

How to Add Additional Network Interfaces

<https://campus.barracuda.com/doc/41116003/>

When you add network modules to Barracuda appliances or virtual network adapters to virtual systems, you must add these network interfaces to the network configuration of your Barracuda NG Firewall. Every Barracuda NG Firewall model has its own set of interface names (naming eth, port, LAN, etc.). You must have the product and model configured correctly in the **Box Properties** configuration before adding additional network interfaces. Hardware appliances are automatically configured with the correct network interfaces.

When adding additional network interfaces to a Barracuda NG Firewall Vx on a VMware hypervisor, check the order of the network adapters after rebooting. You may have to change the assigned virtual switch in the VMware configuration if the new network adapter has not been placed last in the configuration.

In this article:

Before you Begin

Find out which network driver is needed for your network adapter/interface.

Step 1. Add Network Interface(s)

Add the additional network interfaces to the Barracuda NG Firewall.

1. Open the **Network** page (**Config > Full Config > Box**).
2. In the left pane, click **Interfaces**.
3. Expand the **Configuration Mode** menu, and then click **Switch to Advanced**.
4. Click **Lock**.
5. In the **Network Interface Cards** table, add or edit an entry for the NIC. For more information on the NIC settings, see the following Interface Settings section.
6. To dynamically update the settings in the **Physical Interfaces** table, select **yes** from the **Interface Computation** list. The physical interface settings are updated whenever the network configuration is changed. Otherwise, you must manually update settings.
7. In the **Physical Interfaces** table, add or edit an entry for your physical interface. For more

information on the physical interface settings, see the following **Interface Settings** section.

8. In the **Internal Interface Configuration** table, add loopback equivalent devices.
9. Click **Send Changes** and **Activate**.

Step 2. Activate Network Changes

You must activate the network changes to add the network devices.

1. Open the **Box** page (**Control > Box**).
2. In the left menu, expand the **Network** section and click **Activate new network configuration**.
3. Select **Failsafe**. The 'Failsafe Activation Succeeded' message is displayed after your new network configurations have been successfully activated.

The Barracuda NG Firewall can now send traffic over the new network interfaces.

Interface Parameters Description

Network Interface Cards Table

Descriptions of the settings that you can configure in the **Network Interface Cards** table:

Setting	Description
Driver Module Name	The driver that is used for the NIC. Only recommended cards are listed. If you require a card that is not listed, see the list of supported NICs to verify that your card is supported. To manually enter the card name, select the Other check box and enter the card name in the Driver Module Name field. If you are using a Marvel network adapter that requires the sk98lin_cb.o interface, interface naming must begin with eth1. The eth0 interface is NOT supported.

Number of Interfaces	<p>The number of NIC interfaces that can be used simultaneously. This indicates the number of ports and not the number of cards of the particular type. For example, one dual-port NIC counts as two interfaces, but one combo-type card with support for three different connectors (for example, BNC, AUI, RJ45) counts as one because only one connection is active at one time. If you enter 0, the module is not loaded.</p>
Driver Options (Advanced Configuration Mode)	<p>This setting is used with module-based driver support. For more information, see the Driver Options section below. Note that several interface-specific option strings may be added to this table. They are formatted as: <code>key=value1 ... valueN</code> with <i>N</i> being the number of interfaces.</p>
Fallback Enabled (Advanced Configuration Mode)	<p>(Advanced Configuration Mode) Activates an alternative NIC driver that is defined via the Fallback Module Name and Fallback Driver Options settings. This setting might be helpful during and after updating sequences. If the primary driver does not work, the fallback driver is used. If the fallback driver does not work, both drivers are loaded.</p>
Fallback Module Name/Fallback Driver Options (Advanced Configuration Mode)	<p>(Advanced Configuration Mode) The fallback driver to be used for the NIC. Only recommended cards are listed. If you require a card that is not listed, see the list of supported NICs to verify that your card is supported.</p>
Activate Driver	<p>Enable or disable the driver.</p>
NIC Type	<p>NIC type. This information is used for logical consistency checks. In conjunction with the specified number of interfaces, it is possible to check whether a particular interface may be referenced in some of the other sections. Available NICs: Ethernet.</p>
Driver Type (Advanced Configuration Mode)	<p>(Advanced Configuration Mode) Specifies if driver support is module-based or kernel-based. Default is Loadable_Module.</p>

Ethernet MTU	<p>The MTU size for an Ethernet NIC. Packets exceeding this value are fragmented when sent. This MTU is used as the default value for all existing interfaces. To specify an MTU for an interface, edit its MTU setting in the Physical Interfaces table.</p> <p>MTUs can also be set for virtual LANs, box network, additional networks, and standard routing. The maximum accepted MTU of the next hop is used.</p> <ul style="list-style-type: none"> • Example 1: If you have a NIC with MTU size 1500 and a Standard Route with MTU size 2000, the valid MTU size is 1500. • Example 2: If you have a NIC with MTU size 2000 and a Standard Route with MTU size 1500, the valid MTU size is 1500.
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Physical Interfaces Table

Setting	Description
MTU	The MTU for the interface. This setting overrides the MTU that is entered in the Network Interface Cards table.
Availability	<p>If nothing else has been configured, all recognized interfaces are generally available by default. Interfaces can be claimed for exclusive use by xDSL (Connection Type: PPPOE) and DHCP links (see How to Configure an ISP with Dynamic IP Addresses (DHCP)). When an interface has been claimed as Modem Interface or DHCP Interface, its usage is set to status Reserved. If an interface is claimed by multiple services concurrently, its usage status is set to Overbooked.</p> <p>Interfaces marked as overbooked cannot work properly. They will not be available for any of the configured services.</p>
References	An interface that has not been claimed by a service is flagged with none . Interfaces claimed by xDSL or DHCP links are flagged with xdsl or dhcp , respectively, followed by the link name as specified in the xDSL/DHCP configuration area when creating the link. For example, xdsl::xDSLLinkName .
Name of NIC	The NIC name as specified in the Network Interface Cards table.
NIC Type	The NIC type as specified in the Network Interface Cards table.
Used Driver	The driver module driver name as defined in the Network Interface Cards table.
Enable Autonegotiation	If the driver module does not support static network speed and duplex mode settings, select no in order to manually enter these settings. Speed and duplex mode options that cannot be steered through the NIC driver are manually set to a static value via the ethtool utility.
Forced Speed [Mbps]	The static network speed for the NIC. To manually set the forced speed, enable autonegotiation and select 10 , 100 , or 1000 Mbps.

Duplex Mode	The static duplex mode for the NIC. To manually set the duplex mode, enable autonegotiation and select half or full .
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