CHECK POINT
21800 APPLIANCE

CHECK POINT
21800 APPLIANCE

Datacenter-grade security appliances

Product Benefits

- Fits easily into complex networks
- Redundancy eliminates downtime
- Centralized control with LOM
- Ideal for low latency transactions
- Extensible Software Blade Architecture

Product Features

- 4100/4300[1] SecurityPower™ Units
- Optimized for low latency
- High port density
- High availability and serviceability
- Simple deployment and management

INSIGHTS

Today the Internet gateway is more than a firewall. It is a security device presented with an ever-increasing number of sophisticated threats. As a security gateway it must use multiple technologies to control network access, detect sophisticated attacks and provide additional security capabilities like data loss prevention and protection from web-based threats. The proliferation of mobile devices like smartphones and Tablets and new streaming, social networking and P2P applications requires a higher connection capacity and new application control technologies. Finally, the shift towards enterprise private and public cloud services, in all its variations, changes the company borders and requires enhanced capacity and additional security solutions.

SOLUTION

Leveraging its multi-core and acceleration technologies, with 4300 SecurityPower Units, the Check Point 21800 appliance supports lightning-fast firewall throughput of up to 110 Gbps[1] with sub 5μs latency. The 21800 is designed from the ground up for unmatched flexibility for even the most demanding enterprise and data center network environments.

The 21800 appliance has 3 expansion slots supporting a wide range of network options. The standard configuration includes one on-board 10/100/1000 RJ-45 Management port and a twelve 1 Gigabit Ethernet copper port card. In addition the 21800 appliance includes an on-board 10GbE Sync port (SR transceiver included). A maximally configured 21800 provides up to 37 Gigabit Ethernet copper ports or 36 fiber ports or thirteen 10 Gigabit Ethernet fiber ports.

The 21800 appliance chassis is highly serviceable. Access to all components is available from the front and the back of the unit when mounted in the rack. There is one slot for an optional Security Acceleration Module to boost performance of the appliance. In addition to hot-swappable redundant disk drives and power supply units, the 21800 appliance also supports Lights-Out-Management (LOM) for remote support and maintenance capabilities.

21800

1 Graphic LCD display
2 2 x 500 GB RAID1 HDD
3 USB port for ISO installation
4 Sync 10GBase-F SFP+ (with SR transceiver)
5 Management 10/100/1000Base-T RJ45
6 Lights-Out Management port
7 Console port
8 Three network card expansion slots

SECURITY ACCELERATION MODULE

The optional Check Point Security Acceleration Module (SAM-108) for the 21000 Appliances is ideal for latency-sensitive applications such as financial trading and VoIP communication. With sub 5 micro-seconds firewall latency, this purpose-built acceleration module boasts 108 SecurityCores™ accelerating traffic on all Acceleration-Ready interface ports with a single SAM-108. Performance for the 21800 appliance is boosted to 110 Gbps of firewall throughput, 50 Gbps of VPN throughput and 300,000 connections per second.

INCLUSIVE HIGH PERFORMANCE PACKAGE

Customers with high connection capacity requirements can purchase the affordable High Performance Package (HPP) with the Next Generation security package of their choice. This includes the appliance plus an Acceleration Ready 4x10Gb SFP+ interface card, transceivers and 64 GB of memory for high connection capacity. The SAM-108 High Performance Package also includes transceivers, 64 GB of memory in the appliance and 48 GB of memory in the Security Acceleration Module.

A RELIABLE SERVICEABLE PLATFORM

The Check Point 21800 appliance delivers business continuity and serviceability through features such as hot-swappable redundant power supplies, hot-swappable redundant hard disk drives (RAID), redundant fans and an advanced LOM card for out-of-band management. Combined together, these features ensure a greater degree of business continuity and serviceability when these appliances are deployed in the customer's networks.

REMOTE MANAGEMENT AND MONITORING

A Lights-Out-Management (LOM) card provides out-of-band remote management to remotely diagnose, start, restart and manage the appliance from a remote location. Administrators can also use the LOM web interface to remotely install an OS image from an ISO file.

ALL-INCLUSIVE SECURITY SOLUTIONS

The Check Point 21800 Appliances offer a complete and consolidated security solution available in five Next Generation Security Software Blade packages.

