SAUTER Vision Center

Building Intelligence Hub

SAUTER

Creating Sustainable Environments.

The integration platform for smart spaces

Focus on digitalisation concepts

Traditional building management has evolved into the IT system in the building. Building automation networks the individual equipment systems and thus offers the data basis for digitalisation solutions for operators and users alike.
Many projects involving direct exchanges with our customers have made SAUTER Vision Center (SVC) what it is today: A universal building management and integration platform for energy efficiency, operational safety and value preservation.

The web-based software solution is at the heart of digitalisation concepts in smart buildings. In addition to the building management and energy monitoring, SVC now includes other disciplines such as energy management and building analytics, maintenance, ticket and area management, as well as fault detection and diagnostics (FDD).

Achieve your performance goals

REAL ESTATE MANAGEMENT

- Increased user satisfaction
- Securing the capital investment
- Cost transparency and savings effects

FACILITY MANAGEMENT

- Increased availability of the plant
- Fault prevention instead of reaction
- Everything at a glance: plant operation, reports and ticket management

ENERGY MANAGEMENT

- Continuous control of energy consumption and of resulting costs
- Overview of sustainability goals and CO_2 reductions at all times
- Energy inspections of ventilation and air conditioning units
- Support of corporate certification according to ISO50001 / 50002

NEW: BUILDING ANALYTICS

- Real-time analysis of the plant behaviour to identify operating pattern and setpoint deviations
- Proactive services for optimum room comfort and continuous plant operation

Manage more efficiently

Modules and functions that help you

Operation/FM

Dashboards with consolidated information provide an instant overview of the plant status and the optimum operation in the form of **KPIs**. In the event of deviations, detailed information enables a fast and targeted **action** to restore the desired operating status.

Automation

The automated **operation management and plant monitoring** ensures the comfort requirements of the users while complying with economic, environmental and health conditions. Regulatory requirements can be fulfilled via simple **logging** and comprehensive **reporting**.

Planning

Predefined operating procedures based on **scenarios** simplify operation. **Preset programmes** automatically regulate room comfort. Building and **room usage** can be tracked.

Maintenance

Continuous and predictive **maintenance** prevents unplanned shutdowns and downtimes. With the integrated **ticket management**, maintenance can be planned, executed and documented. Maintenance tickets are created automatically in the event of anomalies in the operation. This creates **transparency and traceability** for all maintenance work.

Life Science/Security

Increased requirements for hospital, laboratory and pharmaceutical plants are fulfilled with special functions and settings. For example, **audit trails**, validation reports and extended security requirements for passwords provide the basis for meeting the requirements of **CFR 21 Part 11 of the FDA** for plants and their processes.

