

Success Story Boehringer Ingelheim

A WinGuard Reference Project





The Challenge

Risk management in the pharma industry

Founded in 1885, Boehringer Ingelheim is one of the world's leading pharmaceutical companies headquartered in Germany. The company focuses on the development and research of innovative medicines and therapies in the fields of human pharmaceuticals, animal health and biopharmaceutical contract manufacturing. Boehringer Ingelheim pursues the goal of finding effective treatments for diseases for which there are currently no satisfactory therapeutic options. With around 54,500 employees and a presence in more than 130 markets, the company generated sales of 26.7 billion euros in 2024. Boehringer Ingelheim operates a global network of research and production sites in Europe, America and Asia - the company headquarters are located in Ingelheim am Rhein. Numerous medicinal products are manufactured there on extensive premises covering more than 762,000 square meters. In addition, there is a large research and production site in Biberach an der Riß in Germany, as well as other smaller sites.



In 2014, the company was faced with the task of combining the previously isolated safety technology systems at its German sites into a common platform. As part of the "Control Center Germany" (LSD) project, a nationwide networked system was to be established that would act as a central control center at the Ingelheim and Biberach an der Riß plants. These plants have recognized plant fire departments in addition to the conventional safety organizations. In addition to the integration of various security subsystems, particularly in the area of fire and burglar alarm systems from different manufacturers, the focus was also on the integration of hazard management into the control center processes of operations management. The close integration with an operations control system was intended to ensure optimum coordinated control of plant security and the plant fire departments, also in cooperation with the public fire departments.



WinGuard was selected as the integrated platform for hazard management. Parallel to and downstream of the development of the control center in Germany, Boehringer Ingelheim decided to use WinGuard as a control center solution at other locations in Europe and the USA. The company now has six WinGuard installations worldwide - ranging from installations with just a few interfaces and a four-digit number of connected sensors to the currently largest environment of the control center in Germany with around 20 connected subsystems and almost 100,000 data points from a wide range of trades.

- ✓ WinGuard Enterprise Server
- ✓ 4 WinGuard Professional Server
- ✓ WinGuard Basic Server
- √ 72 WinGuard operator stations
- ✓ Over 110,000 data points
- ✓ Access control
- ✓ Alerting and crisis management
- IT communication / SIP
- ✓ Operations control system
- ✓ Intruder alarm systems
- ✓ Fire alarm systems
- ✓ Standardized adapters
- ✓ Video surveillance / CCTV
- ✓ Intercom / ELA
- ✓ Alarm center

The System concept

WinGuard is the all-in-one solution

Boehringer Ingelheim opted for the WinGuard hazard management system from Advancis in order to bring all security-related systems together in one central system.

WinGuard not only fulfills industrial security requirements by integrating fire alarm, intrusion and hazard detection systems, but also represents an essential component in the operations management processes of the two main sites. WinGuard is linked to an operations control system for this purpose. In this way, incoming alarms from the monitoring systems can be escalated either automatically or after interactive qualification by the control center dispatchers to deployments of the plant fire brigade or plant security. In addition to a consistent operating logic between WinGuard and the operations control system, particular emphasis is placed on automated data synchronization and the intelligent modelling of location references within the systems. This largely avoids duplication of maintenance work in the data supply.

For example, if a fire alarm system triggers an alarm, this is recorded in WinGuard and seamlessly transferred to the command and control system via the interface. The relevant emergency services can then be alerted immediately and without media discontinuity. All alarm information-including the visualization of individual detectors in floor plans-is available in real time. The constantly up-to-date display of the sensors in building plans was also a central requirement for the new control center environment, which is fulfilled by the WinGuard CAD-Plus module. The underlying building plans are regularly updated from Boehringer Ingelheim's company-wide CAD database; the detectors are automatically placed in the correct position using intelligent links.

