

EDITORIAL

Optimizing corporate performance management



Today, we are witnessing a fundamental revolution in business intelligence systems in the enterprise. On the one hand, these contribute to improved decision-making processes – both

strategic and operational – and now involve every business inside the organization. On the other hand, they help businesses to anticipate the future, a major advantage in a world that is moving forward at an ever-increasing pace. What's more, the market sectors that are setting the pace in this area are also the most competitive: telecoms operators, banks, mass-market retailing, transport... as well as the various sectors associated with healthcare and social protection, where they are using such systems to personalize their dealings with the public and to combat fraud.

Nevertheless, one point is key: effectively sharing "knowledge capital" within an organization is essential for coherent decision-making and corporate performance management. Also, integrating data sources and data processing is crucial to avoid the classic pitfall of individual business functions operating in "silos". We must never lose sight of the fact that knowledge management is a major strategic challenge, and that it represents the sum total of the enterprise's know-how. To fully optimize the value an organization gets from its knowledge capital, a single, unified Business Intelligence information system is the answer.

Today we are launching the third initiative in our 7i program, with the aim of facilitating decision-making through fully integrated Business Intelligence solutions. Our solutions – developed in partnership with other industry leading players – are based on the best practices and large-scale projects we have delivered in Europe and the Americas. In the USA, our customers include some of the largest States – California, Michigan, Illinois, New York, Minnesota and Utah – and in the framework of their Medicaid* programs, we now cover a quarter of the beneficiaries and one third of all the country's expenditure.

To support your BI projects, Bull will combine its significant expertise in this area with its wealth of technical skills in infrastructures, which are virtually unique in Europe. This really gives us the edge when it comes to implementing unified Business Intelligence systems.

Didier Lamouche,
Bull's Chairman and CEO

**Medicaid is the USA's health insurance program for individuals and families with low incomes and resources*

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7i PROGRAM

Bull launches third initiative in its 7i program: "facilitating decision-making"

- Helping enterprises make the most of their knowledge capital: better information leads to better decisions
 - Providing a comprehensive methodology for breaking down barriers and unifying Business Intelligence (BI) systems
 - Encouraging the democratization of Business Intelligence, with a new, integrated appliance for the mid-market
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7i PROGRAM – EXECUTIVE OPINION

Getting the most from your information capital to improve competitiveness

By **Julio del Valle**, General Manager, Bull Spain *(page 3)*

HOT TOPICS

Bull chosen by the French State to supply IT infrastructure for Chorus, its future financial management application

The Agence pour l'informatique financière de l'État (AIFE) has awarded Bull, and its partners Atos and Accenture, one of the largest infrastructure and security tenders ever let in France, to develop and maintain operational status for section 4 of the "Chorus" program. *(page 8)*

7i PROGRAM

Bull launches 3rd initiative: "facilitating decision-making"

- Helping enterprises make the most of their knowledge capital: better information leads to better decisions
- Providing a comprehensive methodology for breaking down barriers and unifying Business Intelligence systems
- Encouraging the democratization of Business Intelligence, with a new, integrated appliance for the mid-market

In the context of its 7i program, Bull launched its third initiative to help enterprises make the most of their knowledge capital and facilitate decision-making. Bull is building on its experience as the integrator of numerous large-scale Business Intelligence (BI) projects worldwide. The company's aim is to facilitate the deployment of open BI solutions that collate data from across the extended enterprise and transform it into knowledge, enabling businesses to understand, anticipate, and react more quickly and effectively.

"With the e-enabling of business processes, and the growth of the Internet and mobility, the quantity of information being produced and data being exchanged is exploding," affirmed Jean-Pierre Barbéris, General Manager of Bull Services and Solutions. "In the face of this exponential increase in data, every business function often tries to implement its own decision-support systems, giving rise to a raft of disparate, tactical projects, with each department only seeing one facet of operational reality. The challenge is to avoid this disjointed approach and construct a unified Business Intelligence system that can correlate and analyze information for the benefit of everyone. With its offering centered on establishing a "BI Center of Expertise" and its "appliance"-based approach to making BI more accessible to the mid-market, Bull is taking innovative steps to respond to this challenge."

An original approach – helping organizations break down the barriers between decision-support systems and establish a unified BI Center of Expertise

As part of this, its third initiative, Bull is announcing the strengthening of its own competence centers focused on Business Intelligence – already renowned in Europe and in the USA for their impressive track record on major projects – and launching an innovative offering for customers, the "BI Center of Expertise". Drawing on Bull's global experience of Business Intelligence, this offering provides a toolkit of services and methodologies to help enterprises deploy a unified approach to Business Intelligence, in order to:

- Guarantee long-term consistency and effectiveness of Business Intelligence systems
- Standardize all methodologies and procedures related to BI systems
- Provide powerful structures for capitalizing on experience
- Ensure optimum management and day-to-day operation of BI systems
- Accelerate the process of taking on board new requirements

- Control the risks, costs and timescales of new Business Intelligence projects.

The new offering builds on Bull's experience gained as a result of working on very large-scale BI projects, such as Medicaid in the USA (where systems implemented by Bull are managing the fight against fraud, as well as preventive health programs for 25% of all recipients of social healthcare services) and many more. Bull also manages major BI implementations to support public spending in finance (in line with the French budget reform act, the LOLF), employment and healthcare.

As the Deputy Director of the Michigan Department of Community Health commented: "Today, the BI solution in Michigan – in which the data warehouse is the pivotal element, coordinating data deriving from 21 different agencies working in healthcare – provides a unique, integrated environment. Among the State's 1.4 million beneficiaries of social and healthcare services, a large number are registered on several financial support programs. Before the BI project, it was practically impossible for one agency to know and monitor the services and costs associated with one person, as delivered by other departments. Now, the data warehouse is helping us combat fraud and abuses of the system, carry out more precise data analysis, identify and interpret classic situations, determine which programs are the most cost-effective, reduce the total cost to contributors, and predict the needs and priorities for public health for the years to come."

In the USA, BI solutions implemented by Bull for the Medicaid program (in States including California, Michigan, Illinois, New York, Minnesota and Utah) have resulted in savings of more than \$2 billion.

Democratizing BI: Bull launches innovative "appliance" for the medium-sized businesses

As one of the very first players in the industry to invest in reporting and extract-transform-

load (ETL) systems, Bull has a great deal of know-how when it comes to technical infrastructures for BI, including servers, storage and security. For many years now, Bull has worked with leading partners and communities in BI – including Business Objects, Informatica, Microsoft, Oracle, SAS and others, who provide databases, data integration tools, reporting systems and analysis tools – to build powerful turnkey unified BI infrastructures. Drawing on this expertise, Bull is now complementing this offering with a turnkey BI solution developed in conjunction with QlikTech, a pioneer and leader in "in-memory" BI: an innovative approach that halves the cost of implementing BI solutions and reduces the timescales by a factor of four! The new solution, available from September 2007, will radically simplify the deployment of BI systems, enabling mid-market businesses and public-sector bodies to benefit from integrated BI, with a rapid return on investment.

