

City Switches to Trend Micro on its Journey to The Cloud

Trend Micro™ Enterprise Security for Endpoints and Trend Micro™ Deep Security build in scalable, lightweight protection.

“When we researched security within a VMware environment, everything pointed us to Trend Micro—Trend Micro has become a security leader in virtualization and it is also important to us that they have been working very closely with VMware.”

—Dave Zylyk, Senior Network Systems Analyst, Information Services/Corporate Services, City of Kelowna

EXECUTIVE SUMMARY

Customer Name: City of Kelowna

Industry: Local Government

Location: Kelowna, British Columbia, Canada

Web site: www.kelowna.ca

Number of Employees: 800–1,000

CHALLENGE:

- Make security invisible to end users and keep protection and security light on the desktop
- Build in security to the new, virtualized data center platforms
- Simplify the switch over to a new security vendor
- Keep day-to-day management of security simple for IT and transparent to users
- Evaluate the potential of virtual desktops without increasing complexity and security risks

SOLUTION:

- Trend Micro Enterprise Security for Endpoints
- Trend Micro Deep Security
- Trend Micro™ OfficeScan™ VDI Plug-In

BUSINESS RESULTS:

- Light & Lean security that gives the impression that computers have been upgraded to new, faster hardware
- Highly effective integration of virtualization and security
- Technology roadmap that makes it easy to evaluate and introduce virtualization technologies
- Simplified administration, extended to both physical and virtual environments
- Improved protection and increased confidence in security solutions
- Easy management, contributing to excellent cost of ownership

Challenge

Kelowna was incorporated in May 1905, with a population of only 600 and when farming was the basis of the local economy. Today, the city is considered one of the popular locations in Canada and more than 106,000 people call Kelowna home.

The business of government and delivery of services falls on a diverse and talented team of leaders and professionals, including technology specialists that keep the city's infrastructure available to all arms of the government. The city does not mandate that departments use the same hardware and software, although many choose to use recommended core components along with their own specialized applications.

“This is working to help each organization streamline their tasks,” said Dave Zylyk, a senior network systems analyst in the Information Services/Corporate Services (ISCS) department of the City of Kelowna. “And it supports our main goal—providing the best possible customer service to our end users and ultimately to Kelowna's citizens.”

To maximize the returns on technology investments, the ISCS team re-evaluates platforms and vendors regularly and adjusts the core platform accordingly. This includes consideration of security solutions. “Protection of our systems, the risk of security threats, or a combination of attacks—these are things we do not take lightly in our corporation,” said Zylyk.

When the city's data center virtualization initiative was gaining momentum, the technology team recognized the need to adjust its security stance accordingly. The data center supports all of the corporate functions of the city, from scheduling of pool vehicles to email to finance and human resources. Internal and external web applications are also hosted in the data center, along with numerous mission-critical database management systems. Since some of these applications handle credit card transactions, Payment Card Industry (PCI) compliance had to be considered, along with the other application and user requirements.

Solution

Prior to the data center virtualization project, endpoint security had come under scrutiny by the Kelowna ISCS team. A security product from another leading security vendor was becoming too resource-intensive, and interfering with city employees daily tasks.

“We found over time that our previous endpoint security product was continually growing and our systems were getting slower and slower as a result,” said Zylyk. “End users were complaining. They would come in the morning, login and then have to wait 15 minutes

because the computer was grinding through virus sweeps and security scans—they couldn't launch any applications until this was finished.”

The city's power users are even more reliant on having access to the full power of their systems. They employ engineering, drafting, geographic information system (GIS), and other large applications that are video, graphics, or database intensive. Kelowna's ISCS team looked for a security solution that did not dominate hardware resources to the detriment of any of their users' computer applications.

Switching to Trend Micro

“We needed a product that could in fact deliver what it touted, and keep even our power users happy; we found not one, but two products from Trend Micro that delivered,” said Zylyk.

“Trend Micro Enterprise Security for Endpoints delivers exceptional protection to our physical endpoints, without compromising performance or increasing complexity in terms of deployment and management. Trend Micro Deep Security builds security into our virtual data center environment, without placing resource strains on the virtual machines or VMware ESX hosts. Together, both Trend Micro products have provided us with a fortified, easy-to-deploy, easy-to-manage security infrastructure.”

Light & Lean Endpoint Security

“The previous endpoint security solution was consuming too many administrative and system resources—Trend Micro Enterprise Security for Endpoints was the opposite,” said Zylyk. “The design keeps the solution light on clients, with a lot of the work being performed on the server or in the cloud.”

Trend Micro Enterprise Security products and services are powered by the Trend Micro™ Smart Protection Network™ infrastructure that delivers advanced protection from the cloud. Threats are blocked in real-time, before they reach Kelowna's network and systems. The bulk of ever-growing pattern files are kept on a central scan server rather than individual endpoints, keeping the agent footprint small and reducing the need for frequent updates.

Data Center Virtualization

As the basis for its data center virtualization initiative, Kelowna chose VMware solutions. “VMware is a leader in virtualization, with its competitors trying to keep up,” said Zylyk. “During our pilot tests, we found that VMware had a solid understanding of enterprise requirements. They keep coming out with improvements to the software design and architecture, and they partner well with other technology providers like Trend Micro. We also appreciate the VMware focus on virtualization—we can see where they are going and it aligns well with our own technology roadmap. VMware is strong in the market and gives us a broad range of best-in-class products.

