

Cloud Europe S.r.l

📍 Rome, Italy



Cloud Europe Data Center

About Cloud Europe S.r.l.

A company specialized in the design and management of Data Centers, with particular attention to the problems of security and service continuity, Cloud Europe is uniquely qualified to meet the needs of the new industrial revolution. Based in Rome, the company builds, hosts, and manages modular infrastructures for customer Data Centers in the private and public sectors. The objective of Cloud Europe is to provide a cutting-edge service, characterized by the highest standards of security and quality, and is aimed at organizations operating in the financial and insurance worlds and in general to all organizations that have business management as a strategic continuity policy.

ICONICS Software Deployed

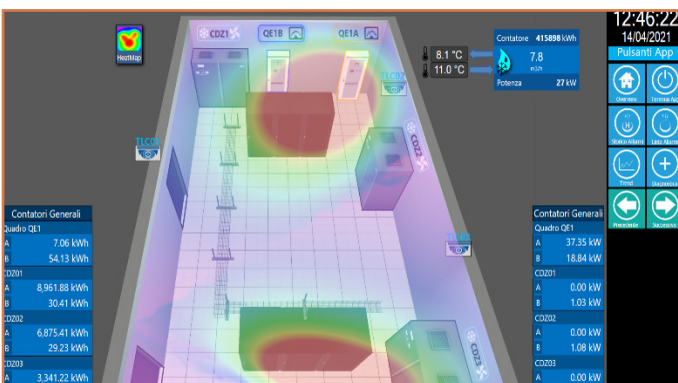
Cloud Europe chose the ICONICS GENESIS64™ HMI/SCADA suite (including GraphWorX™64, Hyper Historian™,

AlarmWorX™64, MobileHMI™ and WebHMI™) for monitoring the energy and environmental resources of its server rooms.

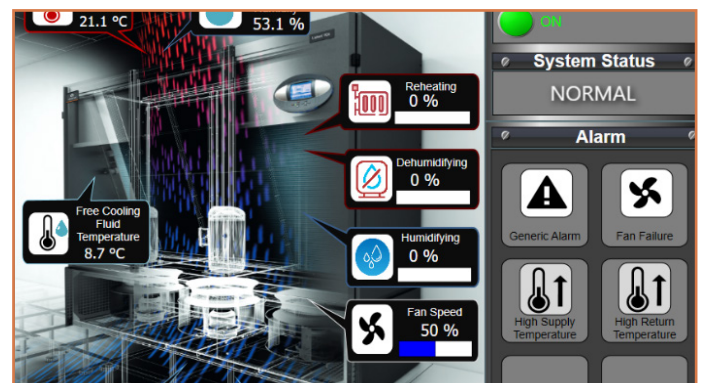
Key Platform Features

The ICONICS GENESIS64 Software Platform was designed with a "responsive" graphic interface by integrating 2D and 3D objects, as well as Smart Symbols. The system collects more than 6,000 energy and environmental data points and makes these available in easy-to-interpret graphs and Excel tables. Moreover, heat maps are available for each individual server room to help operators distribute machine workloads.

The system is installed in a Virtualization infrastructure with redundant configuration. With two virtual machines, product security and reliability are ensured. The status of over 4,000 electrical switches, the uninterruptable power



Thermal Map of One of the Server Rooms



Detail Page for Air Condition Units

supplies (UPS) operating parameters, generators, and air conditioners are monitored. In addition, the Data Center is protected by an extensive fire prevention system and anti-intrusion and video surveillance system. ICONICS has made it possible to centralize all these various building systems using numerous communication protocols such as Modbus TCP, SNMP, OPC, RESTful Web API's, and RTSP/ONVIF.

Project Summary

The centralization project carried out with the ICONICS GENESIS64 Suite at the Cloud Europe Data Center aimed at helping the company guarantee the promise made to its customers to provide a business continuity equal to or greater than 99.995% hours per year. Cloud Europe chose system integrator Metrovox S.r.l. (www.metrovox.it) to install and manage its system maintenance and continuous evolution. Located in Rome, Metrovox operates in the security systems field taking care of all aspects and technological implications to provide prevention and protection solutions, systems, and services.

With the ability to interface with PLCs located in the field, ICONICS collects the status of over 4,000 electrical switches, ensuring the monitoring of the current supply from the source to the end user. The software platform interfaces with numerous energy meters installed in the electrical distribution panels, collecting consumption data and the progress of measurements over the month. At the same time, data is collected from temperature probes located at strategic points throughout the various rooms.

Due to ICONICS' exceptional visualization capabilities, the enormous amount of stored data is transformed into graphs that have allowed Cloud Europe to improve its energy consumption and increase equipment life.

Since the electricity supply to its customers' servers in the Cloud Europe Data Center is of vital importance, there are 12 UPS of more than 300 kVA and two Diesel Generator Sets with a power of over one Megawatt.

No less important are the climatic conditions of temperature and humidity, which must be constant and well calibrated. For this reason, there are 60 air conditioners inside the Data Center, all controlled and logged. The ICONICS software takes care of monitoring and connecting the data

from all these devices and creating alerts when anomalous conditions arise.

ICONICS also offers operators an overall view of all systems, including security systems such as fire detection, intrusion detection, and video surveillance.

Benefits of the System

Thanks to ICONICS' capacity for the collection, processing, and historization of energy and environmental data, it was possible to improve efficiency and optimize consumption. The alarm notification system helps operational staff to provide business continuity to its customers. The Cloud Europe operational staff is tasked with the fundamental mission to prevent failure and rapidly resolve issues and for this reason, the ICONICS Suite has become their main working tool.

Additionally, the technical and maintenance staff are equipped with tablets with the Mobile HMI application, allowing them to continually consult the data and status of the systems and thus act in advance before fault occurrences. As a result, Cloud Europe was able to optimize the prevention and resolution of faults.

Conclusion

ICONICS enabled Cloud Europe to improve its productivity and ensure the best possible efficiency. Knowing that its servers and data are in excellent hands, Cloud Europe was able to strengthen its customers' trust in the company. This outcome was possible due to the support of the ICONICS software platform.

“The ICONICS system has allowed us to minimize failure incidences and optimize energy consumption. It has also strengthened the trust and confidence our customers have in our company.”

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