



New, Modern Hospital Maximizes Efficiency While Improving Health

Integrated solution from Schneider Electric

Rehabilitation Innovative Technologies (RIT) Hospital, in City Nigniy Tagil in the Sverdlock Region, is the first modern medical centre to be located outside of Russia's big cities. Supported by President Vladimir Putin, the hospital is the result of private and government co-financing: approximately one quarter of the total 4,4 billion rubles project is financed by the Russian government.

An important investment in the region's healthcare, RIT Hospital is a multifunctional medical centre equipped with the most sophisticated and high-tech European diagnostic, surgical, and rehabilitative equipment. The facility specializes in providing services for patients with musculoskeletal disorders and 15 other diseases that are common to residents in this region.

Large, diverse campus poses unique challenges

Located on a 6-hectare parcel, the medical centre's total area is 52,000 m²; the campus includes five medical buildings, an energy centre, plus a residence for staff and a hotel for visitors.

The expansive campus's diverse building types have different energy, financial and security challenges. Facility managers need to be able to manage and control each building, and eventually track energy consumption.

Integrated solution addresses complex issues

Schneider Electric worked with its partner of 10 years, STR Group, a leading system integrator in Russia's Ural region.

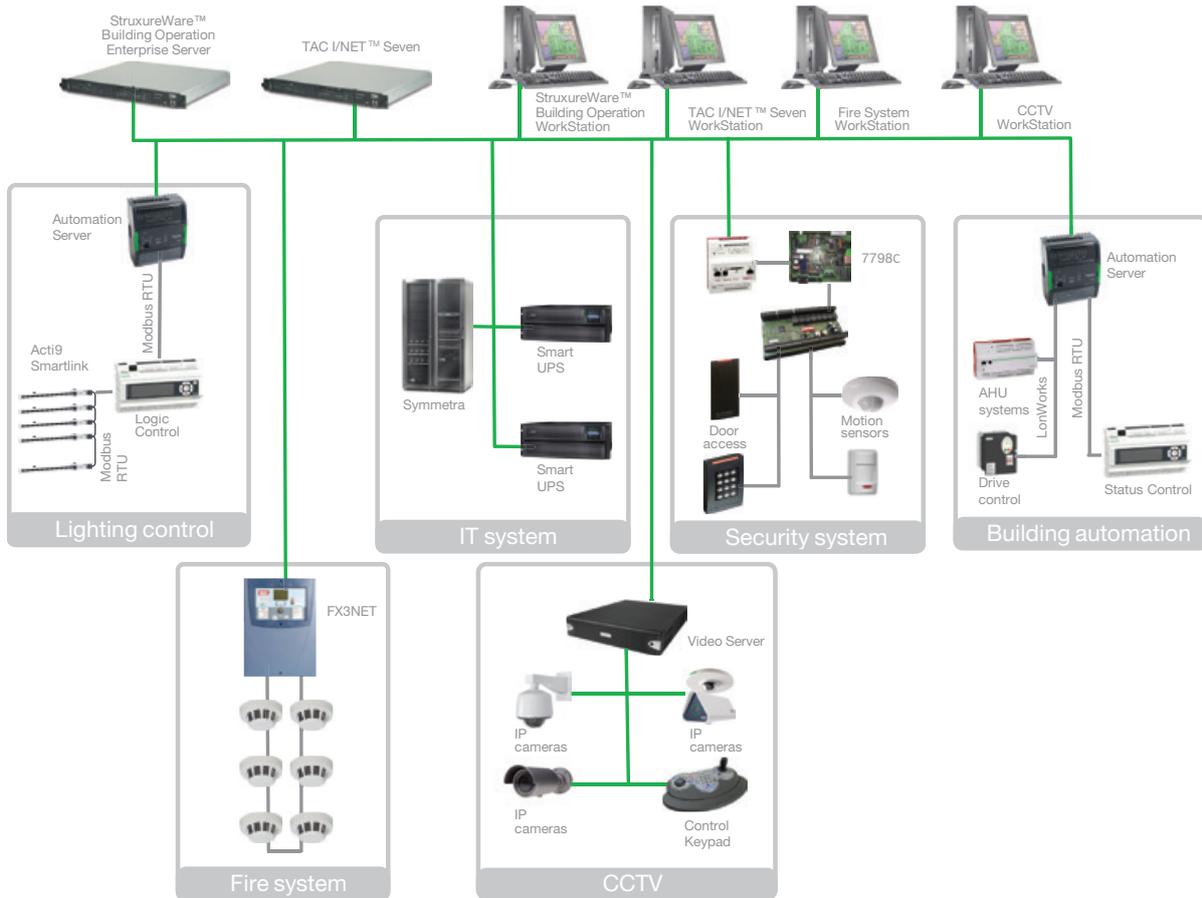
They provided a fully integrated building solution including control and monitoring of HVAC, lighting, IT systems, fire safety and security systems, and building automation.

SmartStruxure™ solution was selected as the integrated BMS to tie together all of the building systems and provide a single, easy-to-use interface to monitor and control the entire hospital campus. Powered by StruxureWare™ Building Operation enterprise level software, SmartStruxure solution is a state-of-the-art BMS with features and functionality to ensure the hospital runs at maximum efficiency, including:

- Single solution that integrates many disparate systems
- User-friendly interface that can be customised
- Remote monitoring and control via the web and mobile applications
- Native support for open protocols
- Simplified day-to-day operations



RIT Hospital integrated BMS architecture



A combination of Schneider Electric buildings, power and industry products were installed, including:

- StruxureWare Building Operation, including 13 Automation Servers and 100 Xenta controllers
- 70 TAC I/NET SCU units to monitor access and intrusion at 200 access points (doors)
- CCTV video provided with 120 Pelco Digital Sentry cameras with Esgraf user interface
- 10 fire panels and 3,000 fire and smoke detectors from Pelco Finland (ESMI)
- Other products include: ATV212 variable speed drives, Modicon PLC 258 & 168; OptiLine installation system; Merten switches; SmartLynk (KNX)

SmartStruxure solution is the single front-end to monitor all these systems through a common IP network (except for video cameras, fire alarms, door entry and Cisco alarm systems).

The Bottom Line

Initial feedback from RIT Hospital on the building management solution has been positive since its start up in 2014. SmartStruxure solution will continue to support the hospital as it expands in second and third phases planned for the coming years. The customer benefits, in summary, are:

- Simplicity through a single service contract with the system integrator and Schneider Electric
- Decreased complexity via a single competency centre for monitoring and controlling all buildings' systems
- Open architecture for easy integration of multiple systems
- A scalable solution poised for future hospital expansion

“ RIT Hospital now has a single center for managing several buildings with the possibility of increased scalability for the next construction phases.”

- Pavel Volchkov
STR Group, System Integrator

