

# Unified Threat Management



Cyberoam Unified Threat Management appliances offer assured security, connectivity and productivity to organizations by allowing user identity-based policy controls.

Cyberoam's User Layer 8 Technology treats user-identity as the 8th Layer or the HUMAN layer in the protocol stack. It attaches user identity to security, taking organizations a step ahead of conventional solutions that bind security to IP-addresses. Layer 8 technology functions along with each of Cyberoam security features to allow creation of identitybased security policies.

Cyberoam's multi-core technology allows parallel processing of all its security features - ensuring security without compromising performance. Its future-ready Extensible Security Architecture (ESA) offers a security platform that can grow with the future security needs of an organization without degrading system performance. ESA supports feature enhancements that can be developed rapidly and deployed with minimum efforts.



### **User Identity-based Security Policy Controls**

Cyberoam's Layer 8 Technology treats "User Identity" as the 8th Layer in the protocol stack

Cyberoam UTM offers security across Layer 2-Layer 8 using Identity-based policies

Cyberoam assures Security, Connectivity, Productivity





Security Connectivity Productivity



CR Series: 15i, 25ia, 35ia, 50ia, 100ia, 200i, 300i, 500ia, 750ia, 1000ia, 1500ia

CR Wireless series: 15wi, 25wi, 35wi

# Feature Specifications

### Stateful Inspection Firewall

- Layer 8 (User Identity) Firewall Multiple Security Zones Access Control Criteria (ACC) User-Identity, Source & Destination Zone, MAC and IP address, Service
- UTM policies IPS, Web Filtering, Application Filtering, Antivirus, Anti-spam and Bandwidth Management
- Layer 7 (Application) Control & Visibility
   Access Scheduling
- Access Scheduling
   Policy based Source & Destination NAT
   H.323, SIP NAT Traversal

- 802.1q VLAN Support
   DoS & DDoS attack prevention
- MAC & IP-MAC filtering and Spoof prevention

## Gateway Anti-Virus & Anti-Spyware

- Virus, Worm, Trojan Detection & Removal
   Spyware, Malware, Phishing protection
- Automatic virus signature database update Scans HTTP, HTTPS, FTP, SMTP, POP3, IMAP, IM, VPN Tunnels
- Customize individual user scanning Self Service Quarantine area<sup>1</sup>
- Scan and deliver by file size
   Block by file types
   Add disclaimer/signature

# Gateway Anti-Spam

- Real-time Blacklist (RBL), MIME header check Filter based on message header, size, sender, recipient
- Subject line tagging
   Redirect spam mails to dedicated email address

- Image-spam filtering using RPD Technology
   Zero hour Virus Outbreak Protection
- Self Service Quarantine area¹
   IP address Black list/White list
- Spam Notification through Digest<sup>2</sup>
   IP Reputation-based Spam filtering

## Intrusion Prevention System

- Signatures: Default (3000+), Custom
   IPS Policies: Multiple, Custom

- User-based policy creation
   Automatic real-time updates from CRProtect networks
- Protocol Anomaly Detection
   DDoS attack prevention

- Web Filtering
  Inbuilt Web Category Database
  URL, keyword, File type block
  Web Categories: Default(82+), Custom
  Protocols supported: HTTP, HTTPS
  Block Malware, Phishing, Pharming URLs
  Category-based Bandwidth allocation and prioritization
- Block Java Applets, Cookies, Active X
   CIPA Compliant
- Data leakage control via HTTP, HTTPS upload
   Schedule-based access control
- Custom block messages per category

## Application Filtering

- Inbuilt Application Category Database
  Application Categories e.g. Gaming, IM, P2P, Proxy: 11+
- Schedule-based access control - Block
- P2P applications e.g. Skype
  Anonymous proxies e.g. Ultra surf
  - "Phone home" activities
- Keylogger

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- Layer 7 (Applications) & Layer 8 (User - Identity) Visibility

