These new use cases are creating additional demands on the network and infrastructure architectures. In order to drive business value, the solution needs real-time, autonomous decisions powered by complex video and data analytics, 100% uptime and predictability, and data security and privacy.

IoT implementations at scale drive business outcomes. But they come with challenges:

- **Complexity**: Connectivity, guaranteed uptime and security, management of a complex technology stack to process data and run analytics, end-to-end control and predictable service levels are required to derive any meaningful business value.
- **Upfront costs**: Heavy upfront investments are required to deploy IoT at scale; this includes investment in IoT devices, the entire technology stack and resources to manage this deployment.
- **ROI considerations**: Heavy upfront investments mean that business value must be proven quickly. This can be a major stumbling block.

These challenges are leading to future digital transformation projects that need a hybrid architecture that embraces both cloud and edge computing. This way data can be collected and analyzed in real time, with no latency and close to data sources.

**Atos’s Codex Managed IoT services, combined with its BullSequana Edge**, the highest-performing edge computing server on the market enables organizations to drive new business outcomes through pioneering commercial models for IoT and Edge deployments. Atos enables real-time and autonomous decision-making by analyzing complex video and image data, at scale, and with high levels of security, privacy, and compliance.
High performance managed Edge

Make better insight-based, real-time, business-critical decisions through the analysis of complex, high volumes of image and video data at the Edge.

Challenge
Making real-time business-critical decisions based on insights gathered through real-time analysis of high volumes of complex video and image data.

Solution
BullSequana Edge device, powered by the 16 core Intel® Xeon® D processor for fast analysis, combined with the feature-extraction capabilities of Edge Computer Vision, enables data to be captured and analyzed and alerts to be sent in real-time. Layered on this, the Codex Managed IoT services portfolio provides end-to-end control, predictability, security, and enterprise grade Service Level Agreements (SLAs) for 100% uptime. This ensures the implementation is delivering the desired business outcomes.

Analysis expect, by 2020, 99% of enterprise-captured video/image will be analyzed by machines.¹

Enable business continuity, data sovereignty, regulatory compliance, and security at the edge

Challenge
Ensuring that IoT Edge implementations run with security, data security, and privacy with 100% uptime and in a compliant manner.

Solution
We secure IoT and edge deployments at all levels. BullSequana Edge server is equipped with an Intrusion Sensor which disables the machine in case of physical attacks. Intrusion detection and data encryption systems protect business data from external threats. Our IoT Cyber Security services deliver a consistent management and monitoring framework at scale. Keeping data locally and only sending compliant data to the cloud maintains data sovereignty and compliance.

Drive desired business outcomes and value from IoT implementations, by simplifying complexity at scale

Challenge
Scaling IoT implementations in a cost effective, risk free, and simple manner to deliver business outcomes. The entire IoT set-up needs to run together in an integrated and seamless manner, with end-to-end control and predictable service levels in order to derive any meaningful business value.

Solution
Through our suite of Codex Managed IoT services, full edge lifecycle management, 24/7 support, enterprise grade SLAs, and a continuously growing partner eco-system, we deliver a simple and scalable solution to deliver a better Return on Investment (ROI). Pioneering commercial models like Right-of-Use (RoU) and outcome-based pricing, plus a fully managed service reduces financial pressure and risk for customers.

Powering Triple Five Group’s American Dream Mall

Atos enables Triple Five Group to bridge the gap between the physical and digital experiences for customers and 100+ tenants of American Dream Mall, a 3 million-square foot entertainment and retail complex. Edge-computing, DigitalIoT devices, smart parking, ticketing, and wayfinding technologies enable proactive surveillance and reveal trends in shopping, traffic, timing, and rides.

Customers benefit from next-generation shopping, navigation, and entertainment experiences through IoT and Artificial Intelligence (AI) solutions and services.

Optimizing vessel operations at sea

A global shipping company wanted to save fuel and optimize energy consumption by inserting data into the decision-making process.

To overcome cost and connectivity challenges, we implemented autonomous intelligent edge solutions on the vessels. This improved operational efficiency and reduced fuel consumption by 7%.


² Forrester reports that 66% of global manufacturers believe their Digital organizations need assistance from third party partners to fill in skill sets necessary to successfully implement IoT.²
Our solutions

BullSequana Edge

The BullSequana Edge server has been designed to be used securely for the Internet of Things (IoT), in environments in which fast response times are critical - such as manufacturing 4.0, traffic management, healthcare and retail/airport security – where data needs to be processed and analyzed at the edge in real-time.

The server securely manages and processes IoT data, close to the source where it is generated, so that it is treated immediately. It analyzes and runs Artificial Intelligence (AI) applications in real-time for instant insight, so that actions and decisions can be made swiftly to optimize operations.

Codex IoT Services

Deliver smart business services that harness the value of your IoT data at scale. The Atos portfolio of Codex Managed IoT services ensures that you have a complete set of automated processes and tools for infrastructure and device management, with support services, metering, and billing. This comes wrapped in a Service Level Agreement (SLA) for your IoT capabilities across the IoT value chain. This unique IoT service management framework ensures your IoT investments deliver business outcomes and a return on your investment.

Integrating the high performance BullSequana Edge server and associated solutions, Atos provides a complete end-to-end solution that includes hardware, software, managed services and ready-to-go use cases, leveraging an extensive best-of-breed IoT partner eco-system.

Why Atos?

✓ Global presence, proven scale, and industry expertise with millions of devices securely in production
✓ True partnership and risk sharing through pioneering, business outcome-based commercial models such as right-of-use and outcome-based pricing
✓ Security for the full IoT value chain on every level, including devices, data and networks

Atos has been recognized as a Global Leader in IoT services by Everest Group (2019 and 2020) and IDC (2020).

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