration as a default “content type” or favorite
  - Defaults for all Workstation users
  - Favorites follows the user
  - All layouts preserved during upgrades

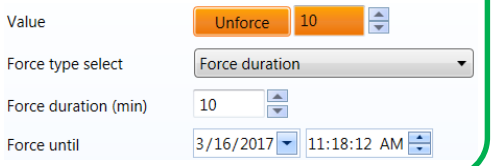
Favorite List View layouts



New Time Force Utility provides temporary service overrides

- Automatic timed “unforce” eliminates risk of customer forgetting the override
- Overrides can be set for a specific duration or until a specified end date and time
- Available for paths that support Utility objects
  - Value property of Analog, Digital and Multistate objects

Time Force Utility objects



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Best-in-class cybersecurity - technology enhancements

Reduce cyber threat risk to provide peace of mind

New
Proven Software Features

Elevated authentication technology

- *New* TLS 1.2 – Authentication and Encryption for HTTPS connectivity
- *New* SHA2-256 – HASH Algorithm for EWS connections (replaces MD-5) Device administrator fingerprint authentication
- *New* Device fingerprints compared to protect against impersonation and credential theft

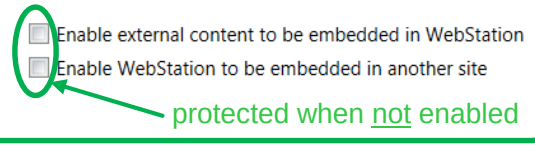
Elevated authentication technology

☑ **TLS 1.2**
☑ **SHA2-256**
☑ **Fingerprinting**

WebStation "clickjacking" protection options

- *New* option - Enable external content to be embedded in WebStation
  - Bypasses clickjacking protection of external content
- *New* option - Enable WebStation to be embedded in another site
  - Bypasses clickjacking protection of content from another site

New "clickjacking" protection setting



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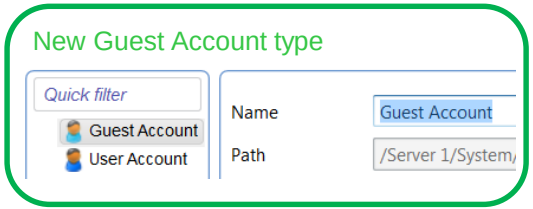
Best-in-class cybersecurity – users and logon

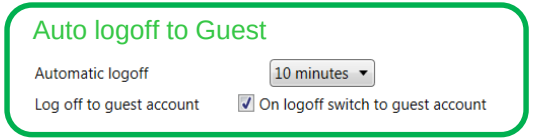
Assure a positive and secure logon experience

New
Proven Software Features

Easy and secure - public workspaces

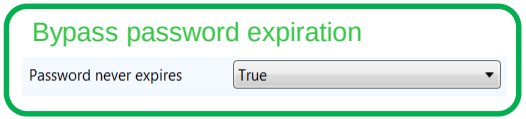
- *New* specific **Guest Account type** does not require a password
- *New* **Automatic logon to Guest** option for User Accounts
- Guest account used for public facing workspaces when no user is logged on
- Great for both Workstations and AD kiosks.





Eliminate the need to change service account passwords

- *New* "**Bypass password expiration**" option for service accounts
- Use with non-interactive logons – EWS, Smart Connector
- All interactive logon can maintain a strong password policy requiring periodic password updates



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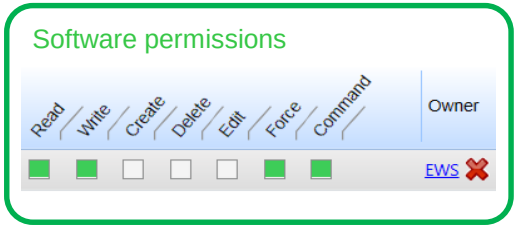
Best-in-class cybersecurity – new permissions

Assure users are given access only to functions for which they are authorized

New
Proven Software Features

New permission levels for tighter assignment of authorizations

- ***New*** “Force” permission provides the ability to assign override capabilities without granting full edit permissions on an object
- ***New*** “Command” permission provides the ability to issue commands independently of other authorizations.



