

Configuration Guide



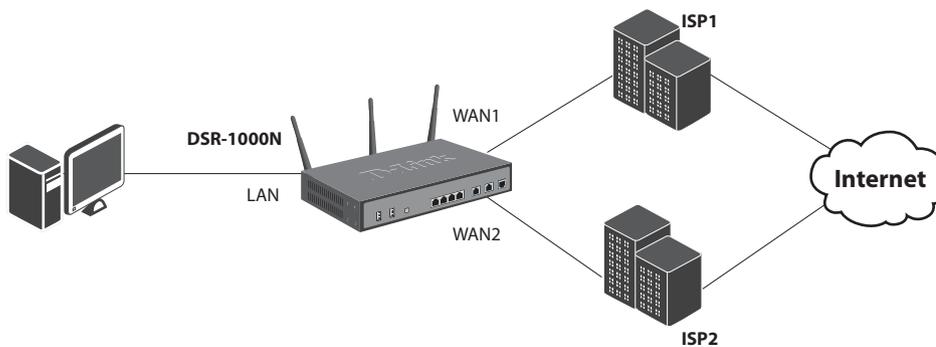
How to Configure Load Balancing in DSR Series

Overview

This document describes how to configure the D-Link DSR-1000N to enable load balancing when device equipped dual WAN links. The screenshots in this document is from firmware version 1.03B12. If you are using an earlier version of the firmware, the screenshots may not be identical to what you see on your browser.

Situation note

Using load balancing with multiple WAN links can simultaneously offer outbound traffic efficiency and bandwidth optimization. The following is a typical load balancing scenario which make all of Internet traffic can be dynamically shared to dual WAN links by Round-Robin algorithm. Also, the ICMP Ping protocol will be kept in WAN2 permanently in this case because this protocol is usually for network diagnosis.



Configuration Step

1. Under the **Setup** -> **Internet Settings** -> **WAN Mode**, select **Round Robin** from Load Balancing drop-down menu and click **Save settings**.

DSR-1000N	SETUP	ADVANCED	TOOLS	STATUS
Wizard				
Internet Settings	WAN MODE			LOGOUT
Wireless Settings	This page allows user to configure the policies on the two WAN ports for Internet connection.			
Network Settings	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>			
DMZ Setup	Port Mode			
VPN Settings	Auto-Rollover using WAN port: <input type="radio"/> WAN1			
USB Settings	Load Balancing: <input checked="" type="radio"/> Round Robin			
VLAN Settings	Use only single WAN port: <input type="radio"/> WAN1			

Note: Once load balancing mode of operation is enabled, users can select either Round Robin or Spillover mode of operation

- a. Round Robin:** It is when new connections to the Internet are alternative between available WAN links.
- b. Spillover:** It will use a single WAN link for all connections until the link's bandwidth threshold is reached. After that, another WAN link will be used for new connections.

2. Under the **Advanced** -> **Routing** -> **Protocol bindings**, Click Add to create a protocol bindings rule to allow the "PING" service to be associated with WAN2 links.

Service: **PING**

Local Gateway: **Configurable WAN**

Source Network: **Any**

Destination Network: **Any**

DSR-1000N	SETUP	ADVANCED	TOOLS	STATUS		
Application Rules ▶						
Website Filter ▶	PROTOCOL BINDINGS LOGOUT					
Firewall Settings ▶	This page shows the configured protocol bindings. A user can also add, delete, edit, enable or disable the protocol bindings.					
Wireless Settings ▶						
Advanced Network ▶	List of Available Protocol Bindings					
Routing ▶	<input type="checkbox"/>	Status	Service	Local Gateway	Source Network	Destination Network
Certificates	<input type="checkbox"/>	Enabled	PING	Configurable WAN	Any	Any
Users ▶	<div style="display: flex; justify-content: center; gap: 10px;"> Edit Enable Disable Delete Add </div>					
IP/MAC Binding						
IPv6 ▶						
Radius Settings						
Captive Portal ▶						
Switch Settings						

The Protocol bindings is a key component of load balancing operation. It allows specific service or users to be associated with one of the available WAN links. Following is description for each field.

a. Service: User specifies the service name, choosing from a list of pre-defined or custom services.

Custom services can be configured in the Firewall menu.

b. Source Network: User specifies the LAN hosts assigned to the protocol binding rule. Only those hosts which are bound to the protocol can transmit or receive the respective traffic via the selected WAN port while the other hosts will transmit traffic over the other WAN port(s). User can choose to assign the rule to any hosts, a single host on the LAN or a set of hosts within a User-defined LAN IP address range.

c. Destination Network: User specifies the WAN hosts assigned to the protocol binding rule. User can choose to assign the rule to any hosts, a single host on the LAN or a set of hosts within a User-defined LAN IP address range.

3. When the User adds a protocol binding rule, the Device updates the new entry and displays it in the protocol binding table. The protocol binding table displays the information regarding the service, source network and destination network and also whether the binding is enabled or not. User can enable, disable or edit a configured binding rule and also delete configured bindings as needed.

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