BullSequana M7200

Responsive mainframe for a digital world

intel XEON GOLD inside

Atos

BullSequana M

With BullSequana M, Atos customers can have access to mainframe-class servers with unrivalled features for their applications.

Designed by Atos engineers and equipped with the latest Intel® Xeon® scalable processors and ultra-flexible and modular architecture, BullSequana M servers offer advanced technology such as virtualization.

BullSequana M servers are available in two series:

- the BullSequana M7200 series for GCOS 7, Windows® and Linux® applications,

and

- the BullSequana M9600 series for GCOS 8, Windows and Linux applications.

Both series include a range of servers that integrate a virtualized environment.

The BullSequana M7200 servers are available in a standard environment (BullSequana M7200 P) and a virtualised environment (BullSequana M7200V).

Key feature: reduced operating costs and optimised integration with other data center infrastructures.

Mainframe and virtualization: legendary reliability and cost reduction

The need to optimize data centers and their costs in terms of use and energy consumption or footprint has resulted in efforts to concentrate and reduce the number of sites.

Virtualization is at the heart of this dynamic as it allows resources to be pooled, consolidated and rationalized, increasing flexibility while reducing administrative complexity and infrastructure costs, and maintaining service levels.

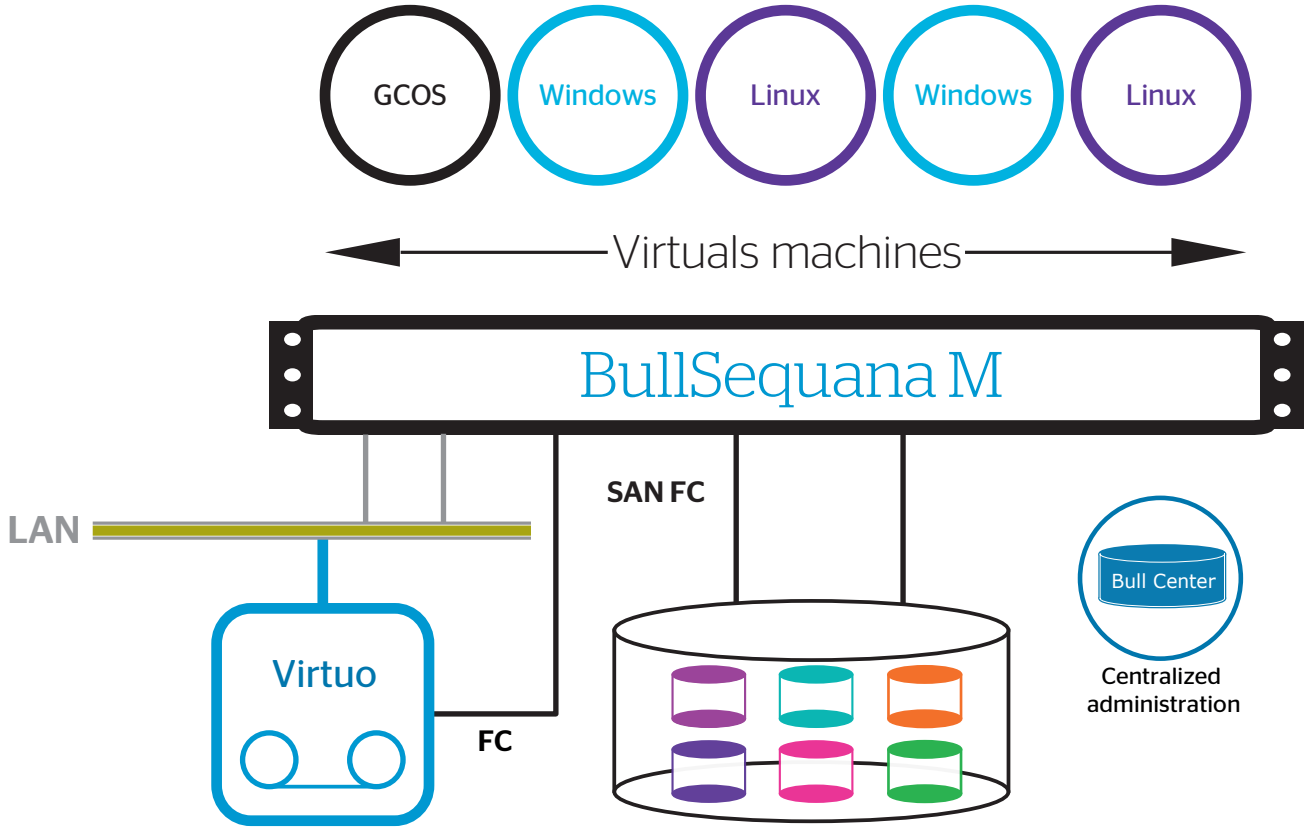
With virtualization, BullSequana M servers offer a new milestone in operational efficiency because it is now possible, with the addition of the VMware ESXi hypervisor, to partition them into multiple logical servers, which can be either GCOS (up to 4 servers on GCOS 7), Linux or Windows.

