Data Center Monitoring

Quality control and optimization of colocation services





The data center monitoring system implemented at Atman is one of the key systems that protects the telecommunications and IT resources of our clients. The system has been developed based on the SCADA (Supervisory Control and Data Acquisition) industry standard. The tasks performed by the system include: collection and archiving of live measurements of key parameters, their visualization as well as notification and alerting of incidents.

19,000 variables monitored 24/7

The system currently supervises over 19,000 variables 24 hours a day, seven days a week, ensuring the utmost security for clients' data colocated in Atman facilities. The system constantly monitors and records the operational parameters of the data center on three main levels:

- Client's individual server rack
- Colocation room
- Whole data center

Server rack monitoring

Security of client data and communication resources is ensured even on the level of individual telecommunications racks, where the SCADA system ensures monitoring of:

- Cooling air temperature
- Rack door opening
- Power consumed by the rack

Colocation room monitoring

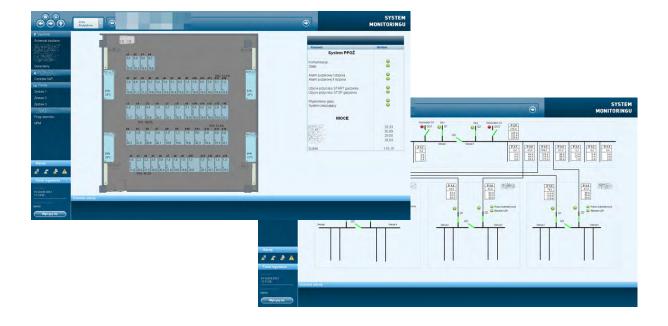
The next control level extends over the whole server room with telecommunication racks. On this level the system monitors:

- Humidity
- Voltage presence sensors
- Detailed voltage parameters
- Air-conditioning systems
- Water detectors

Overall data center monitoring

The whole data center environment is thoroughly supervised. Monitoring on this level includes:

- Power system flow tests
- Power network analyses
- Backup power supply system switching
- UPS systems operation
- Power generator sets
- Chill stores
- Fire dampers and fire systems
- Intrusion detection systems



Threat detection and minimization

The key element of the SCADA system is its capability of early threat detection. This is possible by the collection of data from various production subsystems within a single application. Implementation of a system which accumulates this various data significantly speeds up response times of technical services in case of potential failures. The system detects issues using active and passive alert thresholds, permits trend analysis and report generation, and also logs incidents history.

Benefits to clients

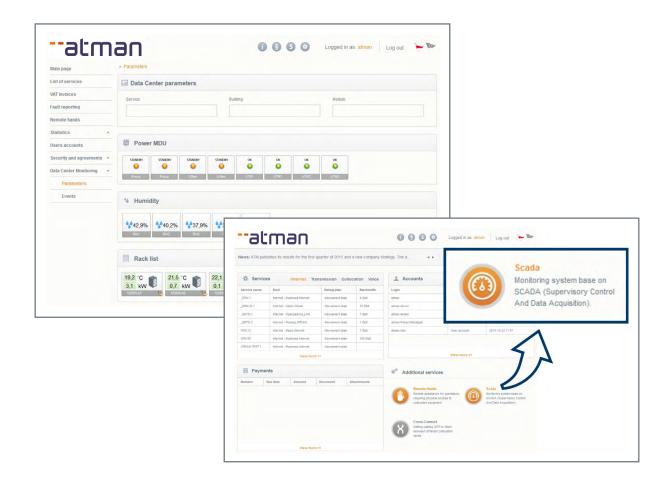
The monitoring system at Atman data centers not only helps us ensure security and high quality of service, but also enables our clients to monitor their devices directly. Through the Atman Customer Portal, as part of the service provided to them, users of our data centers are able to perform such tasks as tracking all events occurring at their colocation (e.g. opening of rack doors), monitoring environmental conditions (such as the

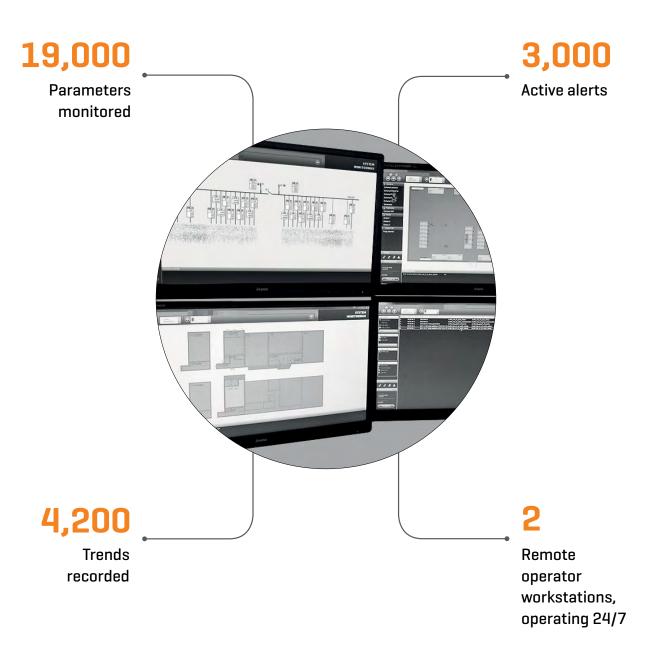


air temperature cooling the rack), and checking the power being drawn by all devices.

The system also allows us, together with the client, to take action to optimize the environmental conditions and consequently improve the efficiency of energy use.

To learn about the full range of possibilities offered by monitoring, please contact us.





Find out more at www.atman.pl



ATM S.A.

Grochowska 21a 04-186 Warszawa, Poland tel: +48 22 51 56 100 info@atman.pl, www.atman.pl ATM S.A. is the Polish data center market leader as well as an expert in security of data transmission and processing. Under the Atman brand the company provides colocation, hosting and cloud computing services in its data centers with 16,470 sq m of the total space. Using own international links and fiber-optic networks in the largest Polish cities, Atman offers broadband IP services, including Internet access and data transmission. Major recipients of the services are telecommunications operators, traditional media, Internet portals, financial institutions, commercial and industrial companies.