Another key advantage of the system is the efficient management of switching orders - a decisive factor in the decision in favor of WinGuard. This function enables the planned deactivation of detector zones and the structured initiation of maintenance processes. This represents significant added value, particularly at the German locations, as formal application processes can be fully digitized and handled without manual effort. Switching commands can be configured in advance and saved for repeated processes. At the same time, the system ensures complete documentation of safety-relevant processes: every switching operation can be traced at any time - including the time of approval and the person responsible. The relevant information is also automatically made available to dispatchers in the system.

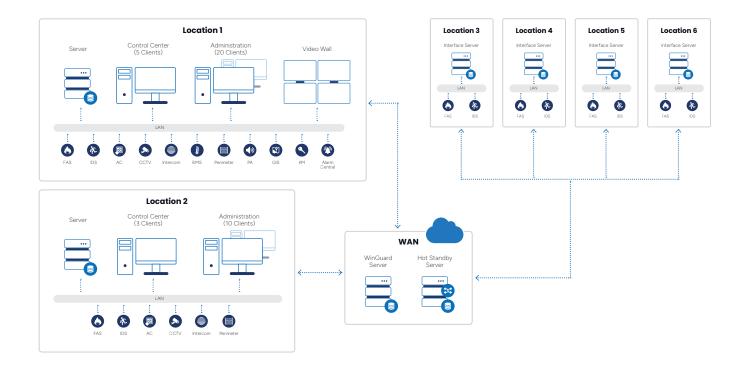
WinGuard is also characterized by a highly flexible system architecture, which allows different operating concepts to be implemented at Boehringer Ingelheim's sites around the world. While WinGuard is used at some locations as an independent system within a plant, such as in Greece or France, it is used in Germany as part of a comprehensive

control center network. Several Security Operation Centers (SOCs) are located there, which can represent each other and also monitor sites without their own workstations. In the USA, Boehringer Ingelheim takes a different approach, as numerous sites across the country are connected to a central regional SOC, which is monitored and controlled remotely. In addition, the focus in Europe is more on fire alarm systems, while in the USA the focus is primarily on access control, video surveillance and intrusion detection technology. WinGuard thus offers an adaptable solution that supports both self-sufficient security concepts and comprehensive control center networks and can be tailored to the individual requirements of each site.

A key success factor for the implementation of WinGuard at Boehringer Ingelheim is the conscious investment in know-how. A sound understanding of the system has been built up so that Boehringer Ingelheim is able to manage WinGuard efficiently internally. In addition, system architects within the company help to optimize the implementation. This targeted build-up of internal expertise helps integrators to better support individual projects and enables Advancis to work closely with the company and integrators to further develop the use of WinGuard at the various sites.

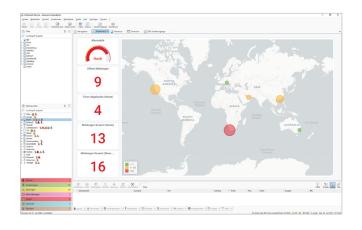
Benefits of the system

- ✓ Central integration of all systems
- ✓ Integration of the IT infrastructure
- ✓ Uniform user interface
- Automation of standard processes
- Seamless integration with the operations control system
- ✓ Intelligent visualization on CAD plans
- ✓ Event visualization and instructions for action
- Legally compliant documentation
- Redundancy and high availability
- ✓ Scalable site solutions
- Ensuring the EMA is armed



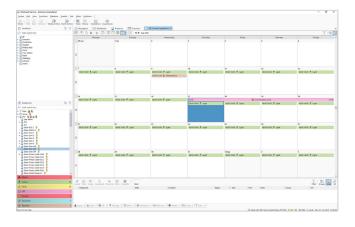
Homogeneous user interface

WinGuard integrates all connected systems



Flexible system architecture

WinGuard from Advancis is used at several Boehringer Ingelheim sites worldwide. The flexible system architecture allows WinGuard to be used as a stand-alone security concept or as a comprehensive control center network.



Switching orders

A key feature of WinGuard for Boehringer Ingelheim is the management of switching orders. This function enables the targeted and planned shutdown of detector zones and maintenance processes, simplifies formal application processes and ensures transparent documentation of all safety-relevant processes.



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