

MARKET ANALYSIS

Worldwide Secure Content and Application Delivery 2005–2009 Forecast and Analysis

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IDC OPINION

Customer demand for a secure, resilient network is increasing the opportunity for secure content and application delivery products. In particular, IDC finds the following:

- ☒ The total worldwide market for secure content and application delivery reached \$235.5 million in 2004 and is expected to increase at a compound annual growth rate (CAGR) of 7% through 2009 to reach \$330 million.
 - ☒ The market is highly consolidated, with the top 3 players, Network Appliance, Blue Coat, and Cisco, capturing a combined 87.3% share. Network Appliance remained the market leader with a 32.1% share. Blue Coat grew faster than the overall market, reaching a 30.1% share.
 - ☒ The secure content and application delivery proxy technology is enabling customers to meet today's networking challenges. It enables a better end-user experience through bandwidth optimization and Internet gatekeeping. Additionally, it provides a platform to support new initiatives in mobility, voice, and storage.
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IN THIS STUDY

This study presents IDC's forecast and competitive analysis of the secure content and application delivery market.

Methodology

The quantitative data provided in this analysis of the secure content and application delivery market stems from IDC's ongoing research focused on datacenter networking and security trends and technologies. IDC used both primary and secondary sources of information to develop the quantitative data and analyze technological trends.

Primary sources of information included surveys of United States– and foreign-based vendors. Secure content and application delivery vendors were asked to supply revenue data overall and in terms of form factors, customer segments, and geographic sales.

The data was also compared with IDC's financial models of leading public companies. IDC's market models are based on historical vendor and market performance and incorporate input from vendors and from end-user survey data. These models help to validate the accuracy of the vendor-supplied data. In addition, survey data was often compared with information obtained from users, user organizations, original equipment manufacturers (OEMs), and resellers.

This study presents worldwide secure content and application delivery revenue by region. Regions include North America, Europe, Asia/Pacific, and the rest of the world (ROW). The revenue data provided in this study is based on the vendor revenue of a secure content and application delivery appliance or blade.

Note: All numbers in this document may not be exact due to rounding.

SITUATION OVERVIEW

The secure content and application delivery market is a crucial element in adding application intelligence to the enterprise and service provider network. The products and architecture have evolved from primarily supporting the performance of Internet traffic into a platform customers use to increase the performance and security of the applications they deliver to end users.

The secure content and application delivery market experienced 15% growth in revenue, going from \$184 million in 2003 to \$235.5 million in 2004. Network Appliance led the market with a 32.1% share. While all vendors experienced growth, the big winner was Blue Coat, which surged in share, growing from 21.7% to 30.1% in 2004. Blue Coat's message of visibility and control resonated with customers grappling with network security.

The secure content and application delivery market is strongest in North America, which represents 58% of revenue. Europe is growing in acceptance with 25% of the market. The Asia/Pacific market has 16% of the market. The opportunity in Asia is still

dominated by service providers increasing performance for users on broadband and wireless networks. Enterprise opportunities will open up in both Europe and Asia as vendors expand the product offerings into smaller form factors.

Competitive Analysis

Table 1 illustrates worldwide vendor market share by revenue in 2004. Vendor highlights are as follows:

- ☒ Network Appliance continues to lead the secure content and application delivery market. In 2004, Network Appliance captured a 32.1% market share on \$75.6 million in revenue. Network Appliance leadership position is the result of a diversified customer base that includes large enterprises and service providers. Looking ahead, IDC expects Network Appliance to expand into product solutions that more directly leverage and enhance its leadership position in storage.
- ☒ Blue Coat is the up-and-coming vendor to watch in the secure content and application delivery market. Blue Coat narrowed the gap with Network Appliance and captured second place with a 30.1% market share. Blue Coat's revenue grew 77% year over year to \$70.9 million. The company continues to leverage its proxy technology to focus on providing a secure, resilient architecture to enterprise networks.
- ☒ Cisco is in third place in the secure content and application delivery market, with a 25.1% market share and \$59 million in revenue. Cisco's product success is in a variety of secure content and application delivery solutions, including software distribution, Internet gateway, and IP video delivery. To gain share and revenue in this market, Cisco is focusing efforts on its new wide-area file services technology.
- ☒ Stratacache is a privately held company based in Ohio. In 2003, the company purchased the assets of Activia Networks of Nice, France, to expand its product portfolio in the service provider market. The company has distinguished itself in its ability to remain competitive against larger, publicly held companies.
- ☒ Microsoft is an often overlooked competitor in this market. ISA Server competes with features such as caching and HTTP inspection. IDC estimated a portion of ISA Server revenue as part of the overall market.

