

TOTAL SECURITY SOLUTION FOR ENTERPRISE NETWORK



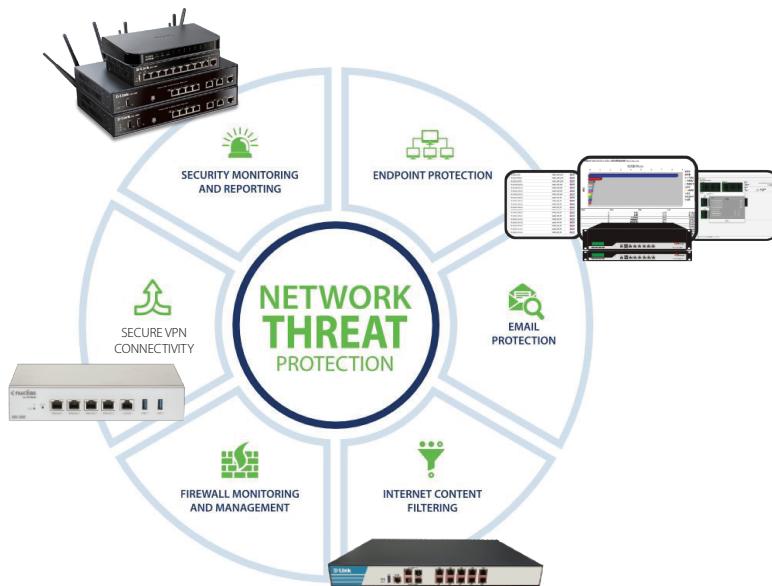
Secure your Business

Security

In today's inter-connected, web-based business environment, a company's network security is key to their stability, productivity and success.

Increasingly businesses with mobile or remote workers, or that who employ social media as a tool have a greater likelihood of experiencing crippling data network security breaches. D-Link's Network Security Solutions will help you maintain a healthy network free from virus attacks, unauthorized intrusion and harmful content.

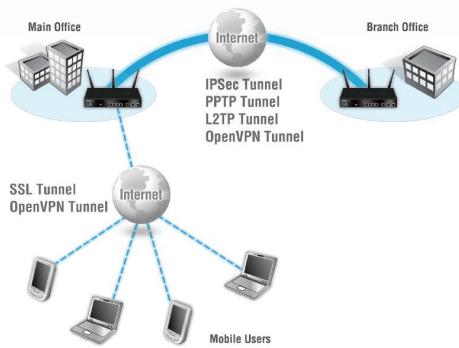
With a full array of components, including Unified Threat Management appliances, firewalls and network switches, D-Link security solutions work together to prevent network disruption from internal and external threats and are easy to install, manage and update



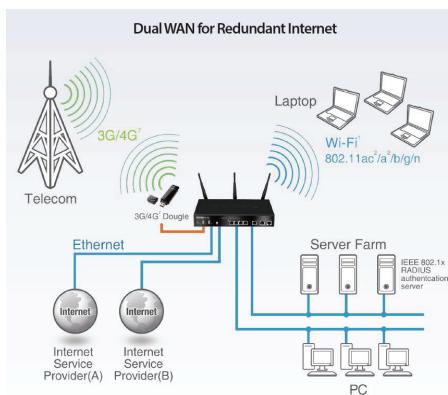
D-Link 360 Degree Network Security

- Flexible Deployment Security
- Secure network with VPN
- Multi-WAN failover & Load balancing
- Complete Security for SMB network
- Deep packet inspection
- Application Control
- Web Content Filtering
- Antivirus

Secure VPN Network Implementation



Dual WAN for Redundant Internet



Application Control & Web Filtering



Available Solution

External Threat Protection

- DSR Unified Service Router
- DFL Firewall
- DBG Cloud Managed VPN Business Gateway

Internal Threat Protection

- Instant Check & Instant Balance By L7 Network

Unified Service Routers

DSR Series

Every day, businesses face potential security breaches from every direction to their network: virus attacks, file sharing, messaging abuse, spyware and many others. Remote workers can unintentionally provide hostile threats with back-door access to your business. With such a diversity of threat, gone are the days when a simple, protective firewall was enough. And managing a host of different remedies is inefficient and difficult. D-Link's Unified Services Routers offer secure, high-performance networking solutions to address the growing data-security needs of businesses. These routers are packed with advanced security and management features that are easily integrated into your existing infrastructure and which provide remote workers with secure access through the powerful VPN engine. D-Link's Unified Services Routers are, essentially, all-in-one gateway devices providing outstanding performance and rich functionalities, including IEEE 802.11ac, secure wireless access, 3G/4G WAN redundancy, IPv6 and comprehensive VPN features. The DSR Series provide a signature package to enhance the security of your network by identifying intrusion patterns and blocking external threats.



Series includes the below models

DSR-250 V2

- 10/100/1000BASE-T (WAN) port x 2 (1 Combo WAN/LAN)
- 10/100/1000BASE-T (LAN) ports x 3
- LAN
- USB 3.0 port x 1 for USB storage or 3G/4G dongle

DSR-500

- 10/100/1000BASE-T (WAN) port x 2
- 10/100/1000BASE-T (LAN) ports x 4
- USB 2.0 port x 1 for USB storage or 3G/4G dongle

DSR-500AC

- 10/100/1000BASE-T (WAN) port x 2
- 10/100/1000BASE-T (LAN) ports x 4
- IEEE 802.11b/g/n/ac wireless LAN
- USB 2.0 port x 1 for USB storage or 3G/4G dongle
- 2dBi antennas x 2

DSR-1000

- 10/100/1000BASE-T (WAN) port x 2
- 10/100/1000BASE-T (LAN) ports x 4
- USB 2.0 port x 2 for USB storage or 3G/4G dongle
- IEEE 802.11b/g/n/ac wireless LAN
- USB 2.0 port x 2 for USB storage or 3G/4G dongle
- 2dBi antennas x 3

DSR-1000AC

- 10/100/1000BASE-T (WAN) port x 2
- 10/100/1000BASE-T (LAN) ports x 4
- IEEE 802.11b/g/n/ac wireless LAN
- USB 2.0 port x 2 for USB storage or 3G/4G dongle
- 2dBi antennas x 3