Next Generation Firewall (NGFW): identify and control applications by user and scan content to stop threats.
Next Generation Secure Web Gateway (SWG): enables secure use of Web 2.0 with real time protection.
Next Generation Data Protection (NGDP): preemptively protect sensitive information from unintentional loss and educate users on proper data handling policy in real-time.
Next Generation Threat Prevention (NGTP): prevent sophisticated cyber-threats with IPS, Application Control, Antivirus, Anti-Bot, URL Filtering and Email Security.
Next Generation Threat Extraction (NGTX): advanced next-gen zero-day threat prevention, NGTP with Threat Emulation and Threat Extraction.

PREVENT UNKNOWN THREATS

Check Point provides complete zero-day threat prevention and alerts when under attack. Threat Extraction delivers zero-malware documents in zero seconds. Threat Emulation inspects files for malicious content in a virtual sandbox. When Threat Emulation discovers new threats, a signature is sent to the Check Point ThreatCloud database which documents and shares information on the newly identified malware with other Check Point customers — providing immediate protection against zero-day threats.

INTEGRATED SECURITY MANAGEMENT

The appliance can either be managed locally with its available integrated security management or via central unified management. Using local management, the appliance can manage itself and one adjacent appliance for high availability purposes.

SPECIFICATIONS

PERFORMANCE

Production Performance[2]

- 4100/4300[1] SecurityPower
- 30.4–44.5[1] Gbps firewall throughput
- 6.9 Gbps firewall and IPS throughput

RFC 3511, 2544, 2647, 1242 PERFORMANCE (LAB)

- 78–110[1] Gbps of firewall throughput, 1518 byte UDP
- 23.5–50[1] Gbps of AES-128 VPN throughput
- 9.9 Gbps of IPS throughput, IPS Recommended profile, IMIX traffic blend
- 6–28 million concurrent connections, 64 byte response
- 198,000–300,000[1] connections per second, 64 byte response

EXPANSION OPTIONS

Base Configuration

- 1 on-board 10/100/1000Base-T RJ45
- 1 on-board 10GbE SFP+ (SR transceiver included)
- 12 x 10/100/1000BaseT RJ45 NIC (default)
- 16 GB memory
- Redundant dual hot-swappable power supplies
- Redundant dual hot-swappable 500GB hard drives
- LOM card
- Telescopic rails (26"–35")

Network Expansion Slot Options (3 slots)

- 12 x 10/100/1000Base-T RJ45 ports
- 12 x 1000Base-F SFP ports
- 4 x 10GBase-F SFP+ ports

Max Configuration

- Up to 37 x 10/100/1000Base-T RJ45 ports
- Up to 36 x 1000Base-F SFP ports
- Up to 13 x 10GBase-F SFP+ ports
- 32,64 GB RAM

Virtual Systems

- Max VSs: 150 (w/16GB), 250 (w/64GB)

[1] With Security Acceleration Module

[2] Check Point's SecurityPower is a new benchmark metric that allows customers to select security appliances by their capacity to handle real-world network traffic, multiple security functions and a typical security policy.

NETWORK

Network Connectivity

- IPv4 and IPv6
- 1024 interfaces or VLANs per system
- 4096 interfaces per system (in Virtual System mode)
- 802.3ad passive and active link aggregation
- Layer 2 (transparent) and Layer 3 (routing) mode

High Availability

- Active/Active - L3 mode
- Active/Passive - L3 mode
- Session synchronization for firewall and VPN
- Session failover for routing change
- Device failure detection
- Link failure detection
- ClusterXL or VRRP

PHYSICAL

Power Requirements

- AC Input Voltage: 100-240V
- Frequency: 47-63Hz
- Single Power Supply Rating: 1200W
- Power Consumption Maximum: 489W/784W[1]
- Maximum thermal output: 1669.4 BTU/2673.4 BTU[1]

Dimensions

- Enclosure: 2RU
- Standard (W x D x H): 17 x 28 x 3.5 in.
- Metric (W x D x H): 431 x 710 x 88 mm
- Weight: 26 kg (57.4 lbs.)

