CRAM was founded in Le Havre in 1958, initially as a distributor of both industrial and domestic fuel oil. The founders of this family-run company have continuously adapted their business to leverage new technologies. The fuel delivery business, a service-based activity, evolved to offer new services including the installation and maintenance of equipment while the fuel is being delivered from the tankers. This was the beginning of the distribution of so-called secondary transformed energy. CRAM’s business continued to evolve with the arrival of district heating systems in 1970, followed by combined heat and power plants in 1995. As energy prices rise, the need for detailed information on plants has become a vital requirement.

CRAM, an energy efficiency specialist, acquired the Panorama suite in 2012 to remotely manage the 3,000 sites it operates. Based in Le Havre, France and with offices in Normandy, Ile de France and Picardy, CRAM’s mission is to manage facilities and control its customers’ energy consumption. To meet its obligations, CRAM has set up a telemetry system able to process information in real time, trigger the necessary interventions as expeditiously as possible, and analyze key indicators via reports.
The Project

CRAM has traditionally offered long-term, local services to its customers in various business sectors, including local authorities, condominiums, health care, manufacturing, social housing, and services. CRAM needed to update its services offer and boost efficiency in order to adapt to changing market conditions including rising energy prices, new regulatory requirements, and new types of markets such as Energy Performance Contracts. Therefore management decided to expand its corporate development plan to include a scalable, reliable telemetry solution meeting key four objectives:

- Improve the technical monitoring of facilities,
- Optimize energy tracking
- Analyze input data to trigger energy optimization actions,
- Provide customers with detailed information.

Choosing the Panorama solution

CRAM invited all the key players in the SCADA industry to its headquarters over a two-day period and set up a system for comparing competing products. After four weeks of wide-ranging, intensive tests, CRAM chose the Panorama solution. Key factors in the decision included:

- the ease of developing components and the ability to copy/paste them, which considerably reduces the time required to create or enhance new sites,
- the simplicity of modifying the application,
- the stability of the software,
- the support and development teams are all based in France.

"We always have lots of ideas at the start of a project. As time goes by, new ideas emerge or we change direction. Panorama is very adaptable and entirely modular, so we always find a solution," said Jean-Marc Eichholtzer, head of the Telesystems Center at CRAM. "The resourcefulness of both the sales and technical teams was an important factor when choosing a SCADA solution," he added.

CRAM decided to work with a Codra expert at the start of the project in order to develop the application, for the company wanted to maintain its position of technological leader in the field of energy efficiency.

"I was involved in the CRAM project from day one" said Christophe Millot, an expert at CODRA. "We had in-depth discussions, built the application together, and set up tools for rapidly developing applications. I enjoyed working with CRAM:"

Panorama IT report: Comparing actual vs. target energy consumption.
it was a very rewarding experience,” he added. Although CRAM can now run the project independently, the company has nevertheless included 10 days of expert support in its maintenance contract in order to further enhance the application, and quickly address any possible emergency.

Information is collected once daily through real-time, transparent, on-demand connections by simply clicking on a site in Panorama. The Panorama solution stores extensive data history: instructions, energy consumption, temperature readings, etc. “A comprehensive system was set up for monitoring faults via the telemetry interface, processing and analyzing data in real time, and triggering the interventions required as fast as possible in order to optimize plants” said Jean-Marc Eichholtzer. Profile groups are determined by the Windows session thanks to an SSO* connection via Active Directory. Users can navigate through the system either using a map-driven interface (Branch > center > site > Alarms > Acknowledged alarms), or through a text-based search.

The menu for each site, defined by a single graphic stylesheet, provides access to:
- Alarms,
- Data history,
- System events,
- On-call function,
- Trends,
- Energy consumption control.

CRAM works with suppliers such as Sofrel, Wit and Trend. It is developing new models using BACnet, the 3G module, Wago, etc.

**Customer feedback**

Panorama has become the key to daily management of energy consumption and interventions. CRAM has recently set up a full-fledged facilities control room in its Le Havre headquarters to provide staff with a comprehensive view of installations and access to details on each remotely managed site.

The city of Paris selected CRAM to manage over 100 schools and provide them 24/7 energy service. CRAM agreed to renovate all the schools within 18 months, cutting energy costs by 30% the first year and maintaining that level of performance for 20 years. The customer’s demand is simple: reduce energy consumption and obtain reports providing information in order to analyze consumption. “These goals have been met for the first schools managed using telemetry. We no longer manage a central boiler room but control each classroom—and each radiator,” said Yannick Huon, Director of the Telesystems Industry Department at CRAM.

Statistics and reports are designed using the Panorama IT, the reporting module that offers numerous possibilities. “Panorama is the trunk of a tree, and we develop applications to obtain the fruit,” said Yannick Huon. CRAM provides all

*Single Sign-On
SUCCESS STORY

From industrial SCADA to a global information system

The reports required by its customers:
• Consumption,
• UDD ratio (Unified Degree Day: estimates thermal energy consumption in proportion to the harshness of winter or heat of summer),
• Total ratio,
• Generic ratio.

The story continues

Over the past decade, CRAM revenue has increased from 20 million to 90 million. The company hires over 40 new recruits each year to boost its staff, currently 450 employees. This growth has made CRAM a midsized firm (one with over 250 employees and revenue over 50 million).

"Now Panorama telemetry is offered as a basic service in all new sales proposals at CRAM", said Yannick Huon.

Supervision teams benefit from a comprehensive view of the equipment at each remotely-managed site via the platform at CRAM’s Le Havre headquarters.