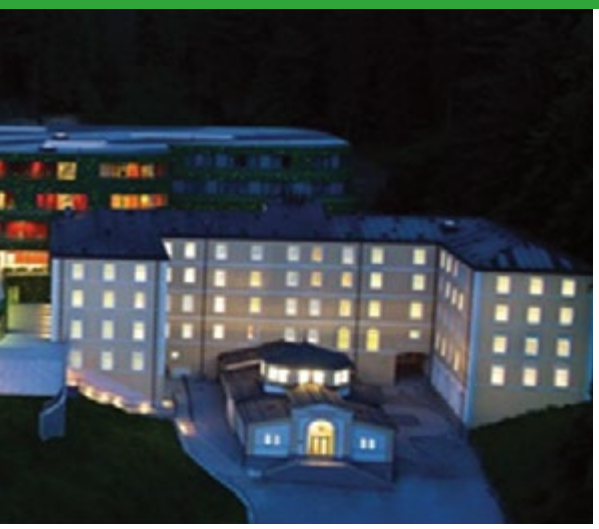
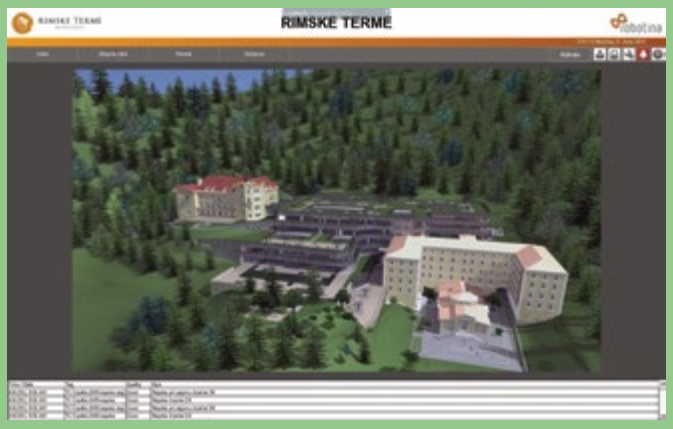


Rimske Terme Resort
Rimske Toplice, Slovenia

Customer Success Story

Rimske Terme
Rimske Toplice, Slovenia



An Overview Screen of Rimske Terme Resort's BMS

About Rimske Terme

Rimske Terme is a luxurious Business, Wellness and Spa Resort, located in the town of Rimske Toplice, Slovenia ("Rimske Toplice" being Slovenian for "Roman Spa"). The location's thermal pools have attracted visitors for centuries, with evidence of visits during the Roman Empire. The Rimske Terme resort is comprised of several buildings including Hotel Sofijin Dvor ("Sofia's Palace", with 43 rooms and a restaurant), Hotel Rimski Dvor ("Roman Palace", with 68 double rooms/suites, pools and a health center with professional medical supervision) and Hotel Zdraviliški Dvor ("Spa Palace" with 75 double rooms/suites and an additional health center). The resort, which also contains a conference center, is mostly known for its spa facilities based around the area's historic, healing thermal baths.

In 2010, the resort started on a project to update their Building Management System (BMS).

ICONICS Software Deployed

Rimske Terme, working with system integrator, Robotina d.o.o., selected ICONICS GENESIS64™ HMI/SCADA software for their new Building Management System integration project.

Project Summary

As part of its planned BMS installation, Rimske Terme wanted to integrate a number of existing automated systems, including hotel room temperature regulation, room emergency/security functions, air conditioning, lighting, and diesel fuel use. They also wanted central control over their heating/cooling (heat pump) station, pumping station, thermal water pump station and electric power station operations.

Systems Integrated:

- Hotel Room Temperature Integration
- HVAC Systems
- Security Systems
- Lighting Systems
- Thermal Water Pump Station
- Fuel Storage
- Electric Power Stations

The hotel room automation required a BMS that could adapt to a few differences in each location. For instance, the heating/cooling in Hotel Sofijin Dvor and Hotel Zdraviliški Dvor is based on air diffusers, while in Hotel Rimski Dvor, it is accomplished via fan coils.