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Andover Continuum transition enhancements

New Continuum Conversion Tool now supports Infinet controllers

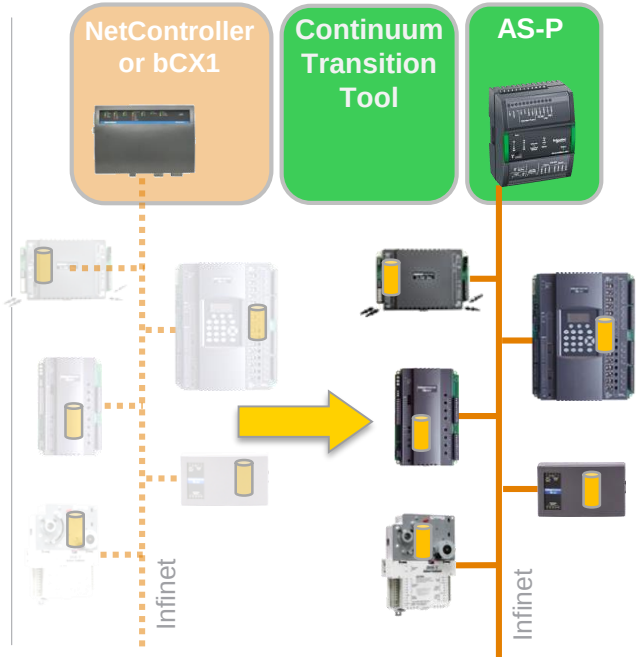
Transition Enhancements

New Full Infinet support on AS-P

- Easily learn, configure, program and replace Infinet Controllers
- Infinet support – up to two AS-P communication ports configured as “Infinet”
  - Diagnostic information
  - Create/edit Infinet objects
  - Infinet points including logs / arrays, alarms (including Expression Alarms with point 1-4 reference)
  - Programs and functions

New Continuum Conversion tool

- Migrate Infinet Network Controllers to Smart Controller – AS-P
- Automatically convert Andover Continuum Infinet controller code
- Convert, move the bus, reload the controllers – limited downtime
- Infinet Import / Export table data transfer
- View / change Infinet array element values



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TAC Vista transition enhancements

Conversion tool enhancements allow sites with LNS databases to transition

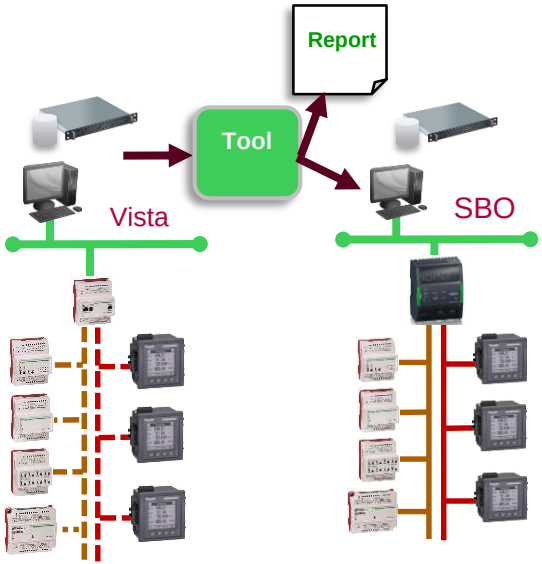
Transition Enhancements

Improved Vista Conversion Tool

- ***New*** maintain LNS database configurations
  - LNS remains on site on for network management (e.g. network addresses, LON bindings)
  - Removal of LNS not supported by the tool
  - New SBO functions after conversion for
    - Modification of Menta applications
    - Service replacement of devices
  - System expansion to be done with SBO, not LNS

- ***New*** Xenta server conversion now includes more object types and functions
  - SmartX Controller – AS-P support for Xenta I/O is scheduled for mid-May
    - Efficient Xenta 700 to AS-P conversion

- ***New*** easily move trend data by date range



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TAC I/A Series transition enhancements

Native SBO experience with Workplace Tech and MNB devices

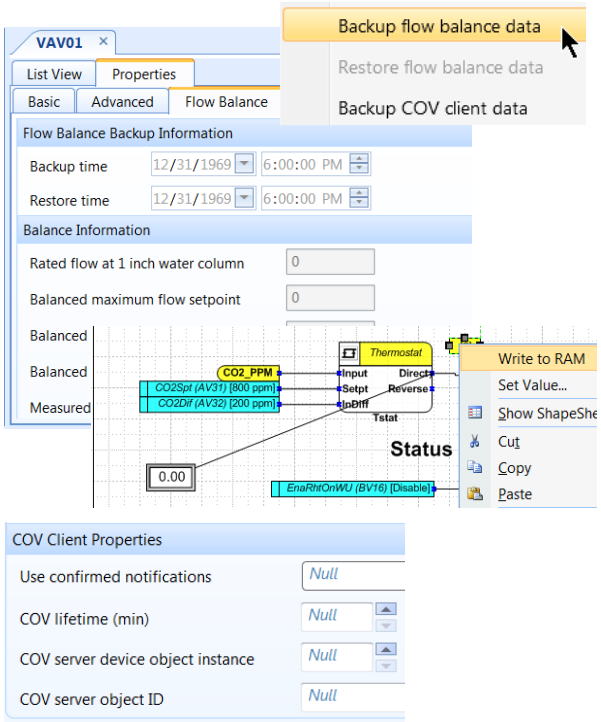
Transition Enhancements

Overall improvements to “Native” experience

- ***New*** simpler MNB controller replacement – without using commissioning and/or flow balance tools
  - Restore MNB COV client objects configurations
  - Restore MNB Flow Balance configurations

