D-Link®

D NETDEFEND

DFL-1100

Network Security Firewall for Enterprise

D-Link's DFL-1100 is an easy-to-deploy, high-capacity firewall designed for the large enterprises that require superior price/performance. This firewall is a powerful security solution that features fault tolerance and high availability, providing integrated Network Address Translation (NAT), Firewall, Content Filtering, IDS protection, bandwidth management as well as Virtual Private Network (VPN) support. The DFL-1100 includes a WAN link support, a trusted LAN port, a DMZ port to support local e-mail and web servers, and a backup port to connect to another firewall.

Multi-Function Security Application
The DFL-1100 features enterprise-grade firewall functions, including Stateful Packet Inspection (SPI), detect/drop intruding packets, embedded VPN, a physical DMZ port, multiple-mapped IPs and multiple virtual servers. The DFL-1100 connects your office to a broadband modem such as cable or DSL through an external 10/100BASE-TX WAN port.

Full Firewall Functions
The DFL-1100 provides complete firewall functions, including the NAT mode, PAT (Port Address Translation) mode, Routing mode and SPI. It also supports customized policy and virtual server configuration. Administrators can easily manage the network through graphical statistics in a logging/monitoring system.

High Performance IPSec VPN Support
The DFL-1100 is equipped with embedded VPN support, allowing you to create multiple IPSec tunnels to remote sites/clients. IPSec on the DFL-1100 uses strong encryption with DES, 3DES, AES and Automated Key Management via IKE/ISAKMP. A VPN tunnel can be activated from the DFL-1100 to a remote site or a mobile user for secured traffic flow using triple DES encryption. This offers users a way to confidentially access and transfer sensitive information. Multiple VPN tunnels may be easily created without the need to setup IKE (Internet Key Exchange) policies.

Access Control List (ACL)
URL blocking is part of basic features offered by DFL-1100. This function provides the benefit of limiting access to undesirable Internet sites. Logs of real-time Internet traffic, alarms of Internet attacks, and notice of web-browsing activities are logged and can be reported through e-mail notification.

DFL-1100 supports Radius authentication so you can make use of your existing Radius Server and user information.

Advanced Features for Complete Protection
DFL-1100 provides advanced features including Content filtering, IDS (Intrusion Detection System), Bandwidth Management for complete solution protection to users's network. Content Filtering lets you filter/protect your network with customized policy. Bandwidth management guarantees bandwidth for different services.

The DFL-1100 protects your network from attacks. It can be configured to log all attacks, locate the source IP address generating the attack, send the attack report notification to a specified e-mail address and establish policies to restrict incoming traffic from specific IP address sources. Network administrators can set e-mail addresses to receive alert message from the DFL-1100. When intrusion events are detected, the DFL-1100 will log them and send alert e-mail, and the administrator can check the log file on the router to find out what happened.

High Performance With Fault Tolerance
The DFL-1100 can operate with up to 200,000 concurrent sessions, providing up to 1,000 VPN tunnels for up to 1,000 mobile telecommuters needing secure remote connections to the company network. In addition, this firewall also provides fault tolerance through redundancy backup with another firewall through a backup port, providing continuous firewall protection for mission-critical applications.

1 DMZ Port, 1 Trusted LAN Port, 1 Backup Port
The DFL-1100 includes a LAN port that connects to your internal office network, a backup port that connects to another firewall, and a physical DMZ (Demilitarized Zone) port that can connect your Web, mail or FTP servers for access from the Internet. DMZ alleviates congested server traffic from entering the Internal network, while protecting your other office computers from Internet attacks by hiding them behind the firewall.

Key Features

- 1 10/100BASE-TX LAN port, 1 10/100BASE-TX DMZ port, 1 10/100BASE-TX sync port
- 1 10/100BASE-TX WAN port for cable/DSL modem connection
- PPTP, L2TP, IPSec VPN tunneling support*
- PPTP, L2TP, IPSec VPN pass throughput support
- Aggressive/Main client mode for VPN
- Stateful Packet Inspection (SPI) firewall protection
- Denial of Service (DoS) and DDoS attack blocking

- Network Address Translation (NAT)/Network Address Port Translation (NAPT)
- NAT Application Level Gateway (ALG) support
- DHCP server/client and parental control
- PPPoE support for dial-up DSL to save ISP charge
- Content filtering, URL/domain blocking and key word check
- Virtual server support
- Web-based configuration management & real-time monitoring
- SYSlog protocol support

* PPTP and L2TP VPN tunnels supported in future firmware upgrade.

DFL-1100
Technical Specifications

Hardware

Basics
- DRAM: 256Mbytes SDRAM
- Flash memory: 64 Mbytes
- Accelerator: VPN accelerator for higher performance

Device Ports
- WAN: 10/100BASE-TX port
- LAN: 10/100BASE-TX port
- DMZ: 10/100BASE-TX port
- Sync: 10/100BASE-TX port
- Console: serial COM port

Performance & Throughput
- Firewall: 250Mbps or higher
- 3DES: 34Mbps or higher
- AES: 84Mbps or higher
- Concurrent sessions: 200,000 max.
- VPN tunnels: 1,000 max.
- Policies: 2,000 max.
- Schedules: 256 max.
- On-line users: 500 max.

