

INDUSTRY

In 1987, Cable & Wireless (C&W), one of the world's largest players in the global telecommunications business with customers in over 70 countries and revenue of over \$11 billion, acquired the Barbados Telephone Company. C&W's vision was a dedicated telecommunications thrust that would bring new cutting edge technology to the residents of this relatively isolated Caribbean Island.

Cable & Wireless Barbados provides a wide selection of technological products ranging from basic telephone and internet services to managed-data network solutions, ISDN, high speed internet and cellular services via an enhanced network. Overall, Cable & Wireless Barbados business unit hosts an ISP infrastructure used by 11 different countries, providing main ISP, email, TDMA and GSM (wireless) services to thousands of Caribbean residents on a daily basis.

Cable and Wireless is the highest-rated provider of business-class broadband connectivity and network services to small and medium-sized businesses, home offices and telecommuters throughout the Caribbean, United States, Asia and Europe. Their broadband network supports thousands of clients and serves almost every major metropolitan area across the nation, and the world.

CommuniGate Pro and Cloudmark Help Cable & Wireless Protect Island Communicators from Messaging Abuse

CHALLENGE

Over the past 20 years, Cable and Wireless has helped to create and shape the communications infrastructure of Barbados. However, providing sole communications services to an entire island that has an area of over 430 square kilometers and a population of over 250,000 was a challenge. Providing a reliable communications platform was only half of their solution. Once they had this foundation, they needed additional protective measures to ensure all information would be accessed via secure channels. Initially, Cable and Wireless Barbados used Netscape messaging and Microsoft Commercial Internet Services packages to handle their electronic communications. Cable and Wireless found numerous problems and compatibility issues with this infrastructure. Elon Richards, Senior Coordinator of Internet Services stated that, "Our setup was unstable, lacked many web mail features, logging capabilities, and multimedia services, was restricted to Windows operating systems, and, most critically, did not have adequate spam or virus filtering."

In addition to basic virus protection, Cable and Wireless Barbados required SSL/TLS encryption capabilities, and needed supplementary software to identify and filter potentially malicious content such as SPAM or identity-phishing emails.

SOLUTION

After a lengthy comparison, Cable and Wireless Barbados switched from Microsoft Exchange to a new communications solution in CommuniGate Pro. With its 99.999% uptime, Cable and Wireless chose to implement the CommuniGate Pro Dynamic Cluster across their existing servers. Since then, "The Dynamic Cluster has improved our uptime and moved us from a fire-fighting mode to one of stability. Because of its directory-based design, we have easily implemented third party applications using a single directory for authentication," said Richards.

In addition to the CommuniGate technology, Cable and Wireless Barbados chose the Kaspersky virus-scan plug-in as well as the Cloudmark Authority plug-in for CommuniGate Pro as their anti-spam and anti-phishing agent. The Cloudmark Authority plug-in easily integrated into the existing Communi-Gate Pro messaging infrastructure. Mr. Richards says Cable and Wireless have been pleased with the incorporation of Cloudmark, stating that, "Cloudmark provides our network administrators with a more complete and accurate view of operations that enable improved resource planning and utilization, as well as offering superior reporting capability. Cloudmark offers flexible integration options at multiple points within a service provider's infrastructure, from gateway to client technologies. And, our subscribers are very happy with the reduction of spam in their mailboxes."

SYSTEM ARCHITECTURE

Cable & Wireless Barbados uses four front-end and three back-end servers to form the CommuniGate Pro Dynamic Cluster Architecture. All seven servers have similar configurations. They have an additional server set up to increase storage capability utilization, sharing the same growth reserve. The shared storage is connected directly to the backend servers delivering a never down environment including change management windows with no subscriber outage. Cloudmark's Authority Engine sits on the frontend server nodes providing real time scanning before SPAM hits the backends or storage saving costly resources.

Cloudmark also enables Cable and Wireless to incorporate subscriber feedback through a network feedback system, speeding responsiveness and increasing accuracy. Cloudmark's user feedback mechanism improves customer experience and satisfaction rates by keeping subscribers better informed of actual network-wide and individual threat-blocking results, resulting in a reduction in customer service complaints and associated expenses.

BENEFITS

Providing telephone and wireless service to a complex community was no small challenge. CommuniGate Pro with its Dynamic Clustering ability is the communications solution Cable and Wireless was looking for. CommuniGate Pro easily met all of their requirements. It is designed to render the highest levels of user-traffic, and offers Cable and Wireless 99.999% uptime, virtually guarantying their customer's access to e-communications 24 hours a day.

Administrators and users alike can run CommuniGate Pro on over 30 different compatible operating systems, easily integrating existing communications models into one stable solution, resulting in reduced communication costs and overall improvements in productivity. CommuniGate Pro provides Cable and Wireless with a Carrier Class Platform supporting a powerful blend of applications and mobility features to enhance the overall customer experience and opens new revenue streams with rich media services for future growth.

CommuniGate Pro is the flexible, extensible and integrated IP Communications platform for new rich media services, meeting the scalability demands of carriers such as Cable and Wireless. This 128mb encryption allows for the safe passage of data to their end users from their main servers. For an additional layer of security, the Cloudmark anti-virus plug-in filters potentially harmful incoming emails and instant messages.

To combat messaging abuse, Cloudmark's Authority carrier-grade software solution delivers the industry's most effective and highest performing anti-spam, anti-phishing and anti-virus protection. Cloudmark's easy-to-manage, scalable solution consistently blocks over 98% of inbound and outbound messaging attacks in real time with near-zero false positives. This industry-leading level of accuracy increases subscriber satisfaction by keeping mailboxes free of the 92% of email that can be classified as abusive, and prevents good email from being misclassified—greatly reducing strain on network infrastructure and delivering an immediate improvement in filtering reliability and accuracy. And, Cloudmark Authority's lightweight fingerprinting algorithms require significantly less processing power than competitive solutions to reduce CPU utilization.

With an eye toward future threat development, Cloudmark also offers service providers such as Cable & Wireless additional layers of security through a set of intelligent, value-added services such as filtering by IP address or sender reputation, zombie identification and remediation, mail store cleanup, customized reports on subscriber feedback for added value to the web mail interface and real-time phishing URL feeds.

With the final additional security layer provided by Cloudmark Authority, Cable and Wireless is able to provide their customers with a reliable, easy to administer and very secure messaging platform. The result is fewer customer complaints, less impact on the email servers, greater customer confidence, noted Richards, citing churn as a significant service provider cost. "Using the CommuniGate Pro directory, LDAP, and Cloudmark API, all accounts for mail and RADIUS authentication are centralized. Even our in-house billing system was integrated using the API. Without CommuniGate Pro, our customers would not have consistent, reliable and secure access to their various forms of electronic communications," concludes Richards.