Workplace Tech Editor enhancements

- Seamless switching between editing and monitoring with Write-to-RAM
- Add/change monitor tags without downloading application to controller
- Windows 10 support
- Visio 2013 and 2016 support



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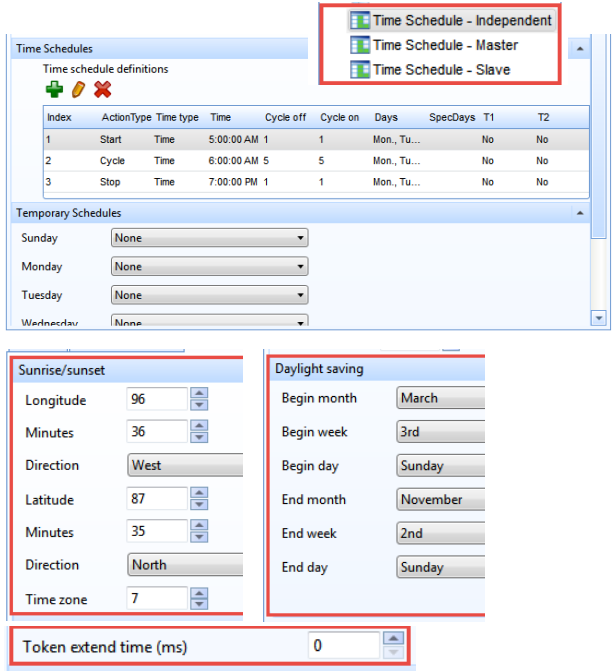
TAC I/NET transition enhancements

Native SBO Schedule support reduces the need for I/NET host software

Transition Enhancements

Overall improvements to “Native” experience

- ***New*** Time Schedule point extension support for discrete control (DC) and discrete output (DO) points
  - Independent, Master and Slave
  - Optimization actions – Opt Start, Opt Stop and Opt Cycle
  - Special day – up to seven (S1-S7)
  - Temporary day – up to two (T1-T2)
  - Slave schedules can be set to Ignore, Mirror or Optimize
- Enhanced DCU Parameter support
  - Sunrise/Sunset and Time Zone properties
  - Daylight Savings
  - Special Days
- TAC I/NET Controller LAN Performance enhancement
  - Optimize token release time with new “Token Extend Time” Property
  - Requires USB-485-INET firmware revision 1.0.1 (06/22/2016)



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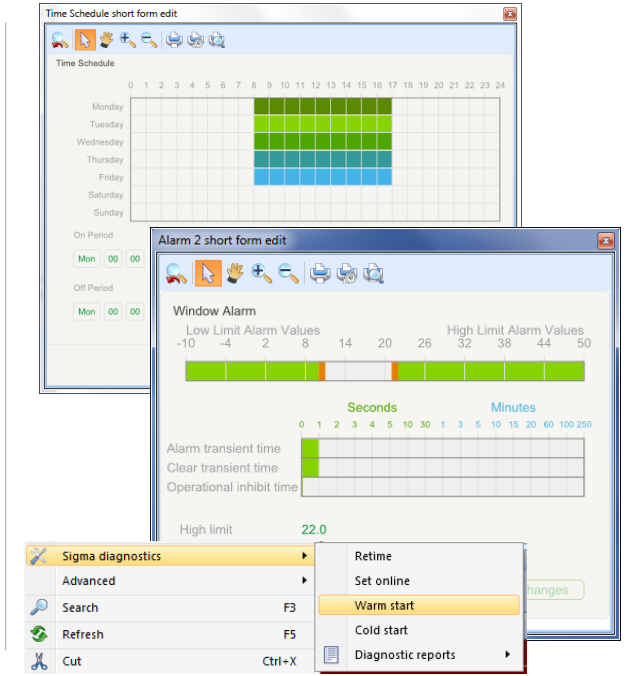
Satchwell Sigma transition enhancements

16 transition enhancements reduce dependence on Sigma software

Transition Enhancements

Improved operator experience

- ***New*** TGML Schedules
  - WebStation support, Editing with drag functionality (replaces existing schedules)
- ***New*** Sigma Alarm support
  - Short From editor, Sigma mnemonics in alarm viewer
- ***New*** Sigma Trends and Logs support
  - Notification reports for Sigma logs
  - List Sigma Trend objects in TGML graphics
  - Log Set description displayed in object name
- Enhanced controller support reduces use of Sigma client
  - Warm/cold start controllers
  - Retime controllers using schedule
  - Retrieve controller logs using schedule
  - Synchronize SBO changes with Sigma database (requires controller firmware upgrade)