It is now possible to concentrate GCOS, Linux and Windows systems on a single physical machine, while maintaining a highly reliable environment.

In addition, the centralized administration of the platform via BullCenter enables the optimal management of system resources. This administration console allows for the secure management of VMs GCOS as well as Linux and Windows. The VMware High-Availability (HA) features can be utilized by GCOS applications, guaranteeing unrivalled continuity of service for applications. In the event of a hardware failure, the GCOS VM will be recovered on the backup server.

In addition, the use of the VMware VMotion feature enables the GCOS VM to switch dynamically from one physical server to another without interrupting production during, for example, a maintenance operation.

Thanks to the Virtuo range of Virtual Tape Libraries (VTL), this new generation of mainframe provides for the optimised management of backup virtualisation. Several GCOS VMs can make their backups on the same Virtuo by pooling hardware resources.



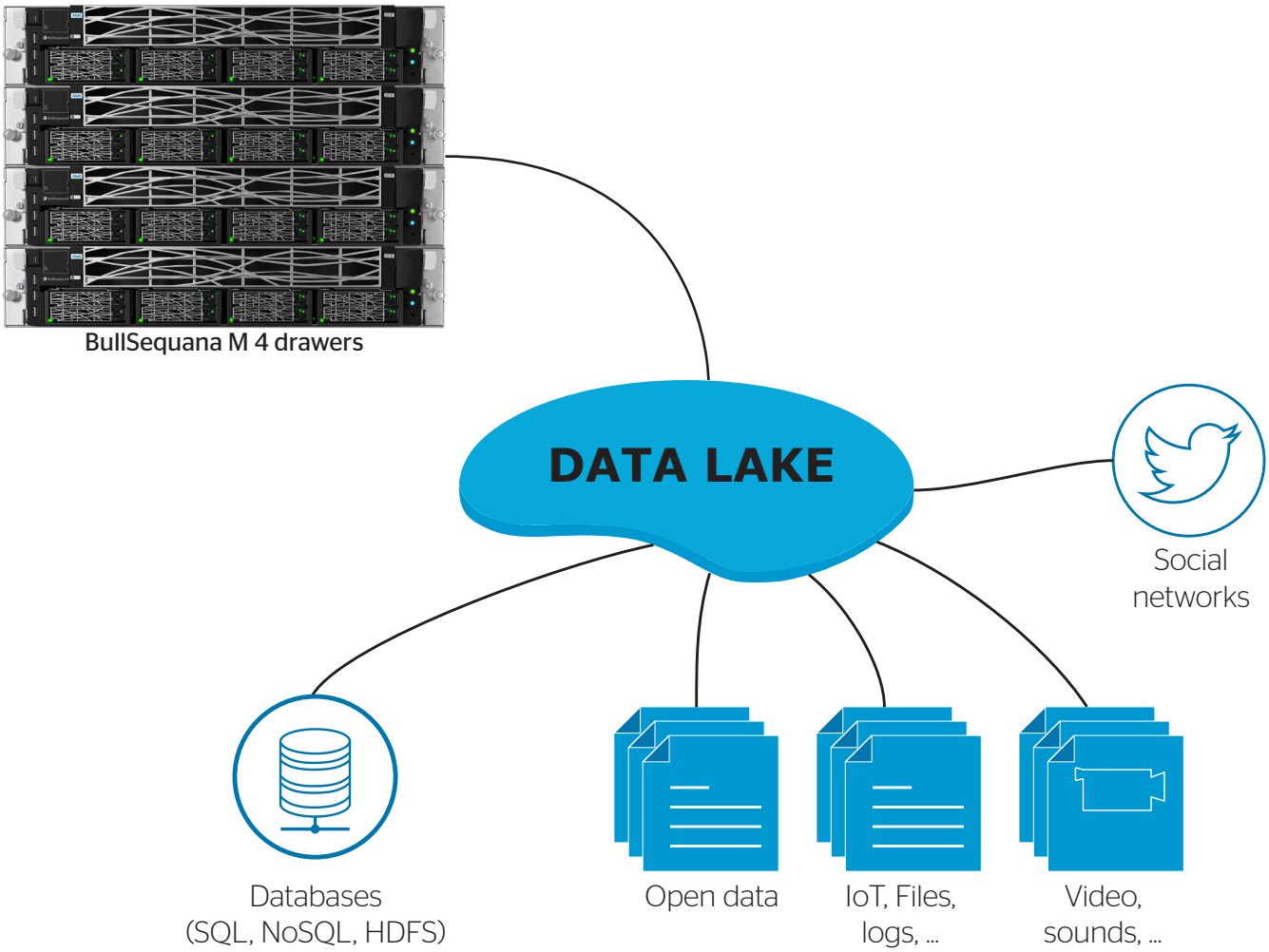
At the heart of Big Data

For businesses, the data in the information system represents an investment and an essential asset. With the digital transformation, analysing large volumes of data allows companies to recognize risks, identify new opportunities and make quick decisions.

This is why Big Data creates value, but it does require the implementation of a very large data collection and processing infrastructure called Data Lake, as well as the integration of analytics solutions that meet business needs.

In this context, the collection and processing of GCOS data therefore present a major challenge that requires not only the most powerful analytical tools but also a flexible and agile IT infrastructure.

This is provided by the BullSequana M range of servers. In fact, the connector developed by the Atos teams feeds directly into a Data Lake by providing data from the GCOS mainframe.



Ever more efficient and environmentally friendly

Given the ever growing number of users and new uses involving the information system, it is important for the infrastructures to be upgraded to maintain maximum levels of performance and availability.

The BullSequana M range, at the cutting edge of technology, meets this requirement. This new generation of mainframe servers improves the performance of GCOS applications with a dual dynamic:

New high-performance technologies

The latest generation of Intel® Xeon® scalable processors and the availability of new flash drives bring outstanding performance.

An original design by Atos

