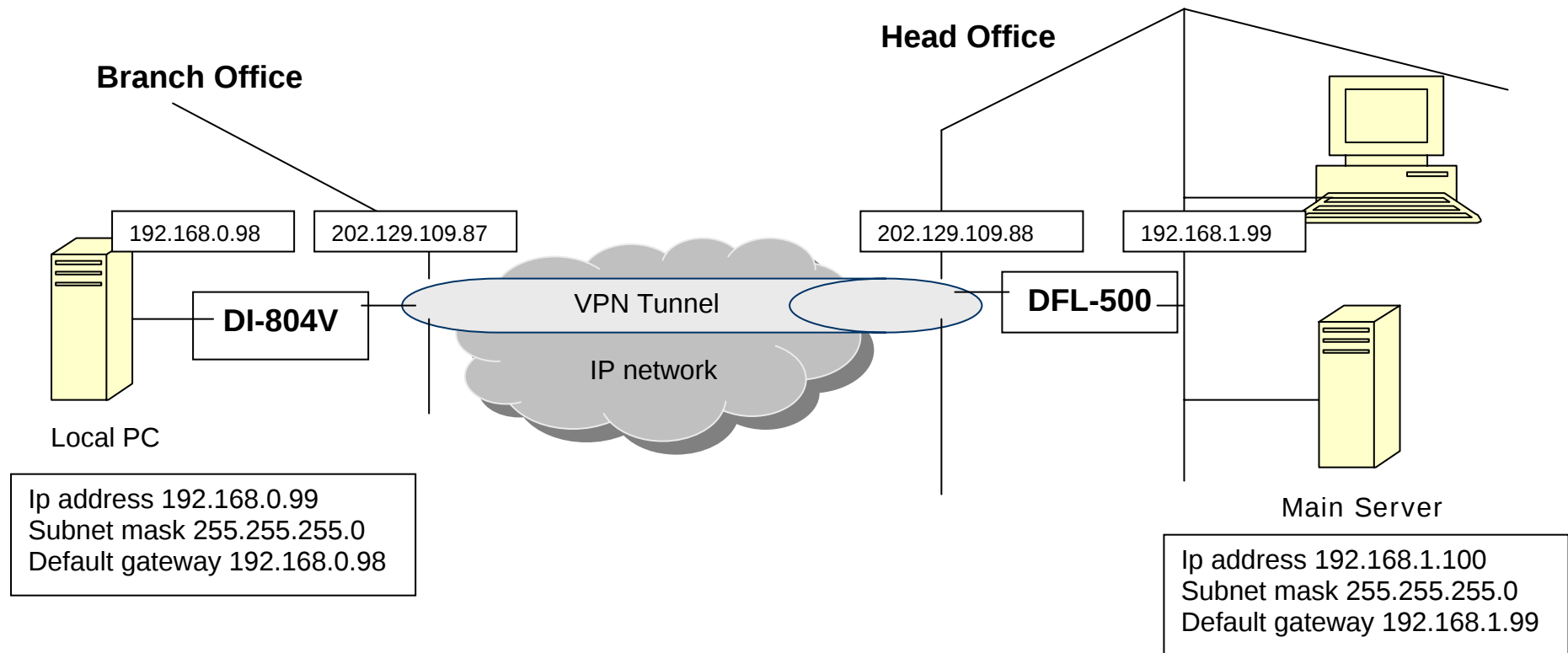


Configuring IPSec VPN between DFL-500 and DI-804V in 15 simple steps

	DFL-500 configuration	DI-804V configuration
Firmware version	2.36 build 77	4.75
Lan IP	192.168.1.99 255.255.255.0	192.168.0.98 255.255.255.0
Wan IP	202.129.109.88 255.255.255.224	202.129.109.87 255.255.255.224
Default gateway	202.129.109.65	202.129.109.65
Pre-shared key	123456	123456
Ipssec local id	202.129.109.88	202.129.109.87
Ipssec remote id (peer id)	202.129.109.87	202.129.109.88