Key Series Features

- Static/dynamic IP WAN type
- Point-to-Point over Ethernet (PPoE)
- SSL/IPSec/PPTP/L2TP VPN/ OpenVPN
- VPN hub and spoke
- IPSec/PPTP/L2TP VPN pass-through
- 3G/4G WAN redundancy via optional 3G USB modem
- Network Address Translation (NAT) transparent mode
- WAN traffic failover
- Outbound load balancing
- Remote management (Web, SNMP, SSH, Telnet)
- Internet Group Management Protocol (IGMP) proxy/snooping
- Stateful Packet Inspection (SPI)
- L2 to L7 access control
- IP/MAC binding
- Virtual LAN (VLAN)
- Intrusion Prevention System (IPS)
- Wireless Security (WEP, WPA, WPA2, WPS)
- Multiple SSIDs
- SSID-to-VLAN mapping
- IPv6





Model		DSR-250 V2	DSR-500	DSR-500AC	DSR-1000	DSR-1000AC
Interfaces	Gigabit Ports (WAN)	1	2	2	2	2
	Gigabit Ports (LAN)	3+1 (LAN/WAN)	4	4	4	4
	USB	1 x USB 3.0	1 x USB 2.0	1 x USB 2.0	2 x USB 2.0	2 x USB 2.0
	Console	1 x RJ45				
Performance	Firewall Throughput	900 Mbps	950 Mbps	950 Mbps	950 Mbps	950 Mbps
	VPN Throughput	200 Mbps	200 Mbps	200 Mbps	250 Mbps	250 Mbps
	Concurrent Sessions	50,000	50,000	50,000	60,000	100,000
	New Sessions (Per Second)	2,000	500	500	1,000	1000
	Firewall Policies	300	400	400	600	600
Internet Connection Type		DHCP, Static IP, PPPoE, L2TP, PPTP				
Firewall System	Static Route	•				
	Dynamic Route		RIPv1, RIPv2, OSPF	RIPv1, RIPv2, OSPF	RIPv1, RIPv2, OSPF	RIPv1, RIPv2, OSPF
	Dynamic DNS	•				
	Inter-VLAN Route	•				
	NAT, PAT	•				
Networking	Web Content Filtering	Static URL, Keywords				
	Intrusion Prevention System (IPS)	Signature Package Included in Firmware				
	DHCP Server/Client	•				
	DHCP Relay	•				
	IEEE802.1q VLAN	•				
	VLAN (Port-Based)	•				
	IP Multicast	IGMP Proxy				
	IPv6	•				
	Route Failover		•	•	•	•
	Outbound Load Balancing		•	•	•	•
Wireless*	3G Redundancy	•				
	Multiple Service Set Identifier (SSID)	•		•		•
	Service Set Identifier (SSID) to VLAN Mapping	•		•		•
	Standards		802.11a/b/g/n/ac			802.11a/b/g/n/ac
	Wireless Security		WEP/WPS/WPA-PSK/WPA-EAP/ WPA2-PSK/WPA2-EAP			WEP/WPS/WPA-PSK/WPA-EAP/ WPA2-PSK/WPA2-EAP
VPN	VPN Tunnels	75	85	85	135	135
	IPSec Tunnels	50	35	35	70	70
	SSL VPN Tunnels	20	10	10	20	20
	PPTP/L2TP Tunnels	30	25	25	25	25
	GRE	20	15	15	20	20
	Encryption Methods	DES, 3DES, AES, Twofish, Blowfish, CAST-128, NULL				
	SSL Encryption Methods	RC4-128, 3DES, AES				
	IPSec/PPTP/L2TP Server	•				
	IPSec NAT Traversal	•				
	Dead Peer Detection	•				
Bandwidth Management	IP Encapsulating Security Payload (ESP)	•				
	IP Authentication Header (AH)	•				
	VPN Tunnel Keep Alive	•				
System Management	Hub and Spoke	•				
	Maximum Bandwidth Control	•				
	Priority Bandwidth Control	Port-Based QoS, 3 Classes				
Physical and Environmental	Web-Based User Interface	HTTP, HTTPS				
	Command Line	•				
	SNMP	v1 / v2c / v3				
	Power Supply	External	Internal	Internal	Internal	Internal
	Maximum Power Consumption	12.6 W	15.6 W	16.8 W	17.2 W	19.3 W
	Dimensions (L x W x H)	190 x 120 x 38 mm	180 x 280 x 44 mm	180 x 280 x 44 mm	180 x 280 x 44 mm	180 x 280 x 44 mm
	Operating Temperature	0°C to 40°C				
	Operating Humidity	5% to 95% RH Non-Condensing				

*Applicable to Wireless Model only.

DFL-870M

UTM Firewall

The D-Link DFL-870M UTM Firewall is a next generation Unified Threat Management (UTM) firewall which provides a powerful security solution to protect business networks from a wide range of threats. The DFL-870M offers a comprehensive defense against virus attacks, unauthorized intrusions, and flooding of harmful traffic, for successfully managing, monitoring, and maintaining a healthy network.

The DFL-870M provides a complete set of advanced security features to secure, manage, and monitor your network. These features include remote management, bandwidth control policies, URL blacklists and whitelists, access policies, and SNMP support. The DFL-870M furthermore supports email alerts, system logging, consistency checking, and real-time statistics gathering that keeps you up-to-date on the status of the network. Additionally, multiple WAN ports support traffic load balancing and failover, thus guaranteeing Internet availability and bandwidth. The D-Link DFL-870M integrates an intrusion detection and prevention system, gateway antivirus, content filtering, and application control for superior Layer 7 content inspection. An acceleration engine increases throughput, while the real-time update service keeps the IDPS information, anti-virus signature, URL and application databases current. Combined, these enhancements help to protect office networks from application exploits, network worms, malicious code attacks, and provide everything a business needs to safely manage employee Internet access. D-Link offers optional, cost-efficient, per-device Firewall UTM Service subscriptions that ensure that each of the firewall's service databases remain up-to-date.

