## DFL-800/1600/2500 How to setup WAN connection failover

This setup is only applicable to firewalls with multiple WAN ports. Additional WAN port(s) (WAN2, WAN3) can be used as backup connections for a primary Internet link on WAN1.

The below steps describe the configuration where WAN2 link is used as a backup for WAN1 link. Whenever the link on WAN1 goes down (physical connectivity or network connectivity), the traffic is automatically redirected through WAN2. As soon as WAN1 comes back up, the traffic is automatically redirected back through WAN1.



**Step 1.** Log into your firewall. Configure both WAN ports in accordance with the Internet connection requirements. WAN1 and WAN2 can be connected to different Internet Service Providers.

**Step 2.** Go to Interfaces > Ethernet > WAN1. In our example WAN1 is set up as DHCP Client. Go to Advanced tab. Disable the "Add default route if default gateway is specified" option.

Ethernet				
Configure	the settings for the Ethernet adapters in the			
# 🔻 Name 🔻	IP Network			
0 Wan1	unat in unatact			
1 📕 wan2	📑 📖 wan1			
2 📑 dmz		102		
3 My lan1	General Hardware Settings	Advanced		
4 My lan2				
	general			
	Name: wan1 IP Address: wan1_i Network: wan1ne Default Gateway: (None) Penable DHCP Client Enable Transparent Mod Mod	P       Image: Wan1         Image: General Hardware Settings Advanced         Image: General Hardware Settings Advanced         Image: Open Automatic Route Creation         Automatically add commonly used routes related to this interface         Image: Add route for interface network         Image: Add default route if default gateway is specified         Route Metric:       100         Image: High Availability		

**Step 3.** Select WAN2. In our example it is configured with static IP address. Go to Advanced tab. Disable the "Add default route if default gateway is specified" option.

	Configure t	he settings for	🕮 wan2		
•	Name 🔻	IP 🔻	General Hardwar	e Settings Adva	nced
3	wan1	wan1	General		
Г	wan2	wan2_			
	📕 dmz	g dmz_i	An Etherne	t interface represen	(1993)
	📕 lan1	🤤 lan1_i	-		Be wanz
	📕 lan2	🤤 lan2_i	Name:	wan2	Ceneral Hardware Settings Advanced
	📕 lan3	😏 lan3_i		Wall2	General Hardware Settings Havanced
			IP Address:	wan2_ip	Automatic Route Creation
			Network:	wan2net	
					Automatically add commonly used routes related to
			Default Gateway:	wan2-gatway	
					Add route for interface network
				L	Add route for interface network

**Step 4.** Go to Interfaces > Interface Groups. Combine WAN1 and WAN2 into a group.

General	
Use a	n interface group to combine several interfaces for a simplified security policy
Name:	wan1-and-wan2
	Security/Transport Equivalent
	Security/Transport Equivalent
) Interfaces	Security/Transport Equivalent
) Interfaces	Security/Transport Equivalent
) Interfaces Available dmz	Security/Transport Equivalent
Available dmz lan1 lan2	Selected
Available Available dmz lan1 lan2 lan3	Selected

**Step 5.** Go to Rules > IP Rules. Add a new rule "Allow-All" which does NAT for all services (Action – NAT). Set LAN1 as Source and the "WAN1-and-WAN2 group" as Destination.

Selleral L	og Settings NAT	SAT	SAT Server Load Balancing
Conoral			
General			
S An	IP rule specifies what	t action t	to perform on network traffic that matches the specified filter crite
•			
Name:	allow-all		
Action:	NAT	~	
Service:	all_services	~	
Schedule:	(None)	~	
	1		
Address	Filter		
Spe	ecify source interface	and sour	urce network, together with destination interface and destination r
the	rule to match.		
	Source		Destination
	lan1	*	wan1-and-wan2 🗸
Interface:	Contraction of the second s		

**Step 6.** Go to Routing > Main Routing Table. Create a new routing rule for WAN1. Interface - WAN1; Network - Allnets; Gateway - WAN1 Default Gateway; Local IP - none. Set it with lower Metric (e.g. 80). Go to Monitor tab and enable the "Monitor This Route" option. Tick "Interface Link Status" – to monitor physical connection status. Tick "Gateway using ARP Lookup" – to monitor network connectivity status.

General Proxy AR	P Monitor		General Proxy ARP Monitor
) General			Monitoring for Route Failover
A route defi Interface: Network:	wan 1 all-nets	and gateway to	The health of a route may be monitored for route failove
Gateway: Local IP Address: Metric:	wan1_gw (None) 80	~	Monitor Interface Link Status Monitor Gateway Using ARP Lookup Manual ARP Lookup Interval: 1000 milliseconds

**Step 7.** Create a routing rule for WAN2. Set Metric higher than WAN1 (e.g. 90). Go to Monitor tab and enable the "Monitor This Route" option.

Route		Route
General Proxy AF	RP Monitor	General Proxy ARP Monitor
General		Monitoring for Route Failover
A route def	ines what interface and gateway to use in order	The health of a route may be monitored for route failover
Interface:	wan2	Monitor This Route
Network:	all-nets 🗸	Method
Gateway:	wan2-gateway	
Local IP Address:	(None)	Monitor Interface Link Status
Metric:	90	Monitor Gateway Using ARP Lookup Manual ARP Lookup Interval: 1000 milliseconds
Comments		

**Step 8.** In the top menu bar select Configuration > Save and Activate > OK.

<b>D-Link</b> Building Networks for People		Logged in as administrator admin - 192.168.1.78
🔮 Home 🛛 📑 Configuration 👻 🎢 Tools 👻	🕹 Status 🗸	😕 Logout 🕜 Help
Save and Activate     Discard Changes     DFL-1600     System     Objects     Address Book     Application Layer Gateways     Services     Schedule Profiles     Schedule Profiles     X:509 Certificates     VPN Objects     Rules	Save Configuration Are you sure you want to save the configuration?	OK Cancel