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Architectures

StruxureWare Building Operation v1.9.1

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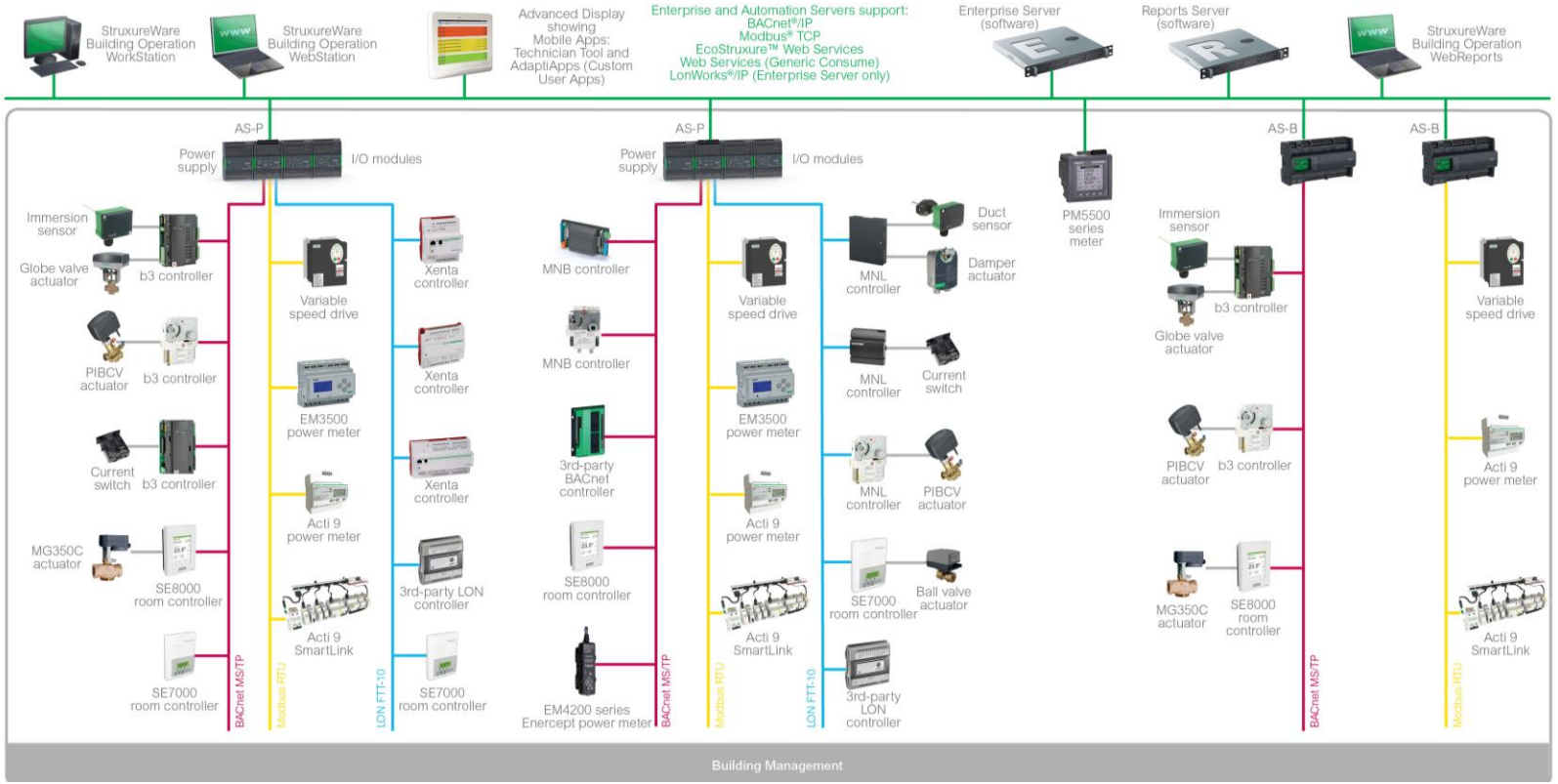
Enterprise Architecture: Multiple Automation Servers