The systems vendors such as HP, IBM, and Dell compete in this market with bundled appliance solutions, but they have not invested heavily in this market because, for the most part, secure content and application delivery products are purchased through networking channels rather than typical systems channels. The exception is NEC, which competes in this space through its software division. Other participants include smaller companies such as Warp Technologies and Certeon.

TABLE 1

Worldwide Secure Content and Application Delivery Revenue by Vendor, 2004

	Revenue (\$M)	Share (%)
Network Appliance	75.6	32.1
Blue Coat	70.9	30.1
Cisco	59.0	25.1
Stratacache	15.0	6.4
Microsoft	10.0	4.2
Other	5.0	2.1
Total	235.5	100.0

Source: IDC, 2005

FUTURE OUTLOOK

The secure content and application delivery market is becoming a necessary element in the network infrastructure. IDC believes that the secure content and application delivery market is meeting the following customer requirements:

- ☒ **Bandwidth savings.** Despite continued upgrades to broadband networks, bandwidth remains a precious resource for enterprise and service providers. Secure content and application delivery products enable customers to save on bandwidth costs or maximize the usage of the bandwidth available or do both.
- ☒ **Internet gatekeeper.** As a gatekeeper for a new generation of applications, secure content and application delivery products play a significant role in helping customers manage and monitor Internet access. The products perform proxy caching, access control, content filtering, virus scanning, and usage reporting. This functionality supports organizations' policies and government regulations and aids in the overall health of the network and IT infrastructure.
- ☒ **Remote/branch.** Demand for operational efficiencies across the enterprise is encouraging IT to evaluate branch operations. Customers want to support business processing workloads at the branch without having to incur additional operational and capital costs. Secure content and application delivery products enable enterprises to optimize the end-user experience at the remote office without upgrading bandwidth and without deploying additional servers at the branch.

- ☒ **Service providers.** Looking ahead, the opportunity for vendors will remain distributed across managed services, content delivery, and ISP services. As vendors such as Akamai and others expand into providing services for enterprise applications, vendors will be competing with CDN services as well as looking to sell equipment into these networks.
- ☒ **Secure network.** Secure content and application delivery is becoming an increasingly critical part of a secure, resilient network. These products provide content filtering, virus scanning, and the ability to manage and control IM and P2P traffic. By blocking or limiting the access of specific types of traffic at the Internet access point, the entire IT infrastructure is more secure and organizations have more control over bandwidth usage within the network.
- ☒ **Voice over IP (VoIP).** IDC believes that customers will need to make room for voice on the network. Voice applications will take priority on the network, and secure content and application delivery will enable customers to make the most of the bandwidth available. The secure content and application delivery products will add specific voice features.
- ☒ **Storage networking.** IDC believes that iSCSI is a disruptive technology to Fibre Channel SANs. As a result, the packet load on the datacenter network has the potential to increase 600% over the next 5 to 10 years. This will create an opportunity for secure content and application delivery to play a role in how customers provide backup and disaster recovery. While this is a longer-term opportunity, vendors should begin to think about how they want to take advantage of this shift in traffic and customer buying patterns.

Forecast and Assumptions

Table 2 presents IDC's worldwide forecast by region. Table 3 presents IDC's key assumptions for the worldwide secure content and application delivery market.