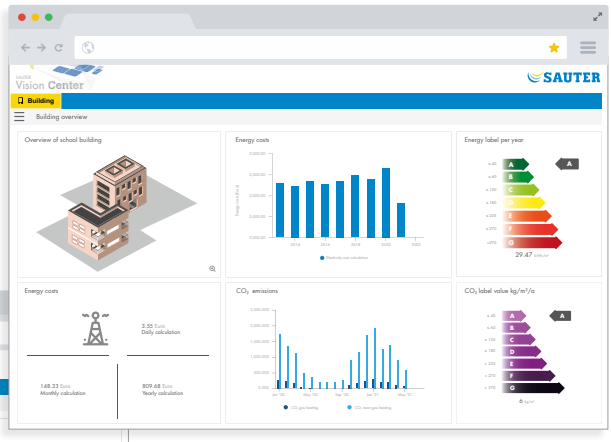
Energy management

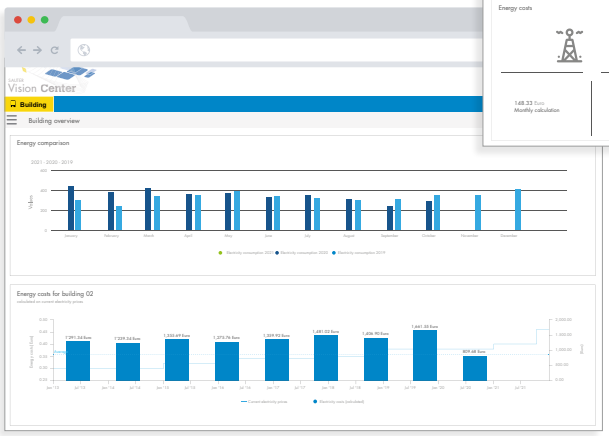
Long-term analysis of energy consumption, room comfort and plant availability

Energy monitoring

The monitoring included in the energy management provides the basis for the **collection of meter data** and the automatic calculation of consumption e.g. on an hourly, daily, weekly, monthly or yearly basis. You can supplement this meter data with additional parameters such as volume or energy mass units (m^3 or kWh) for heating meters, or with current energy prices. In this way, all information about **energy costs or CO_2 emissions** can be viewed on your dashboard at any time. You can also define energy or CO_2 labels to classify the various plants and buildings. The automatic export of **energy data and reports** is included as a standard function.

Energy monitoring dashboard with widgets such as KPIs, energy labels, current consumption information as well as diagrams for an overview





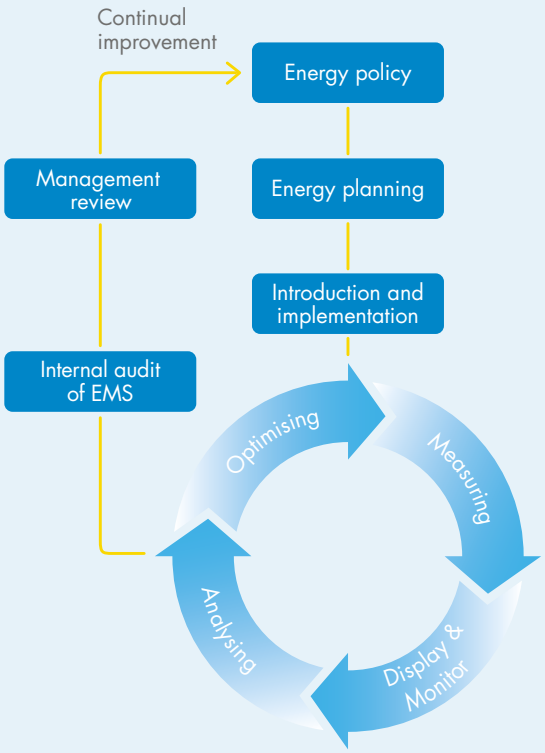
Charts to show energy consumption, resulting costs and comparisons with target figures or previous periods make monitoring easy

Energy management

The energy management offers detailed **navigation** options as well as other **dashboard displays and data visualisations**. Use scatter plots and carpet plots for long-term analyses to identify optimisation potential and monitor manufacturer specifications. To do this, the energy management accesses the comprehensive data sets ("big data") in the SVC database.

Track energy flows in your building using a SANKEY diagram. Or use a histogram (frequency distribution with calculation of the Gaussian normal distribution) to check the control quality of the room temperature during usage times. This helps you to define optimisation measures. Use this toolbox for your **energy and plant optimisation**, from analysing plant behaviour to checking manufacturer specifications.

Energy management is required to meet defined targets and to control company measures for energy and CO_2 management. With SVC, companies are supported in the certification according to **ISO50001** or the energy audit according to **ISO50002/EN16247**.