To discover more about Bull's third initiative: <http://www.bull.fr/7i>

Initiative 3: Facilitate decision-making

Constant competitive pressure, the ongoing search for higher productivity, rapidly-changing market demands... enterprises and decision-makers need information that is both detailed and comprehensive, for greater visibility. By breaking down the barriers between Business Intelligence systems with innovative tools and methodologies, Bull helps your enterprise centralize and analyze data to create unique decision-making capability. Because everyone has the right to information, get a complete, 360° view of your organization with Bull. Discover our 7i initiatives on our website www.bull.com/7i

BULL
Architect of an Open World™

7i PROGRAM – EXECUTIVE OPINION

Getting the most from your information capital to improve competitiveness

By Julio del Valle, General Manager, Bull Spain

Increasingly in the information Society, success is going to be directly proportional to the knowledge that an organization is able to apply in real time, and also to the speed and security it can devote to managing business processes. With globalization, the growth of the Internet and mobility, the amount of information being produced and data being exchanged is exploding. Selecting, managing and using that data, has never been so important to public and private sector decision-makers. The challenge is to convert raw data into real value – in the form of innovative products or services – using powerful business intelligence tools. Only then can information capital become a real source of competitive advantage and business agility.

A strategic challenge

What really keeps today's decision-makers awake at night? Their ability to anticipate the future: so they can act and react ahead of the rest. Their real challenges are to gather relevant information, transform it into knowledge, and understand how best to use it; whether to support day-to-day activities or future plans. The Internet, which represents both a new business channel and a worldwide database, has expanded opportunities in a globalized and hyper-competitive economic environment in which we are all evolving. And it is fuelling a 40% annual growth rate in the amount of data being processed!

Managing the inherent complexity in these data flows, help to understand customers or citizens better, to pinpoint rapidly behavioral changes or shifting market trends, to seize opportunities for growth and continually optimize performance. Which is why so-called Business Intelligence (BI) tools are now gaining ground so rapidly. Today they are at the top of IT Directors and CIOs' lists of priorities, whereas back in 2004 they were only in 10th place, according to Gartner's annual EXP survey. To make the most of the business or public sector body's knowledge capital, the IT Department can now implement extremely powerful analysis tools, and coupled with Customer Relationship Management (CRM) applications, these not only provide information for top-level business "dashboards", but also help managers on the ground in their day-to-day decision-making.



With the advent of Web 2.0, the avalanche of data will only increase, and processing it will be even more complex. So a new generation of tools is appearing,

designed to improve the quality and relevance of searches. Just like the automatic semantic analyses that use artificial intelligence engines for non-structured informa-

tion. It's also worth pointing out that the barrier that exists today between BI/search engines and economic intelligence solutions looks set to disappear in the next few

(To be continued on page 4)

7i PROGRAM – EXECUTIVE OPINION (CONTINUED)

years: because when it comes to decision-making, every bit of information counts!

A stimulus that activates all business processes

Anything that helps understand more about “buyer behavior” is a useful asset and has potential value. Because of its predictive nature, cross-fertilized information can help to identify an opportunity to make revenues or initiate an activity designed to stimulate customer loyalty, before a competitor can take similar action. It is like a stimulus that activates all the organization's internal business processes: a contact with a customer—coupled with other variables – may trigger the submission of a proposal, the tracking of an order, a manufacturing event, a delivery, an invoice... This item of information in turn produces others that circulate not only internally but also outside the organization among suppliers and partners.

Information transformed into knowledge – delivering value and being a source of competitiveness – is a strategic challenge for public and private sector bodies of all sizes and in all areas of the economy, with the increasing democratization of Business Intelligence tools. From the senior management team to the marketing department, from sales and finance to the HR function, everyone needs access to advanced analysis and decision support systems in a world that is moving faster and faster all the time. BI not only enables senior management to be alerted in real time according to their chosen indicators, but also allows financial managers to run budget simulations based on real data, store managers to react to current sales data in retail environments, auditors to detect possible fraud, elected representatives to track subsidies precisely thanks to links with geographic information systems, on-line retailers to get an immediate view of a customer or prospect's profile or potential...

Business benchmarks are essential. Both for central and local government, this involves measuring the impact of public services and developing scenarios for future policies... In areas such as social protection and healthcare, BI tools help organizations undergoing fundamental transformation to have much more personalized relationships with those in receipt of their services, to improve service quality, work more as part of a network, control their costs, combat fraud and develop effective preventive measures. Banks and insurance companies have their own challenges to face: conforming to general financial regulations like Sarbanes-Oxley and LSF in France, as well as to the specific regulatory codes of their own professions, for example. This leads to the implementation of new kinds of BI solutions that enable organizations to capitalize on different types of information and restructure their data to meet the needs of new accounting regulations. In the world of manufacturing, and in retail, the need to optimize production and distribution costs, while at the same time improving logistics capabilities, is a major challenge if a business is to remain competitive in the face of international competition. Behavioral analysis and a good understanding of your customers are vital to ensure continued growth and foster innovation.

The real challenge: transforming information into knowledge in a unified way

The benefits are significant, but so are the resulting challenges. The most important of these is to carry out consistent analyses. Because, faced with the explosion in the amount of data, each department within an organization is often geared up to put in place its own business intelligence systems, often resulting in the implementation of a whole raft of disparate, tactical BI projects or isolated “data-marts”, sometimes well-adapted to the needs of specific functions, but with little cross-correlation. The result may well be effective solutions for specific needs,

enabling rapid decision-making in each department; but serious difficulties when it comes to compatibility between databases, data and analysis tools, which hinders overall attempts to correlate data or take a global view.

This is clearly the biggest challenge for the years to come: implementing unified BI solutions, rather than a series of little systems in their own functional silos, where people only take into account one aspect of a wider reality. The real challenge is to avoid the anarchic spread of heterogeneous BI applications throughout each business function or geographic location. This involves defining a shared customer database that provides a unified, but also function-specific view to the business. A good understanding of your customers must be a fundamental building block of the system.

Of course, this also involves effective integration of data and tools, in order to ensure consistency, cleansing and qualification of data from disparate sources, as well as good integration of the BI system with the organization's other business applications.

Finally, it also involves establishing a business intelligence “center of expertise”, using a mix of internal or external resources to help mobilize the various functional management teams and the IT Department, and adapt people's skills as a result.