TABLE 2

Worldwide Secure Content and Application Delivery Revenue by Region,
2004–2009 (\$M)

	2004	2005	2006	2007	2008	2009	2004–2009 CAGR (%)
North America	136.5	154.0	162.0	168.0	170.0	175.0	5.1
Growth (%)	NA	12.8	5.2	3.7	1.2	2.9	
Europe	58.5	67.5	70.0	74.0	75.0	76.0	5.4
Growth (%)	NA	15.4	3.7	5.7	1.4	1.3	
Asia/Pacific	38.4	46.0	55.0	65.0	72.0	75.0	14.3
Growth (%)	NA	19.8	19.6	18.2	10.8	4.2	
ROW	2.1	2.5	3.0	3.0	3.0	4.0	13.8
Growth (%)	NA	19.0	20.0	0.0	0.0	33.3	
Worldwide	235.5	270.0	290.0	310.0	320.0	330.0	7.0
Growth (%)	NA	14.6	7.4	6.9	3.2	3.1	

Note: See Table 3 for key forecast assumptions.

Source: IDC, 2005

TABLE 3

Key Forecast Assumptions for the Worldwide Secure Content and Application Delivery Market, 2005–2009

Market Force	IDC Assumption	Impact	Accelerator/ Inhibitor/ Neutral	Certainty of Assumption
Macroeconomics				
Economy	The U.S. economy continues to improve, with visible signs of job creation and the expectation of continued rate hikes by the Fed.	High. Steady economic recovery will mean growth rates in IT will be highly dependent on region and technology. Enterprise investments in the datacenter network will focus on upgrading existing networks. The better the economic conditions, the more likely this will occur. Upgrade investments will be justified on balancing performance desires with the need to reduce operational expenses and increase the resiliency of the network.	↑	★★★★☆
Technology/ service developments				
Security adoption	Security appliances are rapidly gaining acceptance and being deployed in various aspects of corporate networks.	High. Appliances will increasingly be the choice for deploying security at the gateway. IDC believes that by 2007, 80% of all security solutions will be delivered via a dedicated appliance.	↑	★★★★☆
Perception of security as an IT or business issue	Information security will be largely viewed as an IT issue during the forecast period.	High. Gaining executive support for a structured security investment policy will be a continued challenge.	↔	★★★★☆
Demonstrable return on security investment	Effective ROI tools/ methodologies for measurement will vary greatly depending on metrics.	Moderate. Business case justification for security investments will remain difficult but necessary, hampering market growth.	↔	★★★☆☆

TABLE 3

Key Forecast Assumptions for the Worldwide Secure Content and Application Delivery Market, 2005–2009

Market Force	IDC Assumption	Impact	Accelerator/ Inhibitor/ Neutral	Certainty of Assumption
Datacenter network strategy	The enterprise datacenter architecture is transforming to support a dynamic IT environment that meets critical business requirements. The datacenter network is vital to IT's ability to meet this new agility challenge and provide the necessary security, availability, and performance required in datacenters. The enterprise datacenter network market reached \$4.2 billion in 2003 and will reach \$6.9 billion in 2008.	High. As customers rearchitect their datacenter network, they will look closely at the bandwidth and performance requirements of these new consolidated datacenters. Secure content and application delivery have a critical role to play in enabling reduced bandwidth costs, increased application performance, Internet gateway functionality, and enhanced security.	↑	★★★★☆
Enterprise deployments of remote branch strategy	Large, globally dispersed enterprises will demand communications solutions that enhance the security and performance of both Internet and intranet traffic. The forecast assumes that customers will look to reduce the cost of managing and deploying infrastructure at the remote branch by deploying appliance and blade solutions.	High. These deployments need secure content and application delivery products to decrease bandwidth costs, increase Web and application performance, enhance security, and optimize bandwidth.	↑	★★★★☆
Blade technology	Blade deployments are growing. Blade servers are growing year over year, and IDC expects continued strong adoption. Adoption of blades in Cisco router and switch platforms is at its infancy but is expected to grow over the forecast period.	High. Blade servers will begin to represent a significant proportion of servers in the datacenter. Secure content and application delivery vendors will need to address the growth in blades. Customers will begin to demand features that have become inherent to the value proposition of blade servers. Features include on-demand, pay-as-you-grow benefits, low entry prices, and ease of management. It will be critical for vendors to meet these feature requirements with a blade platform or software options.	↔	★★★★☆

