

At-A-Glance

What is the Cisco Application Velocity System?

The Cisco® AVS 3120 Application Velocity System significantly lowers the cost of Web application deployments by accelerating performance and optimizing server and network resources. In addition, more business transactions are achieved per minute, eliminating the need for local data centers. Acceleration is accomplished by reducing latency and bandwidth required for any given Web application. Optimization is achieved by off-loading tasks from the server, such as Secure Sockets Layer (SSL) encryption and decryption, compression processing, and redundant requests from the server. Cisco AVS also adds application security at the edge of the data center, further safeguarding vital corporate resources. Additionally, the Cisco AVS 3180 provides critical Web application monitoring and measurement capability, reducing troubleshooting time.

Figure 1. Cisco AVS 3120 Application Velocity System



What Problems does the Cisco AVS Appliance Help to Address?

- Slow and unusable Web applications
- Network latency
- Increasing bandwidth requirements
- Increased application infrastructure to support business
- Increased application threats

What are the Benefits of the Cisco ACE Services Module?

Network Latency Mitigation

Using patented techniques such as FlashForwarding and Smart Redirect, the Cisco AVS 3120 reduces the latency at which a client accesses an application—one of the largest network bottlenecks. By transforming the cache of the browser into a dynamic “engine”, the Cisco AVS 3120 significantly reduces the amount of data required to complete a page load or transaction by reducing the overall number of network round trips required. The result is typically a 200- to 500-percent improvement in response times for the client.

Bandwidth Reduction

The Cisco AVS 3120 Application Accelerator Module can help your company realize a 70- to 90-percent typical reduction in bandwidth usage, resulting in a dramatic reduction in bandwidth costs, a delay or elimination of network upgrade expenses, and an overall improved end-user experience.

Server CPU Off-Load

With the Cisco AVS 3120 Application Accelerator Module, your organization can obtain up to an 80-percent typical reduction in server cycles, greatly increasing the effective capacity in your data center. In addition to better overall performance, you can also delay or reduce server purchases and minimize application licenses.

Powerful Web Application Protection

Built upon bidirectional deep inspection technology, the Cisco AVS 3120 Web application firewall can immediately block the most common and damaging attacks against Web applications. It effectively thwarts attacks that threaten business continuity and eliminates the need for “rush” software development fixes and patches. Optimized for custom applications where attack signatures do not apply, the Cisco AVS 3120 protects all Web applications against sophisticated custom-made hacker threats such as:

- Structured Query Language (SQL) injection
- Cross-site scripting
- Command injection
- Cookie or session poisoning
- Application reconnaissance
- Lightweight Directory Access Protocol (LDAP) injection
- Buffer overflows
- Directory traversals
- Attack obfuscation
- Application platform exploits
- Zero-day attacks
- Cookie poisoning

Appscope End-User Performance Monitor

The Cisco AVS AppScope Monitor (AppScope) is the industry’s only agentless, end-to-end application performance measurement solution. The AppScope management client and database run on the Cisco AVS 3180 Management Station appliance (refer to the Cisco AVS 3180 data sheet). AppScope obtains performance data by polling performance measurement data from the Cisco AVS 3120 appliance. AppScope performance monitoring provides a lightweight way for organizations to monitor, measure, and report end-user response times from a central location. AppScope measures the true application performance as realized by real end users—nothing is simulated. It breaks down response times into individual components that allow better allocation of your IT resources and greatly reduce mean time to repair.

What are the Other Components of the Cisco Application-Delivery Solution?

Cisco CSM and Cisco ACE Content Switching Modules

High-performing services modules for the Cisco Catalyst® 6500

Cisco CSS Family of Content Services Switches

High-availability appliance architecture for Web infrastructures

Cisco GSS Family of Global Site Selectors

For optimized data-center selection and disaster recovery

Cisco Wide Area Application Engine (WAE)

For branch offices needing simple remote access to centralized applications, storage, and content

Cisco Data Center Network Services

For centralized management, operations, monitoring, and reporting of multidevice deployments

For More Information

Cisco ACE: <http://www.cisco.com/go/ace>

Cisco AVS: <http://www.cisco.com/go/avs>

Cisco CSS: <http://www.cisco.com/go/css11500>

Cisco GSS: <http://www.cisco.com/go/gss>

Cisco WAE: <http://www.cisco.com/go/wae>