



Array APV series NetVelocity edition ensures high availability, performance and security of data center applications by managing multiple WAN ISP connections while reducing cost and complexity in the data center. Array APV can be extended as an application delivery controller and global server load balancer with built-in application specific acceleration. Array APV is the next generation in WAN traffic management appliances, reducing overall IT infrastructure costs by 50% or more while improving user productivity.

■ Availability and Reliability

Array APV provides the most complete high-availability and reliability solution for link load balancing, delivers 99.999 % uptime. APV detects and monitors outages and failures as they happen in real-time and instantly redirect individual WAN connections across other available links. End-to-End real-time link health monitoring enables APV to seamlessly re-route traffic via other links while maintaining client connectivity without incurring the costs of downtime to provide the best experience to the client connections. Health check rules can be combined to build advanced load balancing policies.

■ Advanced WAN Management

Array APV manages and scales multiple WAN links for site redundancy and increased bandwidth requirements of the data center. Array APV performs inbound and outbound link load balancing with a host of load balancing algorithms. Any IP terminated link can be managed to support multiple IP address spaces

Policy based routing directs specific application traffic via a preferred route. Static NAT and advanced NAT manages outbound IP addressing for transparent use of different WAN links. With PAT, a single public IP address can be used by many hosts on a private network. Adaptive compression and TCP/IP speedstack accelerates L4 user traffic on slow links

■ Bandwidth Management and QoS

NetVelocity's rate shaping functions limit application traffic on WAN links for efficient bandwidth utilization and reduced delay. Array APV ensures rate limits on specific application traffic so that critical applications always get enough bandwidth and access priority in the data center to prevent over usage of the capacity by any one application

NetVelocity's QoS helps prioritize different Web, E-Mail, VOIP, CRM and Enterprise application (Oracle, SAP) traffic to prevent network congestion and latency. Prioritization will ensure most wanted applications are accessible to end users. NetVelocity's QoS supports filters and class based queues

■ Multi-Layer Web Security

The APV platform is security-hardened and protects internal applications and servers from L4 and L7 DDoS, L7 attacks and Content Filtering, Syn-flood, tear drop, ping-of-death, Nimda, Smurf and many other attacks. It also integrates extensive access control lists (ACL), network address translation (NAT), and stateful packet flow inspection to guard against unauthorized access. Designed to be a default deny device. Additionally APV supports VLANs, Port Forwarding, port and link redundancy

Product Benefits

- Delivers enterprise class reliability and availability for WAN connections (including VPN), web sites and applications in the data center
- Efficiently utilizes WAN link bandwidth by using advanced techniques like compression, bandwidth management and rate shaping
- Most complete high-availability green platform, delivers 99.999 % uptime and strong ROI (reduced energy costs)
- Hardened platform protects applications against network-based attacks
- Maximizes ROI for connectivity by aggregating low cost links
- Intelligent policy based routing directs traffic over the best possible link and ISP for the best quality of experience for the end user sessions
- Easy to configure and simple to manage N+1 clustering solution can be managed via Web UI or Command Line Interface (CLI) or XML / RPC or SNMP
- Real-Time monitoring of WAN links and connections for health, performance and utilization

■ Green Platform and ROI

Array APV enables IT infrastructure to be consolidated and simplified, thereby reducing power and space costs. APV uses 60% less power than other products, reduces server infrastructure by up to 40%, reduces network bandwidth by 30% and delivers strong ROI in as little as 6 months. Easily extend the APV NetVelocity platform to a full fledged Application Delivery Controller at a fraction of cost compared to competitors for best ROI

Availability

Outbound Link Load Balancing

- Round Robin
- Weighted Round Robin
- Shortest Response Time
- Target Dynamic Detection

Inbound Methods

- Round Robin
- Weighted Round Robin
- Optionally Integrated with DNS and GSLB

Layer 4 Server Load Balancing

- Intelligent routing maximizes balancing methods and increases performance
- TCP, TCPS, UDP protocols supported
- Round robin, weighted round robin, least connections, shortest response, persistence IP
- RADIUS, DNS servers

Layer 2 / 3 Load Balancing

- Firewall appliances
- Intrusion Prevention Systems (IPS) and Intrusion Detection Systems (IDS)

Clustering and Health Monitoring

- Ensures availability and performance of applications with single point of management regardless of cluster size
- Active/active; active/standby; N+1
- Fast Fail Over
- Configuration synchronization
- Link health checks based on physical port, ICMP, L4 user-defined

- Application-specific health checks
- Next Gateway Health Check
- Destination Path Health Check
- Combine multiple health checks

WAN Management

- Policy Based Routing based on port, src/dest IP, any UDP, TCP protocol
- Supports RIP v1, RIP v2, OSPF
- Return to sender (RTS)/IP Flow Persistence
- Port Forwarding, Link Aggregation and Port Redundancy
- Transparent to VPN remote access

