Installation in Front of Your Firewall

Use these detailed instructions to deploy the Barracuda Link Balancer between the Internet and your firewall, completely configuring the Barracuda Link Balancer before connecting it to your production system.

In this mode, with the Barracuda Link Balancer firewall disabled, you need an additional static IP address to deploy the Barracuda Link Balancer. If you do not have an extra static IP address, you may need to order one from your ISP.

Step 1. Prepare for the Installation

Do the following before installing your Barracuda Link Balancer:

1. Verify that you have the necessary equipment: Barracuda Link Balancer, AC power cord (included), Ethernet cables, a PC with a web browser.
2. Plug in the Barracuda Link Balancer and power it on.

To enable inbound access to resources behind the Barracuda Link Balancer, such as a web server, you must provide at least one WAN link with a static IP address for receiving incoming traffic.

Step 2. Activate the Barracuda Link Balancer with Temporary Network Settings

Follow these steps to configure the Barracuda Link Balancer with temporary settings and activate it:

1. Change the network settings of a PC with a web browser installed to use an IP address of 192.168.200.10, subnet mask of 255.255.255.0, and gateway of 192.168.200.200.
2. Depending on the model, there may be a LAN port on the front or back side of the Barracuda Link Balancer. Connect an Ethernet cable from the PC to that port.
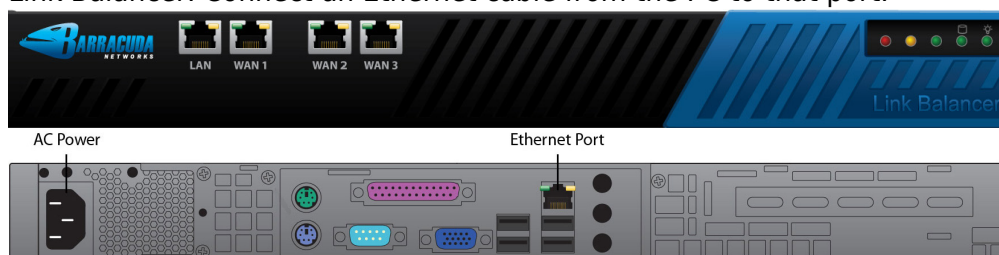
3. Start the web browser and access the web interface by typing

`http://192.168.200.200:8000`.

4. Log in with the default username *admin* and the default password the serial number of the appliance. See [Serial Number for Hardware and Virtual Appliances](#).
5. Go to the **BASIC > Links** page and click on one of the WAN ports displayed in the graphic.
6. In the **Links Configuration** section, set the **Type** of the WAN link to *DHCP* to acquire an address in the office network. Alternatively, set the link **Type** to *Static* and enter a specific IP address.
7. Click **Save Changes** .
8. Connect an Ethernet cable from the corresponding WAN port on the front of the Barracuda Link Balancer into your office network. You should now have Internet connectivity from your PC.
9. At the top of every page, you may see an activation warning message. Click on the link in the warning message or use the link on the **BASIC > Status** page to open up the **Barracuda Networks Product Activation** page in a new browser window.
10. Fill in the required fields and click **Activate** . A confirmation page opens to display the terms of your subscription. On the **BASIC > Status** page, you may need to enter the activation code from the **Barracuda Networks Product Activation** page to activate your Barracuda Link Balancer.

 If your subscription status does not change to *Current*, or if you have trouble filling out the Product Activation page, call your Barracuda Networks sales representative.

Step 3. Update Firmware

You should read the release notes to learn about the features of a firmware update before applying it.

1. Go to the **ADVANCED > Firmware Update** page. If there is a new **Latest General Release** available (the **Download Now** function is enabled), perform the following steps to update the system firmware:
2. Click **Download Now** next to the **Latest General Release** firmware version.
3. Click **OK** to acknowledge the download duration message. To avoid damaging the Barracuda Link Balancer, do not power off during an update or download. To view the progress of the download, click **Refresