



Drive Workplace Sustainability with Unified Building Technologies – A Cisco and Schneider Electric Solution

Enhance the efficiency and sustainability of your buildings by accessing performance insights and improving operational control.



Smart technology and buildings of the future

Managers of commercial real estate and hybrid workplaces face unprecedented challenges in operating their facilities while also delivering occupant satisfaction. But what if there were a way to gain visibility from both IT and OT data? What if a single solution made it possible to manage your building systems effectively, reduce energy consumption and increase sustainability?

Insights and action for smarter, more efficient buildings

Cisco and Schneider Electric have joined forces to meet these needs. Their solution—which connects the powerful Cisco Spaces and EcoStruxure™ Building Operation platforms—creates hyper-efficient buildings that helps control rising energy costs and achieve net-zero carbon goals. It offers insights to maximize building use and occupant productivity. And its unified approach to digitization makes it possible for building owners and facilities professionals to manage the IT and OT layers through a single pane of glass.





Benefits

- Increase sustainability: Reduce energy consumption and carbon emissions by monitoring electrical systems, fine-tuning energy use, and meeting target standards such as LEED, BREEAM, and Fitwel
- Create people-centric spaces: Boost occupant comfort and productivity through higher service levels and faster response times, while optimizing building health and increasing property values
- Reduce energy: Manage HVAC and lighting based on real-time occupancy data
- Save time and resources: Integrate, monitor, and manage IT and OT data and view analytics-driven insights in a single, mobile-enabled view
- Increase resilience: Deploy solutions faster through the straightforward integration of Cisco IT network technology and EcoStruxure Building Operation supported with robust cybersecurity

Trends and challenges

- 37% of the world's CO2 emissions come from buildings¹
- More than 30% of a building's energy is wasted²
- Greenhouse gas emissions have increased 90% in the past 90 years³
- 65% of job candidates are more likely to work for companies with robust environmental policies⁴
- COVID-19, digitization/digitalization, and Industry 4.0 have accelerated development of building capabilities, with energy management today's largest software spending category⁵
- Total building stock is projected to grow from 102.9 to 124.7 billion square meters by 2029⁶

These days, facilities managers, building owners, and systems integrators are challenged to:

- Achieve net-zero carbon and building sustainability goals
- Reduce energy consumption yet enhance the workplace experience
- Create healthy buildings and maximize occupant/tenant satisfaction
- Leverage vast amounts of digital data—to do more with fewer resources
- Engineer solutions more rapidly, improve software performance, and upgrade systems more easily
- Deploy robust cybersecurity and meet ever-stricter compliance requirements



Sources

¹ 2021 Global Status Report for Buildings and Construction

² U.S. Environmental Protection Agency, 2020

³ EPA Global Greenhouse Gas Emissions Data

⁴ Reuters Sustainable Business

⁵⁻⁶ Guidehouse Insights Leaderboard Software



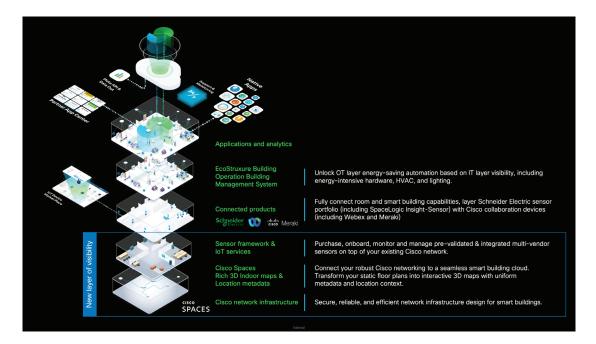


How it works

The Cisco and Schneider Electric Digital Building Solution brings together Cisco Spaces—cloud-based software that leverages Cisco® network infrastructure, collaboration devices, and data from 3rd party solutions and EcoStruxure Building Operation, Schneider Electric's building management system (BMS) platform. (See Figure 1.)

Cisco Spaces—from its Wi–Fi access points, sensors, collaboration devices, and 3rd party solutions—provides real-time location insights every 30 seconds for building occupancy, temperature, humidity, light, and sound levels. Enabled by Schneider Electric's Building Data Platform, an independent data layer facilitating the integration of IoT data, this information is integrated with EcoStruxure Building Operation BMS which controls energy-saving automation of building systems, including hardware, HVAC, lighting, and blinds for the precise number of people in a room or space.

Figure 1 The Cisco and Schneider Electric Digital Buildings Solution



This sustainable buildings solution helps reduce energy consumption, increases occupant comfort and productivity, and provides operational efficiency through automation and continued adjustments of asset management and environmental monitoring.

Operational highlights

- Hyper-efficiency: Data is integrated across the Cisco and Schneider Electric platforms and connected solutions such as Webex. The solution monitors and analyzes performance in real time and automates many operations. EcoStruxure Building Operation optimizes energy consumption and operating costs, while reducing carbon footprint and continuously responding to changes in the environment. These capabilities allow systems integrators and Schneider Electric EcoXperts™ to accelerate deployment and commissioning and to offer feature-rich and compliant digital building solutions.
- Sustainability: The solution supports efficiencyfocused certifications such as LEED, BREEAM, and
 Fitwel. Organizations can retain existing building
 management solutions and products during system
 upgrades, reducing total cost of ownership. It also
 complements Schneider Electric's EcoStruxure
 Connected Room Solutions, which includes the
 SpaceLogic™ Insight-Sensor, a six-in-one ceiling sensor
 that delivers energy when and where it is needed.
- People-centricity: Capabilities, such as needs-based HVAC and advanced scheduling, improve occupant comfort and productivity. Sensors monitor air quality and physical presence to optimize building and occupant health. Enhanced security and access controls improve safety during the workday. Data from alarms, rich graphic visualizations, and integrated analytics raise service levels and shorten response times.
- Resilience: The platform supports web-based remote logins, mobile-friendly access from any device, and cloud infrastructure. IP-based architecture and future-ready cybersecurity support continuous business operations. In addition, users can rezone building floorplans as their needs evolve with EcoStruxure Connected Room Solutions.





Use cases

Reduce energy use	Energy for HVAC and lighting is used only where and when it's needed
Capture occupancy data	Real-time visibility into utilization of different areas of a facility
Simplify system management	Unified platform for access and control of building management systems in a single pane of glass
Do more with fewer resources	Automated, continuous HVAC system adjustments to maintain comfort while reducing energy cost
Ensure occupant satisfation and well-being	Manage HVAC and lighting based on real- time occupancy data
Deploy smart buildings	Leverage existing systems with added functionality to increase building performance and comfort

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The Cisco and Schneider Electric advantage

Strategic innovation partners for more than 15 years, industry leaders, and respected for their commitment to sustainability, Cisco and Schneider Electric deliver market-spanning solutions worldwide. They have created digital building solutions in hospitality, education, healthcare, and residential construction. Closely related areas of focus include industrial automation, edge and IT, and all phases of electrical utility operation.

Learn more

To learn more, please contact your Cisco or Schneider Electric representative. You can also visit Cisco and Schneider Electric alliance sites at <u>Schneider Electric web site</u> or Cisco web site.