PA-2000 Series

Key PA-2000 Series next-generation firewall features:

CLASSIFY ALL APPLICATIONS, ON ALL PORTS, ALL THE TIME WITH APP-ID™.

- Identify the application, regardless of port, encryption (SSL or SSH) or evasive technique employed.
- Use the application, not the port, as the basis for all safe enablement policy decisions: allow, deny, schedule, inspect, apply traffic shaping.
- Categorize unidentified applications for policy control, threat forensics, custom App-ID creation, or packet capture for App-ID development.

EXTEND SAFE APPLICATION ENABLEMENT POLICIES TO ANY USER, AT ANY LOCATION, WITH USER-ID™ AND GLOBALPROTECT™.

- Agentless integration with Active Directory, LDAP, eDirectory Citrix and Microsoft Terminal Services.
- Integrate with NAC, 802.1X wireless and other non-standard user repositories with an XML API.
- Deploy consistent policies to local and remote users running Microsoft Windows, Mac OS X, Linux, Android or iOS platforms.

PROTECT AGAINST ALL THREATS—BOTH KNOWN AND UNKNOWN—WITH CONTENT-ID™ AND WILDFIRE™.

- Block a range of known threats including exploits, malware and spyware, across all ports, regardless of common threat evasion tactics employed.
- Limit unauthorized transfer of files and sensitive data, and control non-work-related web surfing.
- Identify unknown malware, analyze for more than 100 malicious behaviors, automatically create and deliver a signature in the next available update.

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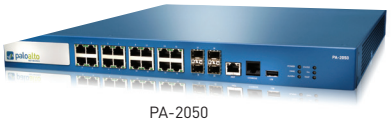
PA-2050


PA-2020

The Palo Alto Networks™ PA-2000 Series is comprised of two high performance platforms, the PA-2050 and the PA-2020, both of which are targeted at high speed Internet gateway deployments. The PA-2000 Series manages network traffic flows using dedicated processing and memory for networking, security, threat prevention and management.

The high speed backplane is divided into separate data and control planes, thereby ensuring that management access is always available, irrespective of the traffic load. The controlling element of the PA-2000 Series is PAN-OS™, a security-specific operating system that allows organizations to safely enable applications using App-ID, User-ID, Content-ID, GlobalProtect, and WildFire.

PERFORMANCE AND CAPACITIES[1]	PA-2050	PA-2020
Firewall throughput (App-ID enabled)	1 Gbps	500 Mbps
Threat prevention throughput	500 Mbps	200 Mbps
IPSec VPN throughput	300 Mbps	200 Mbps
New sessions per second	15,000	15,000
Max sessions	250,000	125,000
IPSec VPN tunnels/tunnel interfaces	2,000	1,000
GlobalProtect (SSL VPN) concurrent users	1,000	500
SSL decrypt sessions	1,000	1,000
SSL inbound certificates	25	25
Virtual routers	10	10
Virtual systems (base/max2)	1/6	1/6
Security zones	40	40
Max. number of policies	5,000	2,500

[1] Performance and capacities are measured under ideal testing conditions using PAN-OS 5.0.

[2] Adding virtual systems to the base quantity requires a separately purchased license.

For a complete description of the PA-2000 Series next-generation firewall feature set, please visit www.paloaltonetworks.com/literature.

HARDWARE SPECIFICATIONS

I/O

- PA-2050: (16) 10/100/1000, (4) SFP optical gigabit
- PA-2020: (12) 10/100/1000, (2) SFP optical gigabit

MANAGEMENT I/O

- (1) 10/100/1000 out-of-band management port, (1) RJ-45 console port

STORAGE CAPACITY

- 160GB HDD

POWER SUPPLY (AVG/MAX POWER CONSUMPTION)

- 250W (105W/120W)

MAX BTU/HR

- 409

INPUT VOLTAGE (INPUT FREQUENCY)

- 100-240VAC (50-60Hz)

MAX CURRENT CONSUMPTION

- 3A@100VAC

MEAN TIME BETWEEN FAILURE (MTBF)

- 7.3 years

MAX INRUSH CURRENT

- 70A@230VAC; 35A@115VAC

RACK MOUNTABLE (DIMENSIONS)

- 1U, 19" standard rack (1.75"H x 17"D x 17"W)

WEIGHT (STAND ALONE DEVICE/AS SHIPPED)

- 15lbs/20lbs

SAFETY

- UL, CUL, CB

EMI

- FCC Class A, CE Class A, VCCI Class A, TUV

CERTIFICATIONS

- FIPS 140 Level 2, Common Criteria EAL2, ICSA, UCAPL

ENVIRONMENT

- Operating temperature: 32 to 122 F, 0 to 50 C
- Non-operating temperature: -4 to 158 F, -20 to 70 C

NETWORKING

INTERFACE MODES

- L2, L3, Tap, Virtual wire (transparent mode)

