

## Server Accelerator

### SA700 & SA7000 Series

Scale Web Infrastructure Intelligently



Within today's Web site architectures, Web servers are responsible for delivering all content to requesting users. However, under the pressures of flash crowds, the need for greater security, and increasing user expectations, these server-dependent infrastructures experience significant strain. The reason is simple: Web servers are designed to process data – not deliver it.

The Blue Coat Server Accelerator 700 and 7000 Series are the only solutions specifically built to offload content delivery and encryption tasks from Web servers. These optimized appliances reduce server bottlenecks and enhance Web site performance and scalability by delivering up to 95% of the inbound page requests.

**The SA700 and SA7000 Series deliver:**

- 50 to 80% faster response times for Web site users
- Up to 5 to 10 times higher site scalability to handle growing traffic volumes
- Up to 90% lower space and power requirements
- 10-40 times more secure sessions than a standard Web server
- Significant capital and operational cost savings
- Dramatically improved customer satisfaction and loyalty

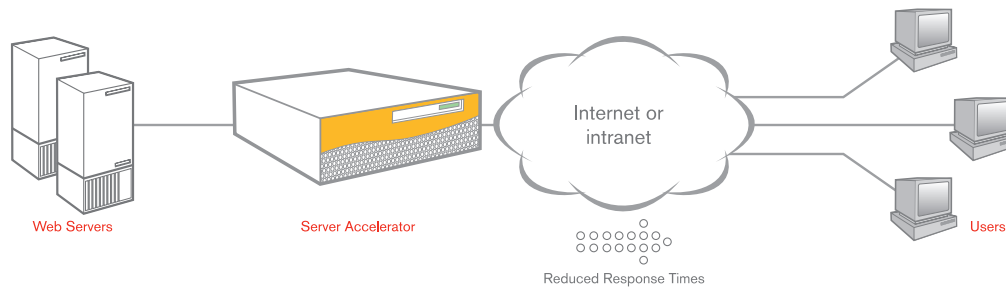


Due to its optimized architecture, a single Server Accelerator can deliver the performance and scalability equivalent of 5 to 10 Web servers. With the Server Accelerators delivering content to users, Web servers are able to perform other tasks, making the overall site much more efficient.

Contact Blue Coat Systems  
1.866.30.BCOAT  
408.220.2200 Direct  
408.220.2250 Fax  
www.bluecoat.com

# Server Accelerator

## SA700 & SA7000 Series



*The SA700 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature.*

## Overview

### Industry-Unique Solution

The SA Series is specifically designed to improve the performance, scalability and security of high-traffic intranet and Internet Web sites. Deployed in minutes in front of any Web server, they dramatically accelerate the delivery of Web content to users and typically serve five to ten times the content of a single Web server.

The SA Series hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio and a built-in Secure Sockets Layer (SSL) encryption/decryption processor. This processor can manage 10 to 40 times more secure sessions than a standard Web server, allowing the SA Series to accelerate the delivery of both public (HTTP) and private (HTTPS) content. The product is packaged in a compact 1U form factor (SA700), a major advantage in space-constrained data centers, or a 4U form factor (SA7000) that allows for modular expansion of network interface cards, SSL cards, processors and RAM.

The SA Series system software, called CacheOS™ Server Edition, is expressly tuned for the workload of high traffic Web sites. This environment is characterized by a finite amount of site content accessed by many remote users – often resulting in flash crowds. CacheOS Server Edition allows efficient scaling of Web farms to address flash or peak periods of traffic, and includes advanced features such as protection against Denial-of-Service attacks and dynamic content acceleration.

As a true Internet appliance, the SA Series installs in minutes, reduces power consumption, and requires little ongoing maintenance. Administrators have the flexibility of interfacing with the SA appliances through a browser-based GUI or through a command-line that can be secured using SSH.

## Customers and Applications

The SA Series is essential for any Web site that needs to accelerate performance and scale traffic levels, without expensive server build-outs. Specific organizations and applications that will benefit from the Blue Coat Server Accelerator appliances include:

### Enterprises

- Accelerate confidential Intranet/Extranet content to employees, partners and customers
- Increase organizational productivity and streamline the supply chain
- Scale CRM, ERP and other Web-enabled applications

### E-commerce, E-business, Content and Portal Sites

- Deliver a higher quality, secure experience to visitors
- Generate more revenue and increase customer loyalty

## Platform and Software Features

The Server Accelerators are designed to seamlessly integrate with a site's existing systems and networks, delivering an immediate performance impact. The following capabilities of the SA Series will help high-traffic Web sites to serve more customers through a lower cost infrastructure.