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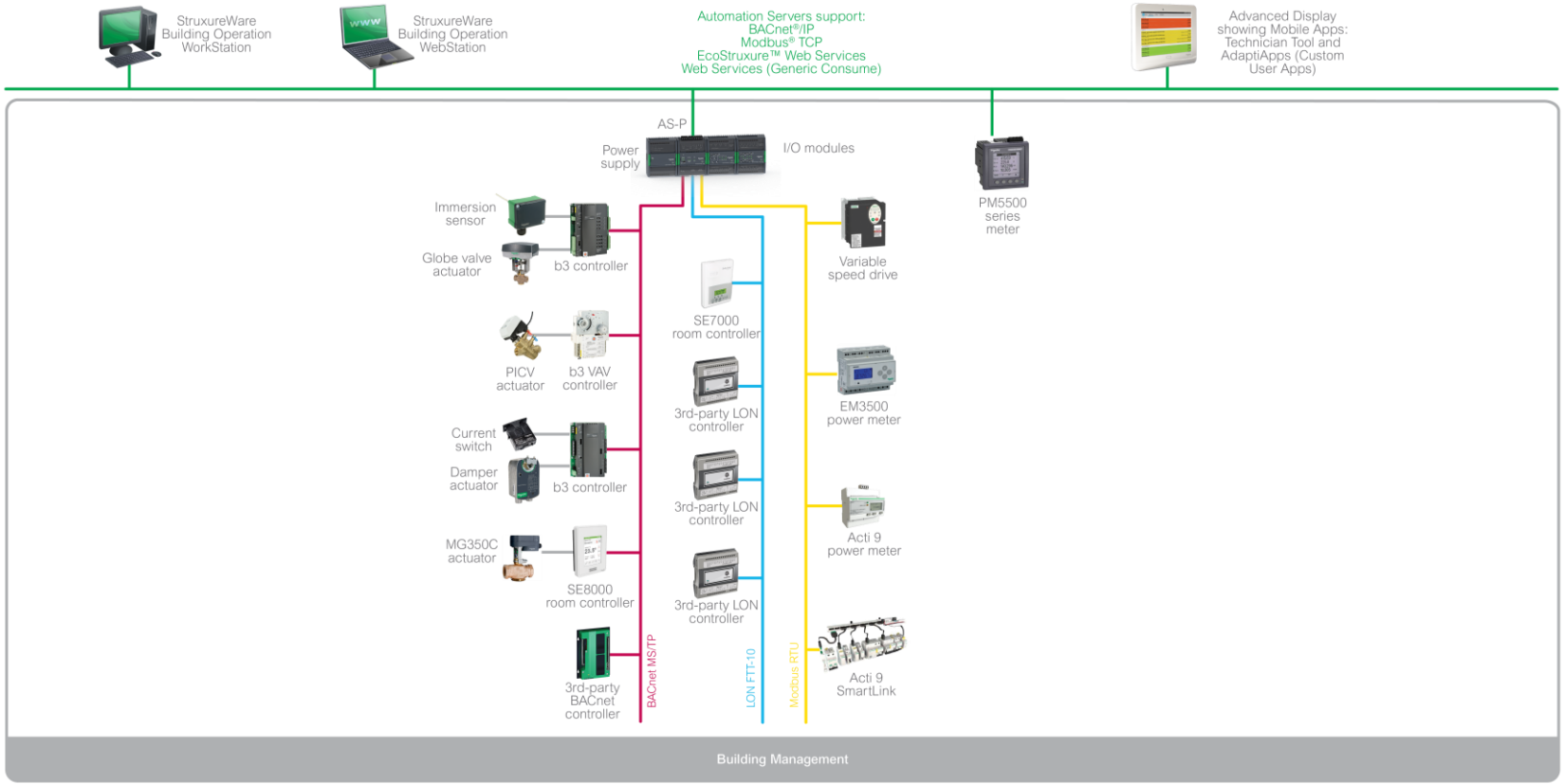
Enterprise Architecture – Single Automation Server (with b3 controllers)