Whether in Europe (Unédic in France, INSS in Spain, etc.), Latin America or some of the largest States in the USA (particularly in the fight against fraud in the Medicaid program), Bull is closely working with leading BI software companies and offers an innovative approach to supporting our customers in this highly strategic area.

And BI is at the heart of Initiative 3 of our 7i program.

7i PROGRAM (CONTINUED)

State of California selected Bull Services' Business Intelligence solution

State of California selected Bull Services' Business Intelligence solution to help improve health care outcomes, reduce fraud and abuse in Medicaid program

As the primary funding source for health care services provided to low-income adults and children, elderly, and disabled persons, Medi-Cal is responsible for providing the care and improving the overall health of approximately one out of every five Californians. With more than 6.6 million beneficiaries, no other Medicaid system in the nation covers as many people as Medi-Cal does.

This new solution will help place California among the nation's leaders in managing medical assistance programs, and support the State's goals of achieving comprehensive health care reform, delivering high quality health care in the most cost-effective settings, emphasizing prevention and early intervention, improving health care outcomes, and uncovering and preventing fraud and abuse.

Business Intelligence

From One National Leader to Another

California has long been considered a national leader, a reputation it is enhancing with its goal of achieving comprehensive health care reform.

It's no surprise, then, that the Golden State has chosen another national leader, Bull Services, to implement a new advanced Business Intelligence (BI) health care solution. The system will provide the advanced analytic capabilities to help more efficiently manage California's \$37 billion Medicaid program—Medi-Cal—and improve health care services for millions of residents.

With the addition of California, Bull Services' BI solutions will help manage Medicaid programs that cover *one of four Medicaid recipients* in the United States and account for more than *one of three Medicaid dollars* expended nationwide.* These include other large states such as Michigan, Illinois, and New York.

More importantly, we have a 100% success rate in implementing Health and Human Services BI solutions, on time and on budget. And, our solutions have helped states realize more than \$2.5 billion in combined financial benefits and achieve breakthrough results in health care quality and outcomes.

California and Bull Services.
National leaders by any definition.

To learn more, please contact Sharon Fahy at 866-764-BULL or sharon.fahy@bull.com

* Sources: Kaiser Commission on Medicaid and the Uninsured and U.S. Centers for Medicare and Medicaid Services (CMS)

data
Information
Knowledge
Excellence

White paper on "Unified BI: better knowledge for better decision-making"

The launch of this initiative is accompanied by the publication of a white paper on "Unified business intelligence: better knowledge for better decision-making".

Capitalizing on experience gained from numerous projects the world over, as well as on case studies from experts and major customers, the white paper describes the ten golden rules for breaking down the barriers between decision-support systems, and optimizing them, and explores:

- The increasing democratization of enterprise Business Intelligence
- The challenge of data consistency
- The classic pitfalls to avoid
- Best practices for successful implementation.

The white paper includes exclusive interviews with the CIOs of major companies and public sector bodies in Europe and the USA.

To download the white paper:
<http://www.bull.fr/7i>

BULL
Architect of an Open World

Executive insight

Unified Business Intelligence: better knowledge for better decision-making

// Faced with the explosion in the amount of data, each different function within the business has often taken steps to put in place its own decision support tools, resulting in the implementation of a whole raft of systems in 'silos', so everyone is only seeing a limited slice of reality. The challenge is to establish a single, unified BI solution that allows information to be correlated and analyzed to the benefit of everyone.

www.bull.fr

GUEST SPEAKER



In just a few short years, ObjectWeb really made a name for itself. So why create OW2?

Since it was established in 2002, ObjectWeb has proved the effectiveness of its Open Source consortium model, bringing together industry players, research institutes and universities to develop Open Source middleware technologies. ObjectWeb consortium has not only inspired many technological advances, but it has also generated a lot of enthusiasm among its members, and keen interest from industry analysts. Most notably, ObjectWeb featured in several of Gartner's "Magic Quadrants". Today, the very fact of its success is causing the world of Open Source to evolve. There is a real step-change. The globalization phenomena we are observing in the economy are starting to take shape in the Open Source world. Although ObjectWeb had a strong profile in Europe and in the USA, we were not very visible in the rest of the world, despite the fact that the contributions of emerging economies – particularly Brazil, Russia, India and China (BRIC) – are starting to grow. OW2 was born from a desire to meet these challenges head on. The last ObjectWeb board meeting therefore set two objectives: to strengthen internationalization, and to increase synergy with both industry and the marketplace.

OW2 is the outcome of this initiative, and of opportunity to associate itself with emerging communities in Asia and Brazil, particularly OrientWare in China. The quantitative leap is huge: at the present time, the new group (ObjectWeb + OrientWare = OW2) has 46 members, involves more than 100 organizations

OW2: a global platform to encourage the creation and development of Open Source ecosystems

**Interview with Jean-Pierre Laisné,
Chairman of OW2 and Director of Bull Open Source initiatives**

At the beginning of 2007, the ObjectWeb Open Source consortium (founded by Bull, France Telecom and INRIA) merged with OrientWare to become OW2. The objective was to become the leading global consortium dedicated to Open Source middleware, in Europe, America and in Asia. In just a few months, OW2 has succeeded in bringing together 46 members (including Red Hat) and 6,000 developers worldwide. Where is it going, and what's on the horizon?

and 6,000 developers, from Asia to America, and including Europe, working a hundred high-technology Open Source projects, as well as initiatives that address problems in the marketplace or in individual market sectors: eGovernment, service-oriented architecture (SOA), telecoms and business intelligence...

Thanks to players like Red Hat, the Open Source market is consolidating. How is OW2 positioning itself?

OW2 is right at the heart of this movement, and there is a high degree of osmosis. The concepts of ecosystems, synergy and collaboration are key to Open Source. OW2 precisely combines all the necessary conditions for developing collaborative ecosystems, fostering synergies between major industry players with wide access to the market (such as Bull and Red Hat), small, flexible and innovative software publishers, academic partners who encourage innovation and the transfer of ideas to industry, and finally end users. As a platform, OW2 is extremely conducive to the creation and development of ecosystems, by favoring collaboration between all these diverse organizations. And that explains the origin of the new kinds of activity we are engaging in, with our market and sector-focused initiatives. Our status as a non-profit making organization is not a contradiction vis-à-vis the increasing professionalization of Open Source. It totally supports it! Our role is to be a meeting place between the different Open Source middleware players: researchers, developers, integrators, users, and other communities such as Apache, Eclipse, etc. For the benefit of everyone.

What part does Bull play in OW2?