DFL-500 configuration

1. Configuring internal ip addresses on the firewall (192.168.1.99 255.255.255.0)

D-Link Firewall - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: https://202.129.109.88/theme1/index?login=1

Find a ?index Travel Techni DU-56 ????? 500 In www. NetTo Yahoo Yahoo www. D-Link Yahoo D-Link Wirele
Techni Device Yahoo D-Link VPN R D-Lin

D-Link Firewall Appliance **DFL-500** Logout Wizard Help

Interface DNS Routing Table Routing Gateway DHCP

System
Status
Network
Config

Firewall
Policy
Address
Service
Schedule
Virtual IP
IP Pool
IP/Mac Binding

User
VPN
Web Filter
Log&Report

Edit Interface(00:05:5D:EF:73:48)

Name: internal

IP: 192.168.1.99

Netmask: 255.255.255.0

Access: ☒ HTTPS ☒ PING
☒ SSH ☒ SNMP

OK Cancel

Done

2. Configuring external ip address on the firewall (202.129.109.88 255.255.255.224)

D-Link Firewall - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: https://202.129.109.88/theme1/index?login=1

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D-Link Firewall Appliance **DFL-500** Logout Wizard Help

Interface DNS Routing Table Routing Gateway DHCP

System
Status
Network
Config
Firewall
Policy
Address
Service
Schedule
Virtual IP
IP Pool
IP/Mac Binding
User
VPN
Web Filter
Log&Report

Edit Interface(00:05:5D:EF:73:49)

Name: external

Addressing mode: ☒ Manual ☐ DHCP ☐ PPPoE

IP: 202.129.109.88

Netmask: 255.255.255.224

Access: ☒ HTTPS ☒ PING
☒ SSH ☒ SNMP

MTU: 1500 (bytes)

☐ Fragment outgoing packets greater than MTU.

OK Cancel

Done

3. Assigning dns ip addresses (207.194.200.1 and 207.194.200.129)

D-Link Firewall - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: https://202.129.109.88/theme1/index?login=1

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Techni Device Yahoo D-Link Setup D-Lin

D-Link Firewall Appliance **DFL-500** Logout Wizard Help

Interface **DNS** Routing Table Routing Gateway DHCP

System
Status
Network
Config
Firewall
User
VPN
Web Filter
Log&Report

Primary DNS Server: 207.194.200.1
Second DNS Server: 207.194.200.129
Apply

Done

4. Assigning a default gateway (202.129.109.65)

D-Link Firewall - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: https://202.129.109.88/theme1/index?login=1

Find a ?index Travel Techni DU-56 ????? 500 In www. NetTo Yahoo Yahoo www. D-Link Yahoo D-Link Wirele
Techni Device Yahoo D-Link VPN R D-Lin

D-Link Firewall Appliance **DFL-500** Logout Wizard Help

System
Status
Network
Config
Firewall
User
VPN
Web Filter
Log&Report

Interface DNS Routing Table **Routing Gateway** DHCP

Gateway IP	Interface	Server IP	Detection Interval(secs)	Fail-over Detections	Modify
202.129.109.65	external	None	0	0	

New

Done

5. Creating an internal network for the vpn (192.168.1.0 255.255.255.0)

D-Link Firewall - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: https://202.129.109.88/theme1/index?login=1

Find a ?index Travel Techni DU-56 ????? 500 In www. NetTo Yahoo Yahoo www. D-Link Yahoo D-Link Wirele
Techni Device Yahoo D-Link VPN R D-Lin

D-Link Firewall Appliance **DFL-500** Logout Wizard Help

Internal External Group

Name	IP/Netmask	Modify
Internal_All DFL-500	0.0.0.0/0.0.0.0 192.168.1.0/255.255.255.0	

New

System
Status
Network
Config
Firewall
Policy
Address
Service
Schedule
Virtual IP
IP Pool
IP/Mac Binding
User
VPN
Web Filter
Log&Report

