

Roland-Garros 2011: 26 years of partnership



Smarter computing from IBM helps turn the simple action of hitting a ball over a net into an event that captivates millions of people worldwide

Overview

The challenge facing the Fédération Française de Tennis (FFT)

To couple innovation and performance with green commitment to increase the tournament's global visibility while reducing its environmental footprint in a secure environment.

For 26 years now, the Fédération Française de Tennis and IBM have been working hand in hand to make Roland-Garros one of the world's most exciting sports events. As the Official Information Technology and Internet Partner for Roland-GarrosOpen – and for all the other Grand Slam championships – IBM is committed to efficient and innovative data collecting, processing and transmission: statistics, scores, serve speeds and TV graphics.

The official website, www.rolandgarros.com, available in English and French, reflects the partnership's growing success. One of IBM and the FFT's prime objectives is to make the tournament accessible to the greatest number of users possible and to draw fans into the heart of the action while reinforcing their environmental commitment

More data for enhanced analysis

IBM solutions help to capture, analyze and distribute data on every aspect of the French Open. From scores to schedules to player statistics and serve speeds, a vast sea of data is captured and collated in real time for officials, media and fans, both in the arena and around the world. All this information enables the players and trainers to measure their impressions against reality in order to improve their performance, and the fans to enjoy an immersive experience of the French Open.

Every year, the channels by which fans can access information are enriched. In 2011, iPad and iPhone owners will benefit from live scores, videos and statistics thanks to a Roland Garros-dedicated application (jointly developed by IBM and Orange), and the official site has been fine-tuned to be compatible with the iPad format. Naturally, the m.rolandgarros.com mobile site is still available to smartphones. This year, television viewers will also be able to discover the new possibilities offered by connected TVs based on the new HbbTV standard through an interactive application.

Technology in the arena IBM Scoring System

The primary function of the IBM Scoring System is to collect data from all courts using radars and scorers, and then to store this data on a server, to calculate all relevant statistics and distribute them to all types of media – Internet, television, mobile. IBM produces graphics for 175 TV channels worldwide by consolidating the statistics in real time for each of the broadcast matches. More than 50 overlays integrating data from the scoring database are available and displayed on the screens.



The solution

- Collecting, processing and dispatching massive volumes of data about matches, statistics, scores, ball speed, TV graphics etc., in an efficient and innovative way to meet the players and fans' expectations.
 - Leveraging Cloud Computing by means of a comprehensive, dynamic and smart infrastructure solution, further enhanced in 2010 following migration to a new Green Data Center
 - New service on official website www.rolandgarros.com: the IBM PointStream application to track and analyze matches in real time.
 - New distribution modes: iPhone and iPad dedicated applications, a site for mobile phones, an interactive application to leverage the new web-connected TVs and links to Facebook and Twitter
 - Preventing attacks and intrusions with the IBM Internet Security Systems (ISS) platform, dedicated to risk prevention as well as network and web server security management.
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Speed serve system

One of the most visible solutions, the IBM courtside radar gun captures the speed of a serve, immediately transmitting it to the IBM scoring database and displaying the information courtside. Consisting of two electronic displays, this system includes custom-built radars and dedicated software for collecting serve speed, direction and other useful data for statistics.

Emergence of connected TV

New in 2011, the development of connected TV is accelerating with the introduction of the recent HbbTV standard. For the first time ever, IBM is offering an interactive application, operated with a remote control that allows users to know more about the players, catch up on the latest tournament news and view the statistics while watching the matches. Viewers can also personalize the data they receive and access additional information on the images being broadcast. This application was designed using the agile development platform WebSphere sMash in a Cloud environment, which reduced and facilitated development work considerably.



Business Benefits

- A sustainable approach thanks to optimized systems based on IBM hardware, with virtualization helping to minimize energy consumption and maximize server consolidation in the Green Data Center.
 - An infrastructure designed to support, throughout the 15-day French Open, traffic 100 times heavier than the year-round figure.
 - A constantly enriched website, which drew over 9.3 million Internet users in 2010 for more than 333 million page views (an increase of 47 percent compared to 2008) and a shift to support new media, offering users new insights.
 - Real-time security management, automatic detection of threats, reduced costs of security through a centralized approach.
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Taking it beyond the arena rolandgarros.com

In conjunction with the FFT, IBM designs, develops and hosts the state-of-the-art French Open website. More than ever, fans want to be a part of the tournament, even if they are not able to attend. With a more engaging, more immersive and more personalized user experience, rolandgarros.com is attracting a huge number of online fans through integration with social networking applications like Facebook and Twitter and by offering them a chance to comment on articles and photos. The interactive, media-rich online experience of rolandgarros.com allows fans to listen to live radio, review highlights of the day's play, read blogs and follow the scores from every court as the action happens. It is not surprising that this site was a resounding success last year, with over 9.3 million unique users.