Historically, Bull is the co-founder of ObjectWeb. Along with the other co-founders, the Group has found ObjectWeb to be an ideal springboard for inviting other major contributors to join forces on shared development projects, and especially in Open Source middleware. Like the twelve other strategic members (out of the 42 current members) Bull is today a co-founder and strategic member of OW2.

Bull doesn't just contribute to the technology, but is also involved in the consortium's development activities. I was elected Chairman of OW2 and Head of Ecosystem Development. Jacques Cayuela (from Bull R&D) is OW2's Chief Technical Officer, in charge of project and development technological consistency. Bull contributes to the consortium's communication and, like all its members, carries the message of OW2 out to customers and partners.

Finally, OW2 enables us to share our developments. With OW2, the JOnAS development teams are getting stronger, for example, as a result of contributions from the prestigious Peking University. Finally, OW2 is an excellent way for Bull to extend its influence and added value in the world of Open Source. A good example, among so many others, is the State of Geneva, where Bull has won a major SOA integration project based on OW2 components, including JOnAS, Bonita and Orchestra.

GUEST SPEAKER (CONTINUED)**What are the likely next steps in OW2's development?**

We are just at the beginning: the new consortium will only reach its final cruising speed at the start of 2008. Over and above the current membership, we are already in discussion with other major industrial players on the subject of OW2 affiliation. Bull's sales teams have also been invited to discuss the issue with their customers. We are ready to welcome them on board any time. Over the next

few months, an important step will be the formal foundation of the OW2 "Local Chapters" in Brazil and China. Another key step will be the finalization of a technology platform, combining the various OW2 members' technologies and offering standard common services (security, communication services, integration, systems administration and supervision, process management, user interaction, etc.). This software platform will ensure that all OW2 components function in a comple-

tely interoperable way, so enabling users to build powerful business applications. Bull is making a significant contribution to the creation of this platform. OW2 initiatives, at the heart of our future developments, will be built on this technology platform. This is converging with Bull's offer in middleware, information systems architecture, and business application development for our customers, which is a key axis for our development and added value strategy.

HOT TOPICS

Bull chosen by the French government's financial information technology agency (AIFE) to supply infrastructure and security services for Chorus, its future financial management application

The Agence pour l'Informatique Financière de l'État (AIFE) has awarded Bull, and its partners Atos and Accenture, one of the largest infrastructure and security tenders ever let in France, to develop and maintain operational status for section 4 of the "Chorus" program.

Chorus will handle government budget expenditures, non-tax receipts and accounting functions. It will be deployed in all the French government's centralized and local administrative organizations by the year 2010.

"This success consolidates Bull's position when it comes to modernization projects for public sector information systems. Our R&D expertise – which is unique in Europe – allied to our global expertise in security are major advantages when it comes to installing large-scale, critical and secure infrastructures," explained Jean-Pierre Barbéris, General Manager, Bull France. *"The partnership we have entered into with Atos and Accenture to deploy Chorus, has enabled us to present a truly industrial and integrated configuration with the potential for constructing and developing a reliable, state-of-the-art technical platform that will operate on a grand scale, while meeting the strategic challenges of Chorus."*

As prime contractor, Bull's mission is to

design, construct, integrate and validate the Chorus architecture technically and in terms of security, working closely to integrate with the other sections of the program, in order to underwrite the various performance warranties and to assure fully secure operating at both industrial and "auditable" levels. Bull has therefore defined an architecture capable of meeting the highest possible requirements, particularly in terms of:

- Security, with global provisioning for high security considerations and the implementation of a horizontal control function covering organizational, functional and technical aspects
- High level availability, with critical path redundancy
- Platform extendibility and scalability, with the ability to add extra power on demand, the adoption of cluster supporting technologies, and the choice of nodes to enable the addition of complementary internal components
- Respect for industry standards, to ensure systems remain flexible and independent.

Delivering Section 4 of the program involves many thousands of manpower days of services, as well as the provision of a hardware and software infrastructure comprising a modular 3-tier architecture. It features the best available open technologies:

- Linux RedHat on around 500 Bull NovaScale blade servers, based on Intel xPF processors
- AIX 5L on Bull Escala mainframe-class servers based on Power PC processors
- EMC DMX and CX, disc-based storage and back-up solutions.

Scoping the system and the provision of resources for on-going fine tuning work will be carried out by Bull's SAP benchmarking and competence center, as part of a close partnership between the two companies.

Finally, Section 4 includes bespoke training programs for the Ministry of Finance's personnel at the end of the project, to enable skills transfer to the Ministry's personnel who will be running the system.

BUSINESS NEWS

Taiwan Post chose Bull NovaScale servers for its high-availability IT infrastructure

Taiwan Post is the largest postal and financial service company in Taiwan. It has over 30,000 employees and manages 1,300 branch offices. Taiwan Post has rationalized its IT infrastructure based on hundreds of servers and supporting over 10,000 programs.

In order to improve its information system administration, the company decided to deploy and integrate all its open systems in a centralized environment. This involved:

- Centralizing the most widely-used applications including the human resources management system, "reporting" system, electronic document management system, Internet banking operations, etc.
- Creating an Oracle database cluster and deploying a database back-up system
- Deploying a remote disaster recovery system
- Migrating applications.

A €1.3 million contract for an open, high-availability architecture

Bull successfully integrated the former distributed architectures into the customer's existing datacenter, by deploying two large-scale NovaScale Intensive servers

running under Windows Enterprise Server 2003 and RedHat Enterprise, as well as 16 NovaScale blade servers running under Linux and an SAN storage network. Unified administration for the entire system is provided by NovaScale Master.

In addition, Bull incorporated a large number of components from third-party suppliers into this complex architecture. For example, Bull experts built a Windows cluster including the company's own NovaScale Intensive servers and the customer's existing HP 9000 Superdome machine.

Bull's particularly competitive solution demonstrated its power with Windows, Linux and Oracle. The openness of the solution – particularly its ability to operate in an open Linux environment – was a key factor for Taiwan Post. In addition, Bull's solution ensures uninterrupted database operation, thanks to the cluster infrastructure.



"We were particularly impressed by Bull's ability to deliver the project and to integrate this new solution with the existing architecture," said Lu Pin-Yu, Taiwan Post's Director of the Department of Information Management.

The project was successfully delivered as the result of remarkably close co-operation between the Bull teams based in Taipei and France.

BUSINESS NEWS (CONTINUED)

Bull and the University of Düsseldorf join forces to design the high-performance computing systems of the future

This co-operation agreement was announced during the Dresden International Supercomputing Conference (ISC 2007), and covers the areas of visualization technologies, software components and HPC cluster technologies. The results of joint development will be gradually incorporated into Bull's product range.