Done

6. Creating an external network for the vpn (192.168.0.0 255.255.255.0)

D-Link Firewall - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: https://202.129.109.88/theme1/index?login=1

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Techni Device Yahoo D-Link VPN R D-Lin

D-Link Firewall Appliance **DFL-500** Logout Wizard Help

Internal **External** Group

Name	IP/Netmask	Modify
External_All DI-804V	0.0.0.0/0.0.0.0 192.168.0.0/255.255.255.0	

New

System
Status
Network
Config
Firewall
Policy
Address
Service
Schedule
Virtual IP
IP Pool
IP/Mac Binding
User
VPN
Web Filter
Log&Report

Done

7. Creating remote gateway for vpn (202.129.109.87, pre-shared key 123456, local ID 202.129.109.88, peer id 202.129.109.87, nat-traversal = enabled)

D-Link Firewall - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: https://202.129.109.88/theme1/index?login=1

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Techni Device Yahoo D-Link VPN R D-Lin

D-Link Firewall Appliance **DFL-500** Logout Wizard Help

Manual Key AutoIKE Key **Remote Gateway** Concentrator Dialup Monitor

System

- Status
- Network
- Config

Firewall

- Policy
- Address
- Service
- Schedule
- Virtual IP
- IP Pool
- IP/Mac Binding

User

VPN

- IPSEC**
- PPTP
- L2TP

Web Filter

Log&Report

Edit VPN Gateway

Gateway Name DI-804V

Remote Gateway Static IP Address

IP Address 202.129.109.87

Mode ☐ Aggressive ☒ Main (ID Protection)

P1 Proposal

1 - Encryption: 3DES Authentication: SHA1

2 - Encryption: 3DES Authentication: MD5

DH Group 1 ☐ 2 ☐ 5 ☒

Keylife: 28800 (Seconds)

Authentication: (Pre-shared Key) 123456

Local ID 202.129.109. (Optional)

Peer ID 202.129.109. (Optional)

Nat-traversal ☒ Enable

8. Creating autoike key (replay detection = enabled, pfs = enabled, dh group = 5, keylife = 3600, autokey keep alive = enabled)

D-Link Firewall - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: https://202.129.109.88/theme1/index?login=1

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D-Link®

Firewall Appliance

DFL-500 Logout Wizard Help

Manual Key **AutoIKE Key** Remote Gateway Concentrator Dialup Monitor

Edit VPN Tunnel

Tunnel Name DI-804V

Remote Gateway DI-804V

P2 Proposal

1-Encryption: 3DES Authentication: SHA1

2-Encryption: 3DES Authentication: MD5

☒ Enable replay detection

☒ Enable perfect forward secrecy(PFS).

DH Group 1 ☐ 2 ☐ 5 ☒

Keylife: Seconds 3600 (Seconds) 4608000 (KBytes)

Autokey Keep Alive ☒ Enable

Concentrator None

OK Cancel

System

Status

Network

Config

Firewall

Policy

Address

Service

Schedule

Virtual IP

IP Pool

IP/Mac Binding

User

VPN

IPSEC

PPTP

L2TP

Web Filter

Log&Report

0

9. Creating int-to-ext VPN policy

D-Link Firewall - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: https://202.129.109.88/theme1/index?login=1

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Techni Device Yahoo D-Link VPN R D-Lin

D-Link®

Firewall Appliance

DFL-500 Logout Wizard Help

Int->Ext Ext->Int

System

- Status
- Network
- Config

Firewall

- Policy**
- Address
- Service
- Schedule
- Virtual IP
- IP Pool
- IP/Mac Binding

