Enterprise-class Application Delivery Network Load Balancing Solution for Layers 4-7 TCP/UDP IP Traffic
Reliable High Performance • Quick to Deploy • Easy to Manage • Fantastic Value • Affordable

Internet Connectivity and Availability Expectations
The Internet allows us to research vast amounts of information, provides quick and convenient shopping, and lets people collaborate and stay connected in many different ways.

What would be the consequences if your internal organization or customers cannot connect to your network back end servers where the applications are servicing their needs? Whether it is connecting to your web site, having conversations through VoIP, social media interactions, streaming videos, playing games, managing IoT devices, or accessing internal accounting records, the frustration levels will escalate.

This is where AVANU’s WebMux Network Traffic Manager plays a key role in your network to prevent situations like these. Businesses and people’s lives have become highly dependent on the Internet and WebMux keeps everything flowing smoothly.

WebMux Network Traffic Manager Introduction
An essential function of your local area network (LAN) is the reliable delivery of local network traffic (Layers 4-7) to your back-end server farms that are servicing the TCP/UDP IP applications and services for your internal organization and external customers.

AVANU’s WebMux Network Traffic Manager is an affordable enterprise-class application delivery network load balancing solution.

WebMux is quick to deploy and easy to manage while providing reliable high availability and high performance supporting a wide range of network load balancing methods. AVANU offers businesses of all sizes scalable WebMux options available in plug-and-run hardware appliances and Virtual appliances for Cloud computing with a fantastic return on investment with its affordability.

A local network load balancing and application delivery solution at its best with full range load balancing and scheduling method features with fast and easy setup options.

Popular TCP/UDP IP applications and services support include but not limited to are Skype® for Business, Lync® Server, Exchange® Server, SharePoint® Server, Xbox® Live Games Server, Internet Information Services (IIS) for Windows® Server, WebLogic®, WebSphere®, Unified Communications (UC) services (unified messaging, IM presence, team collaboration, audio/web/video conferencing, mobility, and VoIP), databases, FTP, POP, terminal servers, and web servers to name a few.

How Does WebMux Compare?

<table>
<thead>
<tr>
<th>Feature</th>
<th>AVANU</th>
<th>Vendor A</th>
<th>Vendor B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor platform (64-bit)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Appliance CPU processors (up to)</td>
<td>18</td>
<td>12</td>
<td>Dual</td>
</tr>
<tr>
<td>Factory pre-configuration</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Intuitive GUI interface</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Certifications required</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Appliance product warranty (HW)</td>
<td>2 years</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Appliance firmware updates (HW)</td>
<td>1 year</td>
<td>90 days</td>
<td>90 days</td>
</tr>
<tr>
<td>Product Technical Support</td>
<td>1 year</td>
<td>90 days</td>
<td>90 days</td>
</tr>
</tbody>
</table>

“Thank you to everyone for being persistent and hammering out solid products. We must have the most robust solution with the best throughput. I appreciate all of the effort.” System Engineering Division Chief, United States Federal Government

“Since partnering with AVANU, we have experienced seeing how AVANU has a dedicated focus to meeting their customers’ real-life requirements. Our customers are very enthusiastic about AVANU’s new WebMux platform.” Vice-President Systems Integrator

Contact Us Today!
1.888.248.4900 U.S. Toll Free
1.408.248.8960 International
info@avanu.com
www.avanu.com
Contact AVANU for features not listed or to request a demonstration

### WebMux - Virtual Appliance

<table>
<thead>
<tr>
<th>WebMux - Virtual Appliance</th>
<th>AVE-100</th>
<th>AVE-300</th>
<th>AVE-500</th>
<th>AVE-1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Layers</td>
<td>4-7</td>
<td>4-7</td>
<td>4-7</td>
<td>4-7</td>
</tr>
<tr>
<td>O/S Processor Architecture (bit)</td>
<td>64</td>
<td>64</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Load Balancing Network Traffic Throughput (Internet Linkmax Gbits/s less any overhead)</td>
<td>1.0</td>
<td>3.0</td>
<td>5.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Servers/Farm Support (Max-Real/Virtual)</td>
<td>4,999</td>
<td>4,999</td>
<td>4,999</td>
<td>4,999</td>
</tr>
<tr>
<td>Technical Support</td>
<td>1 Year</td>
<td>1 Year</td>
<td>1 Year</td>
<td>1 Year</td>
</tr>
<tr>
<td>FIPS-2 Level 1 Compliant</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>TAA Compliant (Developed in USA)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Factory Pre-configuration (optional)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### WebMux - Network Hardware Appliance