The Heinrich Heine University of Düsseldorf and Bull Germany have announced a two-year co-operation agreement to coincide with the commissioning of Bull's supercomputer at the University's Institute of Information and Communication Technologies (ZIM).

The Bull Group has been contributing for several years now to high-performance computing projects internationally, particularly in Germany, in the public sector for research and education, and in the private sector. Bull has recently delivered two of the most powerful European supercomputers to the French Atomic Energy Authority, the CEA (Tera-10), and to the CCRT, the French Center for Research and Technology Computing.

Under the leadership of Professor Stephan Olbrich, the Institute of Research at the Heinrich Heine University, the ZIM Institute and the Chair of IT Management are predominantly involved in the following key areas, also the main areas for future co-operation:

- **Visualization technologies.** These technologies are concerned with developing algorithms, models and application concepts for analyzing series of complex data, for scientific and e-learning applications. This area includes simulations and visualization scenarios with highly interactive 3D virtual reality technologies.

- **Scientific computing.** The objective is to develop and test collaborative solutions including simulations and visualization. The research work particularly covers optimization (parallelization, ultra high-speed networks), resource management and information system security.

Three key projects in the areas of intensive visualization and high-performance computing technologies

- **Project 1: Design of administration tools for Bull's clusters and hybrid clusters.** The aim is to develop methods and tools for administering and optimizing HPC cluster solutions used by the university. The cluster architecture is hybrid (heterogeneous), and is built around a network of front-line, administration and computation servers, combining Intel® Itanium® 2 ("Montecito") and Intel® Xeon® ("Woodcrest") processors. The first such hybrid cluster to be installed in a German higher educational establishment, it features homogeneous management of different platforms integrating the two types of Intel® processor.

- **Project 2: Bull competence and demonstration center** to present shared developments and results, as well as for benchmark testing and customer demonstrations. The center will also be used to port applications to Intel® Itanium® 2 and Intel® Xeon® environments.



- **Project 3: Ultra powerful visualization solutions for scientific computing.** The aim is to offer services to analyze technological advances, particularly in intensive visualization (Scalable Graphics), and visualization of data and specific customer queries in graphical format, and making virtual reality and mobile components for 3D visualization available to research laboratories.

Anticipating the HPC systems of the future

"We have a particularly effective co-operative relationship with Bull's experts, enabling us to undertake projects that are scientifically enriching – both in terms of skills and products – for both our organizations, in the areas of cluster administration and intensive visualization," said Professor Stephan Olbrich.

"Development work in the domains of software components and HPC cluster environment technologies have been part of our core commitment for several years now, underlining the vital role that research plays at Bull," emphasized Michael Gerhards, Managing Director, Bull Germany.

For more information, please visit:

www.bull.de

and www.zim.uni-duesseldorf.de/server

BUSINESS NEWS (CONTINUED)

The first IT disaster recovery centre of the Bulgarian State administration has been delivered by Bull to the Ministry of Finance

In December 2006, the Bulgarian Ministry of Finance chose Bull to implement a multi-site disaster recovery solution between two major Bulgarian cities, separated by 250 km.

The main disaster recovery requirement was to replicate data within each site, and also between the disaster recovery sites, each of which is equipped with two Bull StoreWay FDA storage arrays.

For this disaster recovery solution, Bull put in place an FC-over-IP storage network using QLogic devices, and provided the IT infrastructure that includes:

- Bull NovaScale servers running Linux and MS Windows Server 2003
- Bull StoreWay FDA disk arrays (equipped with snapshot, local replication, remote replication and performance monitoring software options) and Brocade SAN switches
- Bull backup libraries
- NovaScale Master to manage servers, FC switches and storage devices.

To implement the solution, Bull deployed a number of services including:

- Design, planning and implementation of the disaster recovery solution
- Device and operating system (including clustering) installation, configuration and testing
- Assistance with installing customer applications – Oracle, MS SQL Server, SAP, DB2
- Network environment configuration, involving FCP, Ethernet, FCIP and iSCSI devices
- OpenSave installation and configuration, and integration in the customer environment
- Rack arrangement and cabling
- NovaScale Master installation and configuration.

The solution is now at work: local data replication (DDR), remote data replication (RDR) and dynamic snap volume have been successfully tested and work without any problems.

Bull created the necessary organization to finalize the project on time and within budget, with all services, tests and training being carried out and reports being accepted without reserve.

This was the Bulgarian government's first disaster recovery initiative, and it will act as an example for others to follow.

RATP, rolling along with Bull Evidian OpenMaster

As part of its initiative to develop the highest quality relations with passengers, RATP – the Paris transport authority – has chosen OpenMaster, Evidian's intelligent service quality management solution for enterprise information systems.

With OpenMaster, RATP can deploy a solution to control all its business processes related to users of urban public transport in the Ile-de-France region, in real time.

Following an open tender, RATP chose OpenMaster because of the added value

it offered, particularly in terms of flexibility and performance, overall cost of ownership and the timescale needed to implement the solution.

With OpenMaster, RATP aims to ensure that both its IT infrastructures and the applications running its toll-booths and

controlling access to stations operate at the highest levels of quality. The latest version (7.0) of Evidian OpenMaster gives RATP the capacity for total coverage of all its business applications in the areas of sales, access control, hosted services and all its IT resources, including systems, databases, network components and J2EE software infrastructures.

EXPERT VOICE

The BI Center of Expertise: towards a single, unified Business Intelligence system

By Florence Burnoud, Director of the BI Solutions Group, Bull France
and Cyrille Chastaing, Director of the Bull France BI Services



Faced with fluctuating markets, new regulatory regimes, mergers and acquisitions... organizations need to ensure that their analytical views increasingly converge, to give a coherent overall picture of the business. For a long time, numerous decision-support systems have been developed in isolated infocenters, in "silos". With its BI Center of Expertise, Bull now offers a unified approach to BI, encompassing functional, technical and organizational concerns.

Why Bull is consolidating its approach to unified business intelligence?

Given the way the market is moving, and constraints linked to mergers/acquisitions and new regulatory requirements, enterprises are increasingly going to need responsive, reliable and scalable information systems.

Over the past few years, the trend has been to complement production systems with infocenter (or data warehouse) applications enabling data to be separated out, processed and manipulated, so as to cope as quickly as possible with an ever-increasing number of ad hoc requests for information. Based essentially on their analytical capability, such solutions have won over functional managers who are really keen on "dashboards" and forecasting tools.

These vertical solutions may have met the demand in the short term, but have resul-

ted in information systems being subdivided, and solutions, resources and infrastructures becoming increasingly heterogeneous in a way that does not optimize resources. This approach is not conducive to cross-functional business analyses. The IT Director has progressively lost control of these systems as they have rapidly evolved to keep up with new requirements; constantly being renewed, and generating significant additional costs that could have been avoided.