Software

Firewall Mode of Operation
- NAT (Network Address Translation)
- PAT (Port Address Translation)
- Route mode
- Virtual IP
- Policy-based NAT

VPN Security
- IPSec Server/Client, PPTP Server/Client, L2TP Server/Client*
- IPSec/PPTP/L2TP pass-through
- Authentication transform: MD5 and SHA-1
- Encryption transform: Null, DES and 3DES, AES
- Key management: manual and IKE
- Keying mode: Pre-Shared Key
- Key exchange: DH1, DH2 and DH5
- Negotiation mode: Quick, Main and Aggressive mode
- Remote access VPN
- Policy-based firewall and session protection
- Keep-Alives on tunnel free configurable
- Hub-n-Spoke

* PPTP Server/Client, L2TP Server/Client supported in future firmware upgrade.

Firewall Security
- NAT
- Stateful Packet Inspection (SPI)/Denial of Service (DoS)
- Packet Filter
- Content Filter (URL Keyword Blocking, Java/ActiveX/Cookie/ Proxy Blocking)
- Custom Protocol Filters
- Custom ICMP Filter
- Microsoft Active Directory Integration (via MS IAS)

Administration
- Multiple administrators
- Root Admin, Admin & Read Only user levels
- Software upgrades & configuration changes
- Trust host

Network Service
- DHCP Server / Client
- DHCP Relay
- DHCP over IPSec
- PPPoE for xDSL
- PPTP for xDSL
- BigPond Cable
- Free configuration of MTU
- H.323 Application layer gateway*
- SIP Application layer gateway*
- FTP application layer gateway
- DNS resolving of remote gateway

* Functions available in future firmware upgrade.

System
- System log
- Firmware backup
- E-Mail Alerts
- Filtering activity (Logs rejected internal and external connection requests)
- Web access log
- Internet Access Monitor
- Remote Management from WAN
- Simple Network Time Protocol (SNTP)
- Simple Network Management Protocol (SNMP)
- SDI service using Ericsson's Home Internet Solution
- Http
- Consistency checks

Firewall & VPN User authentication
- RADIUS (external) database
- Built-in database: up to 1,500 users

IDS
- NIDS pattern
- DDoS and DoS detected
- MAC address bind with IP
- On-line pattern update
- Detect CodeRed
- Attack alarm (via e-mail)
- Log and report

Bandwidth Management
- Guaranteed bandwidth
- Maximum bandwidth
- Priority-bandwidth utilization
- DiffServ stamp
- Class-based policies
- Application-specific traffic class
- Policy-based traffic shaping
- Subnet-specific traffic class

High Availability (HA)
- Session protection for firewall and VPN
- Active-Active cluster and load balance
- Device failure detection
- State synchronization
- VPN synchronization
- Synchronization method: Ethernet
- Average fail-over time: <800ms
- Network notification on fail over

Driver/Firmware Support
Web Based configuration

Diagnostic LEDs
- Power
- Status
- WAN
- LAN
- DMZ
- Backup

DFL-1100
Technical Specifications

Physical & Environmental

Power Supply
Internal universal power supply

Dimensions
295 (D) x 440 (W) x 44(H) mm (device only)

Weight
3.8 kg (device only)

Operation Temperature
0° to 60 $^{\circ}$C

Storage Temperature
-20° to 70 $^{\circ}$C

Operation Humidity
5% to 95% non-condensing

Storage Humidity
5% to 95% non-condensing

Emission (EMI)
- FCC Class A
- CE Class A
- C-Tick
- BSMI

Safety
- UL
- TUV/GS
- LVD (EN60950)

Ordering Information

Firewall
DFL-1100   1 RJ-45 10/100BASE-TX port
(for DSL/cable modem connection)
1 RJ-45 10/100BASE-TX port (for DMZ network)
1 RJ-45 10/100BASE-TX port (for internal network)
1 RJ-45 10/100BASE-TX port (for backup,
connects to another firewall)

VPN Remote Access Software
DS-601   Single user license
**DS-605**   5 user license