Operating Environmental Conditions

- Temperature: 32°to104°F / 0° to 40°C
- Humidity: 20%-90% (non-condensing)

Storage Conditions

- Temperature: –4° to 158°F / –20° to 70°C
- Humidity: 5% to 95% at 60°C (non-condensing)

Certifications

- Safety: UL/cULT
- Emissions: FCC, CE
- Environmental: RoHS

APPLIANCE PACKAGES

BASE CONFIGURATION[1,2]	
21800 Next-Gen Firewall (with FW, VPN, ADNC, IA, MOB-5, IPS and APCL) bundled with local management for up to 2 gateways.	CPAP-SG21800-NGFW
21800 Secure Web Gateway (with FW, VPN, ADNC, IA, APCL, AV and URLF) bundled with local management and SmartEvent for up to 2 gateways.	CPAP-SWG21800
21800 Next-Gen Data Protection (with FW, VPN, ADNC, IA, MOB-5, IPS, APCL, and DLP) bundled with local management for up to 2 gateways.	CPAP-SG21800-NGDP
21800 Next-Gen Threat Prevention (with FW, VPN, ADNC, IA, MOB-5, IPS, APCL, URLF, AV, ABOT and ASPM) bundled with local management for up to 2 gateways.	CPAP-SG21800-NGTP
21800 Next-Gen Threat Extraction (with FW, VPN, ADNC, IA, MOB-5, IPS, APCL, URLF, AV, ABOT, ASPM, TE and TEX) bundled with local management for up to 2 gateways.	CPAP-SG21800-NGTX
21800 Next-Gen Firewall with 20 Virtual Systems	CPAP-SG21800-NGFW-VS20
21800 Next-Gen Firewall Bundle, one primary and one HA, with 20 VS	CPAP-SG21800-NGFW-VS20-2
HIGH PERFORMANCE PACKAGES[1,2,3]	
21800 Next-Gen Firewall High Performance Package with 12x1GbE copper interface card, Acceleration Ready 4x10Gb SFP+ interface card, 4xSR transceivers and 64 GB of memory	CPAP-SG21800-NGFW-HPP
21800 Next-Gen Firewall High Performance Package with SAM-108 Security Acceleration Module, an Acceleration Ready 4x10Gb SFP+ interface card, 4xSR transceivers, 64 GB of memory in the appliance and 48 GB of memory in the Security Acceleration Module.	CPAP-SG21800-NGFW-HPPSAM-BUN
21800 Secure Web Gateway High Performance Package with 12x1GbE copper interface card, Acceleration Ready 4x10Gb SFP+ interface card, SR transceivers and 64 GB of memory	CPAP-SWG21800-HPP
21800 Next-Gen Data Protection High Performance Package with 12x1GbE copper interface card, Acceleration Ready 4x10Gb SFP+ interface card, 4xSR transceivers and 64 GB of memory	CPAP-SG21800-NGDP-HPP
21800 Next-Gen Threat Prevention High Performance Package with 12x1GbE copper interface card, Acceleration Ready 4x10Gb SFP+ interface card, 4xSR transceivers and 64 GB of memory	CPAP-SG21800-NGTP-HPP
21800 Next-Gen Threat Extraction High Performance Package with 12x1GbE copper interface card, Acceleration Ready 4x10Gb SFP+ interface card, 4xSR transceivers and 64 GB of memory	CPAP-SG21800-NGTX-HPP
21800 Next-Gen Firewall with 20 Virtual Systems and the High Performance Package	CPAP-SG21800-NGFW-VS20-HPP
21800 Next-Gen Firewall Bundle, one primary and one HA, with 20 Virtual Systems and the High Performance Package	CPAP-SG21800-NGFW-VS20-HPP-2

[1] SKUs for 2 and 3 years are available, see the online Product Catalog
[2] DC power SKUs are also available
[3] The SAM HPP bundle requires a minimum software version, see sk68701.

