

## Pari Mutuel Urbain (PMU) Uses NeoLoad from Neotys To Test Its Betting Application



*PMU relies on NeoLoad to test the load-bearing capacity of its betting application used by 16,000 terminals installed in the PMU outlets throughout France.*

PMU is responsible for collecting and totalizing bets placed on horse races in France. The bets are placed by means of two networks. The first network comprises 10,000 PMU outlets with 16,000 terminals, plus 59 racetracks with a total of 2,500 terminals. The second is a remote betting network that allows gamblers with a PMU account to place bets from home via different channels: Internet, cell phones such as the I-Phone and interactive TV.

*"Being able to simulate the use of our betting application by the 16,000 terminals installed in our PMU sales outlets is an important factor for our business" notes Fabrice Labbe, network architect and member of PMU's IT Management team. "The simulation must take into account all the types of transaction carried out on the terminals, such as bet registration and win payouts. To simulate these loads, we had previously relied on a separate system on our mainframe but this set-up didn't reflect a realistic usage and proved to be very complicated to manage and upgrade. This led us to look for a replacement solution".*

### **2000 betting transactions per second**

PMU's main concern was to select a solution capable of simulating as accurately as possible the dialog -based on a proprietary protocol-between the terminals and the main site, while at the same time providing a representative level and distribution of the load. In performance terms, this meant reproducing 2,000 betting transactions per second.

The performance test campaigns run by PMU's IT management team take place each working day on a dedicated pre-production environment. Consequently, it's crucial for the company to have a product that is simple to use and easy to configure for different load generating scenarios.

*"We tested the main products currently available that could potentially fulfill our requirements" Fabrice Labbe continues. "NeoLoad, by its simplicity and its easily-assimilated test and HTTP generation functions, load simulation and report generation, really won us over. Neotys' solution also showed a great ability to adapt simply and quickly to our*

### **About PMU**

Founded in 1930, PMU is an Economic Interest Group whose mission is to devise, promote, market and totalize bets on horse races.

PMU is the largest pari mutuel betting company in Europe with a 2009 turnover of € 9.3 billion and a gross income from bets of € 2.2 billion. PMU provides 80% of the financing for horse racing in France, its entire income being allocated to the racing companies (sociétés des courses) to cover their operating needs.

PMU has equipped itself with an extremely efficient computer system that can handle more than 1,500 transactions/sec. (the equivalent of the NYSE), 28,000 simultaneous on-line connections and 300,000 customer accounts. For more information:

<http://www.pmu.fr>



### **Project Highlights**

- NeoLoad's ability to accurately reproduce a complex, real-life situation involving a large number of terminals using the PMU's betting application simultaneously
- The easy and simple configuring of NeoLoad to adapt to the PMU IT management's daily test conditions
- An enhancement of the development teams' productivity and greater end-user satisfaction

### **The Solution**

*proprietary protocol. In a few days, and with just a few simple JavaScript modifications in NeoLoad, Neotys had carried out a realistic generation of traffic on our site's pre-production platform".*

Using a simple configuration file, the Neotys teams modified NeoLoad to allow the daily load generating scenario (transaction distribution and load variation) to be adapted and its parameters changed "on the go" during a test run. This modification meant that PMU's IT management team could now simulate, to a very exacting degree, a "typical" day in the life of a very particular activity, including, for example, the load peak that occurs before the start of each horse race.

### **Immediate and tangible gains**

Thanks to its ease of use and configuration, the comprehensiveness of its reports and its overall performance, Neotys' NeoLoad very quickly allowed PMU's technical teams to design scenarios for the company's activities and run daily tests, proving itself to be a vast improvement on the previously-used solution.

*"First and foremost, Neotys' NeoLoad brought us a financial gain, since it allowed us to do away with the dedicated in-house software that was costing us money due to its complex operation and drain on resources at our main site" comments Fabrice Labbe. "Secondly, NeoLoad brought us performance gains on the technical side. Its simple configuration meant we could be more responsive and reactive in managing our scenarios and push the limits of stress and performance testing much further. Finally, our users really appreciated its ease of use and its generation of reports. All these gains have added up to a huge increase in productivity and efficiency in our test campaigns, so much so that we're now using NeoLoad for all our new business projects".*

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*The NeoLoad software tests a web application's performance under load, allowing you to burn-in your web applications before they are put into production.*

*Powerful, affordable and very easy to use, NeoLoad is able to generate heavy and realistic loads on a web application, thus allowing you to study the server's behavior statistics and to pinpoint any errors and performance-related problems.*

*NeoLoad lets you test any web and RIA infrastructure, including J2EE, .NET, PHP, AJAX, SOAP, Oracle Forms, Flex, Silverlight, GWT...*



### **About Neotys**

*"Make sure it works": Since 2005, Neotys has been helping its clients in more than 60 countries to ensure their applications' reliability, performance and quality. The NeoLoad load testing solution ensures better efficiency for faster testing, while at the same time providing pertinent analyses and full support for all new technologies. At each stage of your project, the Neotys consultants are on hand to guide you, thereby ensuring the successful deployment of your applications. For further information:*

<http://www.neotys.com>

### **Contact**

*To find out how Neotys can help you test the performance of your web applications prior to their production phase, please contact us at: [sales@neotys.com](mailto:sales@neotys.com)*