APV SERIES SOLUTION BRIEF

Exchange Load Balancing

Array APV Series Application Delivery Controllers Enable Highly Optimized Microsoft Exchange Services

Background

Beginning with Exchange Server 2010, Microsoft extended this popular platform to enable access to email, voice mail and instant messaging from any device, anywhere, using industry-standard protocols. Part of the architectural changes now require that all user access be processed through Client Access Servers (CAS) or MBX Servers.

To ensure high availability and efficient processing of access traffic, as well as to reduce the number of CAS or MBX appliances required, Microsoft recommends the use of hardware load balancers to intelligently load balance and optimize Exchange traffic across CAS servers.

Array's APV Series dedicated, virtual or virtualized application delivery controllers (ADCs) are certified by Microsoft to deliver server load balancing, SSL offloading, global server load balancing, application acceleration and other capabilities that can optimize an Exchange Server deployment and provide the best possible local and global user experience.

Key APV Series Solution Benefits

APV Series load balancers improve overall Exchange user experience by ensuring that employees always have access to Exchange services anywhere, anytime, and from virtually any device. Response times are improved by intelligently load balancing requests across Exchange servers, caching frequently accessed files and compressing network data. User session persistence is maintained to ensure that requests are directed to the same server for the duration of the session. In addition, the APV Series can automatically direct external users to the best global site for Exchange services by intelligently using proximity, latency, site availability, and performance statistics.

Array application delivery controllers help ensure always-on Exchange services by automatically checking the health of servers and directing users to the best possible server or site. In this way, a local server failure does not interrupt Exchange services; similarly, global availability is assured so that a site or ISP failure does not impact Exchange services.

The APV Series ADCs improve security by protecting the Exchange environment from DoS/DDoS attacks, SYN floods, TCP port scans,

UDP floods, UDP port scans and other malicious network and server attacks. In addition Array ADCs feature a full reverse proxy that helps mitigate vulnerabilities for Exchange and other applications.

As workloads increase, it can become increasingly difficult to scale Exchange services in an affordable manner. By intelligently load balancing traffic and offloading non-core application tasks such as compute-intensive SSL processing, network connection handling and compression from Exchange servers, APV Series can increase server utilization and free up server capacity by as much as 50 percent. SSL certificate management can also add to management headaches. With the APV Series, SSL certificates can be consolidated and managed centrally on the ADC, eliminating the need for SSL software and certificates on each application server.

Secure Remote SSL VPN Access

Array's AG Series secure access gateways (SSL VPNs) enforce security policies at the network edge so that only legitimate remote users can access Exchange and other application servers as well as other network resources. Security features include flexible access controls, two-factor authentication, device integrity checking prior to session initiation, and device cache cleaning at the end of the session. Dedicated portals can also be assigned for administrators or groups of administrators to manage services remotely, if desired.

In the event of disasters or other unplanned outages, the AG Series supports 'burst' licensing to support large spikes in concurrent users accessing Outlook Web App email services.

Built for Simplicity, Scale, Performance and Economics

The tightly integrated APV Series dedicated, virtual and virtualized appliances run the same software image, simplifying administration and optimizing performance. Dedicated APV Series appliances support 1.5 Gbps to 50 Gbps SSL throughput per appliance, while vAPV virtual appliances support 10 Mbps to 4 Gbps throughput depending on licensing and resources. The AVX Series virtualized appliances support up to 32 vAPV ADC and/or vxAG SSL VPN instances per system. Clustering of up to 32 APV/vAPV appliances supports massive scalability.

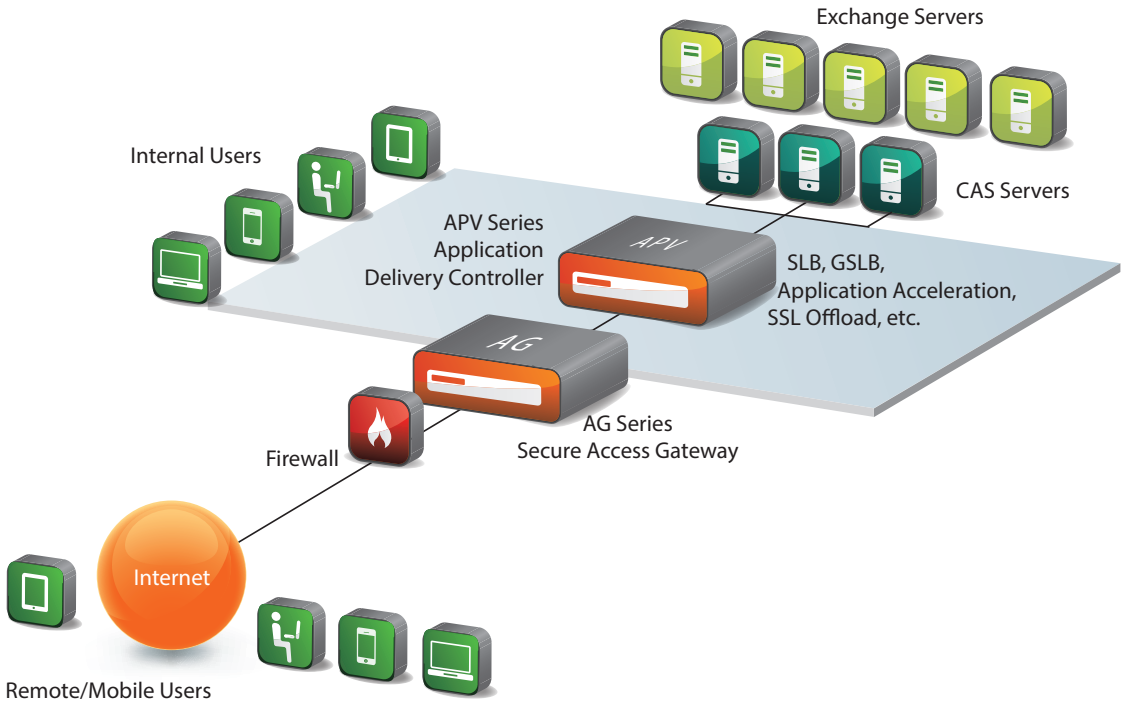
Summary

Array's APV Series delivers improved CapEx and OpEx for Exchange services by reducing server footprint, software, bandwidth and energy costs through better server utilization, offloading compute-intensive tasks, and allowing easier and less expensive scaling.

Step-by-step deployment guides for Exchange 2010, 2013 and 2016 are available on our Microsoft solutions page.

APV Series Benefits

- Ensures high availability and efficient processing, and reduces the number of CAS or MBX servers required
- Delivers server load balancing, SSL offloading, global server load balancing, application acceleration and more
- Optimizes Exchange Server deployments to deliver optimal user experience
- Ensures always-on Exchange services at the local and global levels
- Stops DoS/DDoS and other malicious attacks
- Allows scaling of Exchange services through increased server utilization and reduced server load
- Simplifies administration and optimizes performance
- Reduces CapEx and OpEx through better economies and utilization
- Array AG Series SSL VPNs can provide secure remote access from any device, anywhere and any time.



For more information about how Array Networks can help you highly optimize your Microsoft Exchange services, visit us at arraynetworks.com or send us an email at sales-info@arraynetworks.com.

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