

Blue Square Secures Online Transactional Network with the Juniper Networks Network Security Solution



Customer:

Blue Square, one of the largest interactive betting services in the United Kingdom. Blue Square was a wholly owned subsidiary of the Intercapital Group Ltd until January 2003, when it was acquired by Rank, one of the UK's leading leisure and entertainment companies.

Industry:

Leisure and entertainment

Challenge:

Secure the network to optimize up time and protect customer data without compromising throughput speeds

Solution:

Juniper Networks NetScreen firewall, IPSec VPN and IDP solution

Benefits:

- Increased network security
- Increased customer satisfaction by facilitating fast data throughput
- Increased IT department productivity by easing deployment and management

Blue Square operates an online betting service through Bluesquare.com. The service operates across three major areas—sports events, financial indexes and special events, such as Pop Idol, political elections and Big Brother. Customers can place bets, check odds and confirm results through the public Internet and cable TV services 24 hours a day, seven days a week. Telephone bets also can be placed by customer account holders. During major events, such as the annual Grand National horse race, thousands of bets per minute are placed online at Bluesquare.com.

Technology and marketing are the two key elements to the ongoing success of Blue Square's business. If either of them fails, the company has a major problem. It is also a fact of life that networks are susceptible to attacks by cybercriminals and hackers, whatever the market sector. Traditionally, this meant that one of Blue Square's key business assets was also its most vulnerable. Online customers' credit card details could be at risk from hackers both during

transactions and once stored in Blue Square's database (where telephone customers' data was also stored, making it equally vulnerable if the company's Web servers were breached).

As part of a regular technology review, Blue Square's solution provider, Data Integration, recommended a major overhaul of Blue Square's network security platforms. The existing software-based firewalls within Blue Square's "small but complex" network were creating a "bottleneck" that slowed down customers' transactions and also resulted in intermittent reliability issues. The brief was to design a new security solution that reduced the network's vulnerability to hacking, but which maximized data throughput and network reliability.

Within the competitive world of online betting, the cost of down time is massive and can be calculated by the second. If the Blue Square Web site is unavailable, customers will simply go to a competitor's Web site to place their bets.

The Solution

Following Data Integration’s expert guidance, Blue Square selected Juniper Networks NetScreen’s range of integrated security appliances, which provide custom-built firewall and virtual private network (VPN) functionality integrated in a single purpose-built platform. The selected solution included two pairs of Juniper Networks NetScreen-208 appliances, each pair operating in fully redundant (active/passive) hot-standby mode. Therefore, if one appliance in the pair were to fail, the other would immediately continue stateful processing of traffic, without losing a session.

To further protect Blue Square’s network from attack, Data Integration also installed a Juniper Networks NetScreen-IDP 100 intrusion detection and prevention (IDP) platform. The latter sits inline behind the Juniper Networks firewalls and is able to drop unwanted packets—rather than simply alert the network administrator to malicious traffic—and prevent attacks from reaching their intended victims or wreaking havoc in a network.

Underlining the critical importance of 100 percent up time for its network, Blue Square also opted for a second vendor’s firewalls to sit behind the Juniper Networks network security configuration. Blue Square could not afford to have a single point of failure on its customer-facing network, hence its best practice approach of two vendors. The configuration was originally planned the other way around, with Juniper Networks equipment as firewall “backup,” but performance proved to be so good that Blue Square decided to put the emphasis on the Juniper Networks devices—and so far, the other vendor’s equipment hasn’t been called upon. A load balancer sits between the two vendors’ firewalls, handling Internet connection traffic as it runs between the firewalls.

The Benefits

With the Juniper Networks NetScreen solution in place, Blue Square has been able to offer its customers a much quicker online transaction process, yet still be safe in the knowledge that credit card details are secure in transaction and once stored on the server. This means that more customers can complete their online bet quickly and securely. When high-profile sporting events such as the Grand National put the network under maximum pressure, Blue Square reports that the Juniper Networks security solution can process more online transactions per second than its software-based predecessor.

Finally, Blue Square has found that the Juniper Networks graphical user interface (GUI) is very intuitive to use, making IT staff’s learning curve and responsibilities very rapid to complete and saving operational costs.



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