User

VPN

- IPSEC
- PPTP
- L2TP

Web Filter

Log&Report

Edit Policy

Source	DFL-500
Destination	DI-804V
Schedule	Always
Service	ANY
Action	ENCRYPT

VPN Tunnel DI-804V

☒ Allow inbound	☐ Inbound NAT
☒ Allow outbound	☐ Outbound NAT

☐ **Traffic Shaping**

Guaranteed Bandwidth	0 (Kbytes/sec)
Maximum Bandwidth	0 (Kbytes/sec)
Traffic Priority	High

☐ Log Traffic

Done

10. Creating ext-to-int vpn policy

D-Link Firewall - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: https://202.129.109.88/theme1/index?login=1

Find a ?index Travel Techni DU-56 ????? 500 In www. NetTo Yahoo Yahoo www. D-Link Yahoo D-Link Wirele
Techni Device Yahoo D-Link VPN R D-Lin

D-Link Firewall Appliance **DFL-500** Logout Wizard Help

Int->Ext **Ext->Int**

System
Status
Network
Config
Firewall
Policy
Address
Service
Schedule
Virtual IP
IP Pool
IP/Mac Binding
User
VPN
IPSEC
PPTP
L2TP
Web Filter
Log&Report

Edit Policy

Source	DI-804V
Destination	DFL-500
Schedule	Always
Service	ANY
Action	ENCRYPT

VPN Tunnel DI-804V

☒ Allow inbound	☐ Inbound NAT
☒ Allow outbound	☐ Outbound NAT

☐ **Traffic Shaping**

Guaranteed Bandwidth	0 (Kbytes/sec)
Maximum Bandwidth	0 (Kbytes/sec)
Traffic Priority	High

☐ Log Traffic

Done

DI-804V configuration

1. Configuring internal ip address (192.168.0.98 255.255.255.0)

Setup Wizard - Device IP Settings - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: http://192.168.0.98/wiz_dipsettings.htm

Find a ?index Travel Techni DU-56 ????? 500 In www. NetTo Yahoo Yahoo www. D-Link Yahoo D-Link Wirele
Techni Device Yahoo D-Link Setu D-Link

D-Link

VPN Router DI-804V

DEVICE INFORMATION	DEVICE STATUS	BASIC SETUP	ADVANCED SETTINGS	SYSTEM TOOLS	HELP
--------------------	---------------	--------------------	-------------------	--------------	------

Main menu

TIME SETTINGS

DEVICE IP SETTINGS

ISP SETTINGS

ISP ADDITIONAL SETTINGS

MODEM SETTINGS

VPN SETTINGS

SAVE & RESTART

DEVICE LAN IP SETTINGS

The device LAN IP address and subnet Mask settings

IP Address: . . .

IP Subnet Mask: . . .

< BACK NEXT >

NOTE: Please click 'Next' to accept the settings.

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Done

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2. Configuring external ip address and default gateway (202.129.109.87 255.255.255.224, 202.129.109.65)

Setup Wizard - ISP SETTINGS-Static IP Settings - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: http://192.168.0.98/wiz_ispsettings.htm

Find a ?index Travel Techni DU-56 ????? 500 In www. NetTo Yahoo Yahoo www. D-Link Yahoo D-Link Wirele
Techni Device Yahoo D-Link Setu D-Link

D-Link VPN Router DI-804V

DEVICE INFORMATION	DEVICE STATUS	BASIC SETUP	ADVANCED SETTINGS	SYSTEM TOOLS	HELP
--------------------	---------------	--------------------	-------------------	--------------	------

Main menu

TIME SETTINGS

DEVICE IP SETTINGS

ISP SETTINGS

ISP ADDITIONAL SETTINGS

MODEM SETTINGS

VPN SETTINGS

SAVE & RESTART

ISP SETTINGS - Static IP Settings

1. Select the ISP Settings List below

Static IP Settings

IP assigned by your ISP: 202 . 129 . 109 . 87

IP Subnet Mask: 255 . 255 . 255 . 224

ISP Gateway Address: 202 . 129 . 109 . 65

2. Click Next to send your request to the Cable/xDSL Broadband Router.

< BACK NEXT >

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3. Assigning dns ip address (202.129.64.194)

