

Optimized TCO, unrivalled performance

bullion joins forces with Red Hat

bullion is the world's fastest x86 enterprise server, designed specifically for the virtualization of business-critical applications. And with Red Hat Enterprise Linux technology, it places Open Source at the heart of Data Center rationalization.

Meeting the challenges of virtualization

The bullion server is designed specifically for rationalized data center virtualization – even of business-critical applications – enabling organizations to make a major step-change in the evolution of their information systems. As the most powerful x86 enterprise server in the world, bullion makes it easy to manage resources and seamlessly adapt systems to changing business needs. As a mainframe-class system, it combines the best available components with an architecture designed to deliver the very best service levels available. Thanks to its native virtualization capabilities, bullion offers the flexibility you need to deploy applications of all types quickly and securely. And with its low energy consumption design, the benefits of bullion go beyond infrastructure rationalization.

Rationalizing business-critical infrastructure through Open Source

Bull has joined forces with Red Hat – the world's leading provider of Open Source solutions – to offer an infrastructure and virtualization rationalization solution based on ultra-reliable technologies. With its native Linux environment, bullion is capable of deploying non-virtualizable business-critical applications securely. What's more, the integrated Red Hat Enterprise Virtualization (RHEV) solution makes bullion the first fully Open Source virtualization platform. bullion is the most powerful server in its class which, coupled with its competitive TCO, makes it a genuine business-critical application virtualization solution for organizations looking to do things differently.

Unrivalled features

- bullion is a unique platform, designed specifically for the virtualization of business-critical applications:
- Totally linear performance increases, from four to 16 CPUs, offering guaranteed application workload scalability even in the most demanding environments
- Twice as powerful as any other x86 server
- 100% memory reliability, backed by Bull's experience in mainframe development and Unix environments
- Quick, secure deployment of business-critical applications, backed by the reliability of Linux and the unique user management, scalability, administrator interface and network and storage capabilities of RHEV
- Ultra-compact design, with an "Active/Passive" PSU developed by Bull, making bullion the essential choice for organizations looking to drive down their electricity consumption
- Optimized TCO, with lower software costs, VM concentration and bullion's outstanding energy performance.



Unrivalled scalability and performance capabilities

DESIGN	
Form Factor	19" 3U/ modules Max 4 modules/system
PROCESSEURS	
Number	2-16 sockets, max 160 cores
Type	Intel® Xeon® series E7-4800, Supports 6, 8 or 10 cores
L2 Cache	Up to 30MB shared cache
ARCHITECTURE	
Chipset	Intel® 7510 Chipset. Bull Coherence Switch (BCS) for extension from 4 to 16 sockets X-QPI protocol between BCS modules; Intel® QPI protocol between CPU sockets
Quick Path Interconnect	Max 6,4GT/s
MEMORY	
min/max	min: 64GB, max configuration: 4TB (with 16 GB DIMM's)
Type	DDR3-1066MHz, RDIMM
Memory slots	256x in max. configuration, 64x per module
I/O SLOTS	
BUS slots	4x PCIe Gen2 x16 and 20x PCIe Gen 2x8 in max configuration 1x PCIe Gen2 x16 and 5x PCIe Gen2x8 per module
MEDIA & STORAGE	
2.5" HDD SAS 10Krpm	Seagate Savvio
2.5" HDD SAS 15Krpm	Seagate Savvio
2.5" SSD SATA	100GB, 250GB
Unité d'extension stockage	EMC, Netapp, or other connected SAN support
STORAGE CONTROLLER	
PCI board controller SAS/SATA RAID	In option: SAS RAID 0, 1, 5, 10 controller - 512MB cache & BBU
MEDIA	
2.5" Hot swap HDD (SAS)	Up to 8 hard disk drives per system
VIDEO	
Video Controller	Via iBMC
Memory	8MB
NETWORK	
Network Interface controller	Optional NIC
Number of channel	8x dual ports, 16x ports available

SECURITY	
2-level password	Yes
Front door/intrusion protection	Yes
Trusted Platform Module	Yes
PORTS ENTRÉES/SORTIES	
USB ports	2
PS/2 port (mouse, keyboard)	USB or iBMC
Ethernet port	1x Ethernet port for System Management, with : -remote KVM over IP -remote redirect CD/DVD over IP -control over system at any state.
ALIMENTATION	
Hot-plug PSU	1+1 standard
Power supply number	2, redundant
Power type	Passive/active power-supply solution with ultra-capacitor Power type 80+ Platinum 96% efficient
Power consumption	1600watt w/PFC
Auto-sensing	220V 60/50Hz
VENTILATION	
FAN specifications	8x Hot plug 1+1 redundant per module
PHYSICAL SPECIFICATIONS	
Size (HxLxP)	520 (12U) x 40mm (1.9") x 750mm (max). <i>Recommend to use Bull rack</i>
Weight	90kg for max configuration (45kg per module)
Operating constraints	15°C to 30°C, gradient 5°C/h, 35% to 60%, gradient 5%/h
OS & SOFTWARE	
Management Software	Bull System Manager and iCare
Linux support	Red Hat Enterprise Linux 6
SYSTEM MANAGEMENT	
BMC	IPMI 2.0
Remote Management	Standard via on-board iBMC
WARRANTY & SERVICES	
Standard warranty	3 years on site at day+1 with CRU components
Warranty extension	Optional
Other services	Installation, IT infrastructures advisory, energy audits, HA & Disaster recovery services, capacity & performance management, installation & integration services
REGULATORY & SAFETY	
Regulatory compliance	CE (FCC, UL)

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