



Making your information system **simple** again

Critical applications: the key to your business success

Bringing together an organization's core expertise, its most sensitive data, and critical applications are vital to its growth and productivity. These systems are the key to staying ahead of your competition and require ever-present security, unfailing reliability, and heightened availability. Everything has to be accessible as fast as possible, at all times...even during maintenance operations.

The problem is that the traditional solution of having a server for each application – long seen as the simplest, most cost-effective and robust approach – is now coming up against a hard reality: the proliferation of hundreds, even thousands of servers that are hard to manage, calling reliability into question. Businesses face a crucial question: how do they effectively achieve robustness and agility, when every application has its own specific and unique processing requirements?



A major advance towards a services-oriented approach. A first step towards internal Cloud computing.

An irrational waste of your resources

- How to prevent your maintenance and operating costs from spiraling?
- How to control the growing cost of buying new systems?
- How to limit the space needed for all those servers?
- How to restrict the amount of electricity they use; especially since this now represents a significant part of most organizations' energy bills?

These are burning questions at a time when everyone is expected to be environmentally responsible. Managing each system independently has put the shackles on IT Departments.

Only a holistic, open approach, based on industry standards, can liberate them again. In the space of just a few years, virtualization technologies have emerged as the best response to this situation. bullion enables organizations to make a major step-change in the evolution of their information systems: by consolidating their critical applications.

A growing need for simplicity and responsiveness

The faster the world changes, the greater the need for businesses to respond and act quickly. To survive in today's markets, organizations must be able to equip themselves quickly and easily with the infrastructures they need to evolve (to launch a new product, merge with another business, etc.). Users must be able to access their applications easily, without wasting time, and with guaranteed total reliability.

Already, using standard virtualization technologies, organizations have been able to rationalize some of their infrastructures: their development environments and application infrastructures, but if they are going to extend this approach to their critical applications, businesses are now demanding that everything is in place to guarantee service quality and control at the highest level.

A new kind of service quality, never before available in the standard world

In designing this new system, Bull's aim was to bring simplicity back into the heart of information systems.

With unrivalled features in the world of standard servers, bullion makes it easy to manage resources and to seamlessly adapt your systems to your changing business needs.

As a mainframe-class system, bullion combines the best available components with an architecture designed to deliver guaranteed reliability and availability.

Thanks to its native virtualization capabilities, bullion brings a whole new flexibility to your critical applications, with a corresponding improvement in your business performance. No more duplication, no more waste, a concentration of resources that is resolutely modular and knows how to adapt to meet changing demand: these are the key advantages of a 'scale-up' architecture, which stays true to the principles of a standards-based approach.

AS 'ARCHITECT OF AN OPEN WORLD', BULL taps into the world's intelligence and makes it work for you. It's your guarantee that you always have access to tailored and open solutions and obtain the best the market has to offer, without limitations.

bullion, specifically designed for virtualization of business critical applications

A true instrument for business, bullion has been conceived and developed by Bull with a desire to meet organizations' most fundamental needs for a stable infrastructure, high availability and flexibility. bullion is innovative and different: it's very DNA is built around an environmentally responsible approach.

Europe's largest team of experts specializing in the design and implementation of critical systems has been fully involved in its creation.

bullion, four precious ingots of concentrated technology:

- Its modular architecture brings you the most powerful, scalable platform available; to supercharge your capacity for growth
- bullion offers all the advantages of permanent availability, with built-in redundancy of critical elements, hot-swappable components, which can be updated or added without switching off the machine, automatic correction and predictive maintenance
- Because it natively integrates VMware virtualization solutions, bullion is optimized to offer you all the benefits of the most mature product on the market, as well as a consistent infrastructure platform
- And finally, bullion opens up the way to designing Bio Data Centers, featuring the simplest, most robust and energy-saving infrastructures.

A powerful combination of operational excellence and low running costs: bullion's greatest strength

With bullion, there is no real price to pay for the operational excellence you aspire to. Quite the opposite. The running costs of bullion are a real accomplishment in themselves. With fewer objects to manage, simplified high-availability and disaster recovery architectures, and updates without the need to halt production – for hardware, software and firmware alike... Ultimately, systems administration costs actually fall!