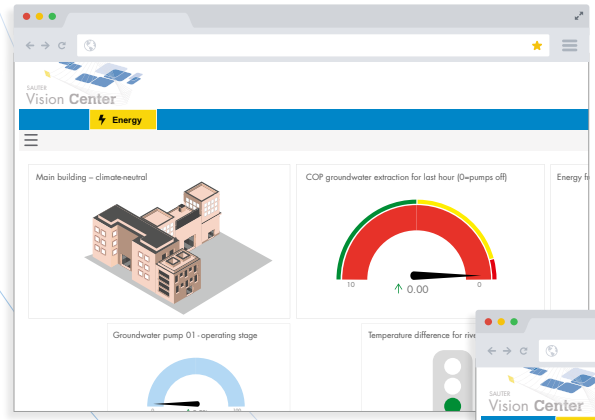
PDCA process cycle (Plan, Do, Check, Act) for energy optimisation according to ISO50001

Building analytics

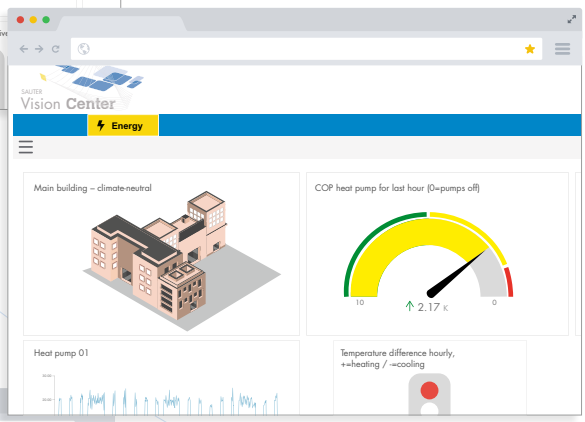
Real-time operating information, fault detection and diagnostics

Analytics

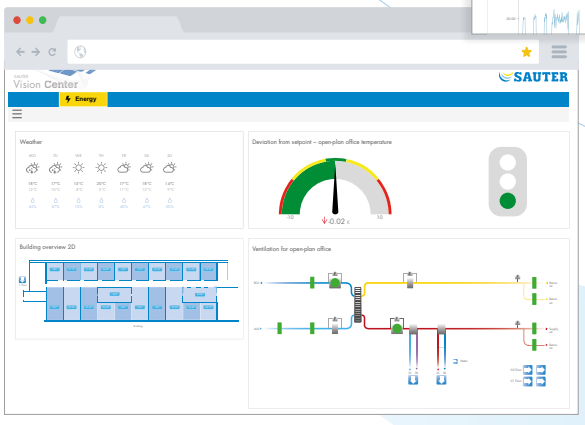
The new **analytics functions** report immediately if plants are running outside predefined **operating patterns**. It also detects if the room comfort deviates from defined specifications or if there are oscillations in switching operations (pumps, relays etc.). **Real-time analytics** condenses the amount of information and presents it in a generally understandable way. In addition, **alarm messages** can be sent via e-mail or SMS message. Through early detection and reporting, which enables **preventive measures**, the continuous operation of plants can be guaranteed.



Control of maximum temperature difference for water extraction and recirculation based on statutory requirements, as well as efficiency monitoring of heat pumps (COP)



Control of groundwater pumps and their switch-on cycles to ensure optimum pump operation and to immediately detect frequent switching on and off



Comfort monitoring in open-plan offices

Comprehensive system integration

Future-proof thanks to expandability and standards

SAUTER Vision Center has proven itself as the universal integration platform and future-proof option for all technical equipment systems in smart buildings and properties. These include systems for fire protection, video monitoring, lift control, access control and ERP software. The integration is standardised via BACnet, OPC, MQTT or application-specifically via REST API and cloud (in Microsoft Azure).

