

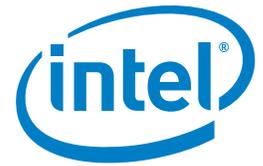
CASE STUDY

Intel® Xeon® Processor

Intel® Core™ i7 Processor

Whitecap Canada Inc.

Woodbine Entertainment Group



Woodbine Wins With Web Wagering

Whitecap Canada Bets Security & Scalability On Intel



CHALLENGE

▪ **Woodbine Entertainment Group*** (WEG) saw an opportunity to give its members a secure wagering option using the Internet. To be successful, it needed to be secure, monitored, regulatory compliant and able to handle thousands of concurrent bets.

SOLUTION

▪ **Scalable Servers Secure Bets:** Whitecap Canada Inc. (Whitecap)* built a user-friendly, scalable and secure online wagering system that is today powered by Intel® Xeon® 5600 processors, making WEG's HorsePlayer Interactive* (HPIbet) the first legal online wagering system in Canada.

IMPACT

▪ **HPIbet, delivered to horse enthusiasts** by servers powered by Intel® Xeon® 5600 processors, has grown from processing \$132 million in 2003 to \$330 million in bets in 2010.

▪ **The scalability of Intel® Xeon® 5600 processors** enables HPIbet to handle spikes in wagering that reached a peak of 12,000 concurrent users during 2011's Kentucky Derby* and an average of 90,000 transactions a day.

▪ **At Whitecap Canada,** developers rely on Intel® Core™ i7 processors to eliminate wait times when building complex, integrated online solutions like HPIbet.



"It's a very unique, complex and mission critical system.

We have to be able to handle huge volumes of transactions in short periods of time. If a bet doesn't go through, we not only lose the bet we could lose the customer."

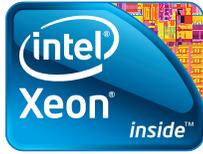
While the idea for an online wagering system originated at Woodbine in 1996, it took until 2004 to get the site built, approved by regulators and launched.

"We were lobbying the federal agency to let us run an online business, which required a re-interpretation of the regulations," explains Andrew Macdonald, Vice-President, Marketing & Communications at WEG.

When WEG obtained the positive re-interpretation, it started looking for a partner to build the site. After an extensive RFP process, WEG selected Whitecap Canada, who had made a name for itself in the development of web applications that require complex integration.

"Our focus is on developing web applications that are tied to back-end systems," says, Robb Carmichael, President, CEO and founder of Whitecap Canada. "We've done some really complicated setups over the years. With HPIbet, there's a huge amount of integration involved and everything has to work well in a highly secure manner across a number of different environments."

The online wagering system needs reliable and secure access to TOTE*, a proprietary racetrack system which accepts all track bets, and houses all the information about horses, odds, tracks, jockeys and races. As Macdonald explains TOTE is the final arbiter of all bets. The web interface



"We buy top quality PCs to optimize productivity and limit frustration. If (my developers and software architects) are forced to wait for something to compile while they're writing code, it's a hit on our productivity and stalls them in their creative process. We don't want that."

also needed scalability to handle the spike in bets that occur just before post time.

"We had a national telephone account betting system. We were looking to add the internet front end with rigorous security to verify the person's identity, age, residency, that they're making a valid bet and that their account is in good standing," says Macdonald.

Once the system was built, it underwent more than 14 months of regulatory review and technical third-party audits before launching in January 2004.

Today, Macdonald says the telephone and internet handles more wagering than in-person at Woodbine or Mohawk* raceways combined. "It's been the largest growth area," says Macdonald, estimating WEG was able to transfer about 14% of its telephone account betting within the first year, while seeing additional growth from new members.

Prior to HPIbet's launch in 2003, WEG had 36,000 members. Today, there are 80,000. With growth, WEG has added new servers and chose Intel® Xeon® 5600 processor-based servers for the reliable performance it needs.

"At the time, I don't think, we realized it would be this popular and have this kind of growth but we had high hopes for it," says Macdonald. "We have absolutely attracted new customers. It has absolutely given better service to customers we already had and we have increased the loyalty of our existing customers because it is a much better system and much more convenient for them.

