

VENDOR PROFILE

Crossbeam XTM: An Enterprise-Class Platform Providing Unified Market-Leading Security Solutions

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IDC OPINION

The IT threat environment has never been worse. Enterprises are constantly being bombarded by cybercriminals who are looking for any avenue to steal valuable company information. IDC research shows that cybercrime continues to rise and will continue to rise for the foreseeable future. The advent of new technologies makes it harder to provide the services people want while maintaining the security people also expect. Attackers have learned how to tailor intrusions to circumvent single security solutions. To best protect the enterprise datacenter, organizations must use layers of defenses that are effective against advanced attacks but that are also manageable. The need for integrated best-in-class security has never been greater. IDC believes that addressing enterprise security needs with a wide combination of single solutions has seen its better days. IDC believes that security solutions must provide enterprises with the ability to select, deploy, and manage best-in-class security solutions. However, security isn't the only consideration when choosing the appropriate products. Performance requirements, budget constraints, green IT requirements, appliance "sprawl," and government mandates are all forces changing the nature of what factors need to be taken into consideration when making enterprise security purchasing decisions. IDC believes that Crossbeam Systems' X-series "network in a box" security platform provides IT with the ability to deploy and manage a variety of market-leading security solutions while helping them to effectively address regulatory security requirements, handle environment considerations (cooling and power), enhance overall enterprise security, and provide this all within the IT budget. Additional information related to Crossbeam solutions includes:

- ☒ Crossbeam led the enterprise unified threat management (UTM) market (\$100,000+ price band) in 2009, its fifth consecutive year leading that category.
- ☒ Crossbeam, which earned \$90 million revenue during 2009, is a profitable, growing company.
- ☒ Crossbeam delivers a highly scalable platform for best-in-class software partners to deliver their services to the enterprise and service providers. The architecture also supports virtualized security applications and extensible threat management (XTM).
- ☒ The Greenlight Element Manager (GEM) offers a graphical, "at a glance" real-time view of what's happening in the X-Series platform, assisting operations for service provisioning, performance planning, and troubleshooting.

IN THIS VENDOR PROFILE

This IDC Vendor Profile focuses on Crossbeam Systems and its unified network architecture security solution. It examines Crossbeam's X-Series security platform and discusses how it supports security services for the corporate network using Crossbeam's XOS. We analyze Crossbeam's strategy, future security market opportunities, and challenges.

SITUATION OVERVIEW

Businesses in the modern, connected economy recognize that new technologies and services available via the Internet offer an efficient way to reach more customers and facilitate remote workers, consequently increasing profits and reducing capital expenditures. However, securing resources is becoming more difficult as the definition of the network perimeter has expanded to include wireless networking, mobile users, and an increasing variety of access devices. It is necessary to employ a variety of security solutions to secure all aspects of the IT experience. One answer has been unified threat management security appliances, which provide a basic core of critical security applications, such as firewall, antivirus, antispypware, intrusion prevention, and VPN. These products are designed to quickly and easily integrate new applications and features as the threat landscape necessitates.

UTM appliances have historically been popular among small and medium-sized enterprises. Enterprises have also deployed UTM appliances at their branch and remote offices because of the completeness of security coverage and ease of use. However, enterprises are beginning to see the value of deploying consolidated security solutions within the datacenter. By marrying multiple advanced security functionality, consolidated management, and high-performance networking technology, enterprises gain some of the same benefits available within a single UTM appliance located at a branch office.

Protection is what companies are looking for from their security products, but to move into the datacenter, UTM must also provide uptime, stability, performance, and manageability. The evolution of the UTM into the datacenter is referred to as extensible threat management. XTM appliances provide essential networking features and a centralized management console as a part of a security solution that can support networking needs for enterprises of all sizes.

IDC believes enterprises will be looking at XTM solutions that can offer best-of-class security and performance and contribute to solving other problems facing the datacenter, including appliance sprawl, power and cooling issues, and advanced networking. As enterprises deploy and use cloud-based technologies, IDC would expect that XTM will become the common security architecture. One vendor dedicated to providing datacenters with market-leading security packaged in a high-performance platform has been Crossbeam.

Company Overview

Crossbeam, founded in 1999, is a privately held firm headquartered in Boxborough, Massachusetts, and has offices in the North America, Europe, Latin America, and

Asia/Pacific regions. Crossbeam recognizes over 140 resellers and distributors as part of its worldwide Crossbeam Authorized Partner Program (CAPP). Its global customer base consists of Global 2000 companies, service providers, mobile operators, financial institutions, pharmaceutical companies, government agencies, and major universities. Crossbeam's key customers include H&R Block, FiServ, T-Mobile, NTT, FedEx, Baylor University, University of Kansas, Temple University, GlaxoSmithKline, HP/EDS, BT, and AT&T.

