AVANU®

CAI Networks
WebMux™ Load Balancers (Models 481SD, 592SGQ, and 690PG)
Layers 4 - 7 Traffic Management & Load Balancing with Built-In SSL Acceleration for Local Networks

CAI Networks' WebMux Load Balancer product line is known for its sophisticated features, straightforward management interfaces that are simple to use, and affordability. The WebMux, from the full-featured, yet affordable, 481SD to the impressive throughput of the 690PG, fits a wide range of load balancing needs. Easily integrate a WebMux into your architecture whether it is for simply managing web site traffic, handling intense video/voice streaming, managing e-commerce sites, or sophisticated balancing of multiple tiers of Unified Communications networks.

WebMux Load Balancers are highly reliable, both in hardware as well as the carefully optimized algorithms implemented in firmware. They are also high-performance to meet the needs of a wide-range of customer applications. Setting up the WebMux is simple as you want or it can be tightly-tied to back-end server script-processing. From the menu-driven LCD front panel, remote Web browser management supporting HTTP and HTTPS, to the Telnet and SSH configuration and diagnostic capabilities, the WebMux has simplicity in mind. Simple configurations allow you to get up and running quickly, while also having the power to engineer more complex solutions to empower your architecture with highly sophisticated load balancing and failover capabilities. WebMux provides for smart solutions for applications such as Microsoft® IIS, Office Exchange Server 2010, Office Communications Server 2007 R2, Lync™ Server, SharePoint®, Oracle® Application Server, Apache™, FTS servers, Sendmail™, and the Payment Card Industry (PCI). WebMux is IPv6-ready to meet the current transition from IPv4.

CAI Networks continues to improve on the WebMux strengths of capabilities, scalability, security, and flexibility. The engineer and system architect can appreciate the power and the simplicity while the manager appreciates the value of choosing the WebMux line. WebMux delivers from 1.7 to 4.0 Gigabits per second throughput in Layer 4, supporting over 65,000 servers, unlimited virtual servers, and built-in SSL acceleration—with optional hardware acceleration also available. WebMux provides the network optimization options that you need -- at the price-points that match your bandwidth -- to support your servers and operations at prices that are easy on your budget.

High Performance
- Up to 4 GB per sec throughput
- Up to 200,000 transactions per second
- NAT (in-path), Direct Response (Out-of-Path) Transparent Bridge mode configuration
- Up to 5,760,000 concurrent connections (NAT Mode; higher performance in Out-of-Path mode)
- Ultra-fast hardware platform
- Solid-state flash memory
- Built-in proxy function

SSL Acceleration
- Native SSL support starts at 300 terminations per second to 4,000 Round Trip SSL Terminations per second (at 1024 bit-configurable)
- CAI-RSA SSL Acceleration Cards available for expandability providing flexible options and growth plans (Optional add-on for 5x models)
- Supports up to 32 Active SSL certificates (Contact AVANU for larger quantity)
- Secure credit card processing, or establish IPSec VPN tunnels (Reference CAI-RSA SSL Acceleration Card data sheet.)

High Availability
- Dual configuration offering automatic failover
- Multiple ISP for multi-homing HA capabilities
- Enhanced HA for office servers
- Supports a variety of Spanning Tree Protocol options, supporting redundant paths (Layer 2-3)
- Multiple Address/Port (MAP) (Intelligent failover of rich media applications and increased flexibility)
- Site-to-site load balancing with optional DNSMux Global Load Balancer

Flexibility and Expandability
- IPv4 and Ipv6 support, including IGMP and MLD support
- IP, URL and cookie based load balancing (Layer 4-7)
- Extensive options in Layers 2 through Layer 7 load-balancing
- Multi-Gigabit Ethernet links
- IEEE 802.1AX (802.3ad) link aggregation
- Multiple VLAN for support of multiple subnets
- 802.1Q tagged VLAN trunking support for multiple VLANs

- Supports unlimited number virtual servers
- IP server capacity increased by load sharing
- Failed server in the farm automatically bypassed
- Last Resort server option provides intelligent option if all servers have failed
- Built-in high-level protocol checker makes sure the Servers are healthy
- Persistent connections via unique routing algorithms
- Burst Activity Management (BAM™) minimizes traffic overloads of UDP/DNS client requests
- Multi-language support for global customers
- Only one real IP address required
- No limit on how many IP address can be used
- Scales to provide an easy and flexible upgrade path

Enhanced Security
- Security principles of confidentiality, integrity, and availability are supported by through secure management options, simplicity in administration, firewall capabilities, and protocol enforcement.
- 802.1Q tagged VLANs for security and flexibility in server connections as well as supporting redundant upstream ISP connections
- Support for PCI industry standards
- Passes all IP traffic and blocks the most common attacks pre-firewalls or servers
- Provides several firewall features to ensure the integrity of your data
- Protects your server from attackers
- Network Address Translation (NAT and SNAT)
- Port Mapping and default Deny any connections
- Denial of Service (DoS) protection
- TCP SYN protection