<table>
<thead>
<tr>
<th>WebMux - Network Hardware Appliance</th>
<th>A425</th>
<th>A525</th>
<th>A620</th>
<th>A625</th>
<th>A725</th>
<th>A825</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Layers</td>
<td>4-7</td>
<td>4-7</td>
<td>4-7</td>
<td>4-7</td>
<td>4-7</td>
<td>4-7</td>
</tr>
<tr>
<td>O/S Processor Architecture (bit)</td>
<td>64</td>
<td>64</td>
<td>64</td>
<td>64</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>CPU Processor (Cores/Threads)</td>
<td>Quad/4</td>
<td>8/16</td>
<td>10/16</td>
<td>10/16</td>
<td>14/28</td>
<td>18/36</td>
</tr>
<tr>
<td>Load Balancing Network Traffic Throughput (Internet Linkmax Gbits/s less any overhead)</td>
<td>4.0</td>
<td>4.0</td>
<td>20.0</td>
<td>40.0</td>
<td>50.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Network Type</td>
<td>Copper</td>
<td>Copper</td>
<td>Copper</td>
<td>Copper</td>
<td>Copper</td>
<td>Copper</td>
</tr>
<tr>
<td>Network Port Connector Type</td>
<td>R34S</td>
<td>R34S</td>
<td>RJ4S/SFP+</td>
<td>RJ4S/SFP+</td>
<td>SFP28</td>
<td>QSFP+</td>
</tr>
<tr>
<td>Load Balancing Network Traffic Ports</td>
<td>4x 1GbE</td>
<td>4x 1GbE</td>
<td>2x 10GbE</td>
<td>4x 10GbE</td>
<td>2x 25GbE</td>
<td>2x 40GbE</td>
</tr>
<tr>
<td>IPMI Port</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Management Port</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ECC Memory (GB)</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Solid State Drive (SSD)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Smart Temperature Control Fans</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Power Supply (Hot-Swap, 400W)</td>
<td>Single/Dual</td>
<td>Single/Dual</td>
<td>Dual</td>
<td>Dual</td>
<td>Dual</td>
<td>Dual</td>
</tr>
<tr>
<td>Servers/Farm Support (Max-Real/Virtual)</td>
<td>4,999</td>
<td>4,999</td>
<td>4,999</td>
<td>4,999</td>
<td>4,999</td>
<td>4,999</td>
</tr>
<tr>
<td>Front LCD Panel (Quick Configuration)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Digital Intrusion Monitoring/Physical Detection</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Chassis</td>
<td>1U</td>
<td>1U</td>
<td>1U</td>
<td>1U</td>
<td>1U</td>
<td>1U</td>
</tr>
<tr>
<td>Hardware Warranty</td>
<td>2 Years</td>
<td>2 Years</td>
<td>2 Years</td>
<td>2 Years</td>
<td>2 Years</td>
<td>2 Years</td>
</tr>
<tr>
<td>Technical Support</td>
<td>1 Year</td>
<td>1 Year</td>
<td>1 Year</td>
<td>1 Year</td>
<td>1 Year</td>
<td>1 Year</td>
</tr>
<tr>
<td>FIPS-2 Level 1, 2 Compliant</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>TAA Compliant (Developed &amp; Manufactured in USA)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Factory Pre-configuration (optional)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### WebMux Feature Highlights (Network Hardware and Virtual Appliance Models)

#### General Operations
- Application and Services Setup/Configuration Wizards
- Intuitive Web-based Graphical User Interface (GUI)
- Compression-Software
- HTTP Caching
- Health Checks (Applications and Services)

#### Network
- One-armed Single Network
- One-armed Direct Server Return (DSR)
- Two-armed Network Address Translation (NAT)
- Two-armed Transparent
- Active/Active WAN
- Active/Passive High Availability
- Adaptive Load Balancing
- Bonding/Teaming Ports (802.3ad/LACP)
- Content Encoding (HTTP Compression)
- Reverse Proxy
- Multiple Address and Port (MAP™)
- Multiple Gateway Network Failover
- Multiple VLAN Trunking (IEEE 802.1Q)

