

 BullSequana Edge

Edge data container



Trusted partner for your Digital Journey

Atos

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The greatest advantages of edge data analysis are reduced latency, analyzing very complex data are reduced latency while analyzing high volumes in real time. It requires systems to be installed as close as possible to the IoT. IoT imposes physical constraints since its main characteristic is that it can be placed anywhere to produce data. The stakes are high: create a mobile and customizable mini datacenter according to the constraints of the environment (temperature, exterior, humidity, fire risk, theft) and storage needs.

To meet these challenges, Atos has developed Edge Data Container, an all-in-one solution from BullSequana Edge. It serves as a decentralized IT system, running at the edge. It is a secure, highly standardized, industrial solution. It can run autonomously in non-data center environments with no needs for a white room or local IT teams to operate. It can be customized for various purposes and can embed Atos Edge Computer Vision, Atos Edge Data Analytics applications as well as other implemented production applications. The Edge Data Container offering can be operated with the BullSequana Edge server or BullSequana SA20G.

BullSequana Edge

BullSequana Edge is the server for high storage needs anywhere in-and-out racks.

Decentralized data processing & storage outside the datacenter

- Connectivity: independent from wireless network
- Adaptability: the server is designed to fit perfectly in any type of environment. It can be placed in stand alone, in a rack or on a wall (DIN rail or VESA wall)
- No dependence on cloud and datacenter availability and connectivity
- It features extended temperature from 0° to 48°, shocks and vibration, while keeping its performance.

Designed to accelerate Edge Data Analytics with hyperconverged infrastructures

BullSequana Edge has been designed to enable open source based hyperconverged infrastructure solutions which enable flexible resource sharing between nodes, centralized management and security hardening.

Streaming Analytics solutions such as Spark and Kafka can flexibly be deployed on this stack. Through its powerful GPUs BullSequana Edge also supports accelerated machine learning algorithms enabled by RAPIDS and similar frameworks.

Low latency and response times for complex AI video inference models:

Edge Computer Vision is a complete environment running on BullSequana Edge and dedicated to deliver computer vision capabilities.

It provides advanced feature extraction (person, faces, emotion, behavior), feature sharing and classification, automatic actions

based on feature analytics, real-time and post-event actions or post event analytics.

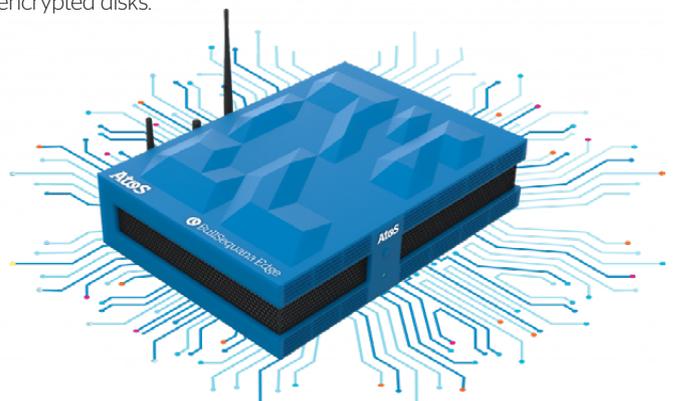
The server is equipped of 2 Nvidia Tesla 4 GPUs and a powerful 16 core Intel® Xeon® D processor for fast analysis. Thus, it delivers powerful AI inference capacity accelerates the search of a specific person from multiple criteria. It enables a large set of intelligent cameras to collaborate holistically in real-time, enabling operations to be tracked without interruption. server is equipped of 2 Nvidia Tesla 4 GPUs and a powerful 16 core Intel® Xeon® D processor for fast analysis.

Combining energy efficiency for AI inference with cost-efficiency

- Energy consumption: 9 TFLOP/Watt thanks to the careful choice of optimized components.
- Reduced datacenter infrastructure and networking costs.

Optimal physical and logical security

The BullSequana Edge is equipped with an Intrusion Sensor which disables the system when opened. There is no physical console port to which a local intruder could connect a screen. A secure boot process can be put in place including signed firmware, bootloader, OS and applications, protected by a FIPS140-2 certified TPM and encrypted disks.



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BullSequana SA20G

Choose BullSequana SA20G server for maximized storage density and unbeatable cost per TB to meet growing capacity challenges at the edge. For high AI performance at the edge, BullSequana SA20G can include upto 3 A100 GPUs.



2 CPUs - up to
2 TB RAM



Up to 100 TB
storage



Up to 2TB of
memory



Up to
12 disks



Up to 3
A100/5xT4



x8 core
capacity

Delivering outstanding storage density and cost per TB for optimized training and AI inference for computer vision

The BullSequana SA20G rack server powered by 2nd generation AMD EPYC™ processors bring a cost-effective balance of performance and storage capacity anywhere. By offering up to 100TB in a 2U form factor, and best-in class SAS/SATA and ultra-fast NVMe drives and up to 3 GPUs*, they provide optimal performance for training & AI inference for computer vision purposes.

Moreover, its autonomous infrastructure allows both servers to be installed in non-data center environments. There is no need for a white room or local IT teams to operate. Indeed, our Edge Data Container can perform its maximum capacity within a large temperature range.

In addition, this outstanding density makes it possible to minimize the footprint and improve the energy efficiency. Storage on multiple hard disks allows data redundancy and performance improvement. RAID technology provides the right balance between reliability, availability, performance, capacity - and cost!

*GPU are only available on BullSequana SA20G server



About Atos

Atos is a global leader in digital transformation with 110,000 employees in 73 countries and annual revenue of € 12 billion. European number one in Cloud, Cybersecurity and High-Performance Computing, the Group provides end-to-end Orchestrated Hybrid Cloud, Big Data, Business Applications and Digital Workplace solutions. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos|Syntel, and Unify. Atos is a SE (Societas Europaea), listed on the CAC40 Paris stock index.

The purpose of Atos 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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Let's start a discussion together