Company Positioning

As the world economy struggles to achieve a turnaround, tightened and in some cases reduced IT budgets continue to plague and stress appliance vendors with declined sales produced by the effects of continuing economic uncertainty. Under these conditions, IT management and professionals are seeking ways to help reduce operational and capital expenses by turning to new technologies that allow them to meet existing and future networking needs without vastly increasing costs. Enterprises believe cloud computing and virtualization will meet their needs. Security solutions must be able to support these high-bandwidth virtual infrastructures.

Crossbeam has successfully provided enterprises with scalable virtual network infrastructures that support best-in-class partner network security solutions with its X-Series platform. Crossbeam's unique high-performance virtual infrastructure system, described as a "network in a box," is capable of consolidating as many as 50:1 devices and positions Crossbeam as a trusted provider to enterprises, carriers, and similar organizations.

Crossbeam's tightly integrated and leading-edge hardware and software systems are matched with security solutions provided in partnership with market-leading security vendors — CheckPoint, IBM, Imperva, Sourcefire, Trend Micro, Sophos, and Websense. In cooperation with these partners, Crossbeam offers a wide range of security functionality including firewall, VPN, network intrusion prevention, Web and email anti-malware, Web content security, and Web application firewall. The Crossbeam architecture provides flexibility to work with any leading vendor to provide the solutions enterprises require. Customers can select best-in-class applications to facilitate implementation of their specific security requirements and policies.

Company Strategy

Crossbeam Product Architecture — X-Series Platform

Crossbeam's solution doesn't consist of a single appliance. Instead the X-Series is an open, adaptable platform that is a combination of a modular chassis, a network processing module (NPM), an application processing module (APM), a control processing module (CPM), and an X-Series operating system (XOS). Together these components provide complete network security solutions for the datacenter:

- ☒ **Modular chassis.** This hardware component is the physical frame upon which all the other parts are built. The X45 is a 7 module slot chassis and the X80 is a 14 module slot chassis, with 10 of those slots allocated to the application processing

module. Total throughput capacity for stateful firewall/IPS is 20Gbps on the X45 and up to 40Gbps on the X80. The backplane of the X80 is scalable to 160Gbps.

- ☒ **Network processing module.** The network processing module blade is the networking traffic controller. Data is controlled as it enters the Crossbeam platform via the NPM, which handles all of the switching, routing, and load balancing within the system. The NPM utilizes Crossbeam's Secure Flow Processing technology to allocate the data flows between the applications hosted on the X-Series security switch in any order.
- ☒ **Application processing module.** Application processing modules are the application blades within the X-Series. Each APM can run one application. Customers have complete choice in the configuration of the APMs. To scale the performance of a single application, all of the APMs in a chassis can run the application, or for full security, logical application groups can be deployed that allow a mixture of applications on a single chassis.
- ☒ **Control processing module.** The control processing module is the health monitor within the platform. It manages and monitors the health of the chassis and can take action to self-heal itself by reprovisioning blades. It also stores all of the application information with the configuration settings.
- ☒ **X-Series operating system.** The X-Series operating system (XOS) is a hardened version of Linux purposely built by Crossbeam that allows multiple security applications to exist on the same platform and work together seamlessly. XOS provides a virtual infrastructure that allows for the movement, addition, and modification of applications with the same hardware.

Additionally, there is a management interface called Greenlight Element Manager. This management system provides an overview of monitored devices' health status indicators in a graphical, "at a glance" real-time view of what's happening in the X-Series platform. Administrators get information on system performance, task scheduling, protocol mix, application capacity, alarms, and other capabilities.

Market Differentiators

Crossbeam continues to hold a unique position in this market. Its strong positioning allows it to quickly adapt to the rapidly changing IT needs with its virtualization and bladed systems inherent to Crossbeam's system architecture. Crossbeam's proven security solutions offer the ability to present multiple security solutions "in a box," versus having to add additional appliances per solution. This eliminates one of the datacenter's biggest pain points — appliance sprawl. IT customers will require other vendors to provide these, or similar, system capabilities and features.

As security products rapidly move away from single-functioned appliances, Crossbeam's systems facilitate this transition with a security platform that is designed to incorporate various market-leading security applications while maintaining high performance, high availability, and resiliency in the network. Crossbeam solutions provide an efficient and secure corporate network while reducing deployment and operational costs by consolidating security and network appliances into a single, chassis-based architecture. Crossbeam's solutions are targeted at, but not limited to,

large enterprises, service providers, and government agencies. Their solutions are especially important as these organizations build out cloud-based technologies.

Unlike other vendors that package single-source or open source security solutions into their UTM products, Crossbeam's strategy has been to integrate and support best-in-class security solutions. This provides customers with the ability to choose which security applications they are able to deploy, while permitting security vendor partners to leverage Crossbeam's security platform. This allows for solutions that are designed to scale to the needs of each customer and quickly adapt to new security threats. The X-Series security platform is ready to be integrated with a wide range of additional and new security functions as the need arises. As a quick summary, the key points to Crossbeam's strong competitive offerings are:

- ☒ **"Network in a box."** A virtual infrastructure that provides a responsive system that is change ready within the platform to provide multiple solutions without significant performance penalties
- ☒ **Consolidation.** Crossbeam solutions providing IT with adaptable and extensible network security solutions that deliver high performance with the ability to support multiple, simultaneous, best-in-class network security applications
- ☒ **Integrated platform.** A network security approach consolidating processing power, storage, security, and virtualization together under one platform
- ☒ **Market-leading security applications.** Crossbeam's security solutions provided in partnership with market-leading security vendors

Market Position

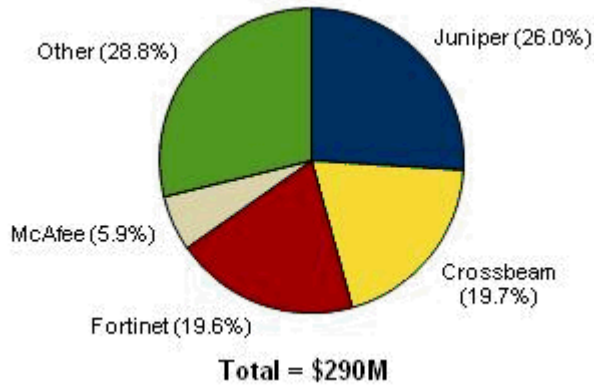
Despite the continuing worldwide financial slump, UTM network security appliance product revenue, according IDC's Quarterly Security Appliance Tracker, grew in 2009 by 7.4% compared with 2008. Product revenue for 2009, as reported in the tracker, reached \$1.7 billion. By contrast, the standalone firewall appliance market shrank by 6% in 2009 compared with 2008, with revenue of \$1.4 billion.

IDC expects the security market to continue its relatively lower growth rates through 2010 because of current uncertainties in world markets. However, the security market will endure the current economic slow times better than other sectors because maintaining the integrity of enterprise information resources is critical and higher on the priority list, and thereby lower on the list of possible budget cost reductions. IDC expects that network security software products will continue to fare well for the foreseeable future.

Crossbeam has been very successful as a provider of enterprise-class UTM solutions. Figure 1 provides the 2009 vendor revenue market share for UTM appliances selling for \$50,000 or more. Crossbeam's strongest market though is for enterprise/carrier-class devices that sell for over \$100,000. Figure 2 illustrates Crossbeam's leadership in UTM appliances in that market segment. Crossbeam has led that price band for five straight years.

FIGURE 1

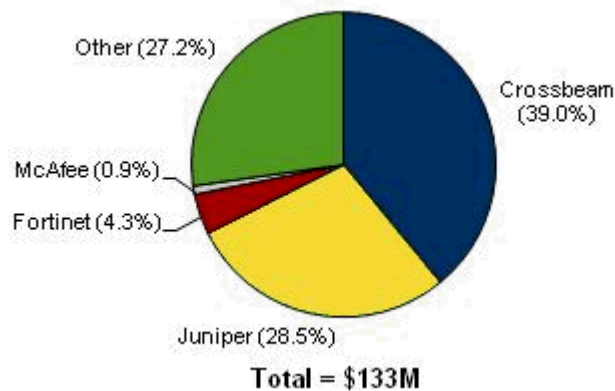
UTM Appliance \$50,000+ Price Band Revenue Share by Top Vendors, 2009



Source: IDC's Quarterly Security Appliance Tracker, 2010

FIGURE 2

UTM Appliance \$100,000+ Price Band Revenue Share by Top Vendors, 2009



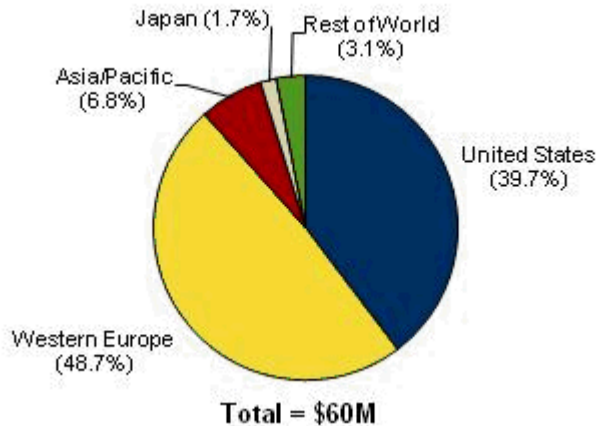
Source: IDC's Quarterly Security Appliance Tracker, 2010

As shown in Figure 3, Crossbeam has a good international mix of sales. By taking advantage of green IT initiatives and customer datacenter pain points, Crossbeam remains positioned to continue selling to organizations worldwide that are looking to consolidate their security infrastructures. IDC expects Crossbeam to continue to have a strong presence in the United States and Western Europe and sees Crossbeam as well positioned to reach further into Asia/Pacific.