D-Link®

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Canada	TEL: 1-905-8295033	FAX: 1-905-8295223
Europe	TEL: 44-20-8731-5555	FAX: 44-20-8731-5511
Germany	TEL: 49-6196-77990	FAX: 49-6196-7799300
France	TEL: 33-1-30238688	FAX: 33-1-30238689
Netherlands	TEL: 31-10-282-1445	FAX: 31-10-282-1331
Belgium	TEL: 32(0)2-517-7111	FAX: 32(0)2-517-6500
Italy	TEL: 39-2-2900-0676	FAX: 39-2-2900-1723
Iberia	TEL: 34-93-4090770	FAX: 34-93-4910795
Sweden	TEL: 46-(0)8564-61900	FAX: 46-(0)8564-61901
Norway	TEL: 47-22-309075	FAX: 47-22-309085
Denmark	TEL: 45-43-969040	FAX: 45-43-424347
Finland	TEL: 358-9-2707-5080	FAX: 358-9-2707-5081
Singapore	TEL: 65-6774-6233	FAX: 65-6774-6322
Australia	TEL: 61-2-8899-1800	FAX: 61-2-8899-1868
Japan	TEL: 81-3-5434-9678	FAX: 81-3-5434-9868
China	TEL: 86-10-8518-2533	FAX: 86-10-8518-2250
India	TEL: 91-022-652-6696	FAX: 91-022-652-8914
Middle East (Dubai)	TEL: 9714-8834234	FAX: 9714-8834394
Turkey	TEL: 90-212-335-2553	FAX: 90-212-335-2500
Egypt	TEL: 202-414-4295	FAX: 202-415-6704
Israel	TEL: 972-9-9715700	FAX: 972-9-9715601
Latinamerica	TEL: 56-2-232-3185	FAX: 56-2-232-0923
Brasil	TEL: 55-11-55039320	FAX: 55-11-55039321
South Africa	TEL: 27(0)1266-52165	FAX: 27(0)1266-52186
Russia	TEL: 7-095-744-0099	FAX: 7-095-744-0099#350
Taiwan	TEL: 886-2-2910-2626	FAX: 886-2-2910-1515
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RECYCLABLE
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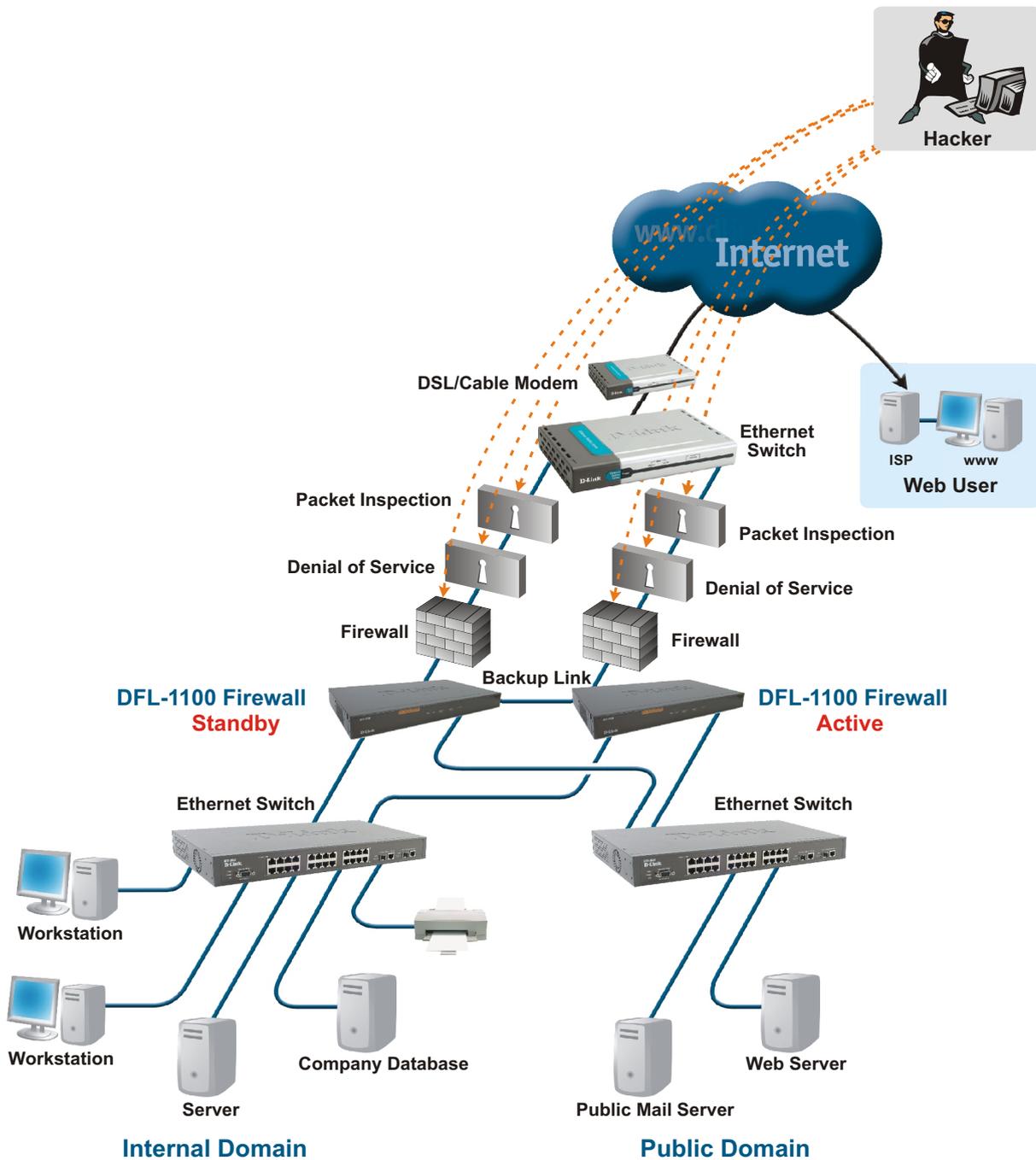
Deploying High Availability Firewalls for Network Protection