Online Marketing Company Uses Router-Based Solutions to Improve Security

ValueClick uses Cisco IOS firewall and threat control services to maintain a scalable, highly manageable end-to-end security solution.

EXECUTIVE SUMMARY

VALUECLICK
- Marketing/Advertising

BUSINESS CHALLENGE
- Protect business network against viruses, malware, and other Internet-based threats
- Provide robust security without impeding employee Internet connectivity
- Maintain simplicity for remotely managed locations

NETWORK SOLUTION
- Manage security for all company locations with Cisco IOS Security solutions, including Cisco IOS firewall, IPS, and Dynamic Multipoint VPN (DMVPN) services

BUSINESS RESULTS
- Provides strong, integrated defense against Internet threats
- Facilitates simple, efficient, and cost-effective security management for all sites
- Streamlines auditing and regulatory compliance requirements

Business Challenge

ValueClick, Inc., is one of the largest online marketing companies in the world, serving more than 1 billion ads per day and providing affiliate marketing services for nearly half of the top 500 Web retailers. With so many customers and partners relying on ValueClick's Internet-enabled services, the company requires the strongest possible protection against viruses, malware, and other Internet-based threats. At the same time, ValueClick's unique business model means that employees at its 16 offices around the world must have unfettered access to the Internet.

"As a leader in the online advertising industry, having reliable Internet connectivity is vital for our staff to conduct their day-to-day jobs," says Kevin Graham, director of networks, security, and storage for ValueClick. "Other businesses have the luxury of treating Internet access as a secondary consideration. For us, it is a primary business requirement, and we have to make sure that security solutions do not interfere with these activities."

Compounding these security challenges, ValueClick's corporate growth strategy is based on a distributed network model. Instead of providing Internet access through a centrally controlled WAN, each ValueClick office connects to the Internet locally. That means that ValueClick's network team must find ways to manage Internet security at each location efficiently and cost-effectively.

"We have a global footprint and some sites do not have full-time IT staff, so the manageability and maturity of our security systems are paramount," says Graham. "Our locations range from small sales offices with a half-dozen employees to a small campus of more than 350. We need a standard solution that we can deploy everywhere, so our technology must be able to cost-effectively scale both up and down to meet those needs."

Serving a broad range of customers and industries, ValueClick also must adhere to diverse U.S. and international regulatory compliance requirements.

"We are a publicly traded company, so we have to comply with a wide range of security and auditing regulations," says Graham. "Being able to demonstrate that we can provide secure Internet access is very important to us."

Network Solution

Faced with so many unique requirements, ValueClick has to strike a delicate balance. Internet security must be strong but flexible. Security solutions must provide enterprise-class management features, but small-office-scale simplicity. To meet all of these needs, ValueClick relies on the security services embedded within Cisco® IOS Software.

Using Cisco IOS Security threat control services, ValueClick can manage a firewall, an intrusion prevention system (IPS), and virtual private network (VPN) connectivity at each company location using the same Cisco platform that terminates the WAN and Internet connection—and without deploying multiple dedicated appliances. Because these powerful defense capabilities are fully integrated into the core functions of the Cisco routers, ValueClick can take advantage of advanced threat protection and rich management features without having to compromise simplicity.

"The maturity and richness of the security capabilities in the Cisco IOS Security platform, particularly in the Cisco IOS firewall, are unrivaled," says Graham. "From SNMP [Simple Network Management Protocol] and NETCONF [Network Configuration Protocol] management support to the embedded event manager to robust local management features, Cisco IOS Security offers much more than you can find in a typical firewall solution."

> **"If we were not able to use an integrated solution, the networks at all of our remote sites would become much more complicated, and our staffing requirements would substantially increase. By building everything with Cisco IOS Security, we only have to manage a single platform. We can maintain the entire network with a smaller team."**
> **—Kevin Graham, director of Networks, Security, and Storage, ValueClick**

By basing the security strategy on Cisco IOS Software, ValueClick also simplifies the management of all of its diverse remote sites. Because every Cisco platform in the company—from the largest routers in the network head end to DSL routers in small sales offices—employs the same Cisco IOS Security services, the company can create a single, repeatable security implementation for every location.

"Cisco IOS Security is one of the few solutions that allows us to use a consistent and, for all intents and purposes, identical solution across the board," says Graham. "It really is just a matter of the hardware platform that we put underneath it. Whether we have a small site with a cable Internet connection or a large campus with an OC3 optical network, we can use the same Cisco IOS Software platform to secure it."

Business Results

Thanks to the inherent simplicity, manageability, and robust network protection provided by Cisco IOS firewall and threat control services, ValueClick can maintain the secure, reliable network environment that is essential for an Internet-based business. They can also provide that environment at all company locations in a highly manageable, repeatable manner.

"The integration of all of these capabilities on a single platform is paramount," says Graham. "In addition to all of the core routing and management features that Cisco IOS Software is revered for, the dependable firewall, IPS, and VPN features allow us to use the Cisco platforms as an end-to-end solution."

PRODUCT LIST
Routing and Switching
• Cisco 1800 Series Integrated Services Router
• Cisco 2800 Series Integrated Services Router
• Cisco 3800 Series Integrated Services Router
• Cisco 7200 Series Router
• Cisco 2600 Series Multiservice Platform
• Cisco 3600 Series Multiservice Platform

The ability to control security services across the enterprise from a single, software-based platform also allows ValueClick to operate as a more agile company, in which decisions about remote offices are dictated by business considerations, not technology requirements.

"If we were not able to use an integrated solution, the networks at all of our remote sites would become much more complicated, and our staffing requirements would increase," says Graham. "When it came to opening smaller locations, those issues would probably prevent us from even exploring them. By building everything with Cisco IOS Security, we only have to manage a single platform. We can maintain the entire network with a smaller team of people."

The advantages of these capabilities are even more substantial when compared to the alternatives. Without an integrated, software-based security solution, ValueClick would have to manage Internet connectivity the way that most enterprises do: by backhauling Internet traffic to a central data center over costly WAN connections.

"We currently have almost half of our offices in Europe, and a model like that would be extremely impractical," says Graham. "With a Cisco IOS Software-based solution, we can easily cross regulatory domains and language barriers without having to bother with a large managed WAN deployment."

The solution also simplifies regulatory compliance and auditing.

"Our Cisco IOS Security approach provides a simple, consistent means of provisioning and auditing security configurations," says Graham. "If we were using multiple devices with separate operating systems, we would continuously have to look at multiple threat factors and correlate multiple security lists and responses for every site. With our Cisco IOS Software solution, everything is uniform."

Most importantly, the ability to maintain a single, pervasive network defense system across small offices, large campuses, and everything in between allows ValueClick's employees and customers to conduct business over the Internet with confidence.

"There are very few solutions that I could cost-effectively deploy in a six-person office and be able to trust," says Graham. "With Cisco IOS firewall and threat control services, I know that even our smallest sites are protected."

For More Information

To find out more about Cisco IOS firewall and other Cisco IOS Security solutions, visit: http://www.cisco.com/go/routersecurity

To learn more about the Cisco Integrated Services Routers, visit: http://www.cisco.com/go/isr