### Web Application Firewall##

- Positive Protection model
  Unique "Intuitive Website Flow Detector" technology
- Unique Intuitive website Flow Detector Technology
  Protection against SQL Injections, Cross-site Scripting (XSS),
  Session Hijacking, URL Tampering, Cookie Poisoning
   Support for HTTP 0.9/1.0/1.1
  Extensive Logging & Reporting
   Back-end servers supported: 5 to 200 servers

### Virtual Private Network

- IPSec, L2TP, PPTP Encryption 3DES, DES, AES, Twofish, Blowfish, Serpent
- Hash Algorithms MD5, SHA-1 Authentication: Preshared key, Digital certificates
- PSec NAT Traversal

  Dead peer detection and PFS support
- Diffie Hellman Groups 1,2,5,14,15,16
  External Certificate Authority support
- Export Road Warrior connection configuration

  Domain name support for tunnel end points
- VPN connection redundancy
   Overlapping Network support
   Hub & Spoke VPN support

SSL VPN<sup>3</sup>
- TCP & UDP Tunneling
Authentication - Active Directory, LDAP, RADIUS, Cyberoam
- Multi-layered Client Authentication - Certificate,
Username/Password

- User & Group policy enforcement

   Network access Split and Full tunneling
   Browser-based (Portal) Access Clientless access
   Lightweight SSL VPN Tunneling Client
   Granular access control to all the Enterprise Network resources
   Administrative controls Session timeout, Dead Peer Detection,
- Portal customization
   TCP-based Application Access HTTP, HTTPS, RDP, TELNET, SSH

- Instant Messaging (IM) Management
   Yahoo and Windows Live Messenger
   Virus Scanning for IM traffic
   Allow/Block: Login, File Transfer, Webcam, One-to-one/group Chat
   Content-based blocking
   IM activities for
- IM activities Log
- Archive files transferred Custom Alerts

### Wireless WAN

- USB port 3G and WiMax Support\*
   Primary WAN link
- WAN Backup link
- Bandwidth Management Application and User Identity based Bandwidth Management
   Category-based Bandwidth restriction
   Guaranteed & Burstable bandwidth policy

- Application & User Identity based Traffic Discovery<sup>4</sup>
   Multi WAN bandwidth reporting
- User Identity & Group Based Controls Access time restriction
- Time and Data Quota restriction, P2P and IM Controls Schedule based Committed and Burstable Bandwidth

- Networking

   Automated Failover/Failback, Multi-WAN / 3G Modem failover
   WRR based Load balancing
   Policy routing based on Application and User
   IP Address Assignment Static, PPPOE, L2TP, PPTP & DDNS
   Client, Proxy ARP, DHCP server, DHCP relay
   Supports HTTP Proxy, Parent Proxy with FQDN
   Dynamic Routing: RIP v1& v2, OSPF, BGP, Multicast Forwarding

### High Availability5

- Active-Active Active-Passive with state synchronization
- Stateful Failover Alerts on Appliance Status change

## Administration & System Management

- Web-based configuration wizard Role-based Access control Firmware Upgrades via Web UI
- Web 2.0 compliant UI (HTTPS)
   UI Color Styler
- Command line interface (Serial, SSH, Telnet) -SNMP (v1, v2c, v3)
- Multi-lingual support: Chinese, Hindi, French, Korean Cyberoam Central Console (Optional) NTP Support

# **User Authentication**

- Internal database

- Internal databases
   Active Directory Integration
   Automatic Windows Single Sign On
   External LDAP/RADIUS database Integration
   Thin Client support Microsoft Windows Server 2003 Terminal
- Services and Citrix XenApp
- RSA SecurID support
- External Authentication Users and Administrators
   User/MAC Binding Multiple Authentication servers

- Logging / Monitoring
   Graphical real-time and historical Monitoring
   Email notification of reports, viruses and attacks
- Syslog support
   Log Viewer IPS, Web filter, Anti-Virus, Anti-Spam, Authentication, System and Admin Events

# On-ApplianceCyberoam i-View Reporting<sup>6</sup>

- Integrated Web-based Reporting tool -Cyberoam-iView
- 1000 + drilldown reports
- 45+ Compliance reports Historical and Real-time reports
- Multiple Dashboards
- Multiple Dashboards
   Username, Host, Email ID specific Monitoring Dashboard
   Reports Security, Spam, Virus, Traffic, Policy violations, VPN, Search Engine keywords
   Multi-format reports tabular, graphical
   Exportable formats PDF, Excel
   Automated Report Scheduling