Setup Wizard - ISP Additional Settings - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: http://192.168.0.98/wiz_addsettings.htm

Find a ?index Travel Techni DU-56 ????? 500 In www. NetTo Yahoo Yahoo www. D-Link Yahoo D-Link Wirele
Techni Device Yahoo D-Link Setu D-Link

D-Link VPN Router **DI-804V**

DEVICE INFORMATION DEVICE STATUS **BASIC SETUP** ADVANCED SETTINGS SYSTEM TOOLS HELP

Main menu

TIME SETTINGS

DEVICE IP SETTINGS

ISP SETTINGS

ISP ADDITIONAL SETTINGS

MODEM SETTINGS

VPN SETTINGS

SAVE & RESTART

ISP ADDITIONAL SETTINGS

☒ Your ISP requires you to manually setup DNS settings

DNS IP Address: 202 129 64 194

☐ Your ISP requires you to input Host Name or Domain Name

Host Name: DI-804V

Domain Name:

☐ Your ISP requires you to input WAN Ethernet MAC

MAC Address: 00 05 5D F0 31 BC

< BACK NEXT >

NOTE: Please click 'Next' to enter inputted data.

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4. Configuring vpn (local id 202.129.109.87, remote id 202.129.109.88, remote network 192.168.1.0 255.255.255.0, remote gateway 202.129.109.88, netbios over vpn = enabled, pre-shared key 123456, key life 3600, ike life 28800)

Setup Wizard - VPN Settings - Avant Browser

File Edit View Navigation Groups Favorites Tools Windows Help

Address: http://192.168.0.98/wiz_VPN_ike.htm

Find a ?index Travel Techni DU-56 ????? 500 In www. NetTo Yahoo Yahoo www. D-Link Yahoo D-Link Wirele
Techni Device Yahoo D-Link Setu D-Link

D-Link

VPN Router DI-804V

DEVICE INFORMATION DEVICE STATUS **BASIC SETUP** ADVANCED SETTINGS SYSTEM TOOLS HELP

Main menu

TIME SETTINGS

DEVICE IP SETTINGS

ISP SETTINGS

ISP ADDITIONAL SETTINGS

MODEM SETTINGS

VPN SETTINGS

SAVE & RESTART

VPN SETTINGS

Connection Name

☒ Enable UID (Unique Identifier String) ☐ Disable UID

Local IPSEC Identifier

Remote IPSEC Identifier

Remote IP Network

Remote IP Netmask

Remote Gateway IP

Network Interface

☒ Enabled NetBIOS Broadcast

Secure Association ☒ Main Mode ☐ Aggressive ☐ Manual

Perfect Forward Secure ☒ Enabled ☐ Disabled

Encryption Protocol

PreShared Key

Key Life Seconds

IKE Life Time Seconds

Enable	Connection Name	Local IPSEC ID	Remote IPSEC ID	Command
☒	DFL-500	202.129.109.87	202.129.109.88	Edit Del

Done

15. Pinging main computer behind dfl-500 from the local pc behind di-804v (192.168.1.100 from 192.168.0.167)

```
C:\ Command Prompt - ping 192.168.1.100 -t
C:\Documents and Settings\Serge>ipconfig

Windows IP Configuration

Ethernet adapter SMC:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . .               : 192.168.0.167
    Subnet Mask . . . . .            : 255.255.255.0
    Default Gateway . . . . .        : 192.168.0.98

C:\Documents and Settings\Serge>ping 192.168.1.100 -t

Pinging 192.168.1.100 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.
Reply from 192.168.1.100: bytes=32 time=6ms TTL=255
Reply from 192.168.1.100: bytes=32 time=6ms TTL=255
Reply from 192.168.1.100: bytes=32 time=6ms TTL=255
Reply from 192.168.1.100: bytes=32 time=6ms TTL=255
```

Congratulations!