In addition, integrating the latest technology for physical servers resulting directly from the innovation of the Atos R&D teams, BullSequana M servers offer excellent energy efficiency, especially since virtualization makes it possible to consolidate infrastructures into a single platform. Decreasing electricity consumption protects the environment by reducing the energy footprint of these new servers at data center level.

Solid expertise

The Atos mainframe server range comes with a set of services and support to provide for the installation, deployment and integration of these servers.

In addition, to ensure that BullSequana's new-generation servers are handled correctly, Atos places at his clients' disposal a team of experts and trainers specialized in integrating the virtualization layer.

Infrastructure designed to endure the next decade

"Core" applications are a very important part of the application portfolios of companies. Used 24 hours a day, in all sectors, and all countries, these applications are critical for organizations. Future-proofing the application portfolio and having infrastructures that are extremely efficient, reliable, scalable and open is not just an option: it is crucial for these organizations.

From the Cloud to Big Data...

Atos mainframe servers have always had the capacity to evolve by integrating the latest technologies, particularly for the processing of very large volumes of data, be integrated in the Cloud or deploy Big Data applications

...to endure the next decade

Used throughout the world, especially in large corporations and government offices, GCOS applications can be based on state-of-the-art infrastructure designed to endure the next decade.

Technical specifications BullSequana M7200P

GCOS7 M7200P/8xy models within proc. XCC INTEL® XEON® Scalable processors 6130	801	811	821	831	841	851	861	871	842	852	862	872	882	892	8A2	893	8A3	8A4	8A6
Number of processors (16 cores / 2.1GHz /22Mo cache / QPI: 10.4GTps)	2																		
Number of core(s) for GCOS7	1								2							3		4	6
Number of cores for Windows®	31								30							29		28	26
Memory size for GCOS7 (Go)	1 Go																		
Memory size for Windows® (Go)	from 63 Go to 383 Go																		
GCOS7 OS version	GCOS7 V12																		
Windows® OS version	Window Server 2016																		
Administration & maint server	1																		
Free I/O slots	5																		
Integrated peripherals																			
System disks	2 disks 600Go 15Krpm SAS RAID1, 1 disk "SPARE", 1 disk "Backup" (Offline)																		
Ethernet 10Gbps Fiber Ports	2																		
Ethernet 1Gbps Copper Ports	2 (including 1 port dedicated BMC)																		
USB Ports	3																		
GCOS7 weight*	75	90	130	190	250	430	560	740	460	790	1020	1360	1870	2500	3600	4400	5100	6600	9500
Upgrade on site to model	821	821	831	841	851 or 842	861 or 852	871 or 862	872	852	862	872	882	892	8A2	893	8A3	8A4	8A6 or 8B3	8B4