These changes are easily taken into account as the BMS is able to help set desired parameters and then monitor and regulate them. In addition, each room's security/alarm (SOS) functions are also handled via the BMS.

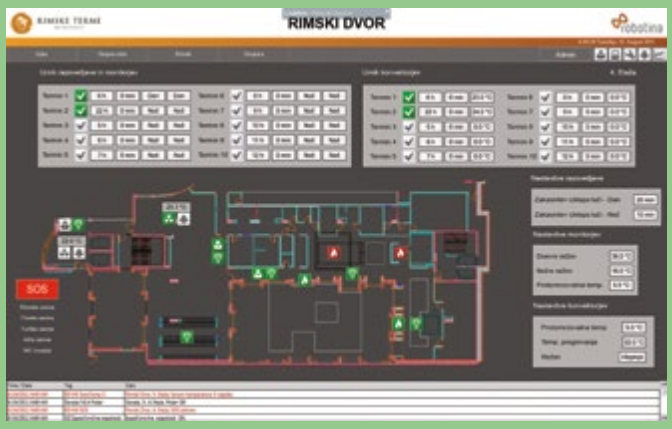
The parameters for all heating/cooling systems and subsystems are set through the BMS. The BMS provides continually updated statuses for each system, allowing the system administrator to adjust parameters for optimal regulation. For instance, with the air conditioning system, the BMS can automatically switch each HVAC control on or off and between operating modes (Economy, Comfort, etc.), following prepared operating schedules. Each HVAC control module also includes a panel that allows users to set temperatures locally.

Rimske Terme has connected GENESIS64 to programmable controllers through an OPC Server. Systems and subsystems are mutually connected or integrated. For example, presence sensors provide information for heat/cooling modes and for switching lights. The complete system consists of more than 200 programmable controllers with CAN bus-connected expansion I/O modules. The controllers communicate between themselves and with the monitoring system over an Ethernet network.

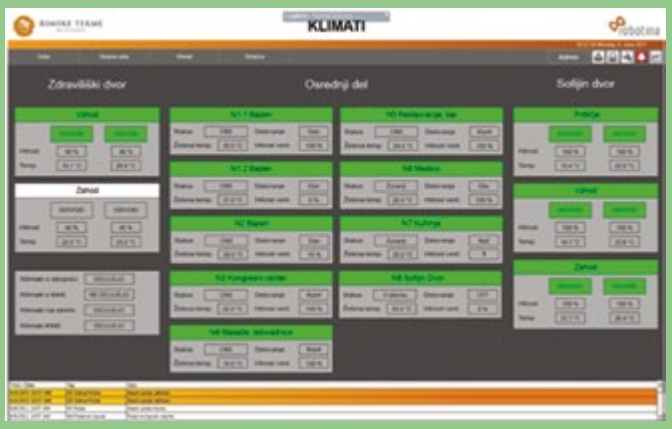
Benefits of the System

As part of the BMS implementation, Rimske Terme wanted to ensure energy efficiency within its hotel rooms. Each room includes a card holder/sensor which can detect the presence of a hotel guest and can then automatically start heating or cooling the room, as needed. In addition, each room contains sensors for detecting open windows, which are connected to the automated system and which can stop heat or cooling, further reducing unnecessary energy consumption.

As a whole, conditions are set to fit the needs of the resort's demanding guests. This means that,despite providing desired temperature regimes, the BMS also uses adaptive scheduling, integrated with multiple functions,to provide optimal, energy efficient performance.



Lighting and Fan Scheduling per Floor of the Resort



Oversight of Air Conditioners

Since installing GENESIS64, Rimske Terme has remarked about its "simplicity of use" and the benefits of allowing for remote control. As a result, the resort has expanded its management stations, including one in hotel reception and another mobile station for maintenance purposes, all connected for remote operation and password-protected for secure access.

Conclusion

GENESIS64 provides Rimske Terme and Robotina d.o.o. with a building management software solution as stress-free as the resort's therapeutic facilities. The resort staff can relax a bit now too, thanks to ICONICS.