Forget the time when 'operational excellence' was a just another way of saying 'expensive to buy'. bullion combines all the factors that lead to a lower initial purchase price. First and foremost, the modular architecture means you only pay for what will really be used or consumed. Then bullion uses standard components to deliver a better performance/cost ratio and much greater openness. When it comes to software licensing and support costs, the fact that bullion provides the highest number of virtual machines per socket and per physical machine is great news when it comes to cutting the cost of software licenses that are billed depending on the number of sockets or physical machines involved.



Bull Coherence Switch (BCS) technology has been specifically designed to meet organizations' demands for scalability. The veritable backbone of the system, it delivers unlimited scalability enabling you to adapt the resources you need to support your applications, without impacting operational expenditure.

bullion, allows you to achieve unrivalled quality of service as quickly as possible

bullion actively contributes to driving business growth: it takes the brakes off project development and lets decision-makers implement the very best ideas without constraints. With its robust and modular architecture, bullion delivers unprecedented levels of availability: it is more than capable of responding to unexpected demands, and opens up the possibility of using a wider range of applications than ever before. bullion also lets you consolidate applications, while still guaranteeing optimum service quality. Meeting all the expectations of your customers within the business.

With bullion, it could not be easier to install and manage your systems

bullion allows you to cut the number of servers you have to run by a factor of ten, allowing you to implement more stable infrastructures that are capable of absorbing changing workloads while simplifying your high-availability and disaster recovery architectures.

Designed using open, standard systems, bullion integrates into existing environments with almost audacious ease! With bullion, interoperability problems are a thing of the past.

The solutions offered through Bull System Manager and VMware vCenter signal the advent of greater flexibility and foresight. You'll be more responsive than ever!

Finally, thanks to its in-depth experience in critical enterprise systems, Bull can offer you a comprehensive range of services that will enable you to reap the full benefits of your new infrastructure as quickly as possible.

For example, Bull partners can provide you with a careful analysis of the cost of ownership for your existing infrastructure, including a detailed study costs, with suggestions for improvement and architecture recommendations.

Call on Bull for the most up-to-date expertise in implementing virtualized production infrastructures, including high-availability, disaster recovery and back-up/restore functions.

As a recognized and respected player in the mainframe market, Bull designs reliable, high-availability machines without equal. So you no longer have to choose between security and openness. A service-oriented approach, at the heart of our long-term customer relationships.

The bullion lifecycle is fundamentally 'green': from its initial design (to meet the most demanding environmental standards), through its highly energy-efficient operational life to its ultimate recycling, governed by extremely strict standards and processes.

bullion, a fundamental building brick of the Bio Data Center, for a greener approach to IT

As well as enabling organizations to optimize their infrastructure topology and control service quality, bullion clearly differentiates itself from all the other platforms by its capacity to manage energy consumption.

Native virtualization and resource sharing drastically reduce electricity consumption.

Its performance per watt outstrips all benchmarks: you can achieve a 30% improvement compared with a blade configuration of the same power, and 70% compared with traditional twin-socket servers.

The dynamic power management features offered by Bull System Manager reduce energy consumption depending on workload for the CPUs, fans, memory, disks and put in stand-by modes resources that are not being used. Finally, using low-energy components also reflects our aim to help you develop environmentally friendly business practices.



**bullit[®] specifically designed for virtualization
of business critical applications**



Bull, guaranteeing a comprehensive infrastructure

Servers, storage, back-up, VMware, operating systems and related services: by choosing Bull, you can be sure that you are getting the best range of expertise to help you design and orchestrate your ideas, tailored to your specific needs.



“Looking at the different technologies we are utilizing, novascale bullion gives us a better utilization of the resources in terms of CPUs and memories and that’s quite important for the SAP hosting services. We are able to achieve a better quality and a higher availability of our services and that’s our main targets we want to achieve with our new novascale bullion systems.”

Ekkehard Spieth, General Manager and Head of the Information Services Division of Freudenberg IT, Germany



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Architect of an Open World™