ROUTING

- Modes: OSPF, RIP, BGP, Static
- Forwarding table size (entries per device/per VR): 5,000/2,500 (PA-2050), 2,500/2,500 (PA-2020)
- Policy-based forwarding
- Point-to-Point Protocol over Ethernet (PPPoE)
- Multicast: PIM-SM, PIM-SSM, IGMP v1, v2, and v3

HIGH AVAILABILITY

- Modes: Active/Active, Active/Passive
- Failure detection: Path monitoring, Interface monitoring

ADDRESS ASSIGNMENT

- Address assignment for device: DHCP Client/PPPoE/Static
- Address assignment for users: DHCP Server/DHCP Relay/Static

IPV6

- L2, L3, tap, virtual wire (transparent mode)
- Features: App-ID, User-ID, Content-ID, WildFire and SSL decryption

VLANS

- 802.1q VLAN tags per device/per interface: 4,094/4,094
- Max interfaces: 2,048 (PA-2050), 1,024 (PA-2020)
- Aggregate interfaces (802.3ad)

NAT/PAT

- Max NAT rules: 1,000
- Max NAT rules (DIPP): 200
- Dynamic IP and port pool: 254
- Dynamic IP pool: 16,234
- NAT Modes: 1:1 NAT, n:n NAT, m:n NAT
- DIPP oversubscription (Unique destination IPs per source port and IP): 2
- NAT64

VIRTUAL WIRE

- Max virtual wires: 1,024 (PA-2050), 512 (PA-2020)
- Interface types mapped to virtual wires: physical and subinterfaces

L2 FORWARDING

- ARP table size/device: 2,500 (PA-2050), 1,000 (PA-2020)
- MAC table size/device: 2,500 (PA-2050), 1,000 (PA-2020)
- IPv6 neighbor table size: 1,000

SECURITY

FIREWALL

- Policy-based control over applications, users and content
- Fragmented packet protection
- Reconnaissance scan protection
- Denial of Service (DoS)/Distributed Denial of Services (DDoS) protection
- Decryption: SSL (inbound and outbound), SSH

WILDFIRE

- Identify and analyze targeted and unknown files for more than 100 malicious behaviors
- Generate and automatically deliver protection for newly discovered malware via signature updates
- Signature update delivery in less than 1 hour, integrated logging/reporting; access to WildFire API for programmatic submission of up to 100 samples per day and up to 1,000 report queries by file hash per day (Subscription Required)

FILE AND DATA FILTERING

- File transfer: Bi-directional control over more than 60 unique file types
- Data transfer: Bi-directional control over unauthorized transfer of CC# and SSN
- Drive-by download protection

USER INTEGRATION (USER-ID)

- Microsoft Active Directory, Novell eDirectory, Sun One and other LDAP-based directories
- Microsoft Windows Server 2003/2008/2008r2, Microsoft Exchange Server 2003/2007/2010
- Microsoft Terminal Services, Citrix XenApp
- XML API to facilitate integration with non-standard user repositories

IPSEC VPN (SITE-TO-SITE)

- Key Exchange: Manual key, IKE v1
- Encryption: 3DES, AES (128-bit, 192-bit, 256-bit)
- Authentication: MD5, SHA-1, SHA-256, SHA-384, SHA-512
- Dynamic VPN tunnel creation (GlobalProtect)

THREAT PREVENTION (SUBSCRIPTION REQUIRED)

- Application, operating system vulnerability exploit protection
- Stream-based protection against viruses (including those embedded in HTML, Javascript, PDF and compressed), spyware, worms

URL FILTERING (SUBSCRIPTION REQUIRED)

- Pre-defined and custom URL categories
- Device cache for most recently accessed URLs
- URL category as part of match criteria for security policies
- Browse time information

QUALITY OF SERVICE (QOS)

- Policy-based traffic shaping by application, user, source, destination, interface, IPSec VPN tunnel and more
- 8 traffic classes with guaranteed, maximum and priority bandwidth parameters
- Real-time bandwidth monitor
- Per policy diffserv marking
- Physical interfaces supported for QoS: 4

SSL VPN/REMOTE ACCESS (GLOBALPROTECT)

- GlobalProtect Gateway
- GlobalProtect Portal
- Transport: IPSec with SSL fall-back
- Authentication: LDAP, SecurID, or local DB
- Client OS: Mac OS X 10.6, 10.7 (32/64 bit), 10.8 (32/64 bit), Windows XP, Windows Vista (32/64 bit), Windows 7 (32/64 bit)
- Third party client support: Apple iOS, Android 4.0 and greater, VPNC IPSec for Linux

MANAGEMENT, REPORTING, VISIBILITY TOOLS

- Integrated web interface, CLI or central management (Panorama)
- Multi-language user interface
- Syslog, Netflow v9 and SNMP v2/v3
- XML-based REST API
- Graphical summary of applications, URL categories, threats and data (ACC)
- View, filter and export traffic, threat, WildFire, URL, and data filtering logs
- Fully customizable reporting

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