< Title >

b<>com joins a European programme for a responsible approach to datacenters

The Institute of Research and Technology (IRT) b<>com has just had its datacenter added to the European [Code of Conduct on Data Centres Energy Efficiency][1] programme (CoC). This volunteer approach, which is rare on the European level, shows a strong commitment to environmental responsibility and optimizing the infrastructure's operational costs. Low power consumption, cutting-edge technology and heightened security: A look at the b<>com datacenter after six months of operation.

b<>com commits to a responsible datacenter

There is an increasing demand for power consumption in European datacenters. By 2020, the European Commission's Institute for Energy and Transport (IET) anticipates a 30% increase in the consumption of the European fleet[2]. Keeping down power consumption in datacenters is therefore a major challenge. The web's major players have weighed in on the issue, but for small businesses, rethinking how they operate their datacenters can be quite a feat.

To handle the specific features of its projects, b<>com opted to design a datacenter that combined cutting-edge technologies, heightened security, and low energy consumption. The bias paid off, as the IRT just had its datacenter added to the European "Code of Conduct on Data Centres Energy Efficiency" programme. This volunteer approach, which is rare on the European level, shows a strong commitment to environmental responsibility and optimizing the infrastructure's operational costs.

"Joining this European programme vouches for our commitment to move towards a more responsible datacenter. The best practices recommended by the CoC are incentives to adopt the latest strategies and architectures for ensuring energy efficiency. For example, virtualization technologies must be preferred over redundant physical equipment", explains Philippe Lemonnier, Director of Infrastructure and Technologies at b<>com.

Low consumption, cutting-edge technology and heightened security: A winning combination

> Challenge #1: Handle a particularly heterogeneous data environment

At the IRT's campus, researchers and engineers work together in the fields of Hypermedia, Ultra High Speed networks, and security, and in the real-world field of e-Health applications.

The result is research that generates highly varied queries, which the datacenter has to be able to cope with: *"The heterogeneous nature of the data and computing technologies is a real challenge for the system architecture. By taking a flexible, modular approach, we offer an extremely adaptable, effective tool: High-performance equipment for optimized setup and maintenance costs,"* he continued.

© Fred

An achievement that was made possible through IRT's decision to install a modular, reconfigurable optical infrastructure. This approach makes it possible to accommodate a diverse range of devices by leveraging on heavy interconnection capabilities.

> Challenge #2: Offer powerful, secure equipment for both internal and external demand

b<>com has designed its datacenter to be a tool accessible to its entire ecosystem: Dedicated first to its teams of researchers, it can also be resized to handle outside requests related to R&D needs.

Solutions that will allow small businesses and major corporate groups to benefit from powerful services for their R&D work:

◊   High-performance computing (HPC) and storage solutions

And coming soon, taking advantage of the datacenter resources:

◊   Outstanding audio and video environments (4K post-production room, small 4K screening room, multi-camera studio, spatialized sound auditorium, quality testing, etc.)
◊   experimental environments for augmented and mixed reality (Navigation, Interaction, Visualization, etc.)
◊   FPGA design platforms
◊   test environments for radio and optical networks.

> Challenge #3: Commit to an energy-efficient approach

In an environmentally responsible approach, b<>com has achieved a high level of performance from its datacenter while also addressing energy constraints. To date, only 32[3] french datacenters - out of several hundred, with 140[4] for sole web hosters - are affiliated with the CoC programme.

"We have been working for more than a year on crafting and designing our datacenter. From the outset, optimizing power consumption has been obvious for us. The process of making commitments to the IET has been long and arduous, but we are now proud that it has borne fruit. The level of requirements needed to meet the CoC's assessment criteria has kept us focused when making choices in all of the structure-defining fields, like energy, climate, computing, mechanics, security, and fire protection," explains Philippe Lemonnier.

The datacenter was designed and is now being managed based on the CoC's recommendations. This European programme is aimed at lowering the energy footprint of datacenters, particularly by spreading best practices.

"The IET's analysis of b<>com's submission made it clear that the facility relies on the most suitable technological choices given the outline of the project, allowing it to achieve a satisfactory power usage effectiveness (PUE). Additionally, calories drained by the datacenter's cooling system power a high-efficiency heat pump, that reinjects most of them into the building's heating system", concluded Philippe Lemonnier.

< Press Release>

About B-com

The aim of the b<>com Institute of Research and Technology (IRT) is to accelerate the development and marketing of tools, products, and services for improving everyday life, through research and innovation in digital technologies. In concrete terms, b<>com innovates at the highest levels in the fields of hypermedia (ultra-high-definition images, 3D, smart content, and virtual and augmented reality, to name a few), ultra-high-speed networks, and its first field of application, e-health.

Its main campus is in Rennes and its satellite sites are in Lannion and Brest. b<>com is supported by the French government's Investissements d'Avenir (Investing in the Future) program and by local authorities in Brittany, Rennes, Lannion-Trégor, and Brest.

www.b-com.com
IRT_Bcom

Press contact

Wellcom Agency
Elsa Favreau / Hélène Boulanger
Phone: +33 (0)1 46 34 60 60
Email: ef@wellcom.fr / hb@wellcom.fr

b<>com
Marion Carcreff
Phone: +33 (0)02 56 35 82 78
Email: marion.carcreff@b-com.com

http://wellcom.fr/presse/b-com/