

Founded in Le Havre in 1958, CRAM is a key energy company operating throughout northern France, including in the Paris region. The company supports its customers in optimising their energy and environmental performance by providing a range of high-quality smart building management services covering FM, BMS, and BEMS.

As of 2012, Panorama SCADA software was chosen to control all of the facilities and equipment managed by CRAM across their multiple projects in the lle de France, Normandy and Picardy regions. CRAM relies on Codra's proven, reliable and highly scalable SCADA platform to meet their contractual commitments on a daily basis. With their decade-long partnership, Codra and CRAM work hand in hand to deliver innovations and meet ever more demanding energy efficiency challenges.



in figures:

- + over 900 towns equipped in France
- + 20,000 energy counters
- + 200 applications installed
- + 1 000 in a few years



Innovation at the heart of the connected

CRAM now offers the **«Lyris Box»** based on the new Panorama Edge to Service technology. Consisting of a fanless PC equipped with a Panorama E2 platform, this appliance is installed directly on site and acts as a local, standalone SCADA. All information flows are then securely transmitted to a remote Hypervision system for centralised management of the install base. This new architecture also responds to the operational constraints of asset managers in order to optimise the daily operations by:

- Administering and controlling the installations remotely via a centralised system,
- Having a local, standalone SCADA system that can be deployed by non-specialists,

- Collecting data in real time with local recording in the event of a network outage,
- Using standard communication protocols.

Based on Codra's latest innovations, the Panorama Edge to Service offering is crucially organised around a unique administration tool. Complete with configuration management, application versioning, secure management of "secrets", and application synchronisation, the Edge Controller is the true cornerstone of the Edge Computing system.



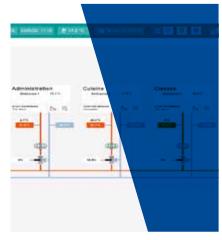






Panorama Centralised

In concrete terms, the local SCADA appliance gathers data in the field from PLCs and connected objects. The data is then sent securely over the Internet to the **centralised Hypervision** system at CRAM's head-quarters in Le Havre. This unique and local SCADA system aggregates, collates and uses all the information provided by the «Lyris Boxes». This means that CRAM can maintain a comprehensive 360° view of infrastructures, enabling it to respond to its customers' requests in real time, raising levels of satisfaction while optimising energy consumptions and usages.



Centralised and secure hypervision



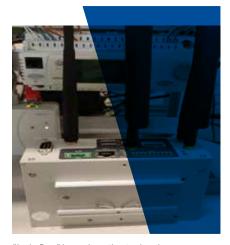
Professional expertise

Scalable and repeatable

Codra's Edge to Service offer has enabled CRAM to completely overhaul its SCADA system and to innovate with its value proposition. System interoperability, scalability and repeatability are the pillars of this offer. In addition, critical communication flows are fully secured. "Panorama is very adaptable and entirely modular, so we always find a solution!», enthuses Jean-Marc Eichholtzer, BMS Director at CRAM. "The development of our new offer, which is at the leading edge of innovation, has been possible thanks to the proximity of Codra's experts and support team and their willingness to go the extra mile mixed with the profession vision of the CRAM teams», he adds.

A large-scale operation

Thanks to the Edge to Service technology, in a few years time CRAM will be able to run 1,000+ applications simultaneously. With substantial savings on deployment times, costs and maintenance, as well as fewer devices to be installed and fewer roundtrips required, the day-to-day management of each customer site is made easier and more efficient. Today, CRAM includes the Panorama solutions in its catalogue as an OEM, as such offering a SCADA and telemetry system for controlling and optimising the energy consumption of several hundred facilities. Customers can thus monitor their consumption on a daily basis, reduce their carbon footprint and make higher energy savings.



"Lyris Box" based on the technology Panorama Edge to Service