Easy Setup and Administration
- Management of the IP server pool is via a browser-based interface
- Can be configured in under 15 minutes with no training
- Remote configuration from anywhere that has secure IP connectivity
- Includes a front keypad interface and menu-driven LCD display

	WebMux 481SD	WebMux 592SGQ	WebMux 690PG
US$ Suggested Retail Price	$3,999	$5,999	$34,995

Layer 4 Performance

Concurrent connections (Max)	1,440,000 (a)	2,880,000 (a)	5,760,000 (a)
Transactions/sec (Max)	65,000	100,000	200,000
Throughput/sec (Max)	1.7 GBits	2.7 GBits	4 GBits
Internet Link Speed (Max)	2,000 MB/s	3,000 MB/s	4,000 MB/s

Layer 7 and SSL Acceleration

1024bit RSA terminations/sec	300	600	4,000
(Round trip; Max)		1,600 (b)	
		2,600 (c)	
Layer 7 Connections/s (Max)	50,000	100,000	144,000
SSL Certificates Supported	32 (d)	32 (d)	32 (d)
HTTP Compression	•	•	•
TCP Optimization	•	•	•

Load Balancing Methods

Cookie content based	•	•	•
URL based	•	•	•
Round-robin	•	•	•
Persistent round-robin	•	•	•
Weighted round-robin	•	•	•
Persistent weighted round-robin	•	•	•
Least connections	•	•	•
Persistent least connections	•	•	•
Weighted least connections	•	•	•
Persistent weighted least connection	•	•	•

Traffic Management Methods

URL based content switch	•	•	•
Cookie based content switch	•	•	•

Fault Tolerance

Diskless design	•	•	•
Port aggregation	•	•	•
Failover via network connection	Optional	Optional	Optional
Failover via Multiple ISP links	•	•	•
Failover via Ethernet link	•	•	•
Service-aware	•	•	•
Server-aware	•	•	•
Backup server	•	•	•

Security

Network Address Translation (NAT/SNAT)•	•	•	
TCP SYN protection	•	•	•
Address mapping	•	•	•
Port mapping	•	•	•
TCP DoS protection	•	•	•
Smart DDos protection	•	•	•
HTTPS/SSH management	•	•	•
IPv4 and IPv6 Support	•	•	•

Topologies

10/100/1000 Ethernet	•	x3	20 Ports
Built-in Switch			•
Multiple Tag based VLANS	•	•	•

Device Support

Interface to switches	Gigabit x2	Gigabit x2	Gigabit 20+4
Virtual Servers (Max)	Unlimited	Unlimited	Unlimited
Real Servers (Max)	65,532	65,532	65,532
Bridge/Router Role In Network	•	•	+ Switch
UDP-based service support	•	•	•

Management

Secure web browser access	•	•	•
In service/Not in service	•	•	•
SNMP	•	•	•
Phone/Pager alarm notification	•	•	•
Email notification	•	•	•
Configuration access	•	•	•
Persistent connections	•	•	•
Port-specific services	•	•	•

Service Support

Product Warranty (Parts & Labor)	1 Year	1 Year	1 Year
Firmware Updates	1 Year	1 Year	1 Year
Technical Support (Phone/Email)	1 Year	1 Year	1 Year
Pre-configuration prior to Ship	------ No Charge Upon Request -----		
24x7 Support	Optional	Optional	Optional
Overnight Exchange Unit	Optional	Optional	Optional

Physical

Rack Mount Form Factor	------ 1U (19"x14"x1.75") ------		2U
Redundant Power Supply			•
Power Consumption (Max)	120w	200w	350w
115VAC Current	2.5A	3.5A	5A
Heat Production	350BTU/H	550BTU/H	800BTU/H
Power Requirements @50-60Hz	----- 95-130VAC or 195-235VAC ----		
Operating Temp Range	0-40°C	0-40°C	0-40°C
Ship Weight	20 lbs	20 lbs	40 lbs

Compliance & Certification

Part 15, FCC (US), Class B (Canada), CE Mark (Europe), FIPS 140-2 standard, NIST (latest industry-standard Open SSL modules), RoHS

Other

30 Day Money Back Guarantee (Subject to restocking fee; contact AVANU for details)

Footnotes:
(a) Performance based on NAT (in-path) mode (Higher performance in Direct Response/Out-of Path mode)

(b) CAI-RSA3500 SSL Acceleration Card Req'd

(c) CAI-RSA7000 SSL Acceleration Card Req'd

(d) Contact AVANU for larger quantity