



Operational Intelligence
Harnessing the power of the Industrial Internet of Things

Put your data to work

Digital technologies are powering the next wave of industrial process improvement. Across sectors smart machines, seamless communication and advanced analytics are helping companies to transform the efficiency, productivity and reliability of their operations.

Realising the full benefits of Industry 4.0 is challenging, however. It requires organisations to integrate new technologies with legacy equipment, to build and manage complex data architectures and to acquire novel skills.

With more than 40 years experience in industrial control, instrumentation and automation, Capula has the capacity and expertise to support your digital transformation. The company develops, engineers and implements advanced technologies that enable customers to safely control, monitor and optimise some of the most strategically important facilities in the UK.

Industrial Internet of Things (IIoT)

Operational intelligence starts at the device level with the selection, configuration and integration of the equipment that executes and monitors your processes, and the systems that run it.

Capula's vendor-independent approach allows the company to recommend the most appropriate hardware and software for each customer. Capula specialises in integrating new capabilities with legacy infrastructure, and can support customers through the full system lifecycle, from design and installation to ongoing operational support.

- Supervisory control (SCADA), DCS and PLC systems
- Instrumentation
- Network and communication protocols
- Human machine interface (HMI) design
- Real-time embedded software: design, development, prototyping and testing
- Manufacturing execution systems (MES)
- Digital Manufacturing Operations Management (DMOM)
- Applications for specialist environments, such as Laboratory Information Management Systems (LIMS)

Data management

Real-time data is the fuel that drives digital operational improvement, but the rising sophistication and complexity of industrial processes and equipment creates significant data management challenges for operators.

Having worked with some of the largest, most safety-critical and widely distributed operational environments, Capula understands the best ways to organise, manage and control complex data.

- Information architecture and strategy
- Master data management
- Data historian implementation
- Enterprise data warehouse design and implementation
- Data quality assurance
- Data integration and migration
- Information lifecycle management
- Data privacy and security

Analytics

Transforming raw data into refined operational insights can be harder than you think. Whether you want to build your analytical capabilities in-house or outsource to a specialist, Capula can provide the expert advice and support you need. Capula works with customers through the full analytics journey, from the identification of business requirements and audits of available data, to the selection and implementation of appropriate analytic solutions.

- Predictive, proactive and remote maintenance management
- Energy efficiency improvement
- Historical process and operational data analysis; in-house or in the cloud
- Implementation of class-leading analytics tools and approaches
- Big data analytics using AI and machine learning technologies
- Embedded machine learning for real-time system optimisation





OPUS – Accelerate your Industry 4.0 transition

Capula's OPUS range is a portfolio of cloud-based solutions designed to bring Industry 4.0 to a wide range of enterprise activities.

To build OPUS, Capula partnered with leading solution providers, then applied in-depth understanding of large scale industrial control and automation to tailor the company's technologies for application in the manufacturing, energy, utilities and building management sectors.

OPUS uses advanced Industrial Internet of Things (IIoT) technologies to integrate multiple asset types. These can range from transforming production and materials handling equipment and heating, lighting and ventilation (HVAC) systems into a single, secure, cloud-based platform, regardless of the equipment manufacturer or communication protocol used.

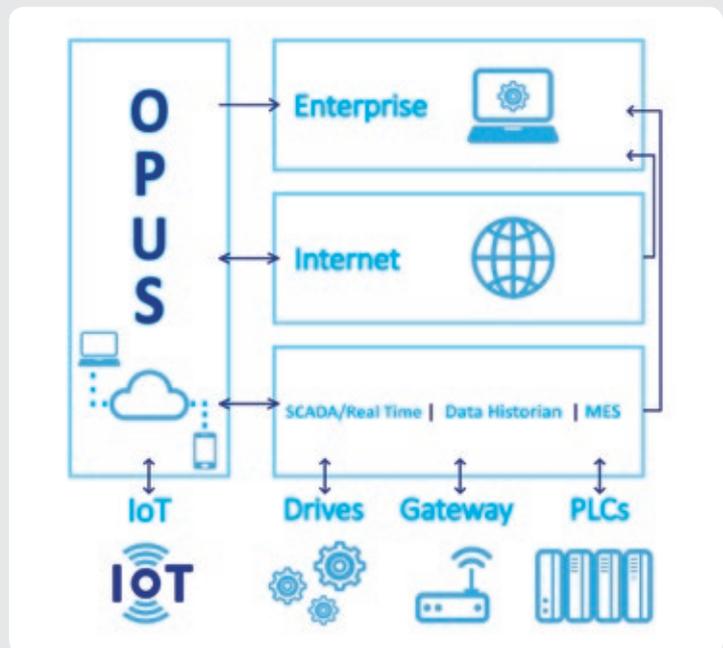
The OPUS portfolio includes robust data management, powerful analytics and advanced visualisation capabilities, making it quicker and easier to turn asset data into transformative business value.

OPUS provides early adopters with a fast, effective and reliable way to develop and deploy smart, connected solutions. But it also has the power and scalability to allow an organisation of any size to manage its complete operations from any location through a single, integrated interface.

OPUS puts all your asset data in one place, and gives you the freedom to manage that data in the way that works best for your organisation. Hence enabling you to make optimal use of in-house resources and outside expertise.

Designed to be fully flexible and extensible, OPUS can be used in a wide variety of control, monitoring and management applications. Typical uses include:

- Building access, HVAC and lighting control
- Energy management
- Network visibility
- Materials handling system control and monitoring
- Production line visibility
- Predictive manufacturing



How Capula can help

With more than 40 years of experience in the design, operation and support of industrial automation systems, Capula is the right partner to support your organisation on its Industry 4.0 journey. For more information visit www.capula.co.uk or contact:

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