# Cronos Containers Limited

Highlights

www.cronos.com

- **Industry**
  Transportation

- **Application**
  Automated online tracking of intermodal marine containers worldwide.

- **Business Problem**
  Cronos needed to secure vital information stored in its databases to avoid the increasing risk of attack by hackers, worms and other security threats. Additionally, it needed to ensure that its key business data did not fall into the hands of competitors.

- **Security Solution**
  AppShield 4.0™

- **Business Benefits**
  By implementing a comprehensive, proactive intrusion prevention solution for thwarting hacking attempts, Cronos can offer customers secure information access over the Web.

- **ROI**
  Ability to easily scale Web Site hardware with no additional security expenditures; 100 percent success at preventing malicious intrusions.
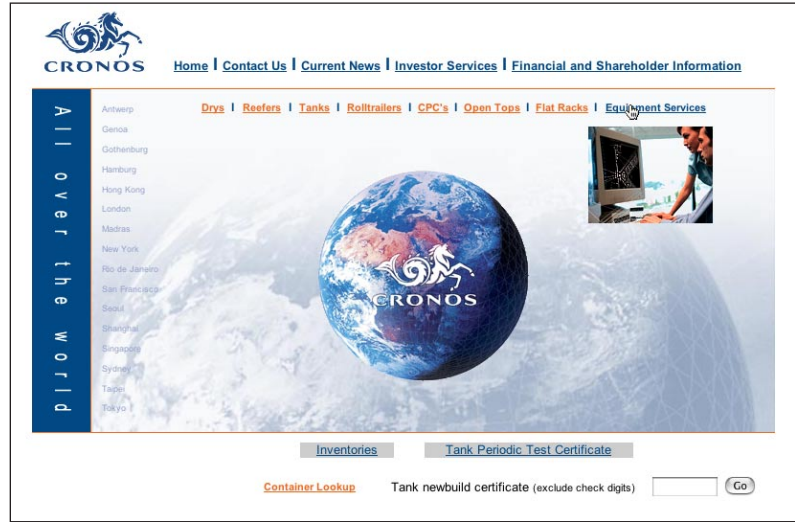
To ensure accurate and up to date information flow, the Cronos Web site links to the company's backend information systems.

Cronos Leverages AppShield to Protect Against Corporate Espionage

After a site audit was performed on the Cronos IT infrastructure, Haroon Ikram (Support Manager at Cronos) realized a hacker or competitor could have breached the Cronos Web site looking for intelligence on the company's fleet operations. The vulnerability was at the application level and therefore the existing network firewall

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—Geoff Isherwood
Head of IT
Cronos Containers Limited

AppShield: Automated Web Application Firewall

- Maximum application protection in minimum time

- Easy application deployment in a secure environment

- Smart, behavioral software eliminates manual configuration with automatic policy generation

- Scales effortlessly with no additional management burden

- No reactive patching, rule updates or administrative headaches

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—Haroon Ikram
Support Manager
Cronos Containers Limited

was useless in this instance. The security consultants performing the audit recommended AppShield from Sanctum.

In today's competitive environment, matching customers to resources has never been more important. For Cronos, this fact holds especially true. With a fleet of approximately 294,000 intermodal marine containers, Cronos' livelihood depends on its ability to connect shipping companies with cargo equipment. Through the use of leading-edge technologies, the 80-person company has refined its logistics to a science, resulting in superior scheduling and efficiency of its services.

The multi-million dollar company attributes part of its success to its Web site (www.cronos.com). The site contains a wealth of information about the container business and is visited by ocean carriers and transport operators from around the globe. Its advanced functionality allows customers to review container specifications and "on-hire" status along with worldwide container inventories.

To ensure accurate and up to date information flow, the Web site links to the company's backend information systems. Two Oracle databases house valuable company data, including detailed information on Cronos' fleet operations. If this data were to fall into the hands of a competitor, Cronos could lose its competitive edge.

A key area of concern for Cronos was its proprietary 'Container Lookup' Web application. Unlike other areas of its Web site, this section for container queries is open to the public. Anyone with a container identification number can enter the information and learn the technical and on-hire details of the shipping container. While this information is useful to customers for tracking goods, it could be even more valuable to competitors interested in stealing business from Cronos. "The key to making money in this business is to have the right containers in the right port at the right time," explains Ikram. "Therefore the data that is most sensitive to us is our container locations."

"On-hire" Status Inquiries Raise Suspicions

"We were receiving a high number of queries on our containers," says Ikram. "Someone was automatically entering multiple container numbers and bringing back a significant number of queries. Not one every twenty seconds, but thirty to forty a minute." This raised an alarm with Cronos which they knew they needed to correct. To prevent attackers from pulling the targeted and competitive container information, Cronos knew it had to implement a security solution to protect its information from future vulnerability.

At the time, Cronos already had a network firewall protecting the Web site. "In this instance, the network firewall was pretty much useless because we knew attackers could come at us by different IP addresses," says Ikram.

Cronos had considered requiring passwords for making container queries, but that was an option it wanted to avoid as this would have created significant administrative overhead and an additional expense for them.

Although the hackers were unsuccessful, the potential for an attack was a wake up call for Cronos. To prevent potential intrusions, Cronos consulted Secure Networks, an Internet security company that thoroughly audited Cronos' existing IT security infrastructure. What was missing, Secure Networks concluded, was application-level protection against unanticipated threats.

Security Vulnerabilities Quickly Contained with Sanctum's AppShield

Upon the recommendation of Secure Networks, Cronos chose AppShield 4.0 software from Sanctum, Inc. as its Web application firewall. Sanctum's reputation and experience for providing highly reliable intrusion prevention solutions that block online application manipulation 24x7, made the AppShield decision an easy one.

"The deciding factor, however, was AppShield's ability to prevent attacks at the application level in a positive security model requiring no signatures or rules to manage," said Jason Howells, Director, Secure Networks Limited. With AppShield, Cronos was able to create a Web application firewall that "learns" what activities are normal for an Internet user, and blocks any type of online application manipulation for the entire Web site.

Cronos was also impressed with how easily AppShield scales. "If you are investing in an application firewall, it is key that it has the ability to grow as your Web site grows," says Ikram. "AppShield met this criterion nicely. The fact that we could change the layout of our Web site and not worry about our security software was an essential consideration for us."

Working with Secure Networks, Cronos installed AppShield in just one day. "We were able to duplicate what the hackers could do in just a few hours," says Ikram. "We were up and running in secure mode by that afternoon."

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Cronos Lets Web Site Traffic Flow with Confidence

Today, Cronos has the confidence of knowing it has shut out malicious hackers while allowing legitimate users into its Web site. The company has a comprehensive, proactive solution for thwarting hacking attempts, allowing it to securely interact with customers over the Web. What's more, Cronos has avoided having to issue passwords to customers who want container information, thereby reducing administrative costs and conserving resources.

Meanwhile, the AppShield solution is proving a good marketing tool. "AppShield allows us to see what pages people are accessing and how frequently they are hitting them," says Ikram. "A few years ago, no one thought they needed application firewalls, but they have become a business necessity," Ikram concludes.

"Anyone with a Web site containing more than static information would be wise to consider a solution such as AppShield," said Geoff Isherwood, Head of IT Cronos Containers Limited.

Cronos Success Story

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