### Key Platform Features

#### Optimized Configuration for Web Server Acceleration

- High RAM-to-disk ratio allows most requests to be served directly from RAM for improved performance
- Model range generates from 50 Mbps to 400Mbps of data throughput

#### Optimized Power Utilization

- Only consumes Watts (SA700) or 300 Watts (SA7000)

#### Secure Content Delivery

- Integrated SSL Cryptographic Processor
- Processes 400 key negotiations per second, ~20 times the power of a standard Web server

#### Simple to Manage Appliance

- Installs in minutes; minimal ongoing maintenance required

### Additional Platform Features of the SA7000

#### Secure Content Delivery

- Modular support for up to (4) SSL Cryptographic Processors
- Processes up to 800 key negotiations per second, ~40 times the power of a standard Web server

#### Data Center-Class High Availability

- Hot-swappable disk drives
- Redundant hot-swappable power supplies

### Key Software Features for all SA Series Appliances

#### CacheOS™ Server Edition

- Industry's only system software that is tuned for the workload of a high-traffic Web site
- Intelligent synchronization and management of content across a distributed network of server accelerators

#### Secure Content Acceleration

- Can accelerate both public (HTTP) and private (HTTPS) content through integrated SSL functionality
- Can establish an SSL session back to the origin Web server, enabling secure communication across a distributed network

#### Dynamic Content Acceleration

- Accelerates all content that is not unique to a user, including dynamically generated pages
- Accelerates all images within user-specific pages

#### Denial of Service (DoS) Protection

- Prevents sites from crashing during hacker-initiated DoS attacks
- Server accelerator distinguishes between valid and malicious connections, servicing users while resisting the attack

#### Robust Security

- Certified by a leading security audit firm (nCircle) for safe placement outside the firewall

# Server Accelerator

## SA700 & SA7000 Series

The Web Security Authority.™

### Configuration & Specification Chart

	Model SA710	Model SA725	Model SA745	Model SA7225	Model SA7285
<b>System</b>					
Disk drives	1 x 20 GB IDE	2 x 18 GB Ultra-Wide SCSI	4 x 18 GB Ultra-Wide SCSI	2 x 18 GB Ultra2 SCSI	8 x 18 GB Ultra2 SCSI
RAM	512 MB	1 GB	1 GB	4 GB	4 GB
Network Interfaces	(2) 10/100 Base-T	(2) 10/100 Base-T	(2) 10/100 Base-T	(1) integrated; supports up to (3) additional 10/100/1000 Base-T, 1000 Base-SX, 1000 Base-LX interfaces	
SSL Cryptographic Processor	Integrated; 200 key negotiations/sec Integrated	400 key negotiations/sec	400 key negotiations/sec	Up to (4); 800 key negotiations/sec	
<b>Server Accelerator Sizing</b>					
Throughput	50 Mbps	100 Mbps	See below <sup>2</sup>	400 Mbps	
Working set size <sup>1</sup>	Up to 500 MB	Up to 1 GB	See below <sup>2</sup>	Up to 4 GB	
Operating System	CacheOS™ Server Edition				
<b>Features</b>					
SSL v2.0 and v3.0, TTL insertion, DoS Protection, Event Logging, Cookie Logging, SSH, Performance Monitoring and Reporting, SNMP, Advanced Routing and Load Balancing, Clustering, Automatic Fast Restart, Log File Formats (Common, Squid, Custom), HTTP 1.0 and 1.1 WCCP v1 and v2, Caching Authenticated Content, Packet Capture					
<b>Enclosure</b>					
19" Rack-mountable	Yes			Yes	
<b>Power</b>					
AC power	100-230V, 47-63Hz; 100 Watts			AC power 100-240V, 47-63Hz 300 Watts; Up to 2 power supplies	
<b>Operating Environment</b>					
Temperature	5°C to 35°C (41°F to 95°F)			5°C to 40°C (41°F to 104°F)	
Humidity	Less than 90% relative humidity, non condensing			Less than 90% relative humidity, non condensing	
Altitude	Up to 3048 M (10,000 ft)			Up to 3048 M (10,000 ft)	
<b>Dimensions and Weight</b>					
Height	44 mm (1.72 in); 1 rack unit			177.8 mm (7.0 in); 4 rack units	
Width	442 mm (17.4 in)			442 mm (17.4 in)	
Depth	635 mm (25 in)			603.25 mm (23.75 in)	
Weight	7.8 kg (17.2 lb)	8.75 kg (19.3 lb)	10.43 kg (23 lb)	24.63 kg (54.3 lb)	30.53 kg (67.3 lb)
<b>Regulations</b>					
Emissions	FCC Class A, EN 55022 Class A				
Safety	CSA C22.2 No. 950 M95, UL 1950 3 Edition, IEC 60950				
Support	Standard warranty: 1-year 24x7 technical support, 90-day next-business-day hardware replacement; extended and upgraded support plans available				

<sup>1</sup> Server accelerators are sized according to the amount of throughput required and the working set size. The working set is defined as the amount of unique content served over the course of a day. A server accelerator will deliver maximum performance when working set content is served directly from RAM.

<sup>2</sup> The SA-745 is optimized for Web sites with a high degree of large-file content types. The size of these sites dictates that all content will not fit into RAM, and the majority must therefore be served from disk (which has throughput implications). The SA-745 is built with a large storage capacity to fit the data characteristics of these rich content Web sites