Bandwidth Management

- Guarantees performance for applications
- Rate Shaping, set user defined rate limits on critical applications
- QoS for Traffic Prioritization
- Supports Class Based Queues, borrow and unborrow bandwidth from queues
- Supports QoS filters based on ports, any protocol (TCP,UDP,ICMP etc)

Performance

TCP Acceleration

- Improves application performance 100x by off-loading TCP processing
- Connection multiplexing
- TCP Buffering
- Client connection persistence
- IEEE 802.3ad link aggregation

Security

Server Security

- Full proxy-based firewall safeguard applications from network attacks
- TCP Syn-flood protection
- Flash event protection
- Full L4 and L7 DoS protection
- URL Filtering
- Nimda and Smurf attacks

Network Security

- Full stateful packet inspection firewall
- Over 1000 ACL rules without performance degradation

Network Address Translation

- Static and port-based translation for maximum flexibility and scalability
- Advanced NAT for transparent use of multiple WAN links

Ease of Use & Integration

- Complete, centralized management tools that simplify installation without compromising security or flexibility
- Industry standard CLI Interface
- Secure SSH remote network management
- Single point for cluster management
- Secure WebUI access
- XML-RPC remote management support
- SNMP V2 / V3 and private MIBs
- Syslog (UDP or TCP)
- Simple initial setup support
- Administrator account management

- CLI command-based monitoring
- Notification/alerting system w/paging
- Multiple configuration support
- Multi- unit config synchronization
- On-line troubleshooting support
- Real-time monitoring graphs support
- Detailed Log messages

Upgrade Options

Layer 7 Server Load Balancing

- Maximizes traffic flow and performance with customizable layered policies
- QoS
- URL
- Hostname
- Cookie
- SOAP
- Arbitrary header
- Per virtual service proxy mode
- SIP/RTSP

SSL Acceleration

- High-performance hardware-based acceleration
- HTTPS, NNTPS, SMTPS, POPS, IMAPS, LDAPS
- SSL inside for end-to-end security
- Full certificate management features

Global Server Load Balancing

- Ensures performance for applications in a multitude of locations worldwide
- DNS DoS protection
- Global site/service selection
- Proximity and IP Persistence for nearest site for improved performance.

	APV1200	APV2200	APV3200	APV5200
HTTP Requests/Second	20,000	50,000	50,000	100,000
Concurrent TCP Connections	500,000	1,000,000	2,000,000	2,000,000
Memory	1GB	2GB	4GB	4GB
I/O Configuration	Fixed: 4 10/100/1000	Up to 6 Ports: Fixed: 4 10/100/1000 Optional: 2 1000 Base-SX	Up to 10 Ports: Fixed: 4 10/100/1000 Optional: 4 10/100/1000 2 1000 Base-SX	Up to 10 Ports: 4 10/100/1000 (2 cards) 2 1000 Base-SX (1 card) 2 10 Gig Eth Fiber (1 card)
Clustering	2	32	32	32
Form Factor	1U	1U	1U	2U
Power Supply	Single	Single	Single	Dual

Technical Specifications

Support	Bronze, Silver, Gold & Platinum Level Support Plans
Warranty	1 Year Hardware; 90 Day Software
Standards	10/100 Base-TX, 1000 Base-T, 1000 Base-SX, 10 GbE, IP, SSH, HTTP 1.0/1.1, SSL, SNMP
Management	SSH CLI, Direct Console CLI, SNMP, Single Console per Cluster, XML-RPC
Console port	Male DB9 Serial (RS232) Port
Dimensions	Standard 19" Rack Mountable 1200/2200/3200: 17" (W) x 15" (D) x 1.75" (H) or 1RU 5200: 17" W X 21.5" D X 3.5" H or 2U
Weight	1200/2200/3200: 14 Lbs. 5200: 30lbs
Environmental	Operating Temperature: 0° to 40°C Humidity: 0% to 90%, Non-condensing Power 1200/2200/3200: 100-240VAC, 2.8 A, 47-63Hz, Auto-Ranging 5200: 100-240VAC; 6A; 47-63 Hz, Full Range Input
Regulatory compliance	The equipments described are declared to be in conformity with the applicable national and international standards, when tested in a representative chassis. The conformity is valid ONLY when the equipment is used in a manner consistent with manufacturer's recommendations and reference documents. IEC 60950-1, LU/CSA 60950-1, EN 60950-1, ICES-003, EN 55024, CISPR 22, AS/NZS 3548, FCC, 47FR part 15 Class A, VCCI-A RoHS and WEE Compliant
Safety	CSA, C/US, CE, UL EMC Testing: Bay Area Compliance Laboratories Corporation, 1274 Anvilwood Avenue, Sunnyvale, CA 94089 CB report issued by: CSA International, 13799 Commerce Parkway, Richmond, BC, Canada.

APV1200



APV2200



APV3200



APV5200



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