- IPSec VPN Client7
- Inter-operability with major IPSec VPN Gateways
   Supported platforms: Windows 2000, WinXP 32/64-bit, Windows 2003 32-bit, Windows 2008 32/64-bit, Windows Vista 32/64-bit, Windows 7 RC1 32/64-bit
- Import Connection configuration

# Compliance

- CE FCC

# Certification

- ICSA Firewall Corporate Checkmark UTM Level 5 Certification
- VPNC Basic and AES interoperability
   IPv6 Ready Gold Logo



							Tech Sh	eet			
Specifications	15i	15wi	25ia	25wi	35ia	35wi	50ia	100ia			
Interfaces											
10/100 Ethernet Ports	3	3	-	-	-	_	_	-			
Copper GbE Ports	-	-	4	4	4	4	6	6			
Configurable Internal/DMZ/WAN Ports	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
Console Ports (RJ45/DB9)	1	1	1	1	1	1	1	1			
SFP (Mini GBIC) Ports	-	-	-	-	-	-	-	-			
USB Ports	1	1	1	1	1	1	2	2			
Hardware Bypass Segments	-	-	-	-	-	-	1#	1*			
System Performance*											
Firewall Throughput (UDP) (Mbps)	150	150	450	450	750	750	1,000	1,250			
Firewall Throughput (TCP) (Mbps)	90	90	225	225	500	500	750	1.000			
New sessions/second	2.000	2,000	3,500	3,500	5,500	5,500	8,000	10,000			
Concurrent sessions	30,000	30,000	130,000	130,000	175,000	175,000	220.000	400,000			
3DES/AES Throughput (Mbps)	15/25	15/25	30/75	30/75	50/80	50/80	60/90	80/100			
WAF Protected Throughput (Mbps)	-	-	-	-	-	-	35	60			
Antivirus Throughput (Mbps)	20	20	65	65	125	125	150	200			
IPS Throughput (Mbps)	40	40	70	70	150	150	200	300			
UTM Throughput (Mbps)	15	15	50	50	90	90	130	160			
Authenticated Users/Nodes	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited			
Built-in Wireless LAN (Only for Wi s	eries)										
Wireless Standards		— IFFF 802 11 a	/h/a/n (WEP WPA	WPA2, 802.11i , TI	KIP AES PSK) —						
Antenna		TEEE OOE. TT Q			rai, reo, rora						
Access Points		— Detachable 2x3 MIMO — — — — — — — — — — — — — — — — — — —									
Transmit Power (EIRP)		— Up to 8 bssid — — — — — — — — — — — — — — — — — — —									
Receiver Sensitivity	——————————————————————————————————————										
,	-65dBm at 300Mbps, -70dBm at 54Mbps, -86dBm at 11Mbps ————————————————————————————————————										
Frequency Range				12GHz ~ 2.483GH		Ζ,					
Number of Selectable Channels				31) / Japan (TELEC							
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Data Rate	—— 802.11a/g: 6,	9, 12, 18, 24, 36,	48, 54 Mbps, 802.	11b: 1, 2, 5,5, 11 N	/lbps, 802.11n: up	to 300 Mbps —	·				
Dimensions											
H x W x D (inches)	1.7 x 6 x 9.1	1.7 x 6 x 9.1	1.7 x 6 x 9.1	1.7 x 6 x 9.1	1.7 x 6 x 9.1	1.7 x 6 x 9.1	1.7 x 16.8 x 10.3	1.7 x 16.8 x 10.3			
H x W x D (cms)		4.4 x 15.3 x 23.2					4.3 x 42.7 x 26.2	4.3 x 42.7 x 26.2			
Appliance Weight		1.5 kg, 3.307 lbs						5.3 kg, 11.68 lbs			
Power	<u> </u>		<u> </u>	<u> </u>	<u> </u>						
Input Voltage	100 040 \/AC	100 040 1/40	100-240 VAC	100 040 \/AC	100-240 VAC	100 040 \/AC	100-240 VAC	100-240 VAC			
Consumption	100-240 VAC 13.2 W	100-240 VAC 13.2 W	33.5 W	100-240 VAC 33.5 W	47.8 W	100-240 VAC 47.8 W	90 W	90 W			
Total Heat Dissipation (BTU)	45	45	114	114	163	163	200				
Redundant Power Supply	40	40	114	114	100	100	200	200			
Зарру	-	-	-	-	-	-	-	-			
Specifications	200i 30	00i 50	0ia/1F/10F	500ia-RP	750ia/1F/10	OF 1000	ia/10F	1500ia/10F			