Key Series Features

INTEGRATED FIREWALL

- Multiple WAN ports for WAN failover and outbound load balancing
- Link aggregation on LAN ports
- IEEE 802.1Q VLAN
- Granular bandwidth management

UNIFIED THREAT MANAGEMENT (UTM)

- Intrusion Detection & Prevention System (IDPS)
- Anti-virus protection
- Web Content Filtering (WCF) in HTTP/HTTPS
- Application control
- Email security

VIRTUAL PRIVATE NETWORK (VPN)

- Supports IPSec, SSL, GRE protocols
- Redundant VPN gateway
- Hub-and-spoke VPN support

ADVANCED FUNCTIONS

- User authentication through:
- Captive portal
- User Identity Awareness
- Active/passive High Availability (HA)



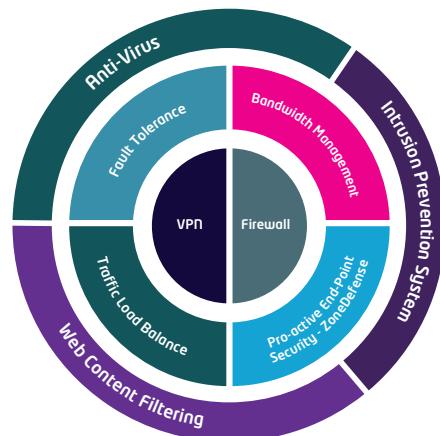
MODEL		DFL-870
Interfaces	Ports	10 x GE + 2 combo GE/SFP
	USB Port	1 x USB 2.0 Ports
	Console Port	1 RT45 Console Port
System Performance	Firewall Throughput	4 Gbps
	VPN Throughput	1 Gbps
	IPS Throughput	2 Gbps
	AV Throughput	2 Gbpsv
	Concurrent Sessions	1,000,000
	New Sessions per second	40,000
	Policies	38,400
Firewall System	Transparent Mode	✓
	NAT, PAT	✓
	OSPF Dynamic Routing Protocol	✓
	NAT Traversal	✓
	Time Scheduled Policies	✓
	Application Layer Gateway	✓
	ICSA Certified	✓
Networking	DHCP Server/Client	✓
	DHCP Relay	✓
	Policy-Based Routing	✓
	802.1q VLAN	✓
	IGMP v3	✓



MODEL		DFL-870M
Traffic Load Balancing	Outbound Traffic Load Balancing	✓
	Server Load Balancing	✓
Algorithms for Outbound Load Balancing	Round Robin	✓
	Destination-Based	✓
	Spillover	✓
	Policy-Based Traffic Shaping	✓
Bandwidth Management	Guaranteed Bandwidth	✓
	Maximum Bandwidth Protocol	✓
	Priority Bandwidth	✓
	Dynamic Bandwidth Balancing	✓
	Bandwidth Management in VPN Tunnel	✓
High Availability	WAN Failover	✓
	Traffic Re-Direct at Failover	✓
	Active-Passive Mode	✓
	Device Failure Detection	✓
	Link Failure Detection	✓
	FW/VPN Session SYN	✓
Intrusion Detection & Prevention System (IDP/IPS)	Automatic Pattern Update	✓
	DOS, DDOS Protection	✓
	Attack Alarm via Email	✓
	Advanced IDP/IPS	✓
	IP Blacklist	✓
Content Filtering	HTTP	✓
	HTTPS	✓
	Script Types	✓
	Safe Search Enforcement	✓
Antivirus	Real-time AV Scanning	✓
	Stream-based Scanning	✓
	Scans, VPN Tunnels	✓
	ZIP/GZIP Compression File	✓
	Signature Licenser	✓
	Automatic Pattern Update	✓
Email Security	IMAP, SMTP and POP3 Protocols Support	✓
	Sender/Recipient Email Address Black List/Exempt	✓
	List Filtering	✓
	MIME Header Check	✓
	File Type Whitelisting/Blacklisting	✓
	File Extension	✓
	Anti Spam	✓
IM/P2P Blocking	12/ 24/ 36 months availabe	✓
	Service Subscription	✓
	Application B/W Management, Policy Control & Prioritization	✓
	Supports 1000+ recognized application	✓
	Schedule & Rule-Based Control	✓

DFL-870M-AV-12-LIC	Antivirus signature—12 Months
DFL-870M-AV-24-LIC	Antivirus signature—24 Months
DFL-870M-AV-36-LIC	Antivirus signature—36 Months
DFL-870M-IPS-12-LIC	IPS Signature—12 Months
DFL-870M-IPS-24-LIC	IPS Signature—24 Months
DFL-870M-IPS-36-LIC	IPS Signature—36 Months
DFL-870M-AC-12-LIC	Application Control Signature—12 Months
DFL-870M-AC-24-LIC	Application Control Signature—24 Months
DFL-870M-AC-36-LIC	Application Control Signature—36 Months
DFL-870M-WCF-12-LIC	WEB CONTENT FILTERING SIGNATURE—12 Months
DFL-870M-WCF-24-LIC	WEB CONTENT FILTERING SIGNATURE—24 Months
DFL-870M-WCF-36-LIC	WEB CONTENT FILTERING SIGNATURE—36 Months
DFL-870M-ALL-12-LIC	All-in-one Signature (AV+IPS+AC+WCF)—12 Months
DFL-870M-ALL-24-LIC	All-in-one Signature (AV+IPS+AC+WCF)—24 Months
DFL-870M-ALL-36-LIC	All-in-one Signature (AV+IPS+AC+WCF)—36 Months

Deployment Scenario



Cloud-Managed Multi-Layered Protection

That Helps Keep Internet-Borne Threats at Bay

Cloud Security Gateway | DBG-2000



Powerful features that keep
users and the network safe

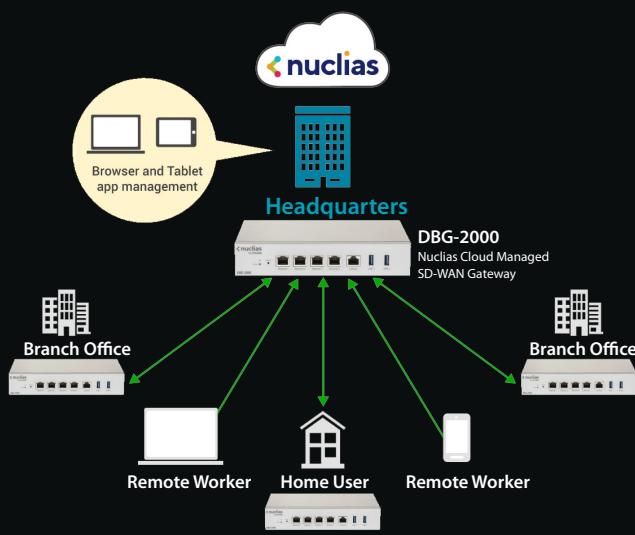


NUCLIAS CLOUD SD-WAN SECURITY GATEWAY

DBG-2000

- Powerful and enduring multi-aspect protection for SMB cloud networks that keeps the network and users secure on all fronts.
- Centralized cloud-based management, with intuitive web and app-based interface.
- Formidable privacy with easy-to-establish point-to-point VPN options.
- Get the best network utilization thanks to Smart Bandwidth Management.
- Equipped with IPS, the network is actively on guard to protect itself.
- Dynamic Content Filtering facilitates categorization and control of accessible sites
- Network firewall provides a formidable first line of defense.
- Bulk up security further with Application Control, controlling which application can utilize the network.
- With Zero Touch Deployment, configure directly from the cloud, no on-site setup necessary.