Against this backdrop, today IT Directors are starting to reclaim their information systems, with the aim of unifying them: in effect, rationalizing, organizing and controlling the business intelligence information systems. This process of unification involves rationalizing and consolidating technical infrastructures, optimizing logical infrastructures, and centralizing resources in centers of expertise, as well as unifying data to make it more relevant and reliable, while unifying tools to pro-

vide effective cost control and management of skills.

How do you implement these kinds of centers of expertise?

The unified Business Intelligence center aims to give IT Directors access to a group of architectural, organizational, methodological and technical components, so they can optimize the deployment and operation of business intelligence applications. The whole process of unifying decision-support or Business Intelligence systems depends on the organization's functional, technical and organizational approach.

The functional approach is of prime importance, in order to design a decision-support system that is well suited to the needs of BI (mass reporting, ad-hoc reporting, multi-dimensional analysis, and data mining...). It does not, at this stage, involve designing software in response to specific functional managers' needs, but rather requires a global vision of the organization's business intelligence requirements which the decision-support system must respond to.

On the basis of these requirements, the technical approach then enables the systems, software and technical architecture for the decision support system to be designed to evolve in total alignment with the master plan, as well as the rules and demands of the organization's existing information systems. This is a really crucial stage in the design of the decision-support system, during which it is also useful to define the standards and good practices that will ensure the overall, long-term coherence of the system.

The organizational approach sets out to define the appropriate structure (Business Intelligence center of expertise) and methodology (BI project proposal, model deliverables, project quality plan, scoping tool...) necessary to the management and operation of the decision-support system.

(To be continued on page 13)

EXPERT VOICE (CONTINUED)

As long as the initiative is based on a specific approach, it will ensure on the one hand that the implementation is consistent and applicable across the whole organization, and on the other hand that the system is appropriately scoped, using structured methodologies, and suitably structured for the organization concerned.

What are the key factors determining the success of this kind of operation?

It is important to achieve a good balance between the technical side and business

knowledge. The IT Director must structure the technical solution, control the architecture, improve the organization of the fundamental platform, and commit both to performance levels and the quality of information.

Functional management teams must take responsibility for formally stating their requirements, streamlining customer tools and overseeing the installation and launch of the solution. We supply a BI methodology toolkit designed to tackle just these kinds of issues. The IS center of

expertise enables the unification of the decision-support system by providing a suitable processes for standardization, architecture design, organization and methodology.

Bull has worked alongside a number of major players in the Business Intelligence sector for more than 15 years, and has defined this particular offering in response to the demands of customers, including Dassault Aviation, the French Post Office, and the RSI, the social security body for French self-employed workers.

SOLUTIONS

Power-boosted, energy-efficient Escala servers with Power6

By **Christophe Loye**, Marketing Director for Bull's Escala offering

The Escala range momentum

Following the launch in February of the Escala EL series of blade servers, from 22 May we began introducing Power6 Escala which features the new dual-core Power6 processor (from 3.5 to 4.7 GHz). At the end of this year we will be releasing the new AIX6 operating system, which was developed like earlier releases, with the involvement of experts from Bull's R&D center at Grenoble in France. Bull has also contributed yet again to writing an IBM Redbook covering new features in Power6 and AIX 6.

The first of these new-generation servers is the Escala PL166OR, a really powerful and robust mid-range server featuring the latest virtualization technologies. This is a server that is ideal for consolidation projects requiring ultra-high performance levels. Our customers immediately displayed a lot of interest, and arrived in large numbers at the seminar organized jointly with CUBE on 24 May, during which we were able to unveil the new offering. A series of "Escala days" are being set up in other European countries.

Ideal for consolidation, this new generation significantly reduces energy and administration costs

The Escala PL166OR is an extremely "green" machine: the new 16-way server provides an impressive 60% boost in terms of transactional performance (tpm/C) over previous models with identical consumption characteristics. This means it provides a greater than 50% improvement in tpm per Watt ratio, and sits well with the approach of sustainable development. This, together with its ability to consolidate multiple complex workloads, helps to maximize resource usage and to significantly drive down administration, power and cooling costs.

In addition, the new Escala Power 6 generation will further increase service



levels, as it enables the administrator to seamlessly move entire partitions between physical servers without the slightest interruption (this function is called "Live Partition Mobility"). And hence the drastic reduction in planned downtimes and the possibility for interrupt-free cross-server workload management.

AIX 6, to be released at the end of this year, will bring an additional set of benefits to customers through so called Workload partitions (WPARs), where multiple applications can share one and the same AIX image while preserving almost perfect physical isolation. This will reduce the memory footprint in consolidation pro-

jects and improve the manageability of the overall environment. The latter is easier thanks to a neat new feature which will allow the virtual transfer of applications running as WPAR's (Workload Partitions) onto other local or remote physical servers. On top of this, an intelligent management application will control and automate this process according to the administrator's set guidelines.

Thanks to our experience in the design and implementation of virtualized complex infrastructures, we are drawing on our various Escala centers of expertise based at Grenoble to partner our customers in their consolidation projects.

SOLUTIONS (CONTINUED)

With IAM Suite 8, Evidian places identity and access management at the heart of business processes

- A new Role Management console for unifying and managing administration functions according to business views
- An integrated and modular suite structured around three major components: access, identity and role management
- An innovative infrastructure using existing directories to speed up return on investment on identity-management projects

Bull Evidian, European leader in Identity and Access Management, announces today the release of IAM Suite 8, its new modular and integrated solution that secures information system accesses and controls the user-identity lifecycle.

Extending the functions of previous Evidian IAM versions, IAM Suite 8 offers the following features in a single integrated software suite: identity management, access control with enterprise SSO, and RBAC-type role management. It thus helps organizations to create the internal audit reports required by laws such as Sarbanes-Oxley, Basel II, and even laws on the confidentiality of medical information (HIPAA, others), while cutting the costs of providing these audits. Thanks to an innovative, user-rights-related role management model, IAM Suite 8 simplifies identity management and prevents the proliferation of users' security profiles that can complicate and increase the cost of audit operations.

Reconciling identity management and access control thanks to role management

"A major challenge for organizations today is how to develop a business approach structured around identity lifecycle management and the granting of access rights", said Hassan Maad, Evidian's Managing Director. "Until now, only two IAM infrastructure deployment

strategies had been possible: either running an ambitious but long and costly user-provisioning then role-management project, or giving priority to deploying a simpler access-control and SSO project with quick return on investment. With IAM Suite 8, Evidian reconciles and unifies these two approaches, favoring a business-process-oriented model for managing users' rights."

