

Network Page

<https://campus.barracuda.com/doc/43847194/>

The **Network** page lets you monitor the current status of the network subsystem. To access the **Network** page, open the **CONTROL** tab on the Barracuda NG Firewall and click the **Network** icon in the ribbon bar.

In this article:

Information Display

The network information display is divided between two tables:

- The top table displays information about configured network interfaces, network addresses, and routes. To view this information, click the tabs that are below the table.
- The bottom table displays information about the routing tables.

DASHBOARD CONFIGURATION **CONTROL** FIREWALL VPN MAILGW PROXY WIFI

Server **Network** Resources Licenses Box Sessions

Interfaces/IPs	IPs	Interfaces	Proxy ARPs	ARPs	Statistics	OSPF	RIP	BGP	Switch Info	IPv6 ND Cache
Interface/IP		Label		Ping	MAC of duplicate IP					Info
dhcp. Speed=10000Mb/s, Duplex=Full										
194.93.0.1...				ok	-					
eth0. Speed=10000Mb/s, Duplex=Full										
10.0.10.60...		mip0		ok	-					
10.0.10.12...		S1		ok	-					
eth1. Speed=10000Mb/s, Duplex=Full										

TABLES ALL











Table / Src Filter	State	Type	Interface	Src IP	Pref	Gateway	Name
Table vpnlocal, From all							
+ Table dhcp 1, From 194.93.0.0/24							
+ Table dhcp 1, From 194.93.0.199							
- Table main, From all							
10.0.10...	up	direct-b...	eth0	10.0.10...	0	-	boxnet
10.17.0...	up	gateway...	eth0	10.0.10...	0	10.0.10.1	91HOMENET
172.16...	up	direct-b...	eth3	172.16....	0	-	DMZ
194.93...	up	direct-k...	dhcp	194.93....	0	-	
194.93...	up	direct-b...	dhcp	194.93....	0	-	
62.99.0...	up	direct-b...	eth1	62.99.0...	0	-	ISP1
8.8.8.8/...	up	gateway...	dhcp	-	100	194.93....	
+ Table ISP1, From 62.99.0.0/24							
- Table default, From all							
0.0.0.0/0	up	gateway...	dhcp	194.93....	100	194.93....	
0.0.0.0/0	up	gateway...	eth1	62.99.0...	1	62.99.0...	ISP1a

Connected to 10.0.91.60 (v 5.4.4.71)

Interface/IPs Tab

To view information on network interfaces and the IP addresses that are assigned to them, click the **Interfaces/IP** tab. In the top table, information about each interface is organized into the following columns:

- **Interface/IP** – The network interface names and their assigned IP addresses. For Ethernet network adapters, additional information on speed and duplex settings are also displayed. To expand and collapse the list of IP addresses with corresponding netmasks (inverted CIDR notation), double-click the interface name. The network interface type and network connection status are indicated by the following icons:

Network Interface Type Icons		Network Connection Status Icons	
Icon	Description	Icon	Description
	Ethernet network adapter.		Up.
	Loopback Interface.		3G/UMTS signal strength: no connection.
	<ul style="list-style-type: none"> Barracuda Networks queuing interface (used for traffic shaping). DHCP interface, used for xDSL/DHCP connections. gre0, used for IP-to-IP tunnelling. 		3G/UMTS signal strength: RSSI value below 10.
	Tap interface (internal interface for SYN proxying & VPN).		3G/UMTS signal strength: RSSI value from 21 to 31.
	Tunnel Interface.		Down or duplicate.

Not all UMTS cards support the signal strength feature. To use this feature, you need a UMTS card with two channels, and you must enable the **Activate 2nd Channel** setting (**Network > UMTS > UMTS Connection Details**).

- **Label** – A label is available for every interface that is 'up' (green icon). Multiple predefined labels are available, such as:
 - **mip0** – for the primary administrative network of the box.
 - **loop** – for the loopback interface 127.0.0.1/24.
 - **fw** – for network 127.0.1.1/24 on interface tap0.
 - **vpn** – for network 127.0.2.1/24 on interface tap1.
 - **vpnpers** – for network 127.0.3.1/24 on interface tap3.

IP addresses associated with server processes are labeled according to the name of the server. Additional networks are named according to the label name in the network in the configuration file/dialog.

- **Ping** – This column indicates whether the corresponding IP address is configured to reply to pings (**ok**) or not (**NO**).
- **MAC of duplicate IP** – If an IP address is used twice, the MAC address of the other interface is displayed in this column.
- **Info** – Contains additional information, if applicable.

IPs Tab

To monitor your networks, click the **IPs** tab. A list of your network addresses is displayed in the top table. Information about each network address is organized into the following columns:

- **IP** – The network address.
- **State** – The status of the network.
- **Interface** – The interface that the network is assigned to. The interface name is displayed, followed by a colon and the interface label. For example: eth0:mip0
- **Ping** – This column indicates whether the corresponding IP address is configured to reply to

pings (**ok**) or not (**NO**).

- **MAC of duplicate IP** – If an IP address is used twice, the MAC address of the other interface is displayed in this column.