Scalable Performance

Not only has HPIbet attracted new customers, the value of bets being placed on the system has increased from \$132 million in 2003 before the

launch of HPIbet online to \$330 million in 2010.

"As more and more people choose this system it needs to scale to handle the volume," says Macdonald. "It's a very unique, complex and mission critical system. We have to be able to handle huge volumes of transactions in short periods of time. If a bet doesn't go through, we not only lose the bet we could lose the customer."

To provide redundancy and security, WEG collocates its servers at Q9 Networks* where, with Whitecap, it manages the corporate web site and HPIbet on Intel® Xeon® powered servers.

WEG depends on its reliable network infrastructure to handle massive spikes in users and transactions during major races like the Kentucky Derby*.

"It's a peak and valley system with 90% of traffic in 2 minutes before the race goes off," says Macdonald. On these key race days, the number of concurrent users will increase from a daily average of 244 to 12,000. Average transactions go from 90,000 to 171,000 per day.

"We built the software and hardware infrastructure to allow for exponential growth while being able to maintain performance. It scales instantly," adds Carmichael.

Providing Canadian Wagering Coast To Coast

HPIbet was created to provide horse racing enthusiasts with the ability to place bets at any member race track around the world, and connect seamlessly with that racetrack's TOTE system to accept the bets.

"We are a service provider for the industry across Canada. All other tracks across Canada use our infrastructure to place bets through our system," says Macdonald, noting

without this kind of a system, they wouldn't be able to accept bets for races at other tracks, or from residents in other provinces wanting to place a bet at Woodbine.

In addition to providing secure and reliable online wagering, HPIbet provides extensive tracking and recording of the entire bet process from start to finish for audit purposes. Further, there's an internal administration module that monitors the automated transmissions of critical data to HPIbet and alerts staff when scheduled downloads don't take place.

Power By Design

To create these integrated and complex online software solutions, Whitecap Canada needs to have powerful Intel® Core™ i7 processor-based desktops and Intel® Core™ i5 processor-based notebook computers.

"My developers and software architects operate in a high performance environment that's really secure. You can't have your people sitting around waiting for things to compile," says Carmichael. "We buy top quality PCs to optimize productivity and limit frustration. If they're forced to wait for something to compile while they're writing code, it's a hit on our productivity and stalls them in their creative process. We don't want that."

Additionally, Carmichael says buying new generation laptops and desktops helps them attract and retain the best people in the industry.

Moving to Mobility

A project currently underway is the development of a new application that would allow horse racing fans to place their bets from a smart phone.

Macdonald explains it's about offering more options for members to enjoy the sport and Carmichael agrees "it's a vital next step for HPIbet."

With careful construction of the back end, Macdonald notes they have a platform to continue to add new applications like mobile betting or interactive TV without needing major infrastructure changes.

For more information on Intel® Xeon® processors, visit: www.intel.com/itcenter

Copyright ©2011 Intel Corporation. All rights reserved. Intel, the Intel logo, Xeon and Xeon logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

This document is for informational purposes only. INTEL MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS DOCUMENT.

Performance tests and ratings are measured using specific computer systems and/or components and reflect the approximate performance of Intel® products as measured by those tests. Any difference in system hardware or software design or configuration may affect actual performance. Buyers should consult other sources of information

*Other brands may be claimed as the property of others

♻️ Please Recycle

ABOUT WHITECAP CANADA

Established in 1997, Whitecap set out to develop custom software and focused on the emerging Internet-based technologies. A privately held, mid-sized company based in Toronto, Whitecap is today recognized as a leading custom software developer, systems integrator and web site design company.

ABOUT WOODBINE ENTERTAINMENT GROUP

With roots dating back to 1881, Woodbine Entertainment Group is Canada's largest and most innovative horse racing operator that owns and operates Woodbine and Mohawk Racetracks offering live thoroughbred and standardbred racing. It also operates Canada's first and only legal online wagering service.

SOLUTION PROVIDED BY:

