

Product Overview



SifoWorks™ is a new-generation multi-function, line-speed-capable firewall security gateway system that is designed using the ASIC chip from O₂Micro. Compared to a traditional firewall, chip-based firewalls show greater performance and stability while lowering latency and power consumption.

Aside from the standard firewall functions, SifoWorks is also equipped with several industry-leading security features such as; attack prevention from internal and external networks, precise flow control to suppress network storms, P2P download and IM messaging limit control, multi-link load balancing,

server load balancing; and comprehensive reporting capabilities to help manage the network.




SifoWorks also provides IPsec VPN that provides secured connections (with link redundancy) to allow secure communication within branch networks. VPN tunnels are created independently to ensure the firewall's performance is not compromised.

SifoWorks' user-friendly and multi-language GUI management interface allows IT administrators to ward off complicated security threats with ease. Users can also centralize the management of more than 100 SifoWorks devices using the SifoView software.

Product Features

- ASIC-based Firewall with the fastest speed in the industry.
- Prevents attacks such as DoS, DDoS, ARP etc..
- Low latency inspection (<10µs) with the capability of forwarding packets without dropping.
- Fine granularity and high performance flow control (for single IP, P2P etc.).
- Independent VPN tunnel, encrypting VPN data without affecting firewall performance.
- VPN dual gateway and dual tunnel redundancy backup.
- Rich application layer filtering capability (web sites, mail, content etc.).
- Multi-link load balancing and server load balancing.
- Powerful local reporting system, monitoring of individual host traffic.
- Centralized management of SifoWorks devices possible using SifoView.
- The new generation of firewall that is stable and easy to use.

SifoWorks D-Series Models

	D100	D200	D300
			
Firewall Performance	200 Mbps	450 Mbps	600 Mbps
VPN Performance	150 Mbps	200 Mbps	200 Mbps
No. of Concurrent Sessions	1,200,000	1,200,000	1,200,000
New Sessions Per Second	6,000	6,000	6,000
No. of Security Policies	4,000	8,000	8,000
No. of Interfaces	8×FE, 2×MGT	8×FE, 2×MGT	8×FE, 2×MGT
Max. no. of Customized Security Zones	8 Security Zones	8 Security Zones	8 Security Zones
Packet Latency	5µs - 13µs	5µs - 13µs	5µs - 13µs
User Scale	Small Enterprises	Small Medium Enterprises	Small Medium Enterprises
No. of Concurrent VPN Tunnels	512	1,000	1,000
Certifications	Please visit http://www.o2security.com/product/certifications/ for the complete list of certifications and awards.		

Features

Mode of Operation	
Layer 2	Transparent
Layer 3	Route, NAT
Mix Mode	Yes
NAT (Network Address Translation)	Static, Dynamic NAT
PAT (Port Address Translation)	Yes
Application Proxy	Kernel-based Content Filtering
802.1Q VLAN	128
VLAN Routing	Yes
No. of users per interface	Unlimited
DHCP	Server, relay, DHCP client methods
Dynamic DNS (DDNS)	Yes
Load Balancing	Link, Server
Firewall	
IP-MAC Binding	Yes
Predefined Service and Network Objects	Yes
Local Access Control	Rule-based
User Access Authority	Yes
QoS	
Maximum Bandwidth	Yes
Guaranteed Bandwidth	Yes
Traffic Shaping	Yes
DiffServ	Yes
QoS Granularity	1Kbps
No. of Interface Array	4 per QoS Zone
No. of QoS Zone	3
Flow Control	
Flow Control Target	Single IP, IP Range, IP Subnet
Flow Control Mode	Share, Independent
Control Granularity	100Kbps
Control Policies	Block, Monitor, Maximum upload and download bandwidth
Content Filter	
Protocol Anomaly Detection	Yes
Keyword Filtering	For connections using any protocols
HTTP Filtering	URL and White-list, Command, Keyword, Prohibit multi-thread downloading
HTTP Clearance	Active X, Java Script, Java Applet, Cookie
Email	SMTP server, Recipient and Sender White-list, Email subject, Email keyword, Email attachment file name, Email size, Maximum number of recipient
FTP	File name, Data connection keyword, Command filtering, Prohibit multi-thread downloading
P2P Application Control	Bit Torrent / E-donkey / MUTE
IM Application Control	MSN / QQ / AIM / Yahoo Messenger
Dynamic Protocol Detection	RTSP / H.323 / FTP / PPTP
Intelligent Protocol Recognition	VoIP: H323 / RTSP / SIP FTP / HTTP / IMAP / POP3 / SMTP / SSH / VNC / TFTP / Telnet
IDP	
Operation Mode	Sniffer, Online
IDP Database	7,000 Rules; 50 groups
Self-defined IDP Rules	Yes
IDP Database	User-upgradeable
Pre-processors	IP Reassembly, TCP Reassembly, Portscan
DoS / DDoS Protection	
Operation Mode	Monitor, Defense
Categorization Method	Source IP, Destination IP
Protocols included in Statistics	TCP, UDP, ICMP, other IP protocols
Statistics	New connections, total connections, message rate
SYN Proxy	Supports TCP traffic verification
Attack Detection and Protection	Tear Drop, Smurf, LAND Attack, ARP Spoof etc.
VPN	
Encryption Algorithm	DES / 3DES / AES
Authentication Algorithms	MD5 / SHA-1
Perfect Forward Secrecy	D-H Group 1,2,5