SOFTWARE BLADE PACKAGES

SOFTWARE BLADE PACKAGES[1]	
21800 Next-Gen Firewall Software Blade package for 1 year (IPS and APCL)	CPSB-NGFW-21800-1Y
21800 Secure Web Gateway Software Blade package for 1 year (APCL, AV and URLF)	CPSB-SWG-21800-1Y
21800 Next-Gen Data Protection Software Blade package for 1 year (IPS, APCL, and DLP)	CPSB-NGDP-21800-1Y
21800 Next-Gen Threat Prevention Software Blade package for 1 year (IPS, APCL, URLF, AV, ABOT and ASPM)	CPSB-NGTP-21800-1Y
21800 Next-Gen Threat Extraction Software Blade package for 1 year (IPS, APCL, URLF, AV, ABOT, ASPM, TE and TEX)	CPSB-NGTX-21800-1Y

SOFTWARE BLADES[1]

Check Point Mobile Access Blade for unlimited concurrent connections	CPSB-MOB-U
Data Loss Prevention Blade for 1 year (for 1,500 users and above, up to 250,000 mails per hour and max throughput of 2.5 Gbps)	CPSB-DLP-U-1Y
Check Point IPS blade for 1 year	CPSB-IPS-XL-1Y
Check Point Application Control blade for 1 year	CPSB-APCL-XL-1Y
Check Point URL Filtering blade for 1 year	CPSB-URLF-XL-1Y
Check Point Antivirus Blade for 1 year	CPSB-AV-XL-1Y
Check Point Anti-Spam & Email Security Blade for 1 year	CPSB-ASPM-XL-1Y
Check Point Anti-Bot blade for 1 year - for ultra-high-end appliances and pre-defined systems	CPSB-ABOT-XL-1Y

VIRTUAL SYSTEM PACKAGES

50 Virtual Systems package	CPSB-VS-50
50 Virtual Systems package for HA/VSLS	CPSB-VS-50-VSLS
25 Virtual Systems package	CPSB-VS-25
25 Virtual Systems package for HA/VSLS	CPSB-VS-25-VSLS
10 Virtual Systems package	CPSB-VS-10
10 Virtual Systems package for HA/VSLS	CPSB-VS-10-VSLS

[1] SKUs for 2 and 3 years are available, see the online Product Catalog

ACCESSORIES

SECURITY ACCELERATION MODULE [1]

Security Acceleration Module with 12 GB RAM	CPAC-SAM108-V2
Memory upgrade kit to 24GB RAM for SAM-108	CPAC-RAM24GB-SAM108
Memory upgrade kit to 48GB RAM for SAM-108	CPAC-RAM48GB-SAM108
Security Acceleration Module with 24 GB RAM	CPAC-SAM108-24GB
Security Acceleration Module with 48 GB RAM	CPAC-SAM108-48GB

[1] The SAM memory upgrade kits require a minimum software version, see sk91880.

INTERFACE CARDS AND TRANSCEIVERS

12 Port 10/100/1000 Base-T RJ45 interface card	CPAC-12-1C-21000
12 Port 1000Base-F SFP interface card; requires additional 1000Base SFP transceivers	CPAC-12-1F-21000
SFP transceiver module for 1G fiber ports - long range (1000Base-LX)	CPAC-TR-1LX
SFP transceiver module for 1G fiber ports - short range (1000Base-SX)	CPAC-TR-1SX
SFP transceiver to 1000 Base-T RJ45 (Copper)	CPAC-TR-1T
4 Port 10GBase-F SFP+ Acceleration Ready interface card	CPAC-ACCL-4-10F-21000
SFP+ transceiver module for 10G fiber ports - long range (10GBase-LR)	CPAC-TR-10LR
SFP+ transceiver module for 10G fiber ports - short range (10GBase-SR)	CPAC-TR-10SR

SPARES AND MISCELLANEOUS

32GB RAM memory upgrade for 21000 appliances excluding 21400	CPAC-RAM32GB-21000
64GB RAM memory upgrade for 21000 appliances excluding 21400	CPAC-RAM64GB-21000
Replacement parts kit (including 1 Hard Disk Drive, one Power Supply, one Fan) for 21000 appliances excluding 21400	CPAC-SPARES-21000
500 GB hard drive for 21000 Appliances	CPAC-HDD-500G-21000
Replacement AC power supply for 21000 appliances excluding 21400	CPAC-PSU-21000

CONTACT US

Worldwide Headquarters | 5 Ha'Solelim Street, Tel Aviv 67897, Israel | Tel: 972-3-753-4555 | Fax: 972-3-624-1100 | Email: info@checkpoint.com
U.S. Headquarters | 959 Skyway Road, Suite 300, San Carlos, CA 94070 | Tel: 800-429-4391; 650-628-2000 | Fax: 650-654-4233 | www.checkpoint.com