Interfaces Tab

To view the settings for your network interfaces, click the **Interfaces** tab. A list of your interfaces is displayed in the top table. Information about each interface is organized in the following columns:

- **Interface** – The interface name.
- **MAC** – The unique MAC address for the interface.
- **Link** – Indicates if the interface is physically connected or not.
- **Speed** – For adapters, the maximum transfer rate in Mbit/s.
- **Duplex** – The duplex settings of the NIC (Half or Full).
- **Neg.** – Indicates if auto-negotiation is on or off.
- **MTU** – The Maximum Transmission Unit (MTU) of the NIC.
- **Bytes** – The byte throughput, which is calculated by the average number of bytes/s (obtained from a 10-second sampling interval) passing through the interface.
- **Packets** – The packet throughput, which is calculated by the average number of packets/s (obtained from a 10-second sampling interval) passing through the interface.
- **Errors** – The total number of errors, which is calculated by the average number of all errors on the interface (obtained from a 10-second sampling interval).
- **Realm** – The Trust Level.
- **Flags** – The following entries are possible:
 - **UP** – Interface is up.
 - **BROADCAST** – Broadcast active.
 - **LOOPBACK** – Loopback active.
 - **NOARP** – ARP requests will not be responded.
 - **POINT-TO-POINT** – Used for PPTP.
 - **PROMISC** – Accepts every packet, regardless of whether the MAC address matches.
- **Features** – The following entries are possible:
 - **SGI/O 0** – Scatter gather Input/Output (DMA).
 - **NOCSUM** – No checksum required.
 - **HWCSUM** – Interface is capable of hardware checksum.
 - **IPCSUM** – Interface is capable of checksum for IP packets.
 - **HW-VLAN-TX** – Interface is capable of VLAN tagging transmits.
 - **HW-VLAN-RX** – Interface is capable of VLAN tagging receives.
 - **HIGH-DMA** – I/O memory above 64 K.
 - **DYNALLOC** – Used for virtual interfaces.
- **IRQ** – The IRQ number (ReQuest line) for each interface.
- **Base-Addr** – The I/O port address.
- **Switch** – The switch, if configured.

Proxy ARPs Tab

Proxy ARPs are additional IP addresses/netmasks that the firewall responds to. To view the list of proxy ARPs, click the **Proxy ARPs** tab. In the top table, information about each proxy ARP is organized into the following columns:

- **IP/Mask** - The IP addresses/netmasks.
- **Interface** - The interface where the IP address/netmask resides.
- **Origin** - The origin of the proxy ARP (by whom it is created).
- **Exclude** - The networks that are excluded from proxy APR creation.
- **Source Restriction** - The network addresses to which the proxy ARP request has been limited.

ARPs Tab

The Address Resolution Protocol (ARP) is needed for translating an IP address into a physical address. To view the list of ARP requests, click the **ARPs** tab. In the top table, information about each ARP is organized into the following columns:

- **IP** - The IP addresses that were used.
- **MAC** - The MAC address of each assigned IP address.
- **Vendor** - The NIC manufacturer.
- **Interface** - The interface.
- **Switch** - The switch, if configured.
- **VLAN** - The VLAN, if configured.
- **Port** - The port, if configured.
- **Uplinks** - The uplinks, if configured.

Statistics Tab

To view statistics about the routing and ARP cache of the Barracuda NG Firewall, click the **Statistics** tab. In the top table, information is organized into the following columns:

- **Key** - Displays information about the processes.
- **Value** - Shows the statistical values for each process.

OSPF, RIP, and BGP Tabs

If you configured the OSPF, RIP, or BGP service on your system, click the **OSPF**, **RIP**, or **BGP** tab to view information about the neighbors and interfaces. For more information, see [Dynamic Routing Protocols \(OSPF/RIP/BGP\)](#).

Routing Tables

In the bottom table on the **Network** page, you can view information about your routing tables. If you have not configured policy routing, information is only provided for the main and default tables. Default routes are contained in the default table.

Table / Src Filter	State	Type	Interface	Src IP	Pref	Gateway	Name
Table vpnllocal, From all							
Table main, From all							
10.0.66.0/8	up	device...	eth0	10.0.66.114	0	-	boxnet
10.0.8.0/8	up	device...	phbr-phpr-dev	10.0.8.1	0	-	
127.0.1.0/8	up	device...	tap0	127.0.1.1	0	-	
127.0.2.0/8	up	device...	tap1	127.0.2.1	0	-	
127.0.3.0/8	up	device...	tap2	127.0.3.1	0	-	
Table default, From all							
0.0.0.0/32	up	gateway...	eth0	10.0.66.114	0	10.0.66.1	boxdev

To display only information for certain routing tables, select the table name from the **TABLES** list. Without policy routing activated, all routes except the default routes will go into the main table. Default routes go into the default table. With policy routing activated, additional tables become available as specified in the configuration dialog. In the table, information for each route is organized into the following columns:

- **Table / Src Filter** - The routing table name and its routed netmasks. This column lists routing tables by name. To expand and collapse the list of netmasks for a table, double-click the table name.
- **State** - The state of the routing. Available entries are **up**, **down**, **wild**, **disabled**, and **off**.
- **Type** - The route type:
 - **Direct** - Direct routes point to directly connected networks. No next hop is involved. The network is directly accessible via the specified interface.
 - **Gateway** - Gateway routes are routes to networks that are only accessible via a next hop. The next hop must be reachable through a direct route.
- **Interface** - The interface through which traffic to the destination network passes. For direct routes, the interface must be specified within the network configuration. For gateway routes, it is automatically determined from the available direct routes.
- **Src IP** - The route source IP address. The control daemon automatically picks the most appropriate source address from the

pool of available IP addresses unless a source address has been explicitly specified in the network configuration.

- **Pref** - The preference of the route, with **0** indicating the highest preference.
- **Gateway** - The address of the next hop for gateway routes. For direct routes, this field is left empty (denoted by a single -).
- **Name** - The given name of the route.

If you added routes at the command line or deleted direct and gateway routes with a 'Soft' network activation, you might see routes that are marked as 'wild'. These are routes for which there is no corresponding entry in the network configuration file. To delete a wild route, right-click it and select **Delete Wild Route**.

Figures

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3. loopback.png
4. queuing.png
5. tap.png
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7. up.png
8. 3g_nc.png
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10. 3g_hc.png
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