IPsec Protocol	ESP / AH / ESP+AH
Manual Key, IKE	Yes
Authentication Methods	Pre-shared key, Digital certificates
L2TP over IPsec	Yes
IPsec NAT Traversal	Yes
Hub-and-Spoken VPN	Yes
Connection Lifetime	Throughput or time
VPN Link Backup	Yes
IKE Negotiation Mode	Main mode, Aggressive mode
IKE ID Type	IP, Domain name, Email address, DN
Dynamic VPN	DDNS, dual dynamic
Hardware Acceleration	Programmable ASIC or Pass Through mode
Administration	
Local Administrator Database	Yes
External Administrator Database	RADIUS / LDAP / AD
Restrict Manageable Networks	Yes
Multiple administrator authority levels	Root user, read/write administrator, log administrator, read-only administrator
Software Upgrade	Via WebUI
User Authentication	
Authenticated Users	Up to 500 users
Local Authentication Server	Yes
Third-party Authentication Servers	RADIUS / LDAP / AD
Web-based Authentication	Yes
Lock Users	Yes
Authentication Methods	Pre-authentication and real-time authentication
System Management	
SSL-based WebUI	Yes
SSH-based Command Line	Yes
Simple Configuration Wizard	Yes
Standard and Customized MIB	Yes
SNMP	Supports versions v1, v2c, v3
Centralized Management	SifoView™
Log and Monitor	
Internal Log Database	Yes
Syslog	Yes
Remote Syslog Server	Up to 4 servers
Local Status Display	LED
Print Log to Terminal	Yes
Alert Method	Email Alert
Routing	
Route Redundancy	Yes
Reverse Routing	Yes
Route Detection	Yes
Route Preservation	Yes
High Availability (HA)	
Active/Passive	Yes
Active/Active	No
Swap Condition	Device failure, Interface failure, Link failure
Configuration File Synchronization	Yes
Configuration Command Synchronization	Yes
Time to Execute Swap Operation	3 seconds
PPPoE	
Manual / Scheduled Dial-up	Yes
Link Backup	Yes
Load Balancing	Yes
Security Standard Certification	
ICSA Firewall, ICSA IPsec GB/T 18019, GB/T 18020	Yes
Environment	
Operational Temperature	0°C – 40°C
Non-operational Temperature	-10°C – 70°C
Humidity	10% – 90%
Product Dimensions and Power Supply	
Dimension (Length × Breadth × Height)	428 × 358 × 47 mm
Weight	5 kg
Power Supply	90 V – 260 V; 50 Hz – 60 Hz
MTBF	100,000 Hours



www.o2security.com

U.S.A +1-408-987-5920 ext.8156 ; sales_us@o2security.com
China +86-800-800-0202 / +886-400-880-0202
Taiwan +886-2-2545-9095

Singapore +65-6890-5710 ; sales_ASEAN@o2security.com
Malaysia +60-3-2168-4494

Copyright © 2009 O2Security Ltd. All rights reserved. O2Security Ltd. is an O2Micro International Ltd. company.

'O2Security', 'O2Security', 'Breathing Life into Security', are trademarks, and 'SifoWorks' is a registered trademark of O2Micro International Ltd. OD1300DSE02-2.2