Application Topology



Why You Want It



Zero Touch Provisioning

Automatically configured,
no on-site setup
necessary



Cloud-Based Management

Manage on-site or remotely,
wherever, whenever



Intrusion Prevention System

Inspect vulnerabilities and
protect intrusions from unknown
backdoors



Dynamic Web Content Filtering

The Web Content Filtering feature
keeps the network safe against
malicious websites and provide
browsing behaviors analytics



Application Control

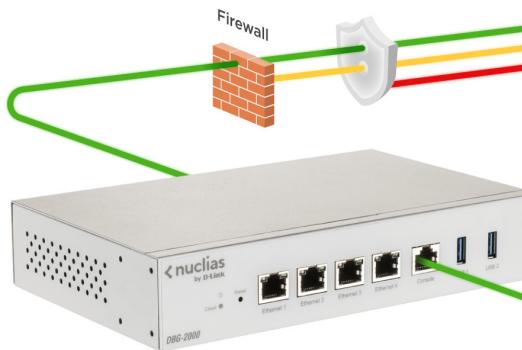
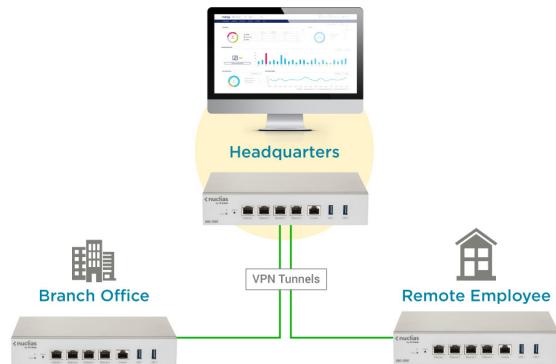
Streamline configuration of
security settings and propagate
to all the connected SD-WAN
gateways



Easily build VPN tunnels
between Nuclias Cloud SD-WAN
Gateways

Quick VPN Enables the Modern Decentralized Workforce Nuclias Connect

As your workforce moves from the office desk to the home one, Nuclias enables easy P2P VPN tunneling for better business privacy and remote working. Rapidly establish your VPN via the Nuclias dashboard for more secure connections.



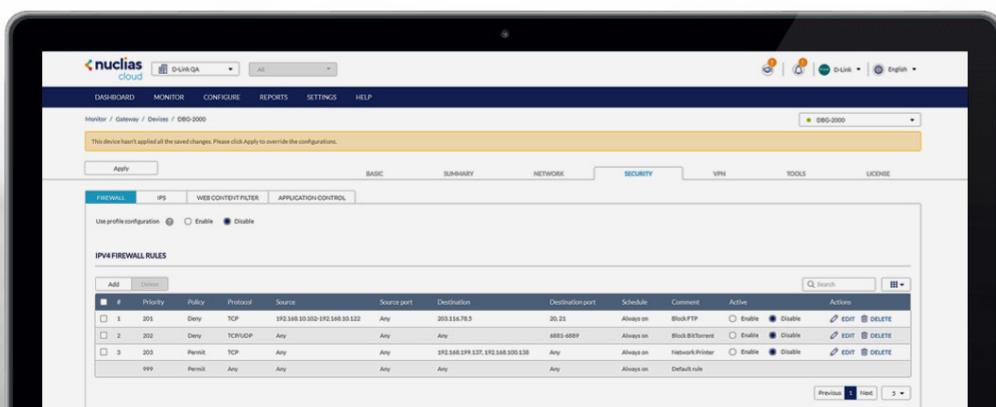
A Stalwart of Network Security

The DBG-2000 is adept at keeping business networks more secure. The powerful network firewall filters traffic, blocking anything that shouldn't be there.

Meanwhile, the Intrusion Prevention System (IPS) actively shields the network from modern day threats such as DDoS attacks, brute force attacks or vulnerability exploits, as well as raising the alarm alerting administrators to irregularities.

Policy Management Complexity, Drastically Simplified

Policies, Policies, Policies. Nuclias empowers you with the tools you need, such as Content Filters, Firewalls, or Application Control. Define your policies as necessary and then roll them out across the entire network for greater network-wide consistency.