Figure 3 shows Crossbeam's annual product sales by geography.

FIGURE 3

Crossbeam Sales Share by Region, 2009



Source: IDC's Quarterly Security Appliance Tracker, 2010

FUTURE OUTLOOK

The burdensome effects of appliance sprawl, management complexity, and reduced effectiveness of legacy security hardware and software, coupled with the "go green" movement, are main drivers of enterprise consolidation efforts. Given these driving forces, IDC expects a strong and continued UTM market growth across all company sizes. Crossbeam has led the high-end price band for over 21 quarters and (refer back to Figure 2) continues to be the leader in the high-end UTM price band.

Other expected UTM-related trends include:

- ☒ Security infrastructure players will continue to venture into the UTM space; however, many of these players have had successes only with solutions for small businesses and organizations with distributed branches. It is much more difficult to produce true multifunction security appliances that can service the datacenter.
- ☒ The telco space will continue to be a good play for XTM, as many of these companies need to protect their infrastructures, which are their core asset. They also need to be able to deploy products and services that can handle the expanding bandwidths required for cloud computing.
- ☒ Security product spending, in general, will be less affected by budget cuts compared with most other IT infrastructure products. Those products that can help companies reduce either capital or operational expenses will be in demand.

ESSENTIAL GUIDANCE

Advice for Crossbeam

IDC expects Crossbeam to continue to succeed and lead in providing market-leading security solutions for the datacenter. Its partnerships with best-in-class security vendors allow it to quickly adjust to the ever-changing threat landscape — adapting to new threat forms and continuing to offer its customers high-performance, adaptable, and flexible network security solutions.

IDC recommends that Crossbeam:

- ☒ Continue to innovate its products to address today's and tomorrow's datacenter security challenges, which include concerns that security solutions can't adjust to the changing threat landscape and that those products and services Crossbeam does deploy not "break the bank" both directly and indirectly
- ☒ Effectively work with Crossbeam domestic and international partners to cost effectively deliver on enterprise customer demands for high-quality, high-performance, and highly effective security system solutions
- ☒ Continue innovating with a focus on new features and functions through the bladed architecture
- ☒ Not branch out into other markets at this time (The X-Series platform meets a specific need in the marketplace, and Crossbeam is well positioned to meet that need.)

Green IT has become a top concern for many enterprise CEOs with companies attempting to reduce their real estate footprint and power and cooling expenses within the datacenter by consolidating functionality with virtualization. IDC expects this process to continue, resulting in more opportunities for Crossbeam's consolidation solution. Crossbeam is perfectly positioned to be the beneficiary of the green movement and overall operations cost reductions programs.

With regard to product development, Crossbeam is in a key position to further explore new research opportunities and emerging technologies. IDC sees virtualization as one of these key target areas. IDC also sees virtualization as the next step in the ability to quickly provide customers with the right security at the right time. IDC believes that Crossbeam, with its experience incorporating multiple vendor applications in its switches and with a full understanding of multiple data flows, is well-versed in the advantages of virtualization and will be in a position to benefit from it.

XTM solutions are positioned to be the next wave of advanced network security services for enterprises. UTM appliances have proven their worth in the SMB and distributed enterprise space, but the move to larger enterprises will mean new features and expanded capabilities. UTM vendors must not only build more into the box but also attach services, whether homegrown or through partners, that expand networking and management capabilities for larger deployments. Crossbeam is in a position to cost effectively offer these advanced features.

LEARN MORE

Related Research

- ☒ *Worldwide Web and Messaging Security Software 2010–2014 Forecast: The Return of WAM?* (IDC #222451, March 2010)
- ☒ *Worldwide Security Products 2010 Top 10 Predictions* (IDC #222109, March 2010)
- ☒ *Worldwide IT Security Products 2009–2013 Forecast and 2008 Vendor Shares: Comprehensive Security Product Review* (IDC #221351, December 2009)
- ☒ *Worldwide Security Software as a Service 2009–2013 Forecast and 2008 Vendor Shares* (IDC #221289, December 2009)
- ☒ *Worldwide Network Security 2009–2013 Forecast and 2008 Vendor Shares* (IDC #220936, December 2009)

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