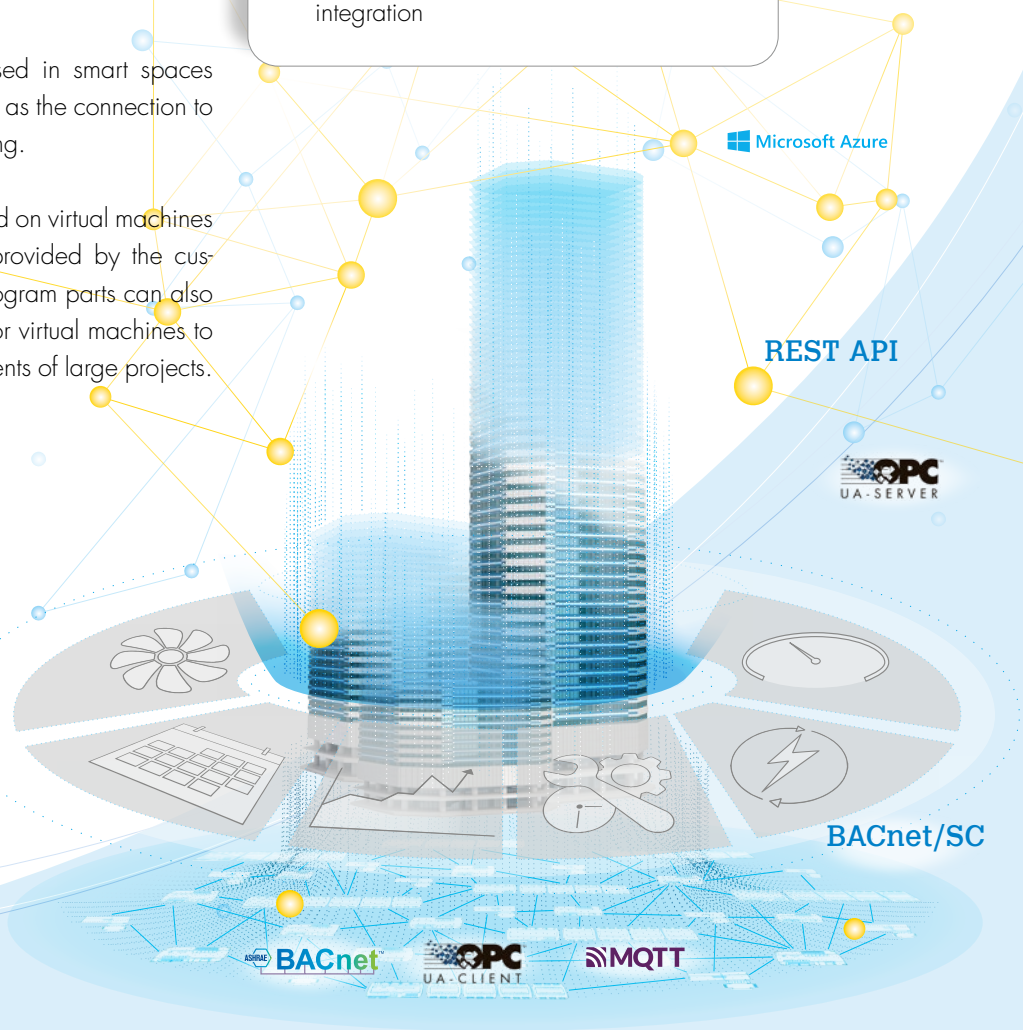
One of the most important standards in the building is BACnet. SVC's certification according to B-XAWS already offers customers today the highest degree of flexibility and security for future connections of equipment systems.

SAUTER Cloud applications used in smart spaces use the MS IoT Edge Connector as the connection to SVC, the IT system in the building.

Of course, SVC can be operated on virtual machines and use the IT infrastructures provided by the customer. If required, individual program parts can also be run on separate computers or virtual machines to meet the performance requirements of large projects.

CONNECTIVITY

- BACnet B-XAWS Cross Domain certification rev. 1.18
- BACnet/SC ready
- OPC UA client with UA/DA gateway and OPC UA server
- IoT client based on MQTT protocol
- MS IoT Edge Connector for secure connection to the SAUTER Cloud
- REST API for application-specific integration



Reference project

Bavaria Towers, Munich

The Bavaria Towers are among the most spectacular construction projects in Munich in recent years. All buildings are sustainably certified and equipped with state-of-the-art building automation from SAUTER, embedded in the outstanding architecture of Spanish architectural firm Nieto Sobejano Arquitectos from Madrid.

