How to Configure Failover with Multiple xDSL or DHCP WAN Connections

https://campus.barracuda.com/doc/72515964/

If you are using a mix of static and dynamic connections, or WAN connections in Standby mode, see How to Configure Link Balancing and Failover for Multiple WAN Connections.

When using multiple DHCP or xDSL Internet connections from the same ISP, you must configure the connections to create the default route for each connection in a source-based route table. Use custom connection objects to determine which WAN connection is used. You can configure failover and load balancing settings in the connection object, depending on your needs.

To be able to also use failover for connections not using the custom connection object, each WAN connection is assigned a unique route metric. These routes are cloned into the default route table. Access rules using **Dynamic NAT** as the connection method now use the default route with the lowest metric. If that connection goes down, the route with the next higher metric is used. This is also useful as a fallback to retain connectivity even if the load-balancing access rules do not match.

Before You Begin

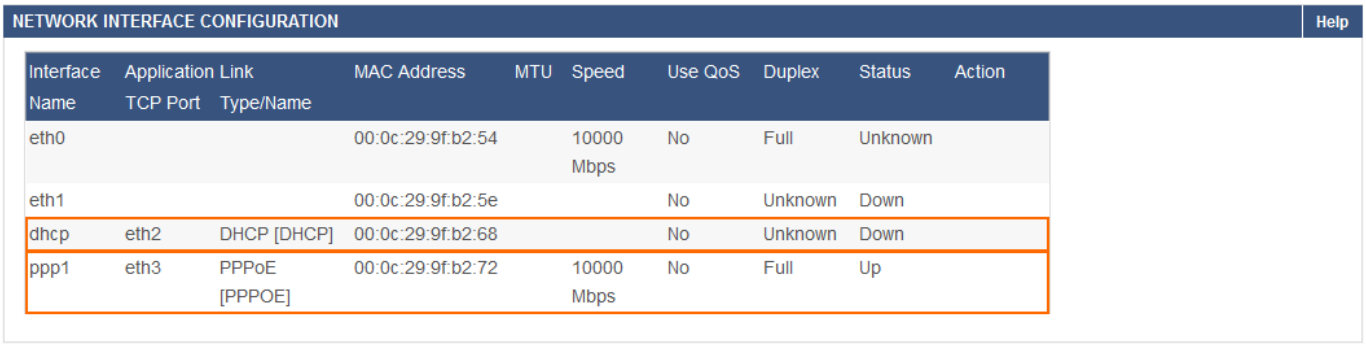
- Each Internet connection requires one free port.
- For xDSL connections, you need the connection settings provided by your provider.
- Configure DNS servers.

Step 1. Configure Multiple xDSL and/or DHCP WAN Connections

Configure multiple WAN and/or DHCP connections. A unique metric must be set for each connection. The connection with the lowest metric is used as the default connection by access rules using Dynamic NAT as the connection method.

For more information about how to configure an xDSL WAN connection, see How to Configure a PPPoE xDSL WAN Connection with an External DSL Modem.

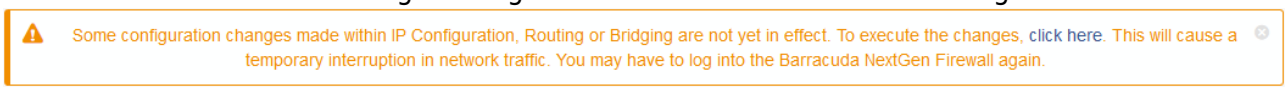
For more information about how to configure a DHCP WAN connection, see How to Configure an ISP with Dynamic IP Addresses (DHCP).



Step 2. Perform a Network Activation

After you create or change basic network configurations such as routing, you must activate your new network configurations.

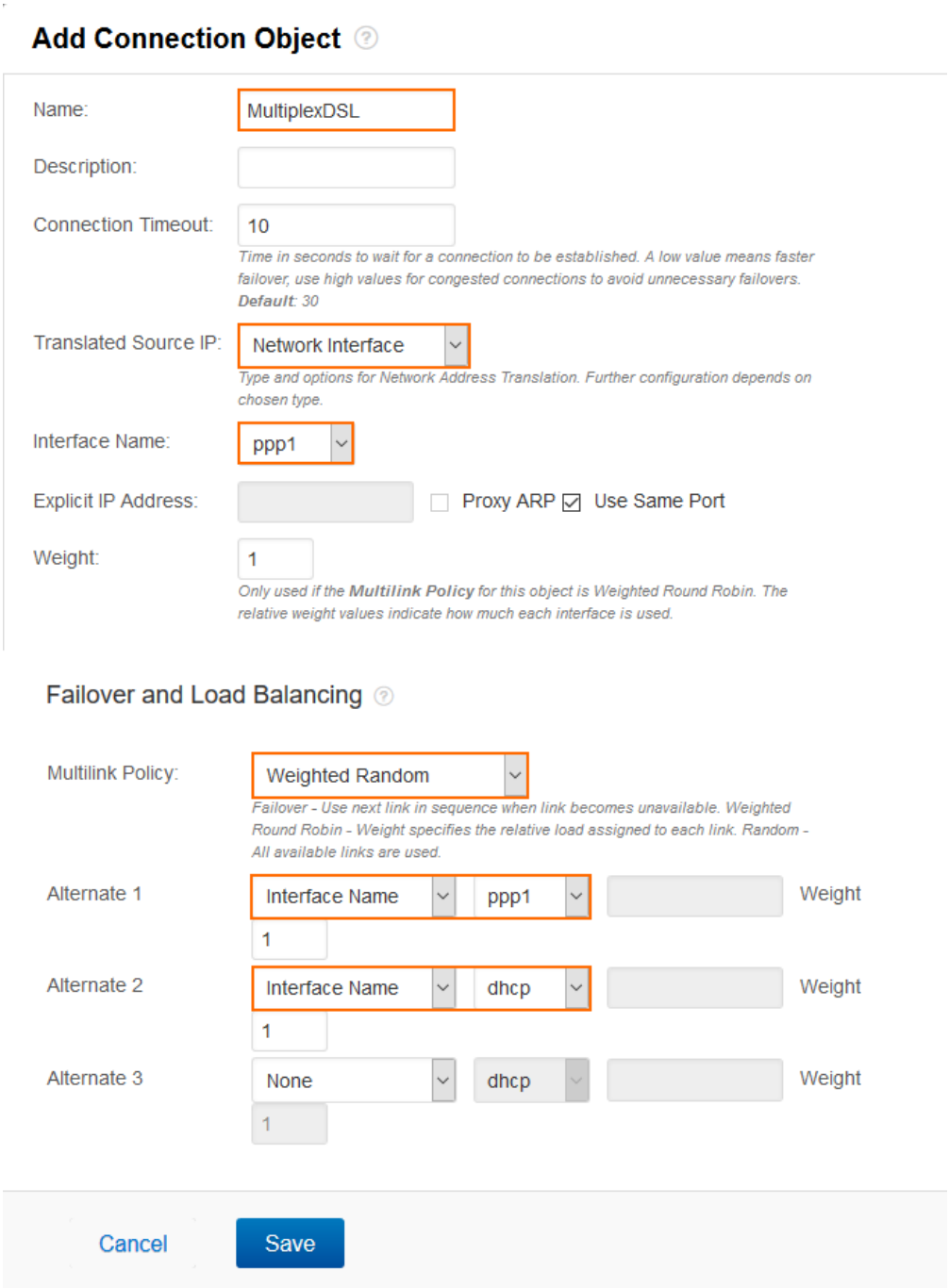
1. Scroll to the top of the page
2. Click on the link in the warning message to activate the new network configuration.



Step 3. Create a Custom Connection Object

Create a connection object using network interfaces of the dynamic Internet connections to determine the translated IP address. xDSL connections use *ppp1* to *ppp4* as interface names. DHCP uses *dhcp* as the interface name. The following steps assume that you want the xDSL interface to be the standard interface to connect to your ISP and that the DHCP interface will serve as the failover interface.

1. Go to **FIREWALL > Connection Objects**.
2. In the **Connection Objects** section, click **Add Connection Object**.
3. The **Add Connection Object** window opens.
4. From the **Translated Source IP** list, select **Network Interface.**
5. From the **Interface Name** list, select **ppp1**.
6. From the **Multilink Policy** list, select **Weighted Random**.
7. From the **Alternate 1** list, select **Interface Name** and **ppp1**.
8. From the **Alternate 2** list, select **Interface Name** and **dhcp**.
9. Click **Save**.

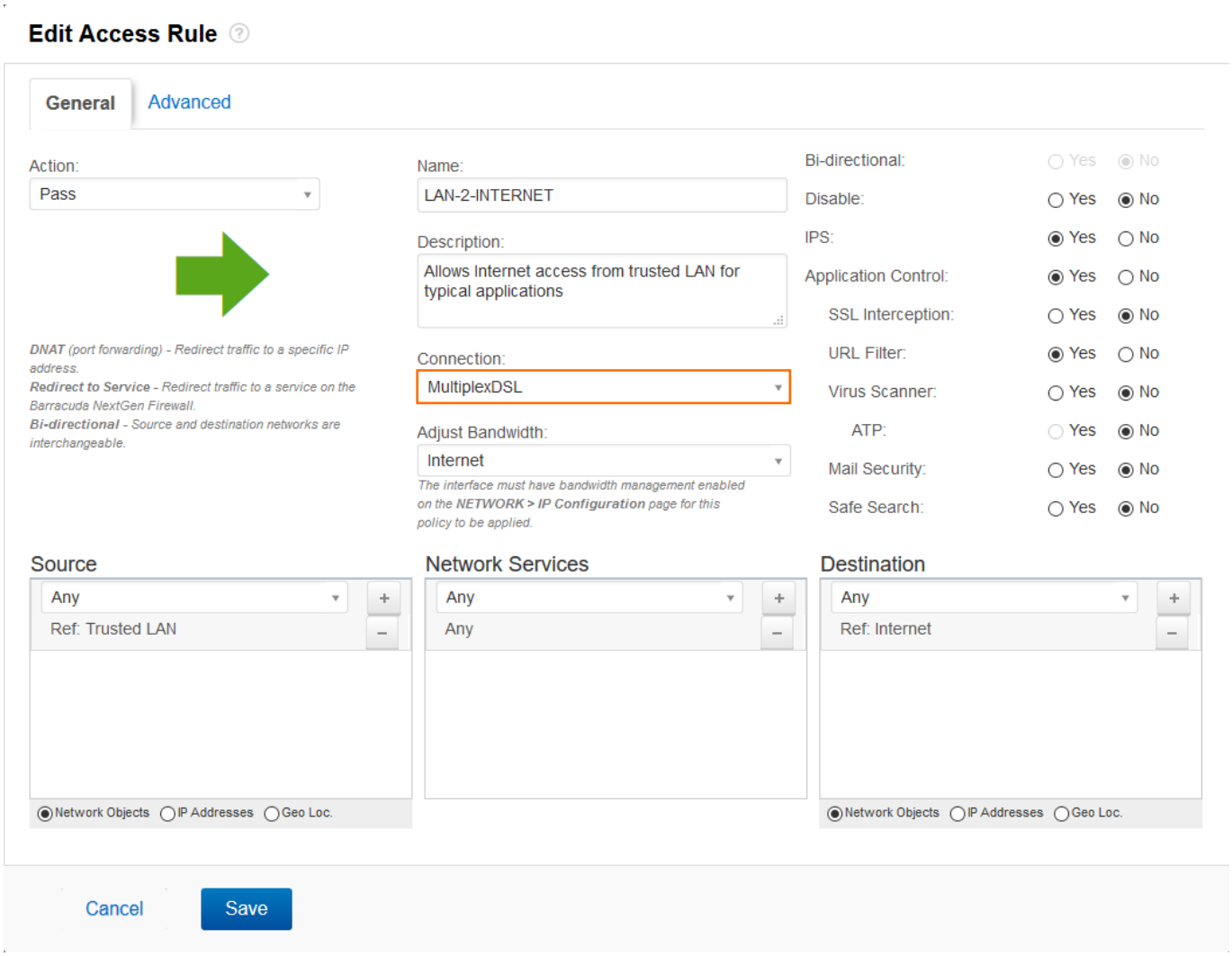


For more information, see How to Create a Custom Connection Object and How to Configure Failover and Load Balancing in Custom Connection Objects.

Step 4. Change the Access Rule Connection Method

To use the custom connection object, change the **Connection Method** for the access rules matching the traffic you want to load balance, or for which you want to use load balancing.

1. Go to **FIREWALL > Access Rules**.
2. Double-click the access rule that connects to your ISP, e.g., LAN-2-INTERNET.
3. The **Edit Access Rule** window opens.
4. Change the **Connection** method to the one configured before, e.g., MultiplexDSL.
5. Click **Save**.



Figures

1. multiple_xdsl_dhcp_interfaces_configured.png
2. network_activation_ip_configuration.png
3. multi_dyn_wan.png
4. multi_dyn_wan_access_rule.png