



## case study

# OAS's web portal solution for an event center

The Rheinhalle culture and event hall is located on the outskirts of Leopoldshafen, Germany. The hall is suitable for a variety of public events (e.g. concerts, theater performances, balls, assemblies and flea markets). The event hall of the Rheinhalle is approx. 380 m<sup>2</sup> in size and has a stage area of 100 m<sup>2</sup>. In addition, there is a fully equipped kitchen and various side rooms.

### THE CHALLENGE

Ventilation systems in event halls are currently a critical discipline. The existing HVAC facilities needed a complete refurbishment to conform with the newest regulations for event buildings. At the same time, the building automation of the HVAC and fire protection system were to be replaced and upgraded.

A strong emphasis was on the operator interface for the facility manager. Intuitive operation with a minimal requirement of IT knowledge was a basic requirement. Fault and alarm messaging was essential to facilitate efficient response by the facility manager.

### THE OPEN AUTOMATION SOLUTION

With the OAS WEBvisuPORTAL the customer opted for an automation solution service with a cloud-based interface. This provides extensive advantages. Multiple operator access options via web services (local or remote). No extra software is needed just an internet access and a browser. The visualization can be accessed from anywhere. No separate server or server structure is required on site, so there is no need for local care and maintenance.

The modernization of the building automation and ventilation system was completed in 2020. Customized 3D modeled graphic user interface of the entire building complex including HVAC equipment and controls was instrumental to the success of the project. The property, building management system, facilities and plants can be visualized schematically or in detail presented on the operator workstation or via web access.

As a Tridium authorized distributor, OAS supplied the required Tridium BACnet controller JACE-8000® for the modernization of the building automation. Equipped with AMEV certificate and BTL certificate, the component with BACnet interface is an OAS top seller from the modular Niagara 4 Framework program. Several JACE controllers and distributed IO-fieldbus-modules were used to seamlessly integrate the heating and ventilation plants into the building automation system.



*“We listened to the customer and identified his pain points. With the combination of the OAS cloud service and solution-oriented consulting we realized higher facility availability with increased personnel efficiency.”*

Ralf Rostock  
Managing Director  
OAS Open AutomationSystems GmbH

### FAST FACTS

**Building Type:** Event and conference hall

**Client:** Eggenstein-Leopoldshafen, Germany

**Project Type:** Cloud based Open Building Management System and HVAC controls

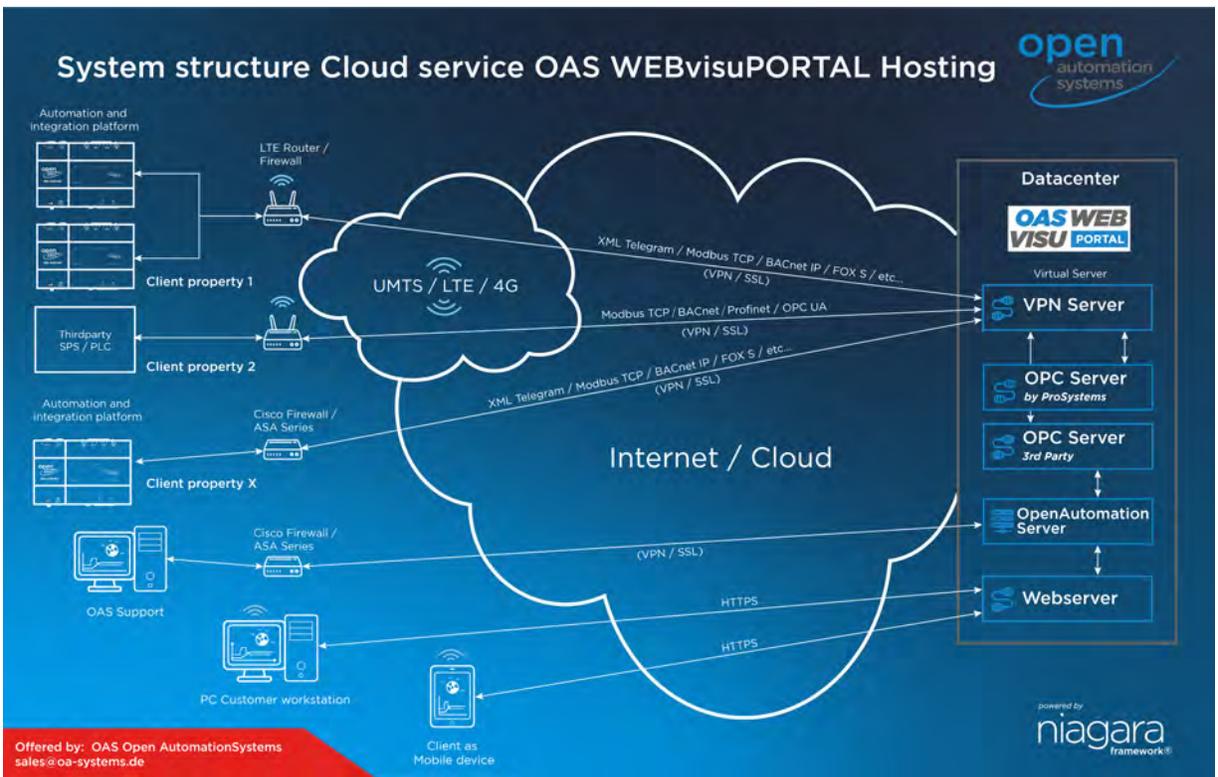
**Project Scope:** Monitoring and control of HVAC, sliding shutters, lighting and audio system with almost 600 data points. Diverse operator access via web services.

**Key Technologies:**

Niagara Framework, BACnet, multiple distributed OAS I/O-fieldbus-modules, cloud based server hosting, OPC, M-Bus, fallback visualization system installed on a controller.

**Authorized Distributor:** [OAS Open AutomationSystems GmbH](#)

**System Integrator:** [PGA Automation](#)



OAS takes server responsibility in a customer focused cloud solution

For additional safety in case of internet failure an on-site visualization system was installed on one of the controllers with a touch panel as an emergency control center.

**THE RESULTS**

The Rheinhalle is now equipped with a modern and state-of-the-art Building Management System with an intuitive Graphic User Interface. The monitoring and operation via web services of individual lights, sliding shutters, heating, cooling, ventilation, and audio centralized in one system makes monitoring and maintenance more efficient.

Fault message and alarm annunciation can be forwarded via e-mail or SMS based on escalation groups, on-call schedules, and delay times. This reduces down-times and increases workload efficiency of the personnel.

On site no own server is required reducing time-consuming and cost-intensive care and maintenance. This ensures that hardware and software are always kept up to date without any customer's effort. Data loss in the event of system failures is a thing of the past, and system reliability is up to 100 percent.

**ABOUT TRIDIUM**

For over 20 years, Tridium has led the world in open-protocol application frameworks for operational data. Our products allow diverse monitoring, control and automation systems to communicate and collaborate in buildings, data centers, manufacturing systems, smart cities and more. We create smarter, safer and more efficient enterprises and communities - bringing intelligence and connectivity to the network edge and back.

**ABOUT OAS**

OAS Open AutomationSystems GmbH is your Tridium Authorised Distributor for open energy management and building automation systems for the continuous digitalisation of technical building equipment. Our cloud-based portal solutions offer a secure, reliable and trouble-free system integration with a high level of ease of use. Our modular Niagara-Framework® components and OEM product developments communicate with BACnet and other common protocols and offer limitless integration from the field level through automation level up to the cloud.