A modular and integrated approach to reconcile different identity data sources, leverage existing investments and speed up ROI

The integration between the three components of IAM Suite 8 is completed through a methodological approach which consists in deploying IAM and the reconciliation tools progressively. In fact, by using self-registration tools to take an inventory of user accounts, together with the identity-management tools, IAM Suite 8 speeds up the deployment of Role Management through the iterative creation of a security repository. It removes the common pitfalls inherent in identity-management projects, such as high costs and process inflexibility. Its strong points: reduced complexity, speedy deployment, quick investment return and increased security. Existing investments are leveraged thanks to the compatibility of each IAM Suite 8 module with third-party identity management solutions available on the market.

More information:
<http://www.evidian.com>

SOLUTIONS (CONTINUED)

Bull Evidian announced OpenMaster 8, the new release of its flagship service management platform

Bull Evidian announced release 8 of OpenMaster, its intelligent information and telecom-systems monitoring and management software suite. Thanks to a new infrastructure based on the latest J2EE application server technologies, OpenMaster 8 strongly enhances interoperability with multiple data sources, point-and-click customization and monitoring of scalability from several distributed operation centers.

// A new generation of our flagship service management suite, OpenMaster 8 offers a powerful answer to enterprises and telecom players that want to deploy ready-to-use management solutions for complex systems, networks and applications.” said Hassan Maad, Bull Evidian Managing Director. “This release strongly increases the extensibility of OpenMaster. It highlights Bull Evidian’s commitment to enforcing its OpenMaster enterprise management product line and to offering strong solutions to service management challenges in an open world”.

OpenMaster 8: next-generation monitoring and alarm management

Release 8 significantly reinforces OpenMaster’s distributed monitoring and alarm management capabilities. It enables organizations to easily manage complex IT infrastructures from several operation centers all over the world. OpenMaster 8 also offers advanced animated maps and alert management features, and makes it possible to integrate external data into composite monitoring applications.

OpenMaster, the ultimate robust and scalable monitoring and service-management solution for enterprises and telecom operators

OpenMaster is used all over the world by security-sensitive organizations and governments, including ANPE (French governmental employment agency), Deutsche Telekom, DFS (German air traffic control), EADS, Ericsson, France Telecom, GIE Cartes Bancaires (French interbanking consortium), Legrand, Orange, RATP (Paris subway), Sanofi and Thales, among many others. It offers an outstanding monitoring performance and can handle several million alarms per day. With OpenMaster, customers can significantly reduce operating costs thanks to intelligent correlation based on an expert system. They can identify in real time major faults in critical applications and systems, analyze the impact on business processes and immediately take corrective measures. Release 8 confirms OpenMaster’s position as the ultimate robust and scalable solution for business-centric process management in enterprises and telecom systems.

OpenMaster 8 is available immediately.

More information:

<http://www.evidian.com>

WHAT'S NEW

Europe unites to foster HPC technologies with the launch of ParMA, an ITEA 2 project to exploit fully the power of multi-core architectures

ParMA will improve the performance of conventional High Performance Computing (HPC) applications
ParMA will enable the advent of power-intensive innovative embedded applications

Leading European HPC players from France, Germany, Spain and the United Kingdom, announced that they have joined forces to launch the ParMA (Parallel Programming for Multi-core Architectures) consortium. The key objective of the new consortium is to help the HPC community to benefit fully from the processor race while developing innovative, flexible and open technologies for taking full advantage of the multi-core architectures.

First analyze, refine and prioritize the genuine requirements

To fight against the limits of processors' clock speed, processor manufacturers are now delivering multi-core architectures – with today dual and quad core processors and dozens tomorrow – while most applications, mostly sequential, can only benefit from the power of a single core.

The challenge is now to enable the current and future applications to benefit fully from the new processor technologies by either restructuring existing applications or by facilitating the development of new applications that fully exploit the power of parallelism on these new architectures.

The ParMA project will start by analyzing, refining and prioritizing the genuine requirements of the industry. A first version of the ParMA technology will then be introduced at the end of the first project year to gain experience with a wide-range of applications. A second version of ParMA will be released at the end of the second year for further trials.

Powering up parallel processing for a large community

As parallel programming is becoming

mainstream in the era of multi-core architectures, the project achievements will not only be relevant to software engineers who have already developed parallel HPC applications in the past and continue to port and optimize their codes on multi-core architectures: in many domains, parallel code will again be developed and, thus, can largely benefit from this project's achievements. Part of the ParMA software is open source and so available to a wide community.

The three essential goals are to enable:

- Both the simulation of more complex processes and the modeling of more complex structures without increasing the execution time.
- SMEs to acquire and run simulation applications that can be hosted on medium-sized systems when the power of multi-core processors is fully exploited.



- The advent of innovative power-intensive embedded applications especially in industries – air & space for instance – which were “blocked” by the limits of the volume of the system, the power consumption, the heat dissipation, and the time constraints in communications

About the ParMA project

The ParMA project is a 3-year ITEA 2 project, starting on June 2007 under the label #06015. It gathers European leaders in HPC technologies, including Research centers in Universities or Industries and Computing Centers, from France, Germany, Spain and the United Kingdom.

The 17 partners, across Europe, are a heavyweight group of ICT industry players: Allinea Software, Bull, CAPS-Entreprise, CEA, Dassault Aviation, Forschungszentrum Jülich, Gesellschaft für Numerische Simulation, Gesellschaft für Wissens- und Technologietransfer der TU Dresden, Höchstleistungsrechenzentrum Stuttgart (HLRS, Universität Stuttgart), INDRA SISTEMAS, Institut National des Télécommunications (INT), MAGMA Gießereitechnologie, RECOM Services, ROBOTIKER, Universitat Autònoma de Barcelona (UAB), Université de Versailles Saint Quentin-en-Yvelines (UVSQ), Zentrum für Informationsdienste und Hochleistungsrechnen (ZIH, Technische Universität Dresden).

For more information on ParMA visit: <http://www.parma-itea2.org>

WHAT'S NEW (CONTINUED)

Bull and AVL together help to reduce automotive combustion side effects

AVL, the Austrian automotive ISV, has chosen a Bull NovaScale® cluster to create a wide range of simulation tools to optimize engine combustion and reduce emissions. AVL's choice is a proof Bull democratizes high-performance computing (HPC), with the aim of helping enterprises accelerate the process of innovation

The pressure on the automotive industry to increase both the efficiency and the mileage of their vehicles while reducing the environmental effects of automobiles, especially in the area of emissions has led AVL LIST GMBH in Austria to strengthen its business partnership with the European IT company Bull in the area of advanced simulations.