The high-rise ensemble, consisting of three office towers and a hotel tower with heights between 46 and 83 metres, offers fantastic conditions for companies and guests who value first-class infrastructure and comfort. The buildings, designed as green buildings, form a harmonious ensemble that will enhance and reshape Munich's eastern edge.

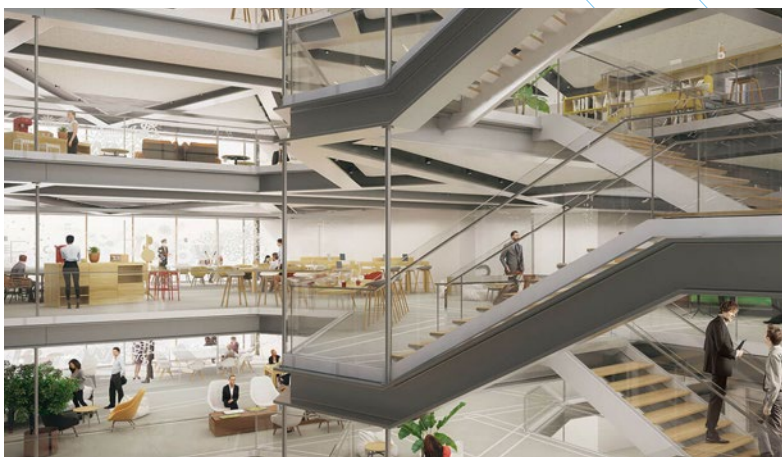
Depending on the energy and space concept of the individual buildings, bespoke control strategies such as weather forecasting control, but also extensive consumption measurement with energy management and the green building monitor are used. The desired high sustainability standard, which is verified in the building certification according to DGNB and LEED, absolutely requires solutions such as sophisticated technical building management.

SAUTER Vision Center is used as the building management system for the Bavaria Towers. It provides the visualisation, monitoring and control of the primary plants, as well as optimum comfort in conjunction with the integral room automation.

In one of the towers, the "Blue Tower", SAUTER Vision Center also helps to keep the cost of alterations to the office space to a minimum. The "Flexible Room Automation" function is used to reallocate room segments, i.e. office sizes can be flexibly designed and adapted. Adjustments can be made during operation, making the air conditioning immediately ready for use again. This saves time and money and is possible without structural changes to the hardware or engineering work within the rental space.

Reference project

SHiFT, Paris



The SHiFT office complex is located both in Paris and in the suburb of Issy-les-Moulineaux. This is not the only special feature of the building, which was brought up to the latest technical standard with systems from SAUTER. Nestlé now has a registered office in this new building.

SHiFT comprises 46,000 square metres of office space on seven floors, providing room for 3,600 people. Thanks to its refurbishment, the building is on its way to becoming a Smart Building, an energy-efficient building with a state-of-the-art design. SAUTER has become part of this success story thanks to its experience in building automation.

Using the web-based building management solution SAUTER Vision Center in HTML5 standard, comfort and well-being are tangible for employees and visitors in the building complex. SAUTER Vision Center integrates window contact monitoring, ventilation, lighting and window blind control, as well as time-dependent setpoint specifications. The SAUTER modulo system family served by SVC with the ecos504 room automation station ensures the optimisation of energy consumption through precise control options.

Additional energy meter data is monitored and visualised with SVC's energy management module, and is used for further energy optimisation processes.

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Key Facts

- Building & energy management
- Plant operation and optimisation
- Planning of maintenance schedules
- Real-time analytics

With user-specific task areas for energy managers, facility managers and building owners.

See for yourself!

Simply scan the code and register for the SAUTER Vision Center demo version!

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