IBM Point Stream

New in 2011, the IBM PointStream application allows users to track matches in real time on vivid graphics and to view the statistics calculated throughout the game. By clicking on a spot, you get all the details to better understand the match highlights. IBM PointStream has become an essential, extremely powerful data analysis tool that tennis fans can use during and after the match to enable unique insights.

IBM SlamTracker

SlamTracker provides users with an increased level of personalization and interactivity, allowing them to follow their favorite players using an interactive draw and to track individual matches in as they progress.

Featured Matches

This interface, enhanced in 2011, gives real-time access to what is happening, what has happened and what is about to happen.

Mobile

Fans can stay up to date with Roland-Garros wherever they are using their mobile phones, smartphones or digital tablets. Thanks to the new dedicated iPad application, the iPhone application (both jointly developed by IBM and Orange) and the mobile site (m.rolandgarros.com), real-time scores, videos, schedules, draws and player information are available to everyone.

Smarter, more energy-efficient technology

IBM has been the official technology partner for the French Open for 26 years, and over time, this type of partnership has been extended to all four Grand Slam tournaments. This cycle of events triggers a constant stream of innovation, generating smarter and greener technology year after year.

Solution Components

Software

- IBM® Tivoli® Monitoring
- IBM Director Active Energy Manager

Servers

- IBM System x®
 - IBM POWER7® based servers
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Harnessing Cloud Computing

The official French Open website is supported by multiple geographically-dispersed server farms, virtualized as one. In 2006, 60 servers were required to cope with the 100-fold increase in traffic that the site experiences during the Open. Now, Cloud based services are utilized to allocate the appropriate capacity to support the tournament, based on IBM System x and IBM POWER7 processor-based servers. This technology, which boosts performance while reducing energy usage, opens up completely new horizons by providing the ideal platform for each of the workloads generated by the website.

Through virtualization, energy demand has been reduced by up to 40 percent and cooling demand by up to 48 percent. Moreover, IBM has implemented IBM Tivoli® Monitoring and IBM Direct Active Energy Manager in monitoring mode and is adjusting CPU clock speed during non-busy times to further reduce energy demands.

The platform, in secured, private Cloud Computing mode and shared with the other Grand Slam events, enables the FFT to access the services according to tournament needs. This flexible technology allows the rapid creation and dynamic allocation of the resources required for the tournament while offering transparent and real-time access to a multitude of media (Internet, mobile, smartphones, tablets and television). In addition, throughout the development and preparation phase of the new site, the IBM Enterprise Cloud for Roland-Garros Development & Testing solution allows:

- reduced operation costs
- system allocation or deallocation according to evolving needs
- improved resiliency.

Year after year, IBM provides new services and handles increased traffic while reducing cost, floorspace requirements and energy consumption.

Managing risk proactively

The IBM Internet Security Systems Solution has been deployed in the three centers that make up the site's infrastructure, enabling:

- real-time preventive analysis of vulnerabilities before the infrastructure is compromised by potential system attacks
- automatic detection of all threats, anomalies and infringements of security rules
- immediate assessment of attack impact
- vulnerability management and protection
- the reinforcement of protective barriers in addition to the firewalls and other existing technologies.

With IBM Internet Security Systems, the Roland-Garros website benefits from an integrated, proactive approach to security. Combined with centralized monitoring of the entire infrastructure, this solution offers additional benefits: cost control, compliance with regulations.

“(The Cloud Computing architecture) marks the culmination of the FFT’s efforts seeking primarily to achieve simplification, greater flexibility, reinforced security and reduced production costs through smarter computing.”

— Gilbert Ysern, FFT & Roland Garros General Manager

Tomorrow's “Green” Data Center

IBM now provides the four Grand Slam tournaments with one of the world’s most sophisticated data centers in the world. As a result, Roland Garros benefits from a more eco-friendly, energy-efficient solution for managing and hosting its data and strategic infrastructure. Floor space has been reduced by 54 percent and energy demand, by 38 percent in this green, innovative data center! The Maximo heat map implemented in the data center allows instant detection and fast adjustment of energy waste. Thanks to this technology, IBM offers the highest possible level of security, availability and automation while minimizing the carbon footprint.

Roland-Garros, resolutely committed to innovation

According to Gilbert Ysern, FFT & Roland Garros General Manager, “IT systems are becoming increasingly light and precise.” He explains that Cloud Computing architecture “marks the culmination of the FFT’s efforts seeking primarily to achieve simplification, greater flexibility, reinforced security and reduced production costs through smarter computing.” By supporting the French Open’s growing reach since 1985, IBM has helped turn this international tournament into an event resolutely committed to innovation, to the great satisfaction of fans and tennis players all around the world.

For more information

To learn more about any of the solutions in this case study, please visit: ibm.com/rolandgarros

To learn more about smarter computing from IBM and how we can help you integrate, automate, secure and transform your IT, contact your IBM sales representative or IBM Business Partner, or visit: ibm.com/smartercomputing



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