

WÄRTSILÄ OPERATORS' INTERFACE SYSTEM sWOIS



A SMARTER WAY TO OPERATE YOUR POWER PLANT

The rapid development of computer hardware and operating systems means that obsolescence and availability challenges are common problems for power plant operators. In addition, cyber threats to the human-machine interface (HMI) system are a growing issue. By utilising a virtualised sWOIS built on server hardware and implementing cyber security controls, you can prolong the lifecycle of your HMI systems and mitigate cyber security threats.



WHY UPDATE YOUR OLD WOIS/WISE SYSTEMS?

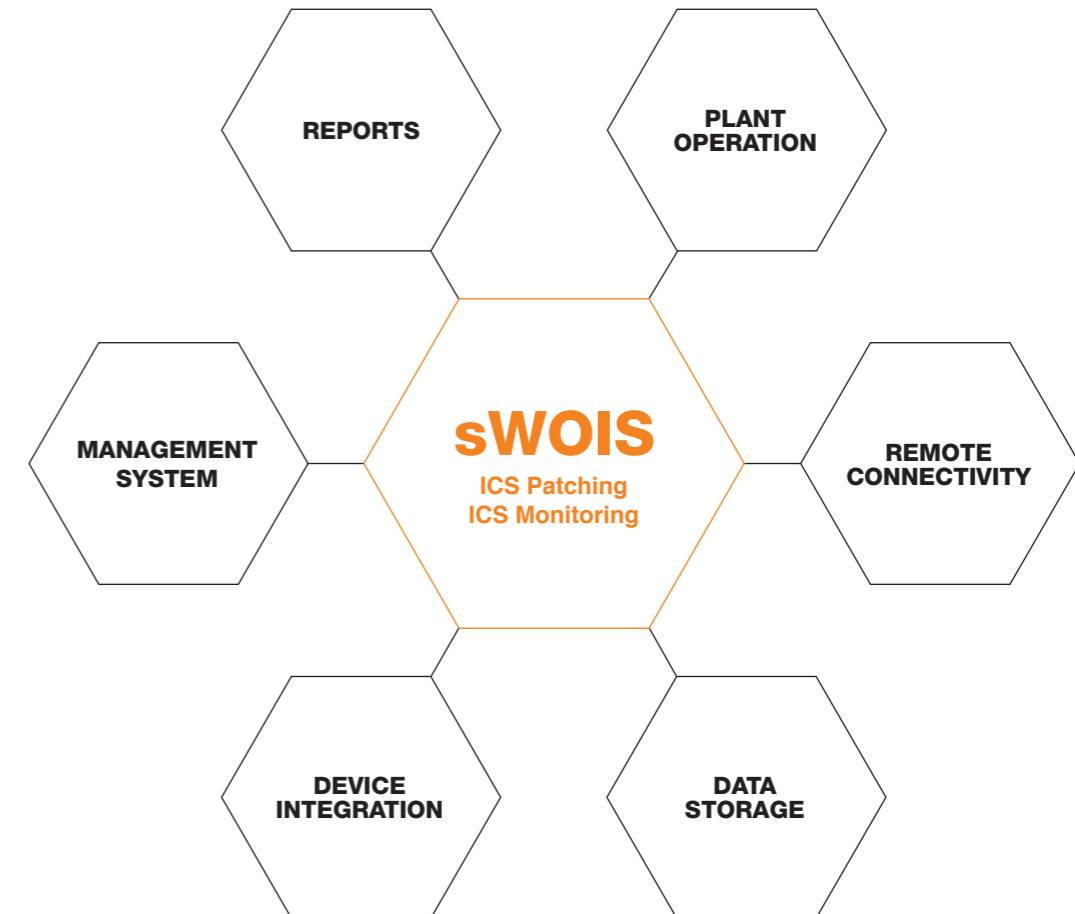
As power plants age and the control system becomes obsolete, upgrading control systems to modern modular systems can help improve availability and performance, extend the plant lifecycle and ensure better support. Modern systems improve flexibility by enabling the sharing of process data for remote monitoring and analysis. Up-to-date control systems also help ensure that you can follow grid requirements.

OUR SOLUTION

Wärtsilä sWOIS monitors and controls your power production, power distribution and other power plant assets in real time to ensure optimal and reliable operations. Besides monitoring and control functions, the solution offers secure remote connections for viewing plant data, and also gathers and stores process data to create analyses such as trends and reports. Wärtsilä sWOIS follows IEC 62443 and NERC CIP cyber security standards and supports asset diagnostic, patching, and monitoring and response services.

The management system provides essential information about your plant's hardware and network availability to ensure a fast response and timely action in potential fault situations. The solution also supports your disaster recovery procedures with backup and restore functions.

WÄRTSILÄ sWOIS MODULES



Wärtsilä sWOIS has two main modules:

- **Plant operation** – the operators' interface to the power plant
- **Device integration** – the interface to the power plant's control network

The other available modules are:

- **Data storage** – for long-term storage of process data
- **Reports** – the power plant's reporting system
- **Remote connectivity** – remote monitoring and data sharing to other systems
- **Management system** – the system monitoring, backup and restore system

The sWOIS can be supplied based on your specific needs and requirements. To further strengthen your system's security, Wärtsilä Cyber services offers e.g. ICS patching and ICS monitoring and response services.

WHY CHOOSE WÄRTSILÄ?

sWOIS is designed for power plants supplied by Wärtsilä and therefore we have the best technical understanding of how your plant has been built. This enables us to guarantee that the solution fits your exact needs and can bring you real value.

WÄRTSILÄ INTELLIGENT PLANT UPGRADE

The Wärtsilä Intelligent plant upgrade provides integrated electrical and automation solutions to maximise the quality, reliability and flexibility of power generation in Wärtsilä power plants. We offer a wide range of applications from single device upgrades to improving the entire power plant operating principle. Our offering is customised to meet the specific needs of your power plant.

YOUR BENEFITS



Ensure a longer lifecycle and better supportability for your system

sWOIS is built on industrial-grade server hardware with a virtualized operating system that enables upgrades without changing hardware and vice versa.



View availability instantly, with reliable backup handling and fast recovery

Monitor the health status of sWOIS-related devices and react proactively, as well as easily manage system backups for quick recovery after failure.



Monitor power plant operations remotely

The in-built security technical controls and remote monitoring functionality enable you to securely access the system from any location.



Analyse process data effortlessly

Process data is collected automatically, stored for years and presented in an easily understandable way to help you make fact-based business decisions.



Protection against cyber threats

To reduce cyber risks sWOIS has IEC 62443 standard best-practice security controls built in, including a firewall, OS hardening, malware protection, user management and network segmentation.