“When we researched security within a VMware environment, everything pointed us to Trend Micro—Trend Micro has become a security leader in virtualization and it is also important to us that they have been working very closely with VMware. Trend Micro solutions are well integrated with VMware platforms and solutions.”

Versatile Security Options

After explaining their requirements to the Trend Micro account team, Kelowna's technology group got the advice of the local security experts. “It was nice to have Trend Micro experts help us—the technical support teams are very accessible and knowledgeable within their field,” said Zylyk. “Trend Micro teams have been very friendly and easy to work with—and their design experts and engineers helped us achieve results that have exceeded the needs of our user base. In our opinion, Trend Micro's attention to customer service is #1.”

Within the Kelowna data center, Trend Micro Enterprise Security for Endpoints protects physical servers, and Trend Micro Deep Security protects virtual machines. “One of the nice things about Deep Security is that you can put a thin client on each virtual machine or configure protection into the ESX host,” said Zylyk. “We have chosen to keep

DEPLOYMENT ENVIRONMENT

- : 1 main data center
- : 700 PCs
- : 30 physical servers; 90 virtual servers (virtualization still in progress)
- : VMware ESX servers, with vSphere 4.1
- : VMware View (VDI pilot test)
- : Trend Micro Enterprise Security for Endpoints
- : Trend Micro OfficeScan VDI Plug-In
- : Trend Micro Deep Security

Customer Profile

- : With a population of more than 106,000, Kelowna is the largest city in British Columbia's Okanagan Valley. The city has been rated among the most cost competitive places to do business in the Pacific Region of North America. Kelowna has become the main marketing and distribution centre of the Okanagan Valley, with a flourishing tree fruit industry and a growing light industrial sector that competes on a world scale. Best known for forestry and the manufacture of boats, plastics, fibreglass, body armour and oil field equipment, Kelowna also has a growing high technology sector that includes aerospace development and service. The city's international airport is one of the top ten airports in Canada, serving over one million passengers annually.

virtual servers very light, with agentless security. In this configuration, Deep Security blocks threats and helps us gain maximum hardware performance while keeping security transparent.”

Results

“Beyond the security team, Kelowna end users have very little or no idea that we have switched over to Trend Micro—the new security solutions have been transparent and we achieved a ‘silent install’ for Enterprise Security for Endpoints and Deep Security,” said Zylyk.

The improvement in performance, however, has not gone unnoticed.

“We get lots of comments—many users say they really like their new hardware,” said Zylyk. “They tell us, ‘This new machine is so much faster.’ While they do have new hardware, what they are experiencing is the result of a new image, with security switched to Trend Micro.

“Trend Micro Enterprise Security for Endpoints has solved all of our previous security problems. And we aren’t a special case—right out of the box, we set it up and it just worked. That was it.”

Besides pleasing users and the IT security team that deployed the new solutions, a main benefit has been improved protection. Trend Micro products give Kelowna a very strong, scalable security solution that is easy to manage.

“With the way the industry is going, information is growing in leaps and bounds,” said Zylyk. “We are continually demanding more out of our infrastructure—one day it is VoIP and the next day it will be video conferencing—more and more data is being pushed through our infrastructure. Why would we want security to put up hurdles or roadblocks or additional strains on hardware? That would only frustrate users. Trend Micro Enterprise Security does what it says without our infrastructure taking any noticeable performance hits.”

The low-impact, highly effective solutions have also helped the technology team gain improved visibility over security-related issues and user behaviors. “Trend Micro enterprise consoles make it a lot easier to see what is going on,” said Zylyk. “The information in the dashboard shows us status, and simplifies making changes. For users Trend Micro Enterprise Security is invisible, but for our administrators, it is completely visible. The combination of protection for both physical and virtual environments is what we’ve been waiting for, and Trend Micro has delivered. Now we can introduce and manage security—without it being a full-time job. Trend Micro is the only vendor that has so far been able to do this for us in a bundled solution.”

Next Steps

Kelowna is currently executing a pilot test phase for virtual desktop infrastructure (VDI). The thin clients are being considered for kiosks, front-desk applications, and other light-use systems while also being tested against the requirements of more demanding users and applications. Deep Security extends protection to virtual desktop instances in the data center, and the OfficeScan VDI Plug-In adjusts endpoint security for efficient execution within VDI environments. “Trend Micro solutions extend our security policies to our VDI pilot—we can evaluate this new approach without risking security vulnerabilities that would make it impractical,” explained Zylyk.

“We have chosen to keep virtual servers very light, with agentless security. In this configuration, Deep Security blocks threats and helps us gain maximum hardware performance while keeping security transparent.”

—Dave Zylyk, Senior Network Systems Analyst, Information Services/Corporate Services, City of Kelowna

Trend Micro Security

- **Trend Micro Enterprise Security for Endpoints**
<http://us.trendmicro.com/us/products/enterprise/security-for-endpoints/index.html>
- **Trend Micro Deep Security**
<http://us.trendmicro.com/us/solutions/enterprise/security-solutions/virtualization/deep-security/index.html>

Trend Micro Enabling Technology

- **Trend Micro Smart Protection Network**
<http://us.trendmicro.com/us/trendwatch/core-technologies/smart-protection-network/>



© 2011 Trend Micro Incorporated. All rights reserved. All Trend Micro company, product and service names and slogans are trademarks or registered trademarks of Trend Micro Incorporated. Other names and marks are the property of their respective owners.
CS_KELOWNA_DEEP SECURITY_JULY2011

www.trendmicro.com