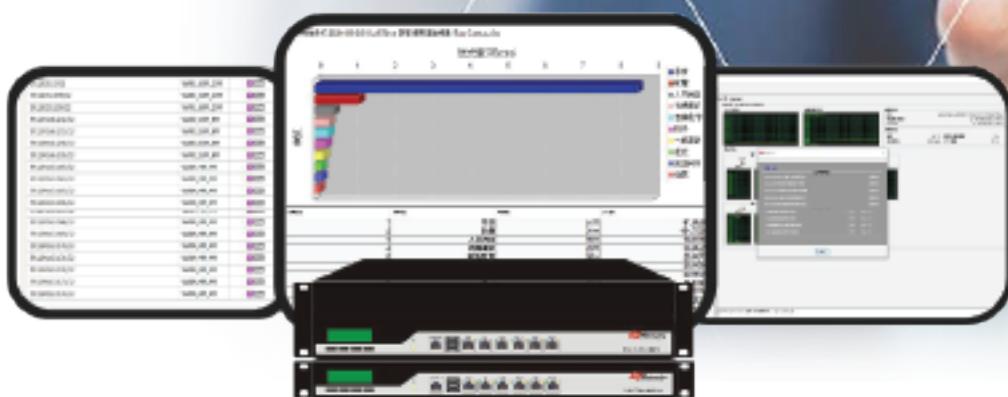


Complete Cloud Managed Solution



InstantCheck®

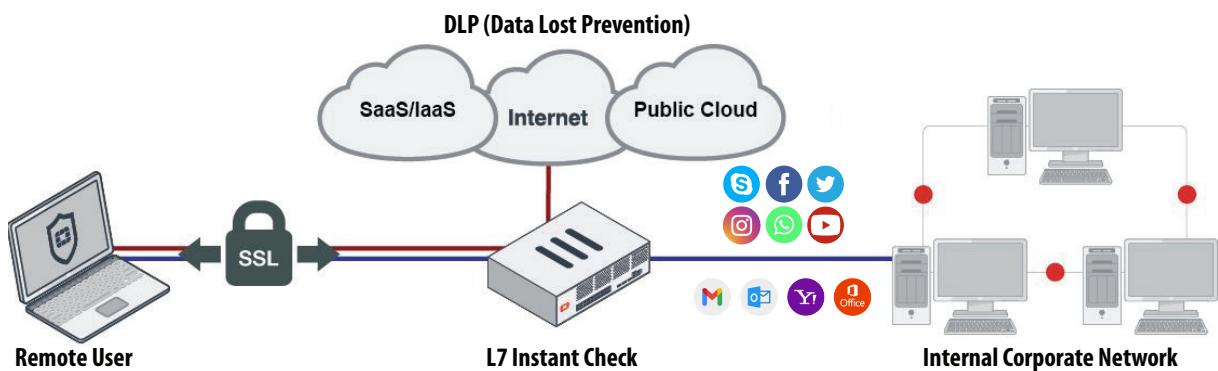
Secure · Monitor · Protect



InstantCheck®

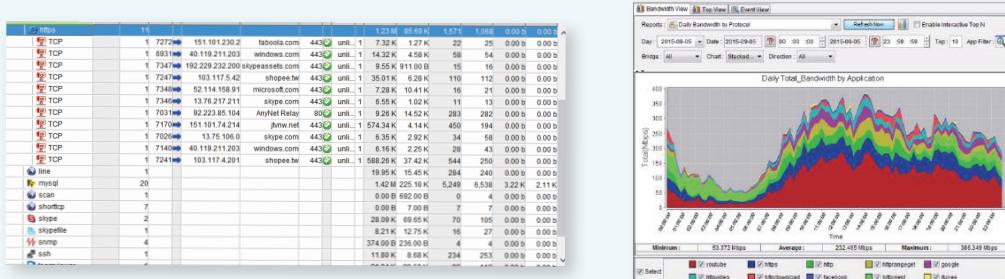
by L7 Network- Secure Web Gateway

Existing web security solutions focus on filtering threats within http channels. However, more and more web sites redirect users to https-encrypted tunnels for privacy reasons so existing security solutions are bypassed. Such applications include Google Search / Map / Mail / Drive / Doc / Plus / Chat / Youtube, Twitter, Facebook, Facebook Chat, Dropbox, Yahoo Mail, Microsoft Outlook (Hotmail) / OneDrive / Skype / Line. As cloud services prevail, researchers had indicated that more than 90% of traffic will be encrypted in https by 2020. Auditing and filtering web contents becomes an uneasy job but everyone pretends to be unaware of this issue because no solution is available. It's time to face the truth.



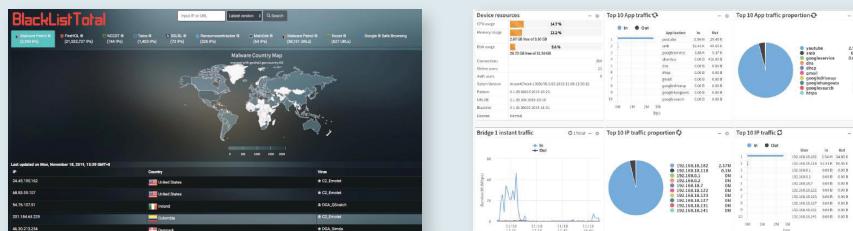
- **Visibility: not just reports, but in real-time**

- Real-time drill down into https sessions: IP/URL/Web category
- Track Line App into: Login/ File-up / file-dw / video / voice / store /...



- Security: not just blacklists, but threat centers

- Detect botnets / ransomwares with 8 global threat centers
 - Top reports of malware / C&C / compromised hosts / cryptojack /

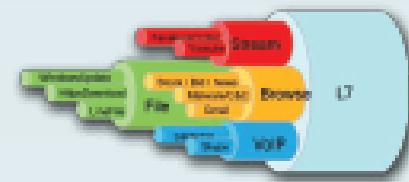


- QoS : not just limites, but guarantees

- Patented PotACK TCP control
 - Schedule-based policy
 - Quota control

- **Security:**

- Block C&C/botnets
 - Stop IP Spoofing attacks
 - Limit access to unwanted web categories

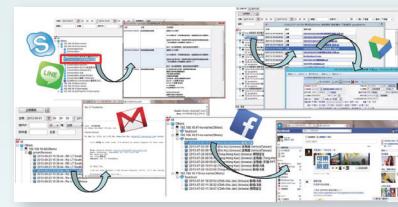


- Recorder: not just emails, but also WebMails

- Record popular WebMail / WebHD / Social / Messenger cloud contents
 - Match keywords with alerts to auditors for further investigations
 - Track and filter employees' cloud behaviors

- Regulatory compliance

- Lawful compliance to GDPR, Sarbanes-Oxley, ISO27000, PCI-DSS, HIPAA,...
 - Improve corporate governance with strict content rules



DLP (Data Lost Prevention)

- **Web DLP: WebMails**

- Transparently installed between employees and firewall
 - Decrypt HTTPS to scan for any personal identity information (PII)
 - Built-in PII fields: name/ addr / tel / visa / birth date / gender /

- USB DLP

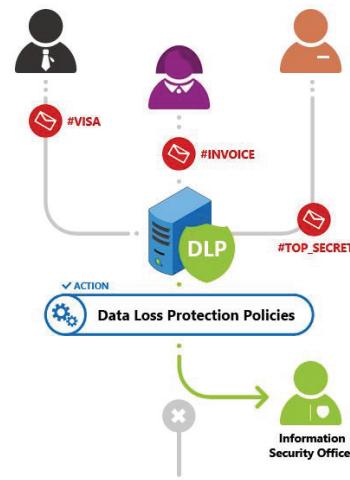
- Lock down Mass Storage Device to prevent information leakage
 - Allow USB drives only issued by your corporation

- Email DLP

- Transparent installed between your mail server & firewall.
 - Scan outgoing SMTP mails for PII / secrete patterns

InstantCheck® Choice: 4 Package for Your Business

	Basic	Silver	Gold	Max
NPM: (Network Performance Monitoring)	●	●	●	●
QoS: (Quality of Service)		●	●	●
SWG: Proxy/ Secure Web Gateway			●	●
DLP: Data Loss Protection				●



