

Digital manufacturing relies on a strong foundation of accurate, timely and consistent data. Convergence Pro is a new way to achieve this ambition.

# Shaping the digital future of manufacturing

## Path to data-centricity

Innovative organizations know that data isn't just a by-product of their operations. It's a vital resource for transforming every aspect of their business. To become truly data-driven, they must collect, store and analyze large quantities of raw data from multiple sources. They must convert this into actionable insights that power effective decision-making, optimize operations, and fuel innovation and growth.

## **Evolutionary challenges**

But there are challenges. Manufacturers need to seamlessly introduce and integrate new technologies into live operational environments without impacting production minutes. They also need to be able to manage ever-expanding volumes of data from both the OT and IT domains, which have traditionally remained segregated.



# IT and OT in manufacturing

## Addressing the complexity of production domains

The OT and IT domains differ vastly. Unlike today's increasingly standardized IT environments, OT networks utilize proprietary protocols and standards. Shopfloor environments often include critical devices like PLCs, which are part sensors and part IO devices.

Regulatory requirements impose additional restrictions on OT networks. Safety, quality and traceability are all defined according to specific factory requirements.

Yet, while challenging, the ability to combine OT and IT data with applied business logic and processes will empower new ways to leverage machine learning, advanced algorithms and generative AI to extract new and exciting insights.

This convergence will enable operational teams to optimize production by leveraging real-time or near-real-time analytics. These can be explored through new mediums like the industrial metaverse, where combining millions of data points can bring the real and digital worlds closer together.

If manufacturers cannot bridge the gap between IT and OT, this will impede progress towards becoming truly data-driven.



Global factories will generate

175 ZB of data annually by 2025

A wealth of valuable but trapped insights inaccessible via traditional IT toolsets.

# Convergence Pro: from coexistence to collaboration

# Bridging the gap between IT and OT to unlock datadriven production.

Convergence Pro combines the powerful operational tooling and automation of <u>Siemens SINEC NMS</u> with the market-leading service management tooling of ServiceNow and the systems integration and managed service expertise of <u>Atos</u>.

SINEC NMS gathers data from the plant environment to centrally monitor, manage and configure industrial networks. ServiceNow's service management platform provides end-to-end visibility, service management, and vulnerability response through a single record system. Atos' long-standing proven expertise in complex system integration and comprehensive managed services brings these technologies together.

Through standard APIs, Convergence Pro creates a seamless flow of OT and IT data while adhering to IEC 62443 standards for securing industrial automation and control systems.



# Blending the best of all worlds

Convergence Pro minimizes downtime by accelerating service recovery. It capitalizes on a unified OT/IT data repository, automating workflows to enable real-time orchestration of OT visibility, vulnerability management, and service operations.

## Maximizing value for your business:



#### React

- Instantly generate incident tickets and route them to the expert support team for resolution when industrial device faults occur.
- Employ standardized major incident management processes familiar to global support teams to address critical faults.



#### **Resolve**

- Store precise OT device details and status alongside IT data in a unified repository, enhancing troubleshooting and expediting issue resolution.
- Simplify operations by monitoring and supporting IT and OT environments using a single tool.



#### Report

- Empower strategic decision making and process optimization based on past and current trends, supported by historical performance data.
- Measure true business impact against appropriately defined SLAs, leveraging accurate historical data for all recorded incidents.

Real-time dashboards relay crucial business insights, underpinned by metrics from multiple sources, including OT data from Siemens via SINEC NMS, ServiceNow data from both Siemens and Atos, environment monitoring, service availability metric data, Business Process Chains, ITSM reports, OS & Patching reports, and network availability. This rich tapestry of correlated data provides factory management teams with a holistic view of current production services and potential risks.

#### Connecting IT/OT performance to business outcomes

Whatever happens in your IT/OT environment, you need to understand its operational impacts. Unlike other IT management solutions, Atos Bridge prioritizes your business processes by tracking OT and IT system performance against business KPIs — not simply SLAs. By bringing together service integration and orchestration with application control and monitoring in one centralized location, you stay in control and fully aligned with the business.

For more: Atos Bridge

# Accelerate your digital evolution with Convergence Pro

## Opportunities beyond service management

In addition to OT Service Management benefits, Convergence Pro creates a new flow of real-time data to drive ever more predictive, preventative and pre-emptive interventions, strengthening manufacturing operations.

Using this growing converged data repository, a digital twin offers new ways to re-imagine, predict and control virtually any aspect of manufacturing, from speeding up production to reducing waste or increasing sustainability.

Innovative augmented reality applications can utilize combined real-time data to better inform, train and support employees remotely and at the plant.

Manufacturers who achieve OT-IT data convergence can utilize this invaluable resource to deliver their strategic and operational objectives.

For more about Convergence Pro or to discuss any of your OT/IT challenges, please contact

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#### **About Atos**

Atos is a global leader in digital transformation with c. 95,000 employees and annual revenue of c. € 11 billion. European number one in cybersecurity, cloud and high-performance computing, the Group provides tailored end-to-end solutions for all industries in 69 countries. A pioneer in decarbonization services and products, Atos is committed to a secure and decarbonized digital for its clients. Atos is a SE (Societas Europaea) and listed on Euronext Paris.

The <u>purpose of Atos</u> is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

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#### **About Tech Foundations**

**Tech Foundations** is the Atos Group business line leading in managed services, focusing on hybrid cloud infrastructure, employee experience and technology services, through decarbonized, automated and AI-enabled solutions. Its 48,000 employees advance what matters to the world's businesses, institutions and communities. It is present in 69 countries, with an annual revenue of € 6 billion.

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