Specifications	200i	300i	500ia/1F/10F	500ia-RP	750ia/1F/10F	1000ia/10F	1500ia/10F
Interfaces							
Copper GbE Ports	6	6	10/6/6	10	14/6/6	12 / 4	22 / 14
1GbE SFPMini Ports	-	-	- / 4 / -	-	- / 4 / -	4 / 4	4 / 4
10GbE SFPMini Ports	-	-	-/-/2	-	-/-/2	-/2	-/2
Configurable Internal/DMZ/WAN Ports	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Console Ports (Rj45)	1	1	1	1	1	1	1
USB Ports	2	2	2	2	2	2	2
Hardware Bypass Segments	1#	1#	2*	2#	2#	2*	2*
System Performance*							
Firewall Throughput (UDP) (Mbps)	2,200	2,600	5,000	5,000	9,000	10,000	12,000
Firewall Throughput (TCP) (Mbps)	1,500	1,800	3,000	3,000	6,500	8,000	10,000
New sessions/second	12,000	15,000	25,000	25,000	80,000	85,000	100,000
Concurrent sessions	450,000	500,000	700,000	700,000	1,000,000	1,500,000	2,000,000
3DES/AES Throughput (Mbps)	150/180	180/200	325/400	325/400	500/750	900/1,200	1,200/1,500
WAF Protected Throughput (Mbps)	100	150	300	300	350	425	500
Antivirus Throughput (Mbps)	280	450	750	750	2,000	2,250	2,750
IPS Throughput (Mbps)	750	850	1,000	1,000	1,600	2,500	3,500
UTM Throughput (Mbps)	250	350	550	550	1,350	1,450	1,800
Authenticated Users/Nodes	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Dimensions							
H x W x D (inches)	- 1.7 x 17	.3 x 14.6 —	1.72 x 17.25 x 11.50	— 1.72 x 17.4	4 x 15.98 —	1.77 x 17.25 x 18.30	3.54 x 17.5 x 23.2
HxWxD (cms)	4.3 x 43	.9 x 37.1 —	4.4 x 43.8 x 29.21	— 4.4 x 44.3	x 40.6 —	4.5 x 43.8 x 46.5	9 x 44.5 x 59
Appliance Weight	— 6.5 kg,	14.33 lbs—	5.54 kg, 12.21 lbs	— 6.04 kg, 13	3.31lbs —	13.5 kg, 29.76 lbs	18.5 kg, 40.78 lbs
Power							
Input Voltage	<del></del> 100-2	40 VAC	100-240 VAC	100-240 VAC	100-240 VAC	90-260 VAC	90-260 VAC
Consumption	62.7 W	72.1W	128 W	185 W	185 W	129 W	258 W
Total Heat Dissipation (BTU)		24 ———	375	475	475	626	881
Redundant Power Supply		-	-/Yes/Yes	Yes	Yes	Yes	Yes

**Environmental Conditions:** Operating Temperature 0 to 40 °C, Storage Temperature - 25 to 75 °C, Relative Humidity (Non condensing) 10 to 90%

Actual performance may vary depending on the real network traffic environments.

**Toll Free Numbers** 

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**APAC/MEA**: +1-877-777-0368 | **Europe**: +44-808-120-3958



<sup>&</sup>quot;If Enabled, will bypass traffic only in case of Power failure.

\*Antivirus, IPS and UTM performance is measured based on HTTP traffic as per RFC 3511 guidelines.