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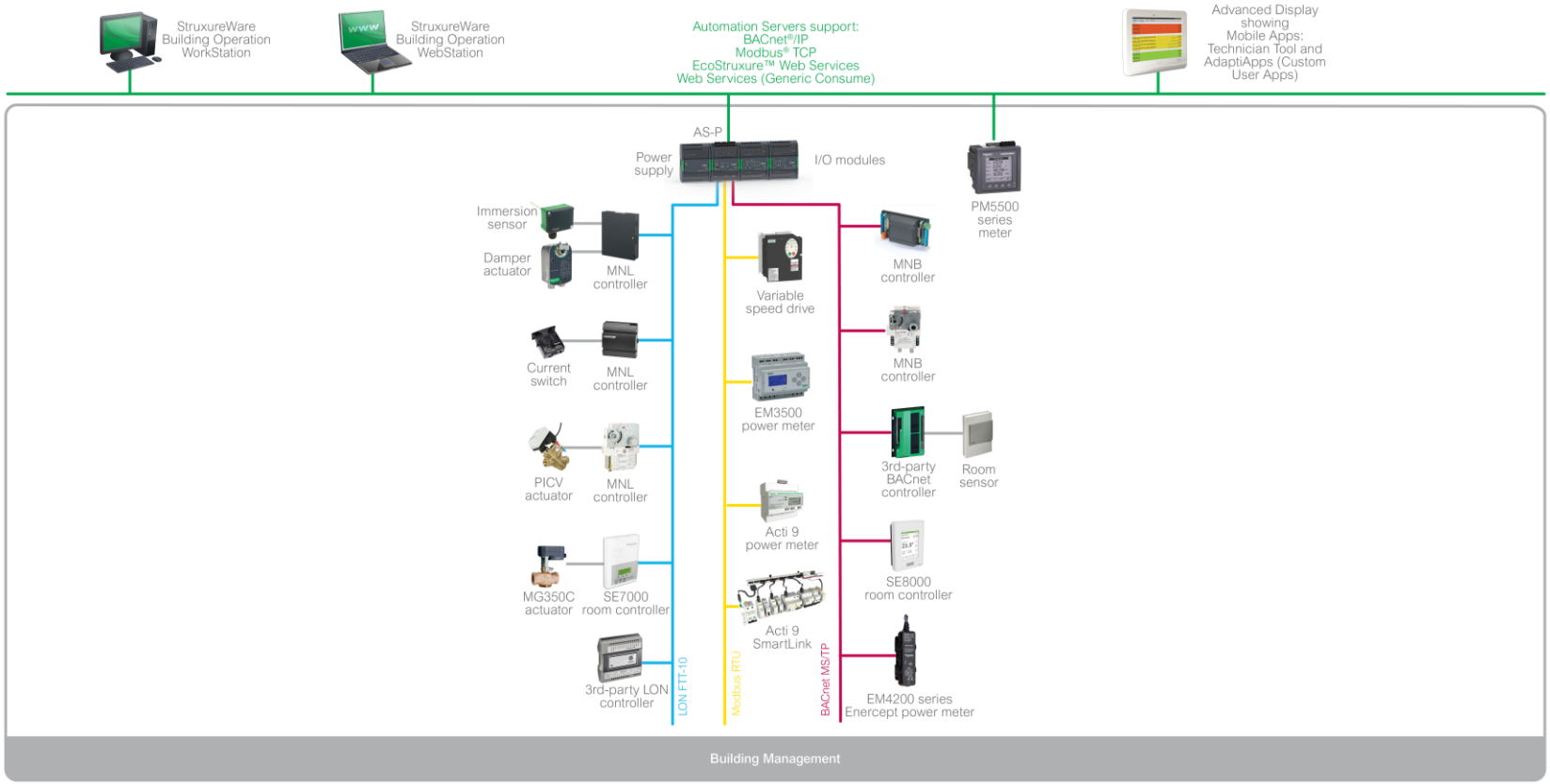
Enterprise Architecture – Single Automation Server (with MNB & MNL controllers)



