STSI d.o.o. Integrated Technical Services Employees at Work at a Croatian Plant

STSI d.o.o.
Integrated Technical Services
Zagreb, Croatia

Main Screen for STSI d.o.o. Integrated Technical Services' Datacenter Control

About STSI d.o.o. (Integrated Technical Services)

STSI - Integrated Technical Services, located in Zagreb, Croatia, is involved with engineering, maintenance, research and production projects within the Croatian oil, gas and petroleum products industry. The company is part of the INA Group (Industrija nafte d.d.), which is a joint stock company owned by the Hungarian oil company MOL (47.16%), the Republic of Croatia (44.84%) and private and institutional shareholders (8.00%). Founded in 2001, STSI - Integrated Technical Services' goals are to:

- Develop safe, efficient and high quality property and technical/technological process maintenance systems based on market principles

- Improve technology and resource integration, as well as use their advantages in a competitive market approach, and

- Develop a highly expert work force as the basic value of the company in the frame of socially acceptable criteria and principles.

ICONICS Software Deployed

STSI - Integrated Technical Services, working with systems integrator, ECCOS inženjering (also of Zagreb), selected ICONICS' GENESIS32™ Web-enabled, OPC-integrated HMI/SCADA Suite, as well as the WebHMI™ Web-based Real-Time Automation and AlarmWorX™32 Multimedia (MMX) Distributed Enterprise-wide Alarm Notification add-ons.
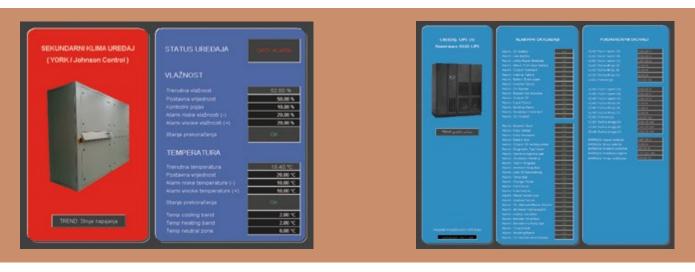
Project Summary

As soon as STSI - Integrated Technical Services decided that the datacenter in its Zagreb headquarters was becoming out-of-date, it made plans for its replacement. The facility is used to house computer systems and associated components, such as telecommunications and storage systems. The new datacenter was designed to include a backup power supply (an Eaton/Powerware UPS system consisting of two UPS devices working in parallel mode), YORK air conditioning units (which are connected to the public power network) and a soon-to-be-installed diesel generator.

STSI - Integrated Technical Services selected specific equipment for its data center, essential for the its continuous operation. The datacenter was designed to include state-of-the-art security, supervision and control. The company sought a SCADA system that would monitor and control crucial

parameters such as power supply, temperature/humidity, AC status/mode, UPS status/mode, branch circuit current, individual circuit breaker status, raised floor conditions (via water sensor), technical security (room doors/cabinet doors/air hatch open or closed, fire alarm status), and PLC status. ICONICS' GENESIS32 HMI/SCADA suite now integrates with STSI - Integrated Technical Services' Schneider Electric Premium TSX P57 PLC, which is connected to a Lampertz security room control panel and Schneider Electric/Merlin Gerin circuit breakers. GENESIS32 also interfaces with the company's Schneider Electric EGX400 Powerlogic Ethernet Gateway (connected to a Carel pCO2 OEM HVAC/R control for the YORK ACs

opening/closing, UPS failure, low battery and more. All alarm limits are stored in a Microsoft SQL database and can be edited by the administrator. ICONICS' ScriptWorX™ will execute a batch file that will shut down all equipment in the data center in emergency situations, such as a very high temperature alarm or a very low UPS battery alarm.

According to STSI - Integrated Technical Services, the HMI/SCADA system is highly user- and administrator-friendly. Operators can supervise all major and critical situations, as well as choose among active objects (UPS devices, air conditioners, branching cabinets, etc.). The system has also proved to aid in maintenance of the data-

An Air Conditioner Monitoring Screen in an Example Alarm Condition

UPS Overview Screen

via RS48); a Veris H704 Series Branch Circuit Current Monitoring System; Schneider Electric ION 7650 Power Meters and the Eaton/Powerware 9355 UPS (via SNMP). In unison with the company's Matrikon OPC Server for Modbus, ICONICS' GENESIS32 is used to collect data from all connected devices. AlarmWorX monitors for any unusual or extraordinary circumstances, including lack of/distortions in the power supply, deviations of the nominal voltage more than 10% (or of any threshold set by the administrator), current higher than pre-alarm or alarm values, AC unit fail, temperature/humidity out of allowed boundaries, technical security breach and/or error, water under the raised floor, circuit breaker

center. For instance, one can see the current consumption on each branch by opening a specific power cabinet, but can simultaneously open the specific Veris Industries Device and see any alarm conditions.

Conclusion

STSI - Integrated Technical Services is satisfied with its ICONICS solutions, helping to provide real-time supervision and control of all devices and environmental parameters (security, power supply, temperature, humidity, etc.) within its new datacenter.