TABLE 3

Key Forecast Assumptions for the Worldwide Secure Content and Application Delivery Market, 2005–2009

Market Force	IDC Assumption	Impact	Accelerator/ Inhibitor/ Neutral	Certainty of Assumption
Dynamic IT	Customers are looking for an IT infrastructure that both meets business requirements and provides operational efficiencies.	High. The network is a critical component of meeting an agile dynamic IT environment.	↑	★★★☆☆
Web hosting/ CDN services	The Web hosting and CDN services are showing signs of investment and recovery. Web hosting vendors will begin to invest again in equipment in 2006.	Moderate. As the hosting business continues to grow, hosting companies will continue to invest in secure content and application delivery. Growth in this sector is highly dependent on Internet traffic and Internet growth.	↑	★★★★☆
ISP services	Service providers will continue to invest in secure content and application delivery in order to reduce bandwidth costs and improve service to customers.	Moderate. As competition between ISPs grows, the need to offer high value-added network services will increase demand for secure content and application delivery.	↑	★★★★☆
Migration to supporting business processing workloads	Business processing workload support such as ERP and CRP applications are strategic to customers and are a critical link to business benefits for IT. These applications were developed to work well on LAN 10/100/1,000 speeds.	High. Business processing workloads will be critical to long-term growth in the overall market. Secure content and application delivery enable business processing workloads to perform faster over the WAN.	↑	★★★☆☆
Streaming media	Streaming media will grow in both the service provider and enterprise markets.	Moderate. Streaming media remains a growth opportunity for secure content and application delivery in both service provider and enterprise accounts. Service provider growth is highly dependent on increased capital expenditure (capex) spending. Enterprise growth is limited to very large, globally dispersed organizations.	↑	★★★★☆

TABLE 3

Key Forecast Assumptions for the Worldwide Secure Content and Application Delivery Market, 2005–2009

Market Force	IDC Assumption	Impact	Accelerator/ Inhibitor/ Neutral	Certainty of Assumption
Storage networking	Customers are looking to migrate storage workloads to IP.	Moderate. Secure content and application delivery has the potential to facilitate improved data protection and data replication and bring flexibility to the IP storage infrastructure.	↑	★★★★☆
Service oriented architecture (SOA)	SOA will become critical in bringing flexibility to IT environments. The Web services security market is slowly heating up, with a proliferation of standards proposal announcements, intense vendor posturing, and early marketplace adoption. 2004 has been a year of Web services evangelism and education for both users and vendors. In the future, there will be major market ecosystem plays and technology releases.	Low. SOA will shift the way customers deploy applications, and network vendors will need to adapt to new application requirements. Demands will begin toward the end of the 2006–2009 forecast period. The Web services paradigm impacts many different markets across the software spectrum, but with varied adoption rates and time lines. The technologies experiencing the earliest investments are in the development and data management arenas. Technologies that support the security, integration, and management of Web services are expected to gain additional traction.	↔	★★★★☆
Mobility	The trend toward enterprise mobile enablement, including the corporate adoption of handheld devices, will continue to gain momentum over the next several years. Corporations will increasingly look to gain control over mobile devices to set and enforce IT policies.	Moderate. The growing mobile population will increase security and bandwidth demands on the enterprise network. Secure content and application delivery bring overall benefits to the network that will enhance the mobile user experience. Alternate communication methods will present new areas of vulnerability; hence, they will require proper security measures. Longer term, the category may evolve to offer specific mobile user features.	↑	★★★★☆

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Key Forecast Assumptions for the Worldwide Secure Content and Application Delivery Market, 2005–2009

Market Force	IDC Assumption	Impact	Accelerator/ Inhibitor/ Neutral	Certainty of Assumption
The Internet	Internet adoption is still growing strong, especially in emerging economies. In the next three years, 300,000,000 new users will come online and commerce will grow threefold. By the end of 2005, 40% of Internet households will be broadband.	High. The upside is strong for secure content and application delivery. The conventional wisdom is that the Internet revolution is over. On the contrary, less than 5% of total commerce is conducted online. As more users come online, the need for secure content and application delivery will grow. The migration to broadband will not hinder the need for increasing network intelligence. All of these factors will create continued demand for security.	↑	★★★★☆
Hardware	Customers will begin to replace and upgrade infrastructure acquired before Y2K. This will place new demands for increasing performance on the network.	Moderate. New upgrades in datacenter infrastructure will place upgrades demands on the network, which will boost sales in secure content and application delivery.	↑	★★★★☆
Converged voice (voice over IP)	Converged voice is the fastest-growing market in enterprise networks today. IDC believes that converged voice will reach \$10.8 billion in 2009.	Moderate. The growth in VoIP traffic will necessitate solutions that improve overall network intelligence and response times. At the moment, products in the secure content and application delivery market do not specifically support VoIP, but they enable bandwidth savings and improved response times for other applications, which can make room on the network for VoIP.	↑	★★★★☆
Capitalization				
Availability of capital	Capital for smaller players in this space will be available to push innovation in the datacenter.	High. Smaller start-ups will continue to energize and foster innovation in the datacenter and remote branch.	↔	★★★★☆

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Key Forecast Assumptions for the Worldwide Secure Content and Application Delivery Market, 2005–2009

Market Force	IDC Assumption	Impact	Accelerator/ Inhibitor/ Neutral	Certainty of Assumption
Financial health of networking vendors	Datacenter customers are willing to invest in smaller, more targeted networking vendors.	Moderate. A renewed focus on the datacenter is enabling smaller vendors to gain ground against financially troubled larger networking players.	↓	★★★★☆
Opportunities for new investment	Opportunities for new investment in content and application networking look promising. The demands of building a dynamic IT environment will necessitate a new generation of intelligence on the network.	Moderate. Excitement for new products will increase awareness, but revenue growth will be a moderately steady climb.	↑	★★★★☆
Market characteristics				
Shift to enterprise	Spending in this market will come predominantly from the enterprise not the service provider.	High. Secure content and application delivery opportunity is growing fastest in enterprise accounts, buoyed by the support in router and blade servers.	↔	★★★★☆
Datacenters	Datacenter customers demand a resilient secure network..	High. There will be significant opportunity in enterprise datacenters.	↑	★★★★☆
Bandwidth limitations at remote/branch offices	Remote branch offices continue to be limited by bandwidth.	High. Bandwidth concerns will encourage customers to invest in secure content and application delivery infrastructure.	↑	★★★★☆
Security	Critical buying criteria include security and Internet gatekeeper functions.	High. Security features are a must-have for secure content and application delivery.	↑	★★★★☆
Market consolidation	The market will be dominated by large players.	High. The majority of the revenue is attributable to large players.	↓	★★★★☆

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Market Force	IDC Assumption	Impact	Accelerator/ Inhibitor/ Neutral	Certainty of Assumption
Market ecosystem				
Security	Vendors will continue to integrate security features into products.	High. Security is an important component of secure content and application delivery. The architecture is used to secure the traffic flowing over the network.	↑	★★★★☆
Remote branch	Customers are looking for operational efficiencies at the remote branch.	Moderate. There will be more demand on vendors to build products that support these users centrally from the datacenter.	↑	★★★★☆
Executive perception of the network	Is the network strategic? Yes. Is it a priority over new business applications and servers? Aside from a major network outage, this can be a difficult argument.	High. Capital budgets are tight, and the arguments to invest in networks have classically centered on solving technical problems. To make the case for strategic network investment, networking vendors will have to get much more adept at articulating the business value of new network intelligence. They need to align network intelligence with business applications.	↑	★★★★☆
Broadband adoption	Broadband will continue to proliferate.	Moderate. With more content and bandwidth will come the need to have intelligent network devices as support infrastructure.	↑	★★★★☆