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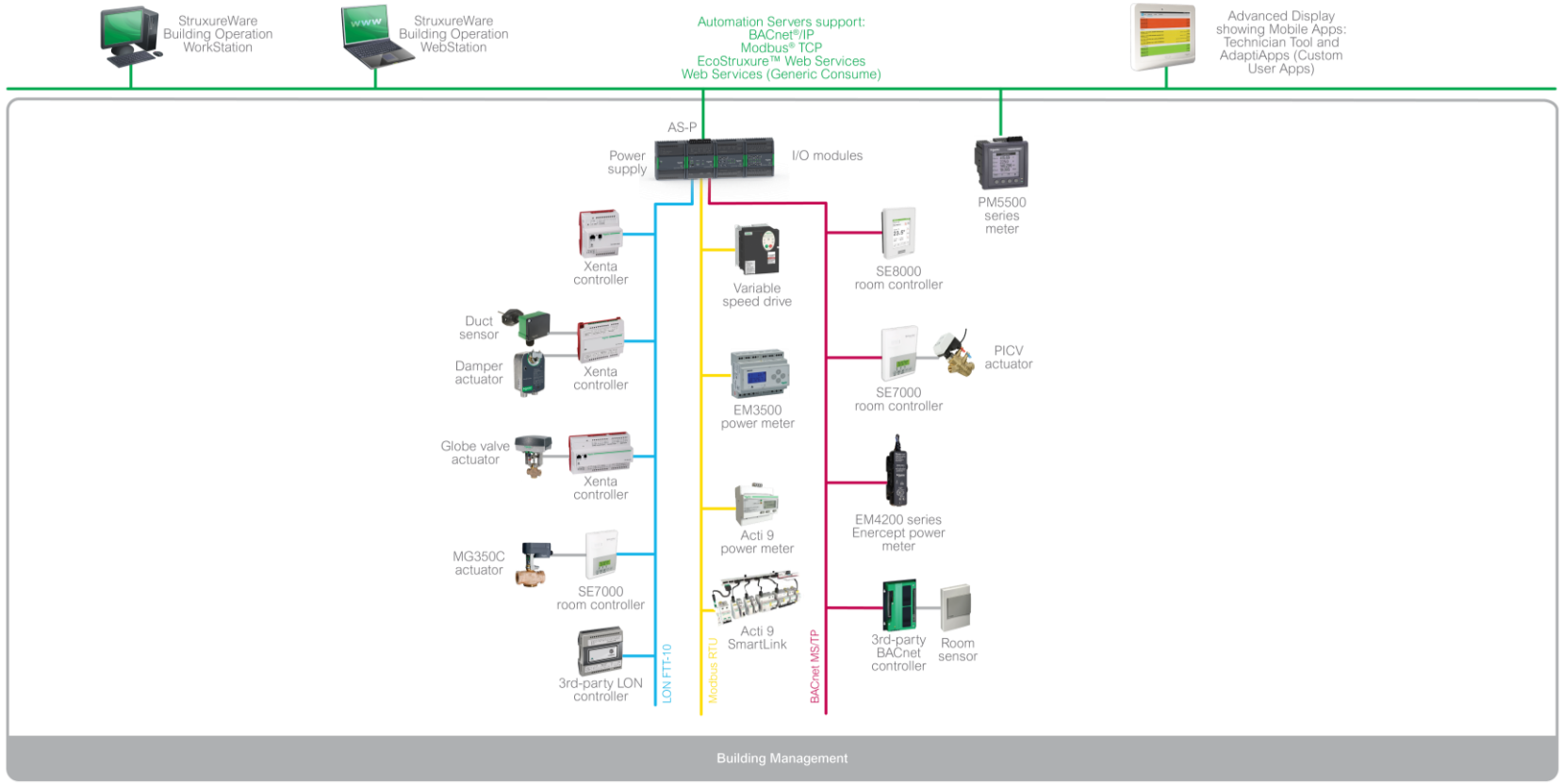
Enterprise Architecture – Single Automation Server (with Xenta controllers)



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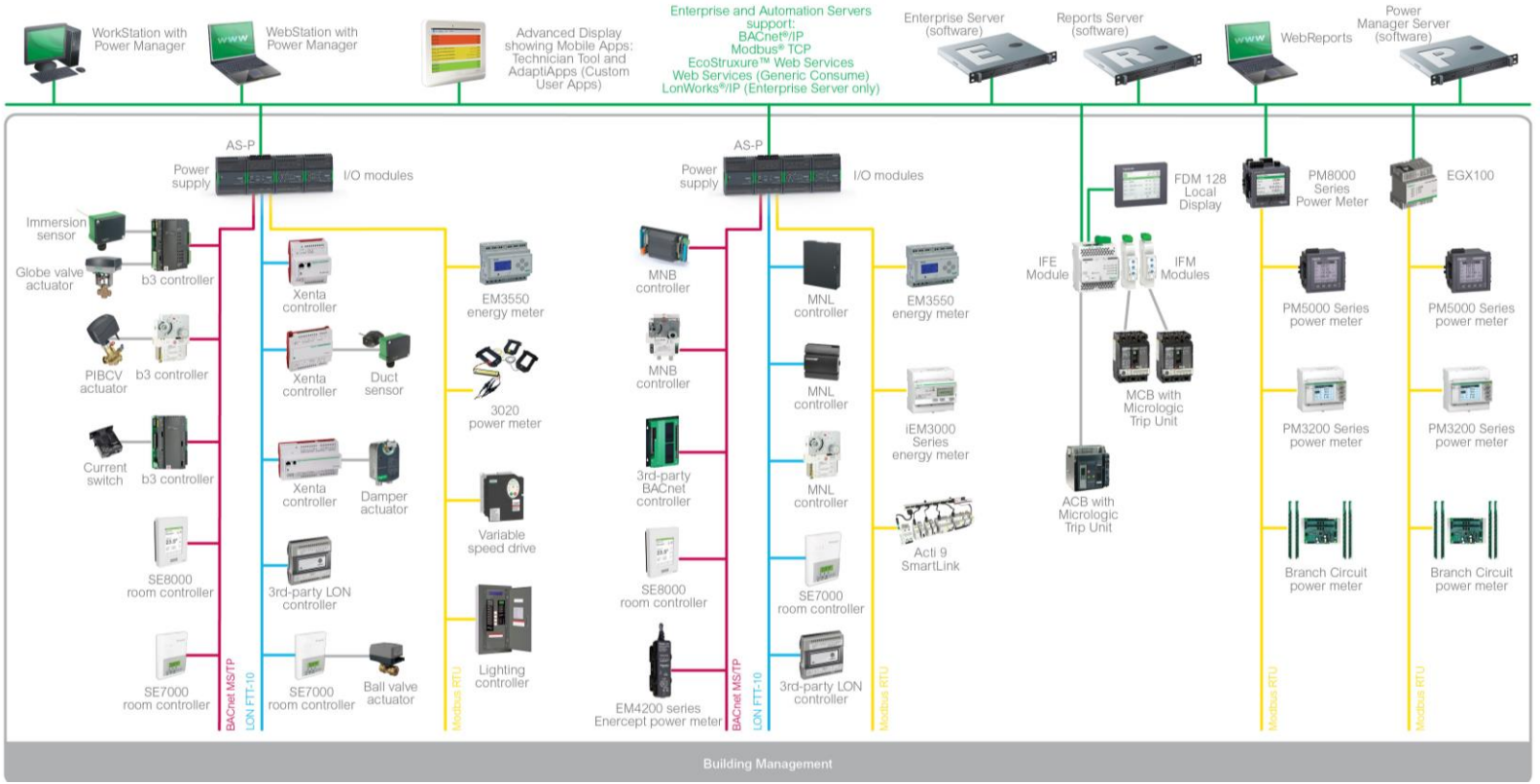
Enterprise Architecture – Multiple Automation Servers with Power Manager