GCOS7 M7200P/8xy models within proc. XCC INTEL® XEON® Scalable processors 6136	8B3	8B4	8B5	8B6	8C6	8B8	8C8
Number of processors (12 cores /3.0 GHz /24.75Mo cache / QPI: 10.4GTps)	2						
Number of core(s) for GCOS7	3	4	5	6		8	
Number of cores for Windows®	21	20	19	18		16	
Memory size for GCOS7 (Go)	1 Go						
Memory size for Windows® (Go)	from 63 Go to 383 Go						
GCOS7 OS version	GCOS7 V12						
Windows® OS version	Windows Server 2016						
Administration & maint server	1						
Free I/O slots	5						
Integrated peripherals							
System disks	2 disks 600Go 15Krpm SAS RAID1, 1 disk "SPARE", 1 disk "Backup" (Offline)						
Ethernet 10Gbps Fiber Ports	2						
Ethernet 1Gbps Copper Ports	2 (including 1 port dedicated BMC)						
USB Ports	3						
GCOS7 weight*	8700	11500	14200	16900	24500	22100	30000
Upgrade on site to mode	8B4	8B5	8B6	8B8	8C8	8C6	N/A

* GCOS7 weight is a transactional power rating on the GCOS7 scale

Technical specifications BullSequana M7200V

GCOS7 M7200V/Vxy models within proc. XCC INTEL®XEON® Scalable processors 6154	V01	V11	V21	V31	V41	V51	V61	V71	V42	V52	V62	V72	V82	V92	VA2	V93	VA3	VB3
Number of processors (18 cores /3.0 GHz /24,75Mo cache / QPI: 10.4GTps)	2 or 4 per server																	
Nb cores Virtual GCOS7	1								2							3		
Nb cores Virtual Srv Windows®	15								14							13		
GCOS7 RAM size (Go)	1 Go																	
Windows Virtual Srv RAM (Go)	31 Go																	
GCOS7 OS version	GCOS7 V12																	
Windows® OS version	Window Server 2016																	
Global server RAM size (Go)	Minimum : 256Go for 2 processors, Maximum : 1.5To for 4 processors																	
Administration & maint server	1																	
Free I/O slots	5 or 10																	
Integrated peripherals																		
System disks	VMware OS and tools hosted within 2x Disks 600Go SAS 15Krpm RAID1-protection (MegaRAID)																	
Ethernet 10Gbps Fiber Ports	2																	
Ethernet 1Gbps Copper Ports	2 (including 1 port dedicated BMC)																	
USB Ports	3																	
GCOS7 weight*	75	90	130	190	250	430	560	740	460	790	1020	1360	1870	2500	3600	4400	5100	8700
Upgrade on site to model	V21	V21	V31	V41	V51 or V42	V61 or V52	V71 or V62	V72	V52	V62	V72	V82	V92	VA2	V93	VA3	VA4	VB4

GCOS7 M7200V/Vxy models within proc. XCC INTEL®XEON® Scalable processors 6154	VA4	VB4	VB5	VA6	VB6	VC6	VB8	VC8
Number of processors (18 cores /3.0 GHz /24,75Mo cache / QPI: 10.4GTps)	2 or 4 per server							
Nb cores Virtual GCOS7	4		5	6			8	
Nb cores Virtual Srv Windows®	12		11	10			8	
GCOS7 RAM size (Go)	1 Go							
Windows Virtual Srv RAM (Go)	31 Go							
GCOS7 OS version	GCOS7 V12							
Windows® OS version	Windows Server 2016							
Global server RAM size (Go)	Minimum : 256Go for 2 processors, Maximum : 1.5To for 4 processors							
Administration & maint server	1							
Free I/O slots	5 or 10							
Integrated peripherals								
System disks	VMware OS and tools hosted within 2x Disks 600Go SAS 15Krpm RAID1-protection (MegaRAID)							
Ethernet 10Gbps Fiber Ports	2							
Ethernet 1Gbps Copper Ports	2 (including 1 port dedicated BMC)							
USB Ports	3							
GCOS7 weight*	6600	11500	14200	9500	16900	24500	22100	30000
Upgrade on site to model	VA6	VB5	VB6	VB4	VB8	VC8	VC6	N/A

* GCOS7 weight is a transactional power rating on the GCOS7 scale

Brochure

About Atos

Atos is a global leader in digital transformation with over 110,000 employees in 73 countries and annual revenue of over € 11 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 technology space. Its expertise and services support the development of knowledge, education as well as multicultural and pluralistic approaches to research that contribute to scientific and technological excellence. Across the world, the group enables its customers, employees and collaborators, and members of societies at large to live, work and develop sustainably and confidently in the information technology space.

Find out more about us
atos.net
atos.net/career

Let's start a discussion together

For more information: **atos.net/BullSequanaM**

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