Legend: ★☆☆☆☆ very low, ★★☆☆☆☆ low, ★★★☆☆ moderate, ★★★★☆ high, ★★★★★ very high

Source: IDC, 2005

ESSENTIAL GUIDANCE

The secure content and application delivery market is at the epicenter of changes in networking architectures. Only application and content intelligence can support transition of the network from transport to a strategic asset. In the midst of this transition, secure content and application delivery vendors are tasked with pinpointing the appropriate mix of form factors and features for customers. IDC offers the following guidance:

- ☒ Changing customer workloads is the key to the success of specific features. Providing a network that offers high performance, low latency, security, and resiliency to those workloads will be the most sustaining business model.
- ☒ Service provider and enterprise needs are diverging, and an appropriate strategy is to offer targeted solutions to these two different customer sets.
- ☒ Mobility is enabling even medium-sized enterprises to have similar network requirements as large, globally dispersed organization. Vendors must expand pricing and form factor options into this customer base.
- ☒ Prepare for the migration to VoIP. It will be biggest driver of changes in datacenter and branch infrastructure.
- ☒ Explore strategic partnerships with storage suppliers that leverage bandwidth optimization and network intelligence.

LEARN MORE

Related Research

- ☒ *Worldwide WAN Optimization Management 2005–2009 Forecast and Analysis* (IDC #33371, May 2005)
- ☒ *Worldwide Enterprise Datacenter Network 2005–2009 Forecast* (IDC #33122, March 2005)
- ☒ *HP Adds Cisco Switch to BladeSystem Portfolio* (IDC #32901, February 2005)
- ☒ *Worldwide LAN Switch 2005–2009 Forecast* (IDC #32893, February 2005)
- ☒ *Worldwide Router 2005–2009 Forecast* (IDC #32711, February 2005)
- ☒ *Cisco Strengthens Its Branch Office Strategy with OEM of EMC's NAS Products* (IDC #32760, January 2005)
- ☒ *Network Appliance's NetCache Solution: A Secure Content and Application Delivery Profile* (IDC #32592, December 2004)
- ☒ *Worldwide Secure Content and Application Delivery 2004–2009 Forecast and Analysis* (IDC #32555, December 2004)

- ☒ *Radware: Vendor Profile* (IDC #32309, November 2004)
 - ☒ *Cisco Serves Up New Branch-SMB Routers With "Integrated Services" Architecture* (IDC #32016, October 2004)
 - ☒ *Content Networking: Taking Stock of Shifting Demand* (IDC #31593, July 2004)
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Definitions

Secure Content and Application Delivery

Customers deploy secure content and application delivery products to facilitate all aspects of end-user delivery. They look at these products as providing a market basket of features bundled to support secure communications. Key functionality includes: bandwidth optimization, secure Internet access (virus scanning, content filtering), application acceleration, Web caching, and compression. Service providers deploy these products at various points within the network to alleviate traffic along the delivery route.

IDC includes static, dynamic, streaming, and file cache products in the secure content and application delivery market. Included in the definition are both reactive caching (typical in an Internet gateway configuration) and proactive caching (typical in a corporate communications application).

Vendors in this category include Network Appliance, Blue Coat, Cisco, and Warp Technologies. Systems vendors that sell caching appliances are included in this market. An estimate of Microsoft ISA server revenue attributable to this market is included.

The secure content and application delivery market is one component of the content and application networking market. Other products in the overall market include Layer 4–7 switches, XML acceleration, SSL acceleration, and software-only content and application networking products that provide similar functionality to a Layer 4–7 switch.

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