Profile

The Customer: Cable & Wireless Communications plc is a multinational telecommunications company in London, U.K. Its operation in Panama—Cable & Wireless Panama—delivers mobile, fixed line, broadband, and pay TV services.

The challenge: Over a period of a month Cable & Wireless Panama was receiving customer complaints because several attacks had taken down the customer-facing network for 20 minutes to an hour at a time.

The solution:
- Two Infoblox 2210s as Grid Masters
- Two PT-2200s with Advanced DNS Protection installed at the main location
- Five 1410s at branch offices
- DNS Firewall on all boxes
- Trinzic Reporting TR-2000
- Ten days of Professional Services

The results:
- Protection from DNS attacks
- More up time
- Better information about the number and types of attacks
- A better customer experience

“...In one of our provinces we had been having complaints about how long it took pages to load. Those complaints dropped by half because we put an Infoblox box close to the province.”
— Hugo Aquino, Vice President of Customer Support for Cable & Wireless Panama

Cyberattacks Leave Customers Wanting on Mother's Day

Cable & Wireless Panama had a legacy solution that combined F5 and BlueCat products in its wireline division. Over a period of a month that division was receiving customer complaints because several attacks originating in Asia had taken down the customer-facing network for 20 minutes to an hour at a time, dropping customer experience below acceptable levels. When the attacks peaked on Mother's Day, Infoblox partner Soluciones Seguras, which manages the service provider's internal security, convinced Hugo Aquino, the company's vice president of Customer Support, Panama, that Infoblox was the answer.

Infoblox Solution Delivers Enhanced Control and Security

Aquino quickly deployed an Infoblox Grid™ architecture consisting of nine security-hardened appliances and running Infoblox DNS Firewall and Infoblox Advanced DNS Protection. DNS Firewall detects and blocks outbound malware communications, and Advanced DNS Protection allows networks to continue to function during denial-of-service attacks by dropping attack traffic while allowing legitimate traffic to flow.

The Infoblox solution put a quick stop to customer complaints about outages in the wireline network—but that network's mobile counterpart, which was running BIND on Solaris hardware, began to experience the same kind of outages. Technicians from the mobile group raised the alarm that their BIND servers and firewalls weren't stopping the attacks, and asked if it was possible to integrate all of the traffic from mobile—which accounts for 80 percent of the service provider's total traffic—onto the Infoblox platform.

The decision was made in March to act on the request, and Soluciones Seguras designed an architecture that was divided into blocks—one for wireline and one for mobile. If one block had problems, the other would act as its backup.

A key step in the integration was the migration of DNS data from the BIND servers. Aquino's team, Infoblox, and Soluciones Seguras set a date for the cutover, planned this phase of the project carefully, reviewed the plan, spent two days performing the final integration, and then tuned the system in production—without any complaints from end users.
Cable and Wireless Panama Protects Network from DNS-Based Attacks, Reduces Customer Impact

“I’m happy with the process,” says Aquino, “from the sale to the implementation to the support.” He’s also happy with the ease with which the Infoblox Grid allows his team to perform what were once time-consuming and error-prone processes such as distributing changes and upgrades. “Things that used to take hours now take about 30 minutes,” he says. “It even gives us recommendations about how to improve the memory usage of our platform. I’m confident that the Infoblox solution is perfect for our needs.”

Infoblox has enabled Cable & Wireless Panama to resolve incidents that were happening repeatedly, and the service provider now has excellent protection from DNS-based attacks, better up time, and fewer complaints. They also plan to use Infoblox Reporting to learn more about the number and type of attacks they are getting.

Aquino notes, “The Infoblox solution helped Cable & Wireless Panama achieve its goal of being number one in customer satisfaction. Service incidents from DDoS attacks have been cut in half, and customer complaints about lengthy page load times have been significantly reduced.”

In addition, Cable & Wireless has found that the Grid has given them the ability to distribute servers to decrease latency, improving customer experience at the edges of the net. “In one of our provinces we had been having complaints about how long it took pages to load. Those complaints dropped by half because we put an Infoblox box close to the province.”

“We didn’t even have to acquire any new appliances,” says Aquino. “We used the ones we already had on the wireline network to handle both workloads. This has worked for us, and believe me, the solution has been fault tolerant. It was not just the right decision to do this platform renewal—it was one of our most important decisions.”