General								
InstantCheck Models	IC50	IC100	IC500	IC1000	IC3000	IC5000	IC8000	IC10000
Dimension	19' 1U	19' 1U	19' 1U	19'2U	19'2U	19'2U	19'2U	19'2U
	2GB	2GB	4GB	4GB	4GB	8GB	8GB	8GB
Interface	1G UTP	GEx4	GEx4	GEx4	GEx4	GEx4	GEx6	GEx6
	1G Fiber	-	-	-	SFPx2	SFPx2	SFPx2	max:8
	10G FiberV	-	-	-	Optional	Optional	Optional	max:4
Management	GEx1	GEx1	GEx1	GEx1	GEx1	GEx1	GEx1	GEx1
Hardware Bypass	GEx4	GEx4	GEx4	GEx4	GEx4	GEx4	GEx6	GEx6
Optional Fiber Bypass	-	-	-	-	-	-	Silicom	Silicom
SSD Capacity (Expandible)	480GB	480GB	480GB	480GB	480GB	480GB	480GB	480GB
Performance								
Max Concurrent IPs	70	250	500	1000	3000	5000	8000	20000
Max Session Rate	1000/s	1850/s	3000/s	5150/s	10K/s	20K/s	30K/s	40K/s
Max Concurrent Sessions	20K	200K	300K	1M	2M	4M	8M	12M
Lan-to-Lan Throughput	80Mbps	200Mbps	300Mbps	600Mbps	1.2Gbps	2Gbps	4Gbps	6Gbps
Lan-to-Wan Throughput	15Mbps	30Mbps	75Mbps	200Mbps	500Mbps	1Gbps	2Gbps	4Gbps
Specifications								
Deployment	Support IPv4/IPv6 sniffer/inline/proxy mode deployment with L7 applicationcontrol and https decryption							
User Identification	Single-sign-on AD integration by auto NTLM, proxy authentication, web login, end-point agent, AD log events							
Real time Monitoring	ICAP redirection of decrypted https traffic for anti-virus, malware sandboxing, data leakage prevention (DLP)							
Cloud Content Forensics								
Web	Reconstructing and filtering of https get / post requests, including filename, file content, uploaded files, URLs							
WebMail	Reconstructing and filtering of webmail Senders / Receivers / Attachments, including Gmail / Outlook / Yahoo Mail etc							
WebHD	Reconstructing and filtering of webhd upload / download files, including Dropbox / Google Drive / OneDrive etc							
WebSocial	Reconstructing and filtering of social website behaviors (posts, photo sharing, status,), including Facebook / Twitter etc							
WebIM	Reconstructing and filtering of web messengers (messages / files), including Facebook Chat / Google Hangout / WeChat etc							
Legacy Content Forensics								
Telnet/FTP	Reconstruction of Telnet screen, FTP behaviours (upload / download file names and file contents							
Email	Reconstruction of SMTP / POP3 / IMAP, sent / received emails with attachment file contents							
End-Point Forensics (Optional)								
Message Recorder	Reconstruction of messengers (messages / files), including PC-version Skype / Line / Wechat etc							
Chat Screen Recorder	MP4 video recording of Line / Line@chrome / skype / skype@Winstore / WeChat / Aliwangwang / QQ / DingDing etc							
http(s) Safe Browsing								
URL Database	Support 70+ URL categories, including porn / ads / gambling / stocks / news / games / comics / chatrooms / jokes / hackers / phishing etc							
Google Safe Browsing	Integrate blacklists from Google Safe Browsing to stop visiting malicious / phishing / botnet C&C / compromised website links							
Anti-Virus Database	Integrate Virus Total-listed anti-virus engine AegisLab							
Ransomware Protection	Integrate ransomware domain prediction engine from Malware Patrol to stop downloading keys from botnet C&C sites							
Botnet C&C Blacklists	Integrate IP / domain blacklists from FireHOL, Cisco Talos, NICST etc with periodical auto updates							
Customized Block Page	Support HTML customization of blocking page which contains user name, source IP, reason to block							
QoS by URL Category	QoS policy rules are conditioned on internal / external IP / network / range, built-in or self-defined URL categories							
BYOD								
Mobile Detection	Support detection of PC / Android / iOS / Windows Phone / BlackBerry devices for policy rules							
USB Control	Support blocking of Windows USB mass storage devices but remaining functionality of other USB accessories							
Mobile SSO	Support over-quota limiting policy to fully disconnect users or restrict users to a even lower bandwidth							

QoS Pipes

Tree-based Pipes	Support partitioning link bandwidth into QoS pipes which can be further divided into child QoS pipes
Guaranteed/Bursts	Each pipe can have a guaranteed bandwidth with a burst bandwidth to borrow unused bandwidth from its parent pipe
Fairness within Pipes	Flows can be defined by host/session/subnet and fairness among flows within a pipe can be strictly enforced
Per-IP Limit	Support Per-IP policy for limiting bandwidth / quota / concurrent session / new session rate
2-Level Punishment	Support over-quota limiting policy to fully disconnect users or restrict users to an even lower bandwidth.

L7 Patterns (3000+)

Chat	Line/QQ/ AliWang Wang/Fetion/Dushow/Popo/5inaUC/5kype/Yahoo/ AOL/ICQ/Jabber /LavaLava/Gadu-/GoogleHangout...
P2P	Xunlei / Thunder / WebThunder / Flash Get / BT / eDonkey / eD2K / eMu le / Overnet / EzPeer / Kuro / ClubBox / Poco / F s2You / Ka Za A / Vagga / GoBoogy / Ares / iMesh / Gnutella / WinMX / Bearshare / Shareaza / Morpheus / Gnucleus / Kugoo / Pigo / dc++ / 100ba etc
VoIP	Skype / Polycom / RTP / RTCP / SkypeOut / Eyebeamchat / SIP / TelTel / H.323 / MsnVoice / NetMeeting etc
Tunnel	Hopster / YourFreedom / Garden / Gpass / Tor / HttpTunnel / JAP / RealTunnel / Vpn / SoftEther / FreeGate / Wu jie etc
Streaming	QQTv / UUsee / PPfilm / PPstream / RealPlayer / Quicklime / KKBox / Shoutcast / Winamp / Live365 / Radio365 / PPTV / Tvants / FastTV / SSTV / MeteorNetTV / 3TV / PhoenixTV / YahooMusic / MMS / SeeTV / QQlive / QQmusic / JetAudio / Jetcast
Enterprise	Citrix / MySQL / Notes / Oracle / MSSQL / RDP / VNC / UltraVNC / Win / PcAnywhere / Telnet / SSH / TeamViewer / Logmein
File Transfer	SkypeFile / Line File / SMB / FTP / OneDrive / GoogleDriveUp / Dropbox / AsusWebStorage / Aspera
Stock	HuaTai / Tazihuei / TungHuaShuen / Tienl / FenShiChia / StockStar / ZhaoZhang / AnShi n / SkyNet
Game	Diablo3 / LoL / CounterStrike / DaHuaShiYo / Dance / Warcraft / MoYu / CadinCar / MiracleWorld / Fight / WenDao / Lineage etc

http(s) DLP (Optional)

File Formats	Support pdf / doc(x) / xls(x) / ppt(x) / txt / eml formats compressed in zip / tgz / 7z / rar / tar / gz files
Rules	Support user-defined regular expressions with additional computational checking to lower false positives
Appearance	Support counting of appearances of each field with logical operators such as AND / OR / NOT to avoid false positives

Management

User Interface	Support web-based Java UI, CLI (Telnet / SSH / Console), SNMP, management client software
Authentication	Support AD single sign-on or captive portal with AD / LDAP / RADIUS / POP3(S) / IMAP(S) authentication
Auto Upgrade	Scheduled updates of application patterns / URL database / Anti-botnet database Auto-save feature
Config Backup/Restore	Facilitates easy configuration rollback to previous versions
Permission Control	Built-in centralized management and log server with 3-level permissions: admin / manager / audit

InstantBalance® Cloud-Gen Load Balancer

InstantBalance®
by Network 7

Cloud-Generation Load Balancer

Enterprise in cloud generation requires a lot of bandwidth to access servers in clouds. InstantBalance can help enterprise use cheaper WAN links to achieve the goal based on weight to distribute traffic across links. You can even direct cloud apps such as WebEx/ Team to your preferred WAN links to make your main WAN link focus on your enterprise resource.

Inbound Multi-Homing

For WAN links serving outside requests, to optimal methods to make outside visitors come in evenly among WAN links.

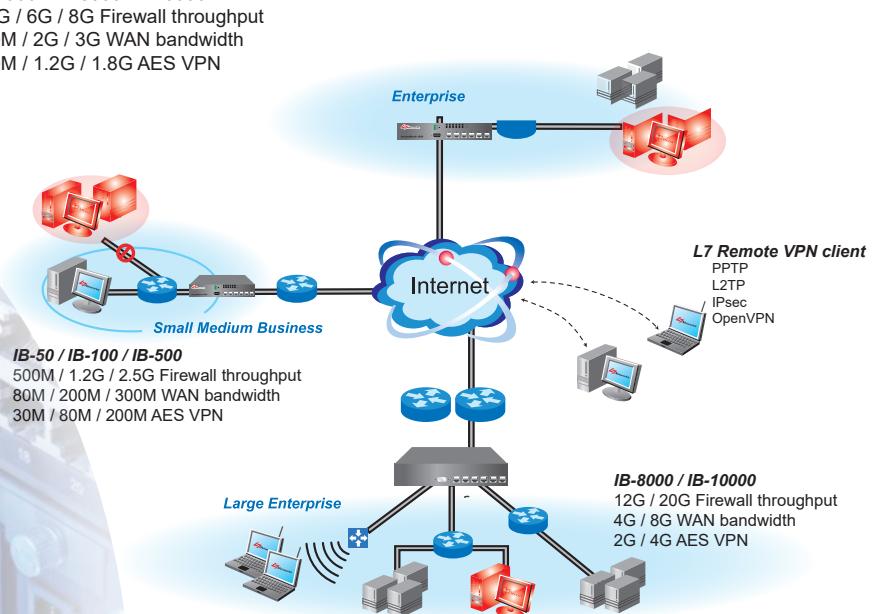
Layer-7 Application Delivery

InstantBalance can import SSL certificates to terminate incoming SSL connections from outside visitors and establish plain-text web traffic to internal web servers according to weights assigned. Decrypted traffic can be further inspected by WAF to avoid common attacks such as SQL injection. Servers are checked if they work normally and will be bypassed if its loading is too high.

SD-WAN

SD-WAN in InstantBalance can replace together to provide as good quality as MPLS but with much cheaper costs. Software-defined WAN makes it possible to load balance between VPN tunnels on different HQ-Branch WAN links.

IB-1000 / IB-3000 / IB-5000
3.3G / 6G / 8G Firewall throughput
800M / 2G / 3G WAN bandwidth
400M / 1.2G / 1.8G AES VPN



Model	50	100	500	1000	3000	5000	8000	10000
Size	19' 1U	19' 1U	19' 1U	19' 2U				
Memory	2GB	2GB	4GB	4GB	4GB	8GB	8GB	16GB
Interfaces(UTP)	GEx6	GEx6	GEx6	GEx6	GEx6	GEx8	GEx8	
Expanable UTP	max:4	max:4	max:4	max:4	max:4	max:4	max:4	max:4
Expandable SFP	max:4	max:4	max:4	max:4	max:4	max:4	max:4	max:4
Expandable SFP+	-	-	-	max:4	max:4	max:4	max:4	max:4
Expandable QoS add-on	GEx6	GEx6	GEx6	GEx6(+4)	GEx6(+4)	GEx6(+4)	GEx6(+4)	GEx6(+4)
Power (110~240v)	Single	Single	Single	Single/Dual	Single/Dual	Single/Dual	Single/Dual	Single/Dual
Self-Defined WAN/LAN	V	V	V	V	V	V	V	V
Performance								
Max WANs (by VLAN)	10	20	20	50	100	300	500	
Max concurrent IPs	200	500	1000	3000	5000	10000	20000	40000
Max rules	512	512	1024	1024	2048	4192	10K	20K
Max new session/sec	10K/s	20K/s	50K/s	70K/s	100K/s	200K/s	500K/s	1M/s
Max concurrent sessions	20K	200K	300K	1M	2M	4M	8M	12M
WAN license(upgradable)	80Mbps	200Mbps	300Mbps	600Mbps	1.2Gbps	2Gbps	4Gbps	6Gbps
System performance	500Mbps	1.2Gbps	2.5Gbps	3.3Gbps	6Gbps	8Gbps	12Gbps	20Gbps
VM platform	Support Vmware vSphere / Microsoft Hyper-V / Citrix XenServer / KVM platforms							

IPv4/IPv6 Load Balance								
Deployment	Mixed IPv4/v6 deployment with Bridge/Routing/NAT. Support DHCP/VLAN/QinQ/MPLS/PPPoE/802.3ad/GRE/RIPv1/RIPv2/OSPF Allow WAN/DMZ/LAN in same subnet for DMZ/LAN servers equipped with public IPs. Objects for rules can be IP/subnet/FQDN.							
Outbound LB	Auto/manually distribute outbound connections to WANs by weight, least connections, available up/dw bandwidth, link quality							
Outbound fail-over	WANs grouped into tiers. All members down in the same tier will trigger fail-over to another tier of WANs.							
Inbound fail-over	Auto respond to incoming DNS queries with IPs of backup WAN links to avoid service disruption							
Inbound LB (Mutihoming)	Built-in DNS for standard records of more than 500 domains/servers. Respond to incoming DNS queries with different WAN IPs according to weight, available bandwidth, least connections, link quality. TTLs can be configured to quickly respond to service disruption							
Disaster Recovery	Auto switch to other IDC by DNS if main IDC fails. Auto recovery from disaster if main IDC is back on track							
Persistent Route	Make connections from the same internal IP sticky to the same WAN link to avoid service disruption by bad web servers							
VPN	Support IPsec/OpenVPN site-to-site VPN to connect branch offices to HQ or client-to-site VPN clients							
SD-WAN	Branch-HQ MPLS VPNs can be replaced by multiple cheap WANs grouped into software-defined WANs to save costs							
Policy Route	Support rules for specific IP subnet VLAN towards specific public IP/FQDN in certain periods to route to specific WANs							
NAT	Support 1-to-1, many-to-1, 1-to-many NAT rules to share public IPs according to NAT policy rules							
Virtual Server	Support destination NAT to redirect specific traffic to certain IP and port							
Link Health Check	Monitor WAN link quality according to configurable loss rate and manage to migrate traffic to other stable links							
Server LB	Load balance traffic towards server according to URL/Header/Cookie/FileType/FileName, and execute insert/remove/modify layer-7 content filter/rewrite. Support methods of weighted round-robin, least connections. Persistence support cookie / source / destination URL / SSL session ID							
Server Health Check	Support L3(IP) / L4(port) / L7(app) health check methods with built-in HTTP/SSL/LDAP/MySQL/PgSQL/Redis/SMTP/Proxy/... or self-defined Send/Expect content inspection for scripting your own health checks							
Management								
High Availability	Support VRRP to work in Active-Standby mode to avoid service disruption during hardware failure							
User Interface	Support https/http/SSH/SNMP/Console for management. Support role management with difference self-defined accounts							
Security	Support anti-DDoS by SYN-Proxy or thresholds of limits per seconds to filter denial of service attacks							
Alert	Support email alerts if WAN links are down or HA triggers. Support SNMP trap and syslog to other 3rd-party systems							
Statistics	Support realtime monitoring of WAN/VPN links and history logs							
Debug tool	Support IPv4 tools such as traceroute/ping/nslookup and IPv6 tools such as NBT/NDE							
QoS Add-on (option)								
L7 App Pattern	This add-on board can enhance application qos							
Chat	Support auto update of following protocols (3000+ apps)							
P2P	Line/QQ/AliWangWang/Fetion/Dushow/Popo/SinaUC/Skype/Yahoo/AOL/ICQ/Jabber/LavaLava/Gadu/GoogleHangout...							
VolP	Xunlei/Thunder/WebThunder/FlashGet/BT/eDonkey/eD2K/eMule/Overnet/EzPeer/Kuro/ClubBox/Poco/Fs2You/KaZaA/...							
Tunnel	Vagga /GoBoogy /Ares /iMesh /Gnutella /WinMX /Bearshare /Shareaza /Morpheus /Gnucleus /Kugoo /Pigo/dc++ /100bao							
Streaming	WebEx / Teams / GoogleMeet / Skype /Polycom/RTP/RTCP/SkypeOut/Eyeballchat/SIP/TelTel/H.323							
Enterprise	Hopster/YourFreedom/Garden/Gpass/Tor/HttpTunnel/JAP/RealTunnel/Vnn/SoftEther/FreeGate/Wujie/...							
File Transfer	QQTV /UUsee /PPfilm /PPlive /PPstream /RealPlayer /QuickTime /KKBox /Shoutcast /Winamp /Live365 /Radio365 /PPTV /							
Stock	Youtube / Netflix / Disney + / Dailymotion / SSTV /MeteoreNetTV /3TV /PhoenixTV /YahooMusic /MMS /SeeTV /QQlive /QQmusic							
Game	Citrix /MySQL /Notes /Oracle /MSSQL /RDP /VNC /UltraVNC /Win /PcAnywhere /Telnet /SSH /TeamViewer /Logmein							
Threat Centers								
Auto update	Support auto update to BlacklistTotal.com who integrate Malware Patrol / FireHOL / Cisco Talos / NCCST / F-ISAC / SSLBL / ...							
Anti-Bot	Support blocking traffic towards IPs listed in BlacklistTotal.com to stop Bot controlled by malware / ramsonware							
Web URL Database								
Auto update	Support 80/443 and other ports of http(s) for filtering with daily auto updates							
URL Database	Support 70+ categories including Porn/Ads/Gambling/Violence/Stock/News/Game/Comic/Chats/Jokes/Hacker/Phishing/Spyware							
QoS by Category	Support self-defined keywords or built-in categories, together with IP/subnet/app to assign traffic into QoS channels							
QoS								
Bidirectional QoS	Support QoS profiles for In/Out bandwidth partitioning into multi-level pipes for rules to assign traffic							
Bandwidth Guarantee	Support different QoS profiles for different schedule periods							
Rate/#Session/Quota	Support dynamic bandwidth borrowing (max rate), guarantee (min rate), intra QoS pipe session/IP limits (reserve rate)							
2-Level Punishment	Support IP/user-based rate/volume limiting and provide portals for status check by users							
	Support web page alert of running out of quota and its following rate/session limiting							
Reports								
Storage	Database software for installation on Windows 10 VMs where storage sizes depend on your hardware							
Top Reports	Dashboards of many daily/weekly/monthly reports which interactively drill-down ability into top of tops or raw events							
Bandwidth Reports	Daily/Weekly/Monthly bandwidths of Apps /Categories / Attacks with drill-down ability into certain period of time							
Reports/Alerts	Daily/Weekly/Monthly email/pdf/html/xls format reports. Support alerts of events by email / SMS / Line messages to admin							



Secure your Business