#### Load Balancing - Scheduling Algorithms
- HTTP to HTTPS Redirect
- Least Connection, Least Connection-Persistent
- Round Robin, Round Robin Persistent
- Weighted Fastest Response, Weighted Fastest Response—Persistent
- Weighted Least Connection, Weighted Least Connections—Persistent
- Weighted Round Robin, Weighted Round Robin—Persistent
- Dynamic Ratio
- Fixed Priority Pre-emptive Scheduling
- IP Persistence
- Layer 7 Persistence

### Internet Protocol (IP) Support
- DNS
- FTP
- HTTPS (SSL/TLS; SNI-Server Name Indication)
- IMAP
- IPv4/IPv6
- LDAP
- NTP
- POP3
- Radius
- SMTP
- SNMP
- SSH
- Streaming Media
- TCP/UDP Applications and Services
- TFTP

### Security and SSL
- Access Control List System
- Authentication - LDAP, TACACS+
- Automatic Attack Detection (AAD)
- Digital Monitoring/Built-in Physical Intrusion Protection (HW appliance)
- DoS/DDos Protection (Flood Control™ UDP/TCP level)
- IP Address Filtering
- SSL (FIPS 140-2 compliant)
- SSL Acceleration
- SSL Certificate Signing Request (CSR)
- SSL Termination/Offloading
- SSL Encryption Strength (bits) 1024, 2048, 4096, 8192
- TCP Protocols Support
- Web Application Firewall (WAF)
Your company’s network is indispensible, whether it serves internal operations or external customers and prospects. Everyone’s livelihood depends on a reliable and secured network, so could it make good business sense to change your network?

To decide, it is vital to ask yourself if your network always performs at its full potential even during peak traffic times, providing maximum service and availability for both your organization and your customers. If not, the hidden costs are enormous. Employees may take longer to do their work. Existing and potential customers may lose patience and move to your competitors. These hidden cost dangers are easy to overlook, but could be dramatically reduced by a wise network change.

One high payoff network change is to invest in an application delivery network load balancing solution. Common terms used for this include network traffic manager (NTM), application delivery controller (ADC), load balancer (LB), hardware load balancer (HLB), network load balancer (NLB), server load balancer (SLB), and local traffic manager (LTM). A load balancing solution will control such costs by securely delivering and reliably directing local data traffic for TCP or UDP applications and services to and from your internal network of servers.

There are many choices in load balancer solutions. How do you pick one wisely, so its cost doesn’t eat up the savings? For any load balancing solution you may consider, ask yourself questions such as these:

- What is its out-the-door price?
- Do I need certification and training to install it myself?
- Must I hire certified personnel to do the configuration and installation? How much does this cost in time and money?
- Is it easy to maintain without having certified or trained personnel?
- Does the initial price include product configuration?
- Will the product continue to meet my future requirements as my network evolves without paying extra for “add-on” features?
- How much does the manufacturer charge for new product features?
- How much does annual support and product registration cost?
- Are there annual royalty fees?

Some considerations are harder to quantify in monetary terms:

- How good is its quality of service, both before and after purchase?
- How reliable is it?
- How long has it been on the market?

What about products with multiple functions that integrate load balancing with other services?

- Are there hidden unnecessary costs for the load balancing configuration?
- How fast can the load balancing function be up and running in the network?
- Do all product functions provide optimal performance for the network?
- If one function of such a product fails, does it become a single point of failure for all its functions?
- Will you pay more for the annual service and support because of a product’s multiple functions?

After you assess the possibilities for load balancing your network, it will become very clear that the affordable enterprise-class WebMux Network Traffic Manager, an application delivery network load balancing solution is the right answer to saving money with its quick and easy deployment of an optimal, high performing, and highly secured local network. WebMux scalable platforms include network hardware appliances (Plug-and-Run) and Virtual appliances for Cloud computing network environments.

It is all about the user experience on your network and keeping everyone connected™

Quick to Deploy • Easy to Manage • Reliable High Performance • Fantastic Value • Affordable Excellence in Customer Support Services

AVANU WebMux = Bottom Line Money Savings (Product cost, time, labor, maintenance) offering more performance value for a high return on investment

© Copyright 2016 AVANU, Inc. All rights reserved. AVANU and Flood Control are registered trademarks of AVANU, Inc. All other trademarks and registered trademarks are the property of their respective owner(s) Rev 0717

www.avanu.com
info@avanu.com