AVL develops and improves all kinds of powertrain systems and is a competent partner to the automotive industry. AVL offers high-tech solutions in 3 main areas:

- Easy-to-use and accurate simulation tools for the engine, powertrain and vehicle development process
- Instrumentation and Test Systems
- Development of powertrain systems for passenger cars, commercial vehicles and even racing cars

- To run their simulation software on the best computing platforms available, AVL-AST has chosen Bull NovaScale Clusters both for their own computing requirements and for porting and certifying their simulation software suite, best known for the AVL FIRE Application.

The new Bull NovaScale cluster, equipped with the 64-bit architecture of Intel's Xeon® 5100 and 5300 processors, satisfies the need for the support of very large computational models. This allows the engine and automotive developers to achieve the advances needed today by increasing the resolution of their computational models and to increase the accuracy of the simulations.

"The combination of powerful and flexible Bull NovaScale Cluster 400 with leading edge AVL Fire software will provide to the automotive industry the ideal solution to address their ever increasing needs. Bull – with AVL - sets the pace in HPC and really shows a commitment to sustaining world class industries", said Benoit Hallez, Director of the HPC Business Unit of Bull.

New software tools are becoming much more accurate at simulating the real-world behavior of finished products. As a result, "virtual prototypes" are gradually starting to replace the physical prototypes. This is a challenge which AVL can respond to by supplying a wide range of simulation tools with co-simulation capability – from IC engine combustion to entire vehicle thermal management systems and from piston and piston ring dynamics to vehicle optimization of fuel consumption and emissions.

Bull and Platform Computing: worldwide cooperation agreement to optimize resource management in HPC clusters

Bull and Platform Computing have announced their worldwide agreement for the availability of Platform LSF on Bull's NovaScale® High Performance Computing (HPC) clusters.

Under the terms of this partnership, Platform LSF, the leading workload manager for distributed computing environments is available on both Intel® Xeon® based Bull NovaScale Cluster 400 and Intel® Itanium® based Bull NovaScale Cluster 3000. The Platform

LSF family of products is fully integrated with Bull Advanced Software (BAS), to help users manage and optimize complex IT environments delivering higher IT efficiency, dramatically reduced cost of computing and guaranteed service execution.

"CEA has been using Platform LSF software in its computing centre for a number of years and we decided to keep it as a batch management system when we replaced its computers in 2005 and 2006. Our motivations to renew our

confidence in this product are multiple. It was of course intended to leverage and capitalize on past invested experience with this operation for running clusters," said Hervé Lozach, Head of Scientific Computing and Networking Service, CEA. *"The software maturity and its compatibility with a variety of architectures are also strong points of Platform LSF. In our case, it also fits with the Quadrics/RMS resource manager for TERA as well as the SLURM CCRT batch management needs."*

WHAT'S NEW (CONTINUED)**PROACT Group, new distributor of Bull servers in Scandinavia.****Bull signed a new Nordic master distribution agreement with PROACT****Group Sweden for the Nordic countries.**

PROACT is a leading independent IT integrator for solutions and services regarding storage and archiving. With this agreement, PROACT further extend its offer for infrastructure solutions, servers and security solutions.

PROACT will exhibit Bull NovaScale servers in its solution centers and its new Microsoft Solution Center which it is building up in Stockholm together with EMC and Microsoft.



"PROACT has a long presence in the market, and the agreement with Bull further increase our unique position as an independent IT integrator to offer combined Storage and Server solutions to the market", says Olof Sand, CEO and President of PROACT IT Group AB. "This strengthens our position in the public sector, as Bull has a strong position in this segment and we have lately recruited people with experience from the public sector", he added.

"We are pleased to set up this partnership with PROACT, a company with significant storage skills and market reach in Scandinavia. Our business through partnerships is critical to the market expansion of our NovaScale and Escala lines of servers. This agreement will give our customers further assurance to benefit from an extremely high level of technology and service" stated Michel Lepert, Bull General Manager for Western Europe.

EVENTS (CONTINUED)

Issy-les-Moulineaux, les 3 et 4 octobre

World e-Democracy Forum

On 3-4 October 2007, the Palais des Sports in Issy-les-Moulineaux, Paris, plays host to the 8th World e-Democracy Forum.

This year, the UK is the guest of honor at the Forum, with its numerous experiences shedding useful light on the debates, particularly for local authority representatives less than six months ahead of the French local elections.

The theme of this year's event is *"Digital society in the era of citizen 2.0"*

The focus will be on how to modernize the relationships between civil servants,

elected representatives and citizens against the backdrop of Web 2.0, the second generation of the Internet which is faster – thanks to greater bandwidth and transmission speeds – and more interactive, with blogs, on-line video and podcasts, etc.

On Wednesday 3 October at 2:30pm, Bull, one of the Forum's sponsors, is taking part in the round-table discussion on *"A collaborative approach to e-government?"*

How to accelerate exchange of good practices? What are the best practices? Are Public-Private Partnerships a solution?



Jean-Pierre Barbéris, General Manager Bull France, will be speaking on new kinds of partnership to structure and professionalize best practices.

For more information, visit: www.forum-edemocratie.com

Frankfurt, 29-31 October

Storage Networking World, Europe

SNW Europe is the largest and foremost independent storage networking event in the region, where IT management and professionals learn, network and maximise their company's storage capabilities. At SNW Europe, delegates can choose from over 100 educational conference sessions and network with fellow

storage professionals from across the continent and around the globe. Endorsed by the European Storage Networking Industry Association (SNIA), this event is sponsored by 40 of the world's top storage vendors.

As SNW sponsor, Bull will exhibit its StoreWay solutions on its stand, and



Benoît Hallez, Director of the storage BU, will deliver a keynote address. Come and visit us on our stand S15.

For more information: <http://www.snweurope.com>

Reno (USA), November 10-16

SuperComputing 2007

SC07 is the premier international conference on high performance computing, networking, storage, and analysis.

SC07 will host an exceptional technical program, tutorials, workshops, an expanded exhibits area, an exciting education program and many other activities. The SC conference series has grown to include scientists, researchers, software developers, network engineers, policy makers, corporate managers, CIOs and IT administrators from universities, industry and government from all over the world.

The SC07 conference demonstrates how high performance computing, networking, storage and analysis touch all disciplines to enhance people's ability to understand information and lead to new understanding, promote interdisciplinary projects, affect the educational process through the use of computers in modeling and simulation in the classroom, and solve heretofore unsolvable problems in nanoscience, biotechnology, climate



research, astrophysics, chemistry, fusion research, drug research, homeland defense, nuclear technologies and many other fields.

Visit the Bull booth (#2749) and meet our HPC experts!

More information: <http://sc07.supercomputing.org>