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Gain insight across systems and access actionable information for ROI-driven decision making

More Efficient.
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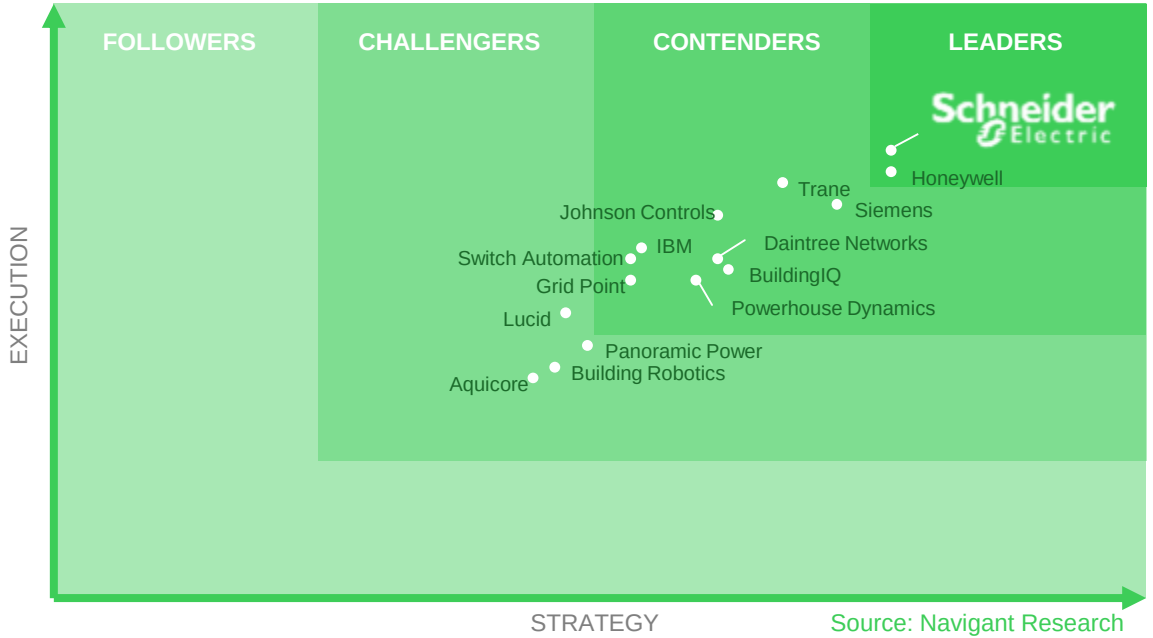
"Schneider Electric has demonstrated strong leadership in its integrated intelligent building platform approach and continues to innovate through deepened capabilities in building analytics."

-- 2016 Navigant Building Energy Management Systems report

NAVIGANT RESEARCH

Learn more here.



Source: Navigant Research

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Innovation At Every Level

- Proven **building expertise** delivering best-in-class solutions
- **Scalable, open and secure** building IoT platform
- 170+ years of **energy innovation**
- A global presence with local teams in **more than 100 countries**

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World's most sustainable office building

PM's Office, Malaysia
High-performance green building

Shedd Aquarium, US
Integrated energy management

GwangHwaMun D-Tower, South Korea
Highly optimized and energy-efficient

New South Glasgow Hospitals' Campus
Largest critical care in Scotland

Hilton Worldwide
Energy savings at global hotels chain

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