

## Transport Balancing and Multi-Link Aggregation

<https://campus.barracuda.com/doc/48203298/>

Transport balancing expands the range of scenarios where Traffic Intelligence can be used. TI can be used to combine the bandwidth of multiple, identical low-bandwidth transports into one tunnel with a higher bandwidth. Instead of classifying the traffic in business critical and non-business critical traffic and sending the different kinds of traffic through different transports, you can use the built-in load balancing mechanism to direct the traffic into multiple transports and combine the bandwidth.

Transport Balancing is fully transparent to the source and the destination traffic. There are two types of balancing available:

- **Packet-based Balancing** - Distributes packets, even for a single firewall session, between VPN transports. Configure packet-based balancing in the settings for the TINA VPN tunnel. Packet-based balancing requires all transports to have the same bandwidth and packet roundtrip times.
- **Session-based Balancing** - Distributes firewall sessions between VPN transports. Configure session-based balancing in the connection objects for firewall rules. Session-based balancing requires all transports to have the same bandwidth.

The redundant design guarantees connectivity in case a link goes down. In combination with [Traffic Intelligence](#) and [Traffic Shaping](#), Transport Balancing is a powerful enhancement of the Barracuda NextGen Firewall F-Series - increasing its connectivity and improving its traffic management capabilities.

### Configuring Packet-Based Balancing

Packet-based balancing is a feature of a VPN tunnel and must be activated in addition to the firewall connection object configuration. In the VPN tunnel configuration of the VPN GTI editor, click on the tunnel that you want to configure and select the Bulk-0 transport of this tunnel. In the Advanced section tunnel configuration, activate packet-based balancing by setting the Packet Balancing parameter to Cycle within a Transport Class.

1. Open an existing or [create a new TINA VPN Tunnel](#).
2. Select the **Bulk** transport or tunnel.
3. In the tunnel configuration window, click the **Advanced** tab.
4. From the **Packet Balancing** list, select **Cycle within a Transport Class**.

### Configuring Session-Based Balancing

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > Firewall > Forwarding Rules**.
2. Click **Lock**.
3. Double-click to edit the connection object. For more information, see [Connection Objects](#).
4. In the **VPN Traffic Intelligence (TI Settings)** section, click **Edit/Show**.
5. From the **Balance Sessions** list, select **between preferred and second transport**.
6. Click **OK**.
7. Click **Send Changes** and **Activate**.

© Barracuda Networks Inc., 2019 The information contained within this document is confidential and proprietary to Barracuda Networks Inc. No portion of this document may be copied, distributed, publicized or used for other than internal documentary purposes without the written consent of an official representative of Barracuda Networks Inc. All specifications are subject to change without notice. Barracuda Networks Inc. assumes no responsibility for any inaccuracies in this document. Barracuda Networks Inc. reserves the right to change, modify, transfer, or otherwise revise this publication without notice.