

Bull Direct



Bull's monthly newsletter

EDITO

2006, strategy in action



We recently launched major initiatives in two key areas – Open Source and HPC – designed to help enhance innovation and sovereignty for companies and public sector bodies alike.

In the area of Open Source, we have just finalized a technological and commercial partnership with JBoss, a division of Red Hat. This

agreement, JBoss' first strategic partnership in Europe, demonstrates leadership and commitment on the part of our two companies to deliver open and innovative solutions for implementing service-oriented architectures (SOAs). Bull is the only European systems integrator to offer such a powerful range of solutions, services and support for Open Source. Under our Open Energy brand name, we are working on the integration of the JBoss Enterprise Middleware Suite with the wide range of solutions offered by the ObjectWeb consortium, of which Bull is a founder member and within which we are actively working on their interoperability.

In the area of HPC, we have demonstrated with TERA-10¹ that we have the talents to rival American and Japanese IT makers. Bull has recently won a number of very large contracts you will undoubtedly hear about over the next few weeks.

But innovation is not just the prerogative of large organizations, and this is why we have decided to facilitate access to HPC for all manufacturing companies in announcing a simple and particularly competitive solution integrating Microsoft's HPC software² and some pre-configured applications³ on our NovaScale servers.

This is our vision as 'Architect of an Open World': interoperability, flexibility, and freedom of choice have been part of Bull's strategic vision for its customers for two years. The recent agreement between Microsoft and Novell is another confirmation that we are on the right track; it reinforces our strategy of concentrating on openness and shows that we are ahead of our competitors.

Our priorities in 2006 have been excellence in the execution of our strategy and business efficiency. In these pages you will be able to appreciate the diversity of what we have achieved, with, this month, a particular spotlight on the success of our teams in Eastern Europe.

On behalf of everyone here at Bull, I wish you a very happy festive season.

Didier Lamouche,
Président-Directeur Général

(1): TERA-10: the supercomputer designed by Bull and delivered to the French Atomic Energy Authority (the CEA)

(2): Windows Compute Cluster Server

(3): For example, Fluent's flow simulation solution

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EXECUTIVE OPINION

Daniel Le-Cogucic,
Vice President International Operations, Central & Eastern Europe and European Affairs

The growth momentum in Eastern European countries

In the wake of events following the fall of the Berlin wall, Eastern European countries have engaged in extensive development programs as part of their pre-accession to European Union (UE) strategies, to grow their market economies and privatize public institutions.

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HOT TOPICS

Bull and JBoss form strategic partnership

Bull and JBoss, a division of Red Hat, have announced a worldwide technology and business partnership to accelerate the development and deployment of interoperable Open Source middleware solutions for enterprise Service-Oriented Architecture (SOA).

The partnership, which builds on Bull's existing alliance with Red Hat, is JBoss' first strategic partnership in Europe to include Open Source research and development collaboration and demonstrates both companies' leadership and commitment to Open Source software innovation.

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Microsoft and Bull put High-Performance Computing within reach

Bull adopts Microsoft Windows Compute Cluster Server 2003.

In the MCAE domain, compute clusters are now a key element in the product life-cycle.

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EXECUTIVE OPINION



The growth momentum in Eastern European countries

Daniel Le-Coguc, Vice President International Operations, Central & Eastern Europe and European Affairs

In the wake of events following the fall of the Berlin wall, Eastern European countries have engaged in extensive development programs as part of their pre-accession to European Union (UE) strategies, to grow their market economies and privatize public institutions.

Information technologies have made a major contribution to the changing dynamics of these countries, as key drivers for modernization. The IT sector has recorded growth rates of between 8-15% a year depending on the country, an average rate higher than those recorded in Western European countries.

Bull has a long history of co-operation with Eastern European countries. We have been making substantial investments there since the beginning of the 1990s, and notably in the Czech Republic, Hungary, Poland, and Russia. A key player in both transition and in modernization, Bull is recognized as a reliable and open partner, with proven expertise in running PHARE projects¹. Our business is based on two major activities: large-scale integration projects for modernizing public services, and infrastructure solutions, notably with our NovaScale servers that are continuing to win over new customers. This year alone we are registering two-digit growth.

Vitality and diversity

Meanwhile the pace of development is going at a very diverse rate in different Eastern and Central European countries. When it comes to computerization, there are really four main groups of countries:

- **New EU member states** are experiencing sustained momentum. On 1 May 2004, ten countries – the Czech Republic, Slovakia, Slovenia, Poland, Hungary, Cyprus, Malta, Latvia, Lithuania, and Estonia – joined the fifteen member states of the European Union. The development model for these countries is similar to that of Western European countries, with very

strong growth for [systems] integration services, and notably in the private sector.

- **EU candidate countries** currently benefit from Community programs and have embarked on major restructuring programs to modernize their administration. In these candidate countries also – Bulgaria, Romania², Turkey and Croatia – it is the public sector that calls the tune.
- **Emerging countries** among them some of the Balkan states³ and member states of the Central European Initiative, or CIS, have a very strong public sector, and an embryonic private sector, with privatization not having yet progressed to any significant level. CIS⁴ modernization projects are sponsored by TACIS (Technical Assistance to the CIS or Commonwealth of Independent States), which are regional co-operation grants (thematic or vertical sector multi-national programs). These markets consist essentially of hardware and infrastructure provisioning.
- **Finally Russia**, which is a whole continent apart, and one of the richest countries in the world in terms of natural resources. This is a country requiring a particular kind of business approach.

Bull, at the heart of their modernization and openness

With regard to these different degrees of computerization and paces of reform, Bull takes an appropriate approach in each case, focusing on major integration projects and complex infrastructure solutions in the most developed countries, and for the most part, hardware and equipment projects in developing

countries. This is combined with a strategy sharply focused on our key areas of expertise in the public sector – representing 30-50% of the market depending on the country – telecoms operators and the banking sector.

- **Bull is a major player in public sector modernization projects linked to pending EU membership.** We also have centers of expertise based in Poland and Bulgaria for this type of project. We are champions of customs management system modernization: seven of the ten countries that joined the EU in May 2004⁵ chose our solutions, which help them meet the standards required for European membership. We also have numerous customers in the fiscal area in Ministries of Finance, Home Offices (for border police forces and homeland security) and Ministries of Education, most notably in Poland, the Czech Republic, Romania and Turkey. These projects are central to the structural reforms being undertaken by these countries. We are now tackling social areas, for example with the Bulgarian Health Ministry and local governments who are embarking on modernization with great determination, such as the Polish town of Rybnik that has asked Bull to implement its ambitious citizen card project.

- **Our second strategic sector is telecommunications operators** In 2006, we decided, with the support of our Worldwide Telecommunications and Media entity, to consolidate and extend our capabilities while strengthening our dedicated centre of excellence in Poland by acquiring AMG.net, a

EXECUTIVE OPINION (CONTINUED)

Polish consulting and integration company specialized in advanced and open-ended computing solutions for telecommunications and finance sectors, in March 2006. As a result, we are fully equipped and ready to address the needs of telecoms operators in Eastern and Central Europe. Telekomunikacja Polska, Poland's leading operator, recently chose Bull teams in Poland to implement its data warehouse. In the Czech Republic, the country's leading Internet service provision portal, Seznam, chose our NovaScale blade servers to host its advertising applications.

- **Banking is a sector in which Bull has long enjoyed a significant presence,** notably with its payment systems solutions used in the deployment of ATM terminals and bank cash dispensers⁶. Most notably, we are the market leader in the Czech Republic with an 80% share of the payment systems market.

This strategy has proved its worth this year – as we have succeeded in winning some 40 new customers – and will be pursued in 2007, along with three major challenges (outlined below) that need to be tackled.

First priority will be given to developing our systems integration business activity. We intend to increase capacity at our centers of excellence in Poland and Bulgaria, and develop our training and recruitment of new skills. We are also launching a strategic Open Source initiative to deploy our Open Energy family of services across all our geographic areas, and this move is already being met with approval in many quarters.

The second priority is to consolidate on-going server projects, not only with our large AIX customers but also with the sustained growth of our NovaScale customer base.

Finally, 2007 heralds the return of Bull to the market represented by European Union institutions. Through our close collaboration with the EU as part of pre-accession aid programs, Bull, in cooperation with its strategic partners, is ideally placed as a key player in Brussels for EU projects themselves.

With its ambition as the new « Architect of an Open World », Bull is well placed to meet the challenges to come in 2007.

- (1) : PHARE is the European Union's financial instrument for assisting candidate countries prepare their entry into the EU.
- (2) : Membership will take effect for Bulgaria and Romania on 1 January 2007.
- (3) : Serbia Montenegro, Bosnia, Kosovo and Macedonia.
- (4) : Commonwealth of Independent States include: Armenia, Azerbaijan, Belarus, Georgia, Kirghizstan, Kazakhstan, Moldavia, Tajikistan, Turkmenistan, the Ukraine, Uzbekistan
- (5) : Bulgaria, Cyprus, Hungary, Lithuania, Malta, Poland and the Czech Republic (infrastructure). Romania and Ireland have also chosen Bull solutions.
- (6) : ATM (Automated Teller Machines)

HOT TOPICS

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The multi-dimensional agreement increases Open Source innovation, interoperability, integration, delivery, and support capabilities. Bull and JBoss will work together in three areas:

R&D collaboration.

Bull becomes a contributor to the JBoss community, following the same collaborative strategy it takes with other communities such as Apache, Eclipse, and the ObjectWeb consortium, which was co-founded by Bull. JBoss projects will benefit from Bull's expertise, especially in security and business process management (BPM). Specifically, Bull engineers will participate in the JBoss jBPM project and lead the BPEL (Business Process Execution Language) project as a starting point.

System Integration (SI).

Bull becomes a strategic SI partner and will add the JBoss Enterprise Middleware Suite (JEMS) to its portfolio of Open Source solutions, known as "Open

Energy". Bull's 400-plus Open Source software service and middleware specialists will provide a broad range of system integration services including consulting, application design, and tuning. Bull will deliver JEMS-based solutions on its NovaScale and Escala range of servers as part of the broad range of Open Source solutions it delivers on its platforms. This capacity of delivery will leverage the Bull-Red Hat OEM contract.

Subscriptions.

Bull will resell JBoss Subscriptions, which includes support and access to the JBoss Operations Network (ON), to its customers. Under the agreement, Bull will provide first- and second-level support with Red Hat providing third-level technical support.

As a result, Bull will be the only company in Europe jointly offering innovation, integration, delivery, and support capabilities on JBoss Enterprise Middleware Suite.

As part of the agreement, Red Hat will

strengthen its involvement with ObjectWeb, including working closely with Bull on the future development and extension of ObjectWeb, codenamed ObjectWeb v2. In addition, Bull is committed to working on interoperability between the JBoss community and the ObjectWeb consortium.

More information:

Press release:

http://www.wcm.bull.com/internet/pr/r_end.jsp?DocId=189541&lang=en

Set of Q&As:

<http://www.bull.com/news/QAjboss.html>

Bull's Open Energy offer:

<http://www.bull.com/integration/libre.htm>

Microsoft® and Bull put High-Performance Computing within reach

Bull adopts Microsoft Windows Compute Cluster Server 2003.

In the MCAE domain, compute clusters are now a key element in the product life-cycle. Microsoft Corp and Bull have announced the availability of Windows Compute Cluster Server 2003 on Bull NovaScale® R400 clusters, built from high-performance Intel Xeon processor-based servers. The announcement was made at Fluent Forum France, hosted by Fluent Inc, the premier conference in Paris for engineers and managers involved with computer-aided engineering. The partnership unites Microsoft's high-

performance computing (HPC) platform with the proven capability of Bull in HPC clusters, creating an easy-to-use, scalable infrastructure, featuring the best price/performance ratio.

Windows Compute Cluster Server 2003 is Microsoft's first software offering designed specifically to run parallel, HPC applications for customers solving complex computations. Windows Compute Cluster Server 2003 accelerates customers' time-to-insight by providing a HPC platform that is simple to deploy, operate and integrate with existing infrastructure and tools. Computer clusters

running mechanical computer-aided engineering (MCAE) codes have become an integral part of design and manufacturing facilities.

Leveraging its deep expertise in designing and delivering HPC clusters such as the supercomputer of the French Atomic Energy Commission (CEA), Bull complements its traditional offering with Windows Compute Cluster Server 2003 solutions to address the needs of industrial users who need fast and easy turnkey solutions for their MCAE applications.

BUSINESS NEWS

Bull advises French Biomedicine Agency as it upgrades its information systems to assume new medical responsibilities

The French Biomedicine Agency has asked Bull to define the new master plan for its information systems, as it adapts to take on its new medical responsibilities in the areas of human fertility and reproduction, embryology and human genetics.

Three fundamental elements will drive the implementation of this new information system: the need to take on board significant growth; the absolute necessity for uninterrupted service, in particular for activities concerned with organ donation and transplants; and finally all the data exchanges between health professionals in these new areas, amounting to several thousand additional users.

"The Biomedicine Agency's areas of influence are highly sensitive and strategic, as they relate to key social issues such as genetics and embryology,"

explained Dominique Chambéry, the Agency's Information System Director.

"We have identified three priorities: opening up the information system to external partners; quality and relevance of shared data; and responsiveness."

Bull's consultancy project for the agency focused on three main areas for consideration, to enable a new master

plan to be drawn up and a series of recommendations to be made on key organizational, technical and safety areas:

- The structure of the business information system, and epidemiological data
- The distribution of information in each business area, opening up and interconnecting the information system to external systems
- Optimizing technical and security infrastructures, with respect to strategic issues linked to the information system.

"Bull's consultants achieved a good understanding of the specific issues related to our business activities very quickly indeed, and were able to mobilize users from the Information Systems Directorate, the specialists in their fields (doctors and epidemiologists) and the senior management who are heavily involved in this strategic project. They knew how to rework our business challenges into a realistic and structured

IT construction plan. The high quality of interviews and exchanges has taken this consultancy project beyond IT concerns into the realm of organizational recommendations,"

added Dominique Chambéry.

This project confirms Bull's positioning in the health sector and in its consulting business.

"Bull's consulting expertise reflects our capacity to help customers in overhauling business processes and aligning their information system with the needs dictated by business. To achieve this, Bull's 300 consultants reap the maximum benefits from technologies, to define and structure effective information systems," emphasized Michel Husson, Director of Bull Management, Bull's consulting center of expertise.

BUSINESS NEWS (CONTINUED)

Bull modernizes Council's IT infrastructure in French *département* of Yvelines and consolidates its mainframe and Linux applications

New infrastructure built around Bull NovaScale 7000 series set to:

- Reduce Yvelines Council's IT operating costs by over 40%
- Enhance application performance by two to four times, and reduce back-up times
- Simplify system operation and administration

The *Conseil Général des Yvelines* (the local authority for the French *département* of Yvelines near Paris) has chosen the Bull NovaScale 7000 series to rationalize its IT infrastructure, in order to enhance the performance of its applications and reduce its IT operating costs.

Bull provided its solution as part of the Council's program to accelerate the implementation of on-line public services, designed to enhance the overall services offering to its citizens.

The NovaScale 7000 multi-environment series runs mainframe applications ported from two GCOS 7 machines, as well as Linux applications, on the same platform. It is enabling the Council to modernize, simplify and reduce the costs of its IT infrastructure, using high-performance, open solutions based on industry standards.

Bull is also the Council's partner in the development, in Open Source, of a 'Personal Independent Living Allowance' application. Currently under experimentation (until the end of 2006), this application will be widely implemented during the first half of 2007. It confirms the Yvelines Council's role as a pioneer in putting applications on line in the areas of social policy for which local authorities are responsible.



"We were very impressed by the new NovaScale 7000 system. Its performance and ease of use immediately won us over," commented Thierry Ehret-Franck, CIO at Yvelines Council.

"Our old applications run more quickly, and back-up times have been more than halved. The new, Linux applications coexist in complete security with the old ones, and share the same data storage system, which simplifies systems administration operations considerably and helps to reduce our costs."

Rapid switchover of mainframe applications to the new, open system

Bull was chosen by the Council to design the target architecture and infrastructure, as well as to manage and implement the project. The development of the new applications and porting of existing ones to the new platform was carried out in close co-operation with the Council's own IT specialists. The Bull NovaScale 7000 system was installed in just one day, and the application switchover to the new server was completed in less than three weeks.

"We are very proud to have the *Conseil Général des Yvelines* among our customers," confirmed Jean-François Bauduin, Director of the NovaScale GCOS business unit of Bull.

"Our understanding of the challenges of the public sector and expertise in information systems architectures meant we could respond effectively to all their expectations. This meant we were able to offer a global solution, based around our architecture consultancy, infrastructure and systems integration expertise."

BUSINESS NEWS (CONTINUED)

The Groupement des Cartes Bancaires chose Bull Escala servers to support significant growth in transactions on its banking services network

The Groupement des Cartes Bancaires (or bank card group) is a private organization that brings together more than 200 French and foreign-owned banks and financial establishments located in France. The Groupement has chosen Bull to supply servers capable of processing around 10 million transactions a day and deal with an increasing volume of transactions, growing by more than 10% a year (with the record level of 10.3 million authorizations having been set this year on the first Saturday of the summer sales).

The Groupement's choice has been made as part of a project to modernize its IT infrastructure and restructure all production sites, and will also integrate the world EMV (Europay, MasterCard, Visa) standard: a further significant step forward in improving security. CS, the Groupement's partner and prime contractor for its 'e-rsb' network implementation, will be integrating Bull Escala servers into this new, totally redundant and secure Banking Services Network.

According to Yves Randoux, Administrator at the Groupement: "After a consultation process led with CS, we chose Bull because of its commitment to our project, and its technical solution that perfectly fulfills the specification. Good co-operation between our teams and those of CS and Bull has also been a decisive element for a project that is as vital as this one is to our business."

The infrastructure will comprise 27 Bull Escala servers, linked to additional equipments destined for development, integration and reception purposes. The production site architecture is totally redundant to cope with the eventuality of different sorts of breakdown; redundancy is assured within the production sites, and from one site to the other. The contract totals €1.8 million.

"We are very pleased that the Groupement Cartes Bancaires is putting its confidence in us. Our infrastructure solution at the core of the e-rsb network corresponds perfectly to the GCB's expectations in terms of performance, security and fail-safe availability of services. It's a solution which can absorb the growth in transactions, and the peaks associated with on-line payments – where growth is running at more than 40% a year," indicated Philippe Miltin, Vice-President of Bull's Products and Systems Division.

About the Groupement Cartes Bancaires

Almost 200 credit establishments operating in France joined together to create Groupement des Cartes Bancaires CB, an interbank payment and cash withdrawal system. Created in 1984 with the aim of establishing a single inter-bank payment and bank card cash withdrawal system in France, the Groupement is a certifying body for payments systems, and custodian of security procedures and mechanisms for bank card payments.

Responsible for organizing and managing the CB interbank system, the Groupement des Cartes Bancaires CB contributes to making this system reliable, secure and simple to use. It organizes message distribution between banks, via the e-rsb bank card network.

BUSINESS NEWS (CONTINUED)

NovaScale makes inroads into Eastern Europe customs authorities

Early 2006, the **Customs Department of the Ministry of Finance in the Republic of Lithuania** decided to create and develop an IT infrastructure dedicated to running its Intrastat system (called IDAIS). Developed by Bull, IDAIS is a Web-based computing system that collects statistical data about foreign trade between Lithuania and other EU member states.

The Lithuanian Customs have chosen Bull NovaScale servers and storage together with the Oracle Enterprise database. Bull also provides associated services, as well as Open Source support and development. IDSA has now gone into production and the customs department is happy with the result.

Also in 2006, Bull was chosen as the

supplier for the Customs infrastructure of trader based risk assessment and control system (RIKS). According to the contract Bull, will deliver NovaScale cluster and storage together with Oracle DB and JBoss application server. Bull again will provide associated services and Open Source support and development.

The Bulgarian customs authorities have also chosen Bull to reinforce their entire IT infrastructure including the Central site and all Customs Offices spread over Bulgaria. The new infrastructure, based on Bull NovaScale and Escala servers, will help Bulgaria to achieve a fast accession to the European Union,

thanks to the full integration of the European Tariff into the national system of tariffs, as well as the automatic calculation of customs duties and quota management. The Bulgarian custom authorities chose Bull NovaScale and Escala servers to support their Informix databases and manage the European

regulations on tariffs. Bull had already developed and implemented the European Tariff Management System, the quota and surveillance systems early in 2006, as well as integrating the local databases with European DG-TAXUD databases to insure interoperability with Brussels.

Bull has gained worldwide recognition in the public sector for its expertise, in particular in the modernization of IT infrastructures, the alignment of customs systems to new international demands, the re-engineering of fiscal systems and on-line business processes. For several years now, Bull has been involved in developing customs solutions in several European countries during their

preparation for EU accession, supporting the implementation of EU requirements. These countries include Bulgaria, Cyprus, the Czech Republic, Hungary, Lithuania, Malta, Poland, and Romania. The Irish and Moroccan customs authorities have also chosen Bull solutions.

Whatever the customs regime or the complexity of the regulations involved,

Bull's Customs Declaration Processing Systems and Integrated Tariff Management Systems allow the customs authorities to deal in real time with all declarations, thus bringing fluidity and efficiency to the customs clearance process. Compliant with best practices, these Web-oriented solutions based on open standards enable automation, control and interoperability.

... and continues to be a compelling proposition in Turkey with the Chamber of Commerce

The Istanbul Chamber of Commerce, representing more than 300,000 companies, has decided to improve the quality of the business services provided to its members by moving most of its applications (inter-company business exchanges, document registration, arbitration, etc.) to a Web-based

environment. The feasibility study carried out by independent consultants recommended migrating the existing AS/400 IT environment to Open Systems, based on industry standards. Facing competition from the current supplier, IBM – who proposed pSeries Power5+ AIX servers with WebSphere

and Lotus Notes – Bull won the bid with a full Microsoft solution (SQL Server 2005, Exchange, Biztalk) running on two NovaScale 6320s with SAN Storage FDA2800 15TB capacity. The new environment will be operational during first quarter of 2007.

BUSINESS NEWS (CONTINUED)

The Spanish Patent and Trade Mark Office chooses Bull to be at the forefront of the move to bring Spain's public sector services up-to-date

The NovaScale® 9000 series will help reduce IT costs and open mainframe applications to standard-based environments

The Spanish Patent and Trade Mark Office (SPTO) has selected the Bull NovaScale 9000 series for its core applications. For several years now, the SPTO has been using a proprietary mainframe (Bull DPS 9000) to manage its databases and run applications for recording and updating, invoicing and controlling its business activities. The Office services include the recording of national and international trademarks and brand names, and European and EU brand names. The services are now available via the SPTO's Website, thanks to new tools enabling interoperability with the servers on which other complementary services run. Continuing its modernization program, the SPTO offers more and more improved services to its customers, so putting the SPTO at the forefront of the move to bring Spain's public sector services up-to-date.

An imperative: modernize the infrastructure that hosts mainframe applications

The SPTO has decided to renew its proprietary system for various reasons, among which are high maintenance costs and limited storage capacity. But the

SPTO's first objective was to ensure that its GCOS 8 applications were fully interoperable with applications from the open systems world, and in particular applications used by other Spanish and international organizations.

The SPTO decided to acquire the NovaScale 9000 series with a storage sub-system – incorporating Bull FDA disks featuring the very latest technology – and an STK back-up system. The new NovaScale platform is based on the most up-to-date industry standards (notably Intel processors) and, in addition to GCOS 8, supports a number of open operating systems (Windows® and Linux®).

The main advantage of the solution is that the new system is perfectly compatible with current applications, especially since all existing applications will need to be fully migrated to the new environment. The upgrade can therefore be achieved very rapidly, without any major risks and at a very low cost. The ROI is swift and guaranteed. This is quite a different story to the cumbersome kind of migration operation that can take several months, even years, without any real certainty as to the outcome. These are major advantages against a background of stringent budgetary constraints, and one where the gains in time translate into major cost savings.

Considerable improvement in application performance, improvement in service quality and system administration.

'Batch' type processing tasks and transactional applications have fully benefited from the additional power brought by the system, and by the new input/output and storage technologies. Processing times for these jobs have been reduced very significantly, resulting in considerable productivity gains.

"The Bull NovaScale 9000 series will enable us to continue to run our core applications with greater power at a lower operating cost, while also allowing us to add partitions to run Linux and Windows based applications. Thanks to Bull's expertise, the evolution from the proprietary server to the new open standard-based server will guarantee a rapid ROI, with no risk" declared José

EXPERT VOICE

Boris Auché, Head of Bull's Linux Open Source Solutions Group

Open source software: what strategies are businesses adopting?



The contribution Boris Auché has made to Bull's Open Source Solutions Group includes developing the Open Source family of services, supporting its deployment overseas, and handling promotion and various upstream consulting projects for individual customers. Boris draws on the resources of Bull's services business in France and its middleware center of expertise, working closely with its Open Source partners. Since 2004, Boris has been an ObjectWeb executive committee member, representing Bull within the ASS2L (French Association of Open Source Software Services Companies) and is responsible for the Open Source section of standarmedia.com, a website operated by AFNOR (the French Standardization Association). More recently, he was the architect of the Bull-JBoss agreement.

Today we are seeing a significant increase in the use of Open Source by businesses. What are the different kinds of strategies being adopted by IT Directors with regard to Open Source?

Before we look at the strategies and tactics, it is vital to remind ourselves of the three fundamental requirements for an IT Director: risk management, cost control and governance. Open Source software offers some aspects of the answer to each of these areas. Open Source applications are gaining ground within businesses and the public sector because the urgency of the need is so precisely matched by the relevance of the response.

Risk management: a key role for service providers

When it comes to risk, the prime concerns of the IT Director are support and continuity. That's still an area where Open Source meets some skepticism. Therefore, the increasingly important role of specialist service providers, whether they are software publishers, distributors, Open Source services companies... or systems integrators like Bull, who have the advantage of offering a global service. It is also one reason why 'Open Source Maturity Models' such as OpenBBR, QSOS, OSMM and others are becoming increasingly prevalent. Their aim is to help businesses evaluate each Open Source component they plan to adopt, and to assess how well it is likely to integrate within their information system. These models provide an interesting indicator, but not a definitive one.

Indeed, they are based on a scoring system that is weighted in a standard way on diverse criteria. But we should not forget that the real importance of each criterion can vary considerably from one company to another and from one sector to another.

Let's take licensing as an example. A government ministry will doubtless be very keen on a viral license, like GPL. This is a guarantee that any modification will benefit the whole community and that the standard will be preserved: and, as a result, interoperability will be maintained. A private company, on the other hand, might seek to keep any modifications it applies to itself, so as to keep a competitive advantage. This type of company would therefore be more favorable to issuing LGPL type licenses.

Pre-defined maturity models are not good at making this type of distinction. They are therefore interesting, but they need to be viewed with objectivity, and evaluated in the individual context of the organization concerned. For the IT Director, therefore, the essential criterion to take into account remains above all the availability of reliable service providers.

Cost control: advantage to Open Source software

When it comes to cost control IT Directors and CIOs are not just interested in the initial purchase price. They will be looking at implementation and acceptance costs, and then the regular costs of updating the system.

Here, Open Source can bring significant

advantages. The main expense is the cost of support, which can account for 30-35% of the cost of supporting a proprietary application with comparable functionalities. Any specific adaptations can be applied internally, without any external costs, because the company has access to the code.

Finally, while a software publisher will tend to release version updates regularly, in order to sell extensions and new functionalities, the enterprise itself has a lot more freedom to ignore these kinds of developments. The development cost is better controlled. It is important to grasp that – over and above the potential savings to be made – Open Source enables an IT Director to control and channel costs, at their own pace, and at their own chosen level.

Governance: from tactical to strategic use

Lastly, when it comes to governance, the enterprise often seeks to benefit from a maximum amount of freedom and sovereignty, and wants to remain in an industry standard environment. Open Source has a trump card to play in this domain, and its use often goes hand in hand with new approaches to software and application governance, which are moving from an approach equating to 'I buy an off-the-shelf application or I develop one myself in its entirety' to 'I assemble my application using components – published standards, or Open Source software – that I will go and look for on the open market'. This

EXPERT VOICE (CONTINUED)

practice is at the heart of the Open Source model. The multitude of Open Source components, and now solutions, available from the various communities (more than 100,000 Open Source applications are listed in SourceForge) is therefore encouraging developers, integrators and IT Directors to avoid re-inventing the wheel and instead to go out and look for the maximum number of components available, and then devote their efforts to adding value: assembling and adapting the applications they have chosen to the specific business context of the organization in question.

Integration is possible because Open Source components are drivers for standards. Their key differentiator is not their incompatibility, but much more so the quality of development, the innovation that they bring, and their capacity to be interoperable: team working in effect.

Two major approaches: 'cherry picking' and 'strategic sourcing'

Open Source therefore brings undeniable advantages to the enterprise. Since it is still a relatively new domain, we can today distinguish between two major types of approach as regards implementation: tactical utilization (or 'cherry picking'), and strategic use (or 'strategic sourcing') within the organization's standard technical platform.

In real terms, what characterizes these two approaches?

They are quite different: for historic reasons, 'cherry picking' is still the most common approach. But we are seeing a growing trend towards 'strategic sourcing'.

'Cherry picking': tactical use of Open Source

'Cherry picking' is clearly an opportunistic strategy, often used at departmental or business unit level. What's more, it's often through cherry picking that Open Source software is first introduced into the company. For a variety of reasons, a developer or an IT manager adopts Open Source components on a case-by-case basis: perhaps to build a new application; or maybe to reduce the operating cost of an existing solution (for example, using an Apache http server, replacing a proprietary application server with an Open Source J2EE server, or a proprietary database with an Open Source one). Today, this kind of use for Open Source

software is growing, particularly in areas such as network security, applications servers, databases, etc, but also messaging systems, portals and content management, ESBs, etc.

This kind of opportunistic strategy has its advantages. But it also has its limitations: in particular, how well can it be integrated into the technical platform and the architecture chosen by the organization. Because although adding diverse Open Source components offers certain advantages as regards flexibility, the limitation is in the number of heterogeneous pieces of the 'puzzle' that can possibly be held together subsequently. The more of these components there are, the more complex the whole is to manage and maintain! And hence the interest in choosing Open Source components that respect standards, even integrated within 'suites'. And hence also, the interest of the second strategy: 'strategic sourcing'.

'Strategic sourcing': making Open Source a key component of the standardized technical platform

This second, more advanced, strategy is being adopted by IT Directors who embrace the Open Source phenomenon and integrate its use fully within the company's technical platform.

This global strategy often has two origins.

It can result from a desire to professionalize and automate the organization's approach, faced with a proliferation of components used tactically. Once Open Source applications have been widely used, in a rather anarchic kind of way (and notably to save costs), management gets hold of idea and decides to rationalize and industrialize its use throughout the company, and as a result, moving from cost control as the main driver to risk management and governance. This is one reason why the subject is now on the agendas of the highest echelons of IS management. They then incorporate Open Source into their strategic vision, demanding that their system architects include Open Source components within the global architecture design, and incorporate a number of avenues for the deployment of Open Source applications in relevant segments of the architecture design. This is typical of the 'bottom-up' approach.

Conversely, it could stem from a 'top-down' initiative, following a managerial policy that usually includes the following strategic considerations:

- **Economic:** Open Source is a means of reducing costs and so gaining competitive advantage vis-à-vis competitors. The very high levels of Open Source used in appliances (such as the 'boxes' used by telecoms operators) is a good example of this.
- **Strategic:** As far as the user is concerned, Open Source enables complete independence from providers, prevents monopolies and so raises the level of strategic freedom. A good example is the current development of several research projects for using Linux in portable telephones, precisely for these reasons of independence.
- **Industrial:** Open Source enables standards to be imposed, facilitates collaborative innovation, and can therefore overcome obstacles to entering new markets.
- **Political.** The fact that many governments have chosen to promote Open Source applications as a means of bolstering their strategic independence, and at the same time supporting the development of their local IT industries, is a good example of this.

In both cases, the result is the same: Open Source is taken on board as part of company strategy in an orchestrated, planned and industrialized way.

This approach is currently gaining a lot of ground: all the more so because the trend is towards centralization of enterprise governance. While models for conglomerate types of governance (groups of entities each retaining their independence and individual processes, and required only to present an end result) have been in fashion for a long time, more centralized models for governance that unify and centralize processes, information systems, purchasing, etc, are now coming back into fashion.

The development of Open Source in the enterprise should increasingly follow this process of rationalization. We are currently seeing this to a significant extent in the telecoms and banking sectors, where the use of Open Source software is quite advanced, as industry analysts

EXPERT VOICE (CONTINUED)

Forrester noted in a recent survey (11 September 2006).

In addition, the public sector is making great leaps forward in this direction. In two or three years' time the movement is likely to become widespread in more than 50% of major organizations.

This has consequences, however, in terms of structure. We will be seeing Open Source centers of expertise appear more and more within IT directorates, taking responsibility for business intelligence, inventory and monitoring of 'libraries' of Open Source components that they have evaluated and selected. This kind of function can be carried out by an in-house team, or delegated to expert service providers, such as Bull.

Strategy, control, management, library... this is a world away from the 'libertarian' image Open Source still inspires in some minds?

We need to be clear about this: today the world of Open Source software is above all a world of professionals! While the first user communities like GNU were essentially groups of like-minded and dedicated individuals (IT experts notwithstanding) we quickly saw much more structured communities arriving like Apache, then constituted around specific businesses (JBoss, MySQL, ...) or communities of organizations (Eclipse, ObjectWeb, OSDL, etc.). Today, it is estimated that 80% of contributors to Open Source are salaried staff, and paid, therefore, to contribute! We are even starting to see Open Source 'Masters' qualifications being offered, like the ones recently inaugurated at the universities of Caen, Lille and EISTI, which I have contributed to setting up.

This demonstrates that the Open Source phenomenon is totally circumventing the only 'ethical' problems or the free delivery of the software which motivated the pioneering developers. If organizations are contributing in this area, it is because it is in their interests to do so in business terms. Sharing R&D effort of course enables huge economies of scale. But as we have seen, strategic and industrial factors also play a key role.

Without wishing to embark on a political

discussion, Open Source is a terrific driver for standardization and 'commoditization' of infrastructures that benefit everyone. It is, in addition, a formidable factor for group dynamics. For example, take ObjectWeb. In 2002, the consortium was founded by three major players: Bull, INRIA and France Telecom. Today, it brings together more than 4,000 developers, 70 businesses and organizations, more than 100 projects, and the consortium has a presence on every continent! It has succeeded in firing a collective momentum that would probably not have been possible for any of the three co-founders to create alone, whatever their talents. And it is also part of a much wider social movement. Today, it's clear from Web 2.0 success stories like MySpace and YouTube that users no longer want to be mere spectators, they want to be able to contribute, get involved... And this is itself a significant driver.

With 100 times fewer employees than the CNN, but 200 million 'readers/editors', in the space of three years MySpace has become the sixth most visited Web site on the planet! Basically, the idea of Open Source is to apply this collective intelligence dynamic to the world of professional technology. Just as they are beginning to see the formidable 'business' potential of 'Web 2.0', businesses today are also starting to realize the wealth of opportunities that Open Source – effectively 'Software 2.0' – offers. This in turn fuels the necessity for strategic thinking, which will increasingly become essential for the majority of IT departments.

To sum up, a final word on the recent Bull/JBoss agreement?

With the JBoss agreement, Bull is quite simply adding new expertise to its Open Energy portfolio of solutions and services, which already includes the ObjectWeb range. Under the terms of its agreement with JBoss, Bull pledges to make its contribution to the JBoss software, to integrate it on a global scale, and to offer it within all its platforms and to sell support for the entire JBoss component range.

Bull's commitment to develop JOnAS in the framework of the ObjectWeb consortium, and in particular new versions of it, remains total. We have a duty to our customers to deliver technological excellence,

and we are committed to supplying them with the means to avoid 'vendor lock-in' and monopoly.

François Exertier, a member of Bull's R&D team, is, and remains, the manager of the JOnAS project within the community, and his team is dedicated to its development. They are already preparing version 5, due for release in the first half of 2007. Numerous innovations are to come, notably in the domain of clustered and highly available solutions. Finally, the noteworthy arrival of new Chinese (through co-operation between ObjectWeb and OrientWare) and Brazilian contributors is a great support to Bull and its commitments, and demonstrates the attractiveness of JOnAS.

Through this agreement Bull is in effect reinforcing ObjectWeb, a community it founded, by contributing to the strengthening of its links with Red Hat; the technical director for Red Hat being Paul Cormier, also a member of the governing council. In the framework of the agreement signed with Bull, Red Hat will strengthen its commitment to ObjectWeb and its future development, code named 'ObjectWeb v2'.

Bull is still a driver of ObjectWeb development. This partnership does not constitute a change in strategy as regards contribution to projects such as JOnAS. As 'Architect of an Open World', Bull intends to contribute simultaneously to different communities including ObjectWeb, JBoss, Apache, Eclipse and others, and in this way to facilitate the cross-fertilization of Open Source initiatives. Cross-fertilizing and interoperability agreements with JBoss will enable us to strengthen and extend the JOnAS ecosystem. Today, four principal Open Source application servers co-exist on the market: JBoss Application Server, JOnAS (ObjectWeb), Geronimo (Apache) and GlassFish (Sun). An open world always needs to have alternatives, to stimulate innovation and to avoid monopolies.

Our desire is to be able to offer our customers the richest possible range of services and expertise. With this in mind, our involvement in the JBoss community is an enriching element. Our participation will be gradual, and we will make sure it is beneficial to our customers, for ObjectWeb, for JBoss and for Bull.

SOLUTIONS

Bull NovaScale Universal servers integrate the new multicore Intel Xeon processors

Performance boost Lower infrastructure costs

Bull announces the availability of new Quad-Core Intel® Xeon® E5310 & E5320 processors (code named Clovertown), and new Intel® Xeon® 7100 series processors (codenamed Tulsa), on its NovaScale Universal servers.

• Lower infrastructure costs

With a two-to-three times higher performance per watt depending on the models, the NovaScale servers offer more computing power and lower heat dissipation and power consumption in the Data Center, leading to significant infrastructure cost savings.



• Ideal platforms for virtualisation and consolidation

The embedded virtualisation technology of Intel Xeon processors delivers optimized support of virtual machines. With this technology combined with the virtualisation software solutions on NovaScale Universal servers and with NovaScale Master software suite, Bull's new platforms are perfectly adapted to consolidation in the Data Center.

Bull Evidian launches three innovative solutions for mobile computing user security

Bull Evidian, a subsidiary of Bull and Europe's leading supplier of Identity and Access Management (IAM) solutions, is extending its portfolio of solutions with three innovative new products for mobile computing user security.

The new solutions combine strong authentication and SSO, access control, encryption of files on the workstation, and encryption of data exchanged within a workgroup consisting of employees and partners. All three form an integral part of the company's E-SSO (Enterprise Single Sign-On):

Evidian Mobile E-SSO is the first Enterprise SSO (E-SSO) to enable employees to benefit from consistent access management, no matter where they are or what workstation they are using, whether they're working within the enterprise itself or remotely (via an VPN IPSEC or SSL extranet gateway, over the Internet from a hotel PC, a home computer or an Internet café). To complement Evidian's E-SSO solution, WiseGuard Mobile E-SSO uses the corporate directory and manages all passwords between the E-SSO and Web SSO systems in a

consistent way. This integrated solution enables the most appropriate authentication method for the particular circumstances to be specified: for example, a password for internal access, and an OTP (One-Time Password) token for mobile access.

Evidian Data Privacy guarantees that no unauthorized person can access data stored on PCs or exchanged within a workgroup. A pure software solution, this simple and integrated product combines application access control with encryption of data flows and exchanges of sensitive data. In addition, the solution enables secure exchange of information between employees and partners.

Evidian's E-SSO solution can also use **TrustWay PPS**, Bull's universal very high security USB encryption key for mobile workstations. With this integration, WiseGuard transforms the TrustWay USB

key into a user authentication tool, encryption processor and ultra-secure memory resource (1GB). Developed using technologies from the defense world, TrustWay® PPS features a universal USB cryptographic processor to enable all key management, encryption / decryption, and signature decoding functions that the user needs to be carried out: strong authentication for all types of applications, VPN IPSEC tunnels, encrypted VoIP, secure messaging, etc.

More information:

<http://www.wcm.bull.com/internet/pr/rend.jsp?DocId=189989&lang=en>

Evidian's offer: www.evidian.com

TrustWay PPS:

<http://www.bull.com/trustway/pps.html>

SOLUTIONS (CONTINUED)

7 golden rules for Single Sign-on projects

Capitalizing on its numerous projects carried out in Europe, in the US and in Asia, Bull Evidian today publishes "E-SSO now", a white paper on enterprise Single Sign-On, its challenges and best practices.

Capitalizing on its numerous projects carried out in Europe, in the US and in Asia, Bull Evidian today publishes "E-SSO now", a white paper on enterprise Single Sign-On, its challenges and best practices.

Targeting decision makers seeking the best way to reinforce security and compliance to regulations, to increase users' productivity, to reduce costs through the implementation of an enterprise SSO (at the heart of all IAM projects), the white paper draws on interviews with

experts and IT security managers as well as on Bull Evidian's experience as Number 1 in Europe in Identity and Access Management (IAM).

Bull Evidian sets out the 7 golden rules for successful SSO deployment and lists:

- The challenges of enterprise Single Sign-On
- The different types and technologies of SSO: E-SSO, Web / J2EE SSO, federated SSO, personal SSO
- The 3 myths and realities of SSO
- The 2 mistakes to avoid in implementation
- The 5 best practices in implementation.

This white paper can be downloaded from: <http://www.evidian.com/go/essonow>

In addition, Bull Evidian's site also gives access to numerous white papers dedicated to very specific areas of SSO: case studies on SSO, SSO compliance with Sarbanes Oxley, Call Centers and SSO, SSO within hospital Information Systems, etc.

These white papers can be downloaded from: <http://www.evidian.com/downloads/index.htm>

Bull offers the ObjectWeb Open Source community a BPEL process orchestration engine: Orchestra

In line with its strategy to be 'Architect of an Open World' and major Open Source software provider, Bull is today offering to the Open Source community its latest Open Source component 'Orchestra', the fruits of its R&D work in business process orchestration. The new module complements the numerous technological contributions Bull has made to communities such as ObjectWeb, Apache and Eclipse.

Orchestra is a complete Web services and process orchestration engine, which features an engine that conforms to the BPEL (Business Process Execution Language) standard and associated design tools. Orchestra can be adapted to any type of process, and meets the needs of medium to large organizations (banks, government ministries, defense bodies, industry, healthcare, etc).

The solution offers three main advantages:

- Fully standard technology. Orchestra conforms to BPEL 1.1, and has been designed to anticipate and support BPEL 2.0 and BPEL J as soon as these two standards are finalized. In other respects, Orchestra supports protocols not based on SOAP such as JMS, JCA, Mail, etc.
- A technology that is adapted to critical business processes. Designed to operate natively with J2EE application servers (JOnAS, JBoss, WebLogic, WebSphere, etc.) - in contrast to the

majority of other Open Source Web service orchestration solutions - Orchestra provides outstanding robustness and interoperability.

- Native integration with workflow tools. Orchestra can be natively integrated with Open Source workflow engines such as Bonita, etc. This enables a complete and totally standard BPM solution to be implemented for any type of process combining workflow and process orchestration.

in order to encourage further synergies with other Open Source projects and initiatives - such as ObjectWeb's ESB initiative, the Bonita workflow engine, and the JOnAS application server, etc. - as well as to facilitate international contributions within the consortium and with other communities.

Bull will supply any organization that requires assistance with the necessary support and migration services, plus development and integration work in the framework of its Open Energy suite of Open Source services.



Orchestra's code is pure Open Source, and will be freely downloadable, utilizable, and modifiable under LGPL license, so it can be reused for all types of application. The project will be hosted by the ObjectWeb consortium,

More information on Orchestra:

<http://www.wcm.bull.com/internet/pr/rend.jsp?DocId=188181&lang=en>

More information on ObjectWeb:

<http://www.objectweb.org>

More information on Bull's Open Energy offer:

<http://www.bull.com/integration/libre.html>

WHAT'S NEW

Bull opens services center in Bordeaux dedicated to new information technologies and the mobile enterprise

Bull opened mid-November a service center in the French city of Bordeaux dedicated to software developments around new information technologies. Applying its strategy that led to Bull's creation of service centers in Grenoble and Marseille, the Bordeaux service center will meet a growing demand for development, innovation and computing expertise from both the public sector and businesses.

The service center at Bordeaux will capitalize on Bull's R&D investment over the last ten years in innovative projects for telecoms operators, based around enterprise and mobility portal solutions such as geolocation, solutions for supporting mobile workforces and embedded video surveillance. Bull has worked closely with operators in these fields on major projects to meet the specific needs of enterprises.

The service center provides access to experts in systems architecture, development and integration, and offers its customers access to a range of

professional, automated resources and tools they need to develop and support projects, all based around open systems applications and Microsoft technologies. These services are focused around 'forge' technologies that enable the shared and automated design, manufacture and maintenance of applications. At the center of this initiative is Bull NovaForge™, a shared industrial tool built around proven and secure distributed development methodologies. These methods are used by Bull's R&D teams on the largest shared development programs, such as global collaboration with Open Source software communities.

Jean-Pierre Barbéris, General Manager of Bull Services and Solutions commented:

"Bull's new Service Center at Bordeaux is part of our strategy to increasingly professionalize and automate our services. We intend to increase the number of staff at the center in 2007, capitalizing on internal resources and recruiting locally. As a central pivot in innovative major mobile computing and development projects involving new technologies, the purpose of this center is to extend the local economic sphere of influence and strengthen Bull's presence in the Aquitaine region."

EVENTS

Echirolles on January 16 and Paris on January 18

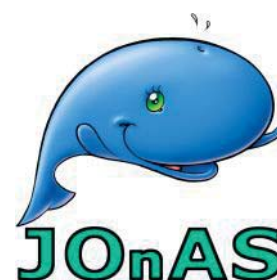
JOnAS Days

From portals to ESB, application servers are key for building next generation business applications. JOnAS, the Open Source Application Server from ObjectWeb, offers a unique alternative for deploying open, robust and enterprise-class J2EE applications. Supported by a broad international community, JOnAS 4.8 will be released by year end 2006, offering strong innovations in clustering and EJB3 support. These JOnAS Days will help you leverage JOnAS 4.8 and the future JOnAS generations for your information systems.

Thanks to the JOnAS Days, you will:

- Understand how to deploy open, secure and robust applications with JOnAS servers
- Get advanced information about R5, the JOnAS next generation release coming out in 2007
- Network with experts and developers to share expertise, insights and best practices
- Meet the team that leads the JOnAS project
- Discover the ObjectWeb middleware

ecosystem (Orchestra, Bonita, Exo platform, NovaStudio, Petals, ...)



Paris, 30 January – 1 February 2007

Linux and Open Source solutions



Host to more than 10,000 visitors, the "Linux and Open Source Solutions" exhibition is a major event dedicated to the world of Linux® and Open Source applications.

As one of the leaders in the field of Open Source in France, Bull will be exhibiting its Open Energy™ family of Open Source services and its NovaScale® servers running on Linux, and will also launch its NovaForge™ range, the first comprehensive shared platform for project management and distributed development projects based on Open Source software.

A number of Bull experts will also contribute to conference events, speaking on the following topics:

Administering, controlling and operating open source systems (S2),

on Tuesday 30 January 14.30 -18.00.

Migrating proprietary system management solutions to Open Source: lessons learned by Bruno Paul Martin, Bull Consultant.

J2EE Architectures and Open Source software (S8),

Wednesday 31 January 9.30-13.00

JOnAS 5: new generation Open Source server applications by François Exertier, JOnAS Project Leader, ObjectWeb / Bull

SOA and Open Source software (S14),

Wednesday 31 January 14.30-18.00.

This session is to be chaired by Jean-Pierre Laisné, Chairman of ObjectWeb and Director of Open Source Initiatives at Bull

- The PRESTO project: implementing administration exchange protocol using Open Source software by Jacques Cayuela, middleware architecture and SOA from Bull, and Frédéric Law-Dune, project manager, DGME-SDAE (a Ministry of Finance' directorate for State modernization).

- Deploying a Business Process Management in Open Source: lessons learned, by Miguel Valdés Faura, ObjectWeb Bonita project leader, Bull

Workstation (S15),

Wednesday 31 January 14.30-18.00.

A secure mobile office with Linux and Open Source by Alain Filée, Director of the TrustWay Business Unit, Bull

DBMS (S20),

Thursday 1 February 9.30-13.00.

Migrating a proprietary DBMS to an open environment: choosing a suitable

industrialization methodology by Ugo Brunel, DBMS consultant, Bull

ObjectWeb (S22) day,

Thursday 1 February 9.30-13.00.

- Orchestrating Web services with Orchestra by Goulven Le-Jeune, Java middleware developer, Bull
- Simplifying Java EE clusters administration: the Jasmine project by Benoît Pelletier, developer, Bull
- The EJB3 EasyBeans and OSGi container: the perfect combination by Florent Benoît, Bull developer

For more information and conference registration, click on:

http://www.solutionslinux.fr/fr/visiter_index.php

EVENTS (CONTINUED)

London, April 24-26

InfoSecurity Europe

As each year, Bull will be present at InfoSecurity London, the main security event in Europe that will take place in London, from April 24 to 26. On its booth, Bull will demonstrate the software solutions of its Evidian subsidiary

(Identity, Access and Single Sign-On management) together with its TrustWay encryption solutions (cryptographic USB key/Personal Protection System, VPN appliances, encryption cards, etc.).

More information:
<http://www.infosec.co.uk/>

Milan, February 6-8

InfoSecurity Italia

Bull will be present at InfoSecurity Italia that will take place in Milan, from February 6 to 8. Bull will demonstrate the software solutions of its Evidian subsidiary (Identity, Access and Single

Sign-On management) and its TrustWay encryption solutions (cryptographic USB key/Personal Protection System, VPN appliances, encryption cards, etc.).

More information:
www.infosecurity.it

Barcelona, 12-15 February

3GSM World Congress 2007**3GSM World Congress,**

the world's premier mobile event, attracted over 50,000 people in 2006, from more than 180 countries. 3GSM World Congress 2007 will bring together leaders and personalities from mobile operators and equipment vendors, as well as players from the Internet and entertainment worlds. It will feature the very latest technology, services and developments, bringing to life the promise of mobile broadband for all and defining the industry's path to continued growth.

The structure of 3GSM World Congress 2007 is being developed to reflect the ongoing changes in the mobile value chain. The program identifies the risks

that will be taken, and highlights the rewards that can be reaped, in bringing these changes to all geographic markets and mobile services.

The conference program will feature five plenary sessions providing an effective platform for the most senior figures from the mobile industry and other industries that are now impacting on the mobile world. Two streams look in detail at the strategic and technical drivers and implications of these. Concerning mobile strategy, subjects like convergence, segmentation and partnership, scaling up, emerging markets, new costs and revenue structures will be covered. Presentations on technical aspects will focus on standards, WiMAX and mobile

TV technology. A third stream is dedicated to the emerging force of mobile entertainment. The technology breakout sessions also introduced last year will be enhanced to allow for deeper examination of key technical issues.

Bull's Telecommunication & Medias worldwide division will be present and will take the opportunity of this major event to organize private meetings with its major customers and prospects.

More information
<http://3gsmworldcongress.com/flashintro.asp>

EVENTS (CONTINUED)**Veracruz, Mexico, 25 to 27 April 2007****2007 WCO IT Conference & Exhibition:
The World in Transition**

Next year, the WCO IT conference and exhibition organized by the WCO (World Customs Organization which involves 169 Member Governments) will take place in Veracruz/Mexico from April 25 to 27.

According to Michel Danet, Secretary General of the WCO: *"The World in Transition is a particularly significant theme as modern Customs must embrace the integrated supply chain perspective and manage the transition from the castle watch to the modern global environment with increasing volumes of trade and unprecedented calls for safe, secure, efficient and well-managed borders"*. In this respect, no doubt that IT plays a pivotal role in this new Customs environment which emphasizes the

importance of security while promoting the facilitated movement of goods across the globe.

Bull is sponsor again of the 2007 WCO IT Conference and Exhibition

a new opportunity to exhibit on our booth our e-biscus open and flexible solution for Customs, which facilitates the legal commerce through fraud detection, fast clearance and efficient enforcement. Our experts would be delighted to welcome you during the company breakout session on April 26 from 3:30pm to 4pm in room A.

Bull has gained worldwide recognition in the public sector for its expertise, in particular in aligning Customs systems to new international demands. For several

years now, Bull has been involved in developing customs solutions in several European countries during their preparation for EU accession, supporting the implementation of EU requirements. These countries include Bulgaria, Cyprus, the Czech Republic, Hungary, Lithuania, Malta, Poland, Romania; Ireland and Morocco have also selected Bull's Customs solutions to modernize their system.

More information on WCO IT

<http://www.wcoomd.org/ie/EN/en.html>

June 26-29 in Dresden, Germany**ISC2007 - International Supercomputing Conference**

The International Supercomputing Conference (ISC) – the largest supercomputing event in Europe – will once again be held from June 26-29 at the Dresden International Congress Centre in Germany. Prof. Dr. Hans Meuer, General Chairman of ISC'07 and TOP500 author, has again put together an impressive program with the theme *"The social significance or usefulness of supercomputing"*.

The program for the 22nd ISC event includes a three-day conference, alongside an exhibition of HPC solutions. Among the 2007 technological highlights are: High-Performance Networking, operating systems and algorithms for petaflop

systems, as well as industry solutions such as fluid dynamics. Two new tracks are in the process to being put together: an 'Automotive Afternoon' and a 'Scientific Day' that will focus on many aspects of the larger HPC solutions such as: Advances in the implementation of large-scale applications (capability computing, Computing and data integration in medicine and biology, etc.

The eagerly-awaited TOP500 list will also be announced.

Bull, as a sponsor of ISC 2007, will be present and will showcase the new series of its NovaScale range of servers and HPC solutions. The Group will take the

opportunity of this international HPC conference to make some announcements.

More information on ISC'07

<http://www.isc07.org>

