INDUSTRY PROFILE

NUCLEAR

CODRA

Azimuth imbalance power control of a PWR reactor

Panorama solutions are used throughout the nuclear energy industry, from R&D to waste processing and storage, not to mention for industrial activities related to power plants and fuel life cycle management.

Multi-site, multi-function hypervision to unite your applications

Panorama E² provides unified access to all your applications in order to ensure the safety of people and property, deliver reliable solutions compliant with industry standards such as IEC61513 and IEC62138, provide information to help decision-makers, and to maximize interactions between your operations, maintenance, security, emergency, chemical and environmental, and risk prevention teams.

Ambient dose-rate Radiation Protection beacon, installed by IRSN on the roof of the French Embassy

Vendor-independent

Panorama E² is based on industry standards and norms, so it can be integrated into and communicate with a wide range of products concerning all the aspects of your business (process control, safety, utilities, facilities management, CCTV, access control, fire detection, radiation protection, etc.). We offer technology-independent solutions.

Data verification and decision support to ensure safety

The management and control of operations using reliable, real-time information is of prime importance for operators, and is vital for detecting and correcting anomalies as fast as possible. Technical infrastructure includes heterogeneous equipment divided into multiple subsystems, and this can complicate decision-making in a crisis. Panorama provides extensive benefits in such cases thanks to its design as a universal tool integrated into the heart of your system. By cross-checking data from multiple sources and equipment, Panorama provides operators with information they can easily understand, so they can take the appropriate action to ensure the safety of people and property, and to call in the necessary specialists.

Availability and reliability

Panorama E² meets the most stringent availability requirements thanks to native functions such as the distribution of the application across multiple servers and the configuration of failure scenarios. For even more demanding environments, you can guarantee availability via up to 16 servers.

Traceability and data security

All your information is recorded and can be protected by either built-in or external mechanisms. Your data is fully secure since Panorama complies with the best practices required for your architecture and your requirements.

Analyzing, improving, and assessing performance

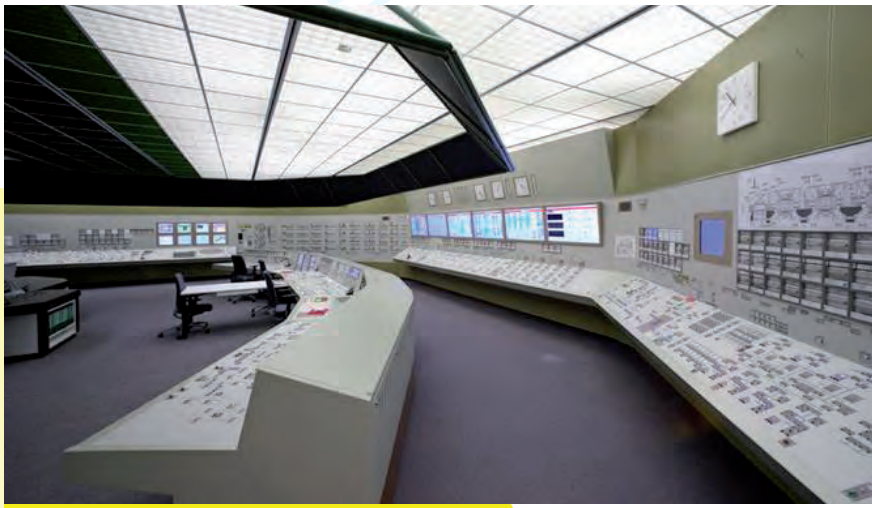
Following a crisis, you can analyze the information recorded by Panorama in order to optimize your risk control strategy and actions: avoid untimely alarms, provide accurate detailed information to the response teams, deploy new equipment (either replacements or post-Fukushima additions) and improve procedures. Dashboards are available with Panorama HISTORIAN in order to assess the vulnerability of your plant and improve the performance of your safety policy.

Used by thousands of clients

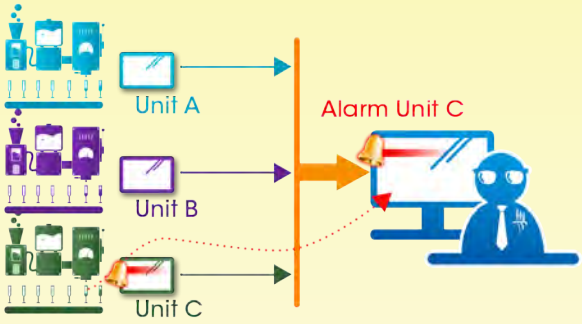
Plant supervision, nuclear ventilation, radiation protection, nuclear waste reprocessing and storage, simulation, etc… Feedback and interaction with users over many years in all these areas have allowed us to enhance Panorama, its functions and services, making it the world's leading SCADA solution in the nuclear power industry.

Panorama Suite

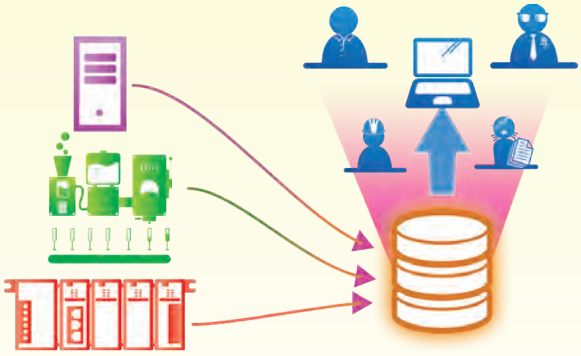
Control room in a nuclear power plant



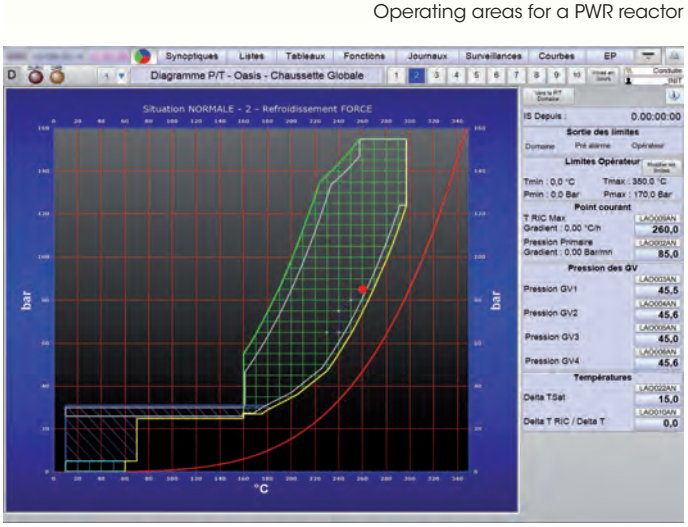
Operations managers receive alarms directly



Centralizing data



Operating areas for a PWR reactor



Panorama Suite offers all the functions required to manage and control your facilities :

- Multi-site / Multi-equipment,
- Flexible, custom control,
- Data acquisition and recording,
- Alarms and diagnostic assistance,
- Data history and archiving,
- Safety,
- Archive Player,
- Reports for improved plant administration,
- Simulation and operator training.

A flexible, reliable, architecture / integration with other information systems :

- From stand-alone workstations to multi-server systems with multi-level redundancy,
- Connection with centralized databases,
- Links to your user directory,
- Computer center operation on a virtual machine.

Remote access via mobile devices (tablets, smartphones, HTML5 based web clients) or via desktop PCs.

ASM

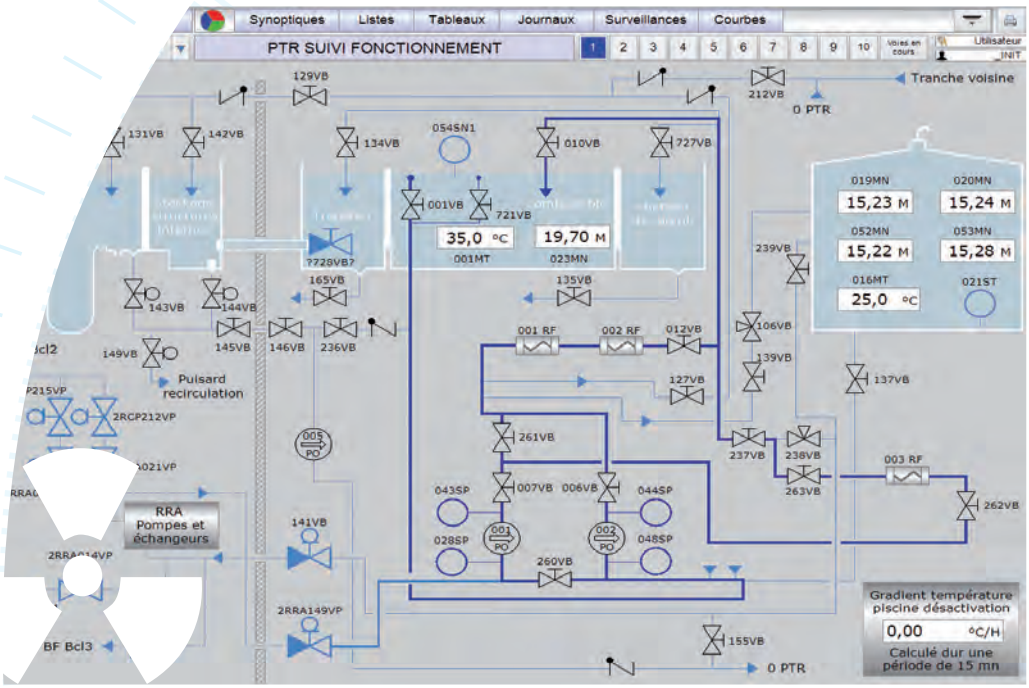
ISA

EEMUA

READY FOR CERTIFICATION
FOR COMPLIANCE
OPC FOUNDATION

Storage of metallic drums at the ANDRA Aube Storage Center

CODRA



Mimic for the pool cooling operations for a PWR reactor

References

Research and Development

ANDRA (Bures underground research laboratory) • Areva TA • CEA (Bruyères le Chatel, Cadarache, Cesta, Grenoble, Le Ripault, Marcoule, Saclay, Valduc) • ILL (Institut Laué Langevin) •

Nuclear power production

Areva TA (Barracuda SSN, RJH) • EDF Energy (Hesham 1 & 2, Sizewell B) • EDF (for 900 and 1300 MW nuclear power plants, used on 54 reactors) • EDF (Fire detection system, used on 58 reactors) • National Emergency Management Center • Local Emergency Management Center at EPR Flamanville • EDF Wastewater treatment plant at Fessenheim •

Fuel life cycle / Waste management

ANDRA (CSA Aube Storage Center, CSM Manche Storage Center) • Areva La Hague • CENTRACO • Decommissioning of EDF Creys-Malville • Westinghouse UK Springfields fuel facility •

Plant monitoring and the Environment / Radiation protection

AFCN (Belgian Federal Nuclear System) • IRSN • IRE (National Institute of Radioelement) • EDF (RMS Chooz, Radiation Protection beacons at Tricastin, Administrative lock-ins for nuclear plants) • CEA (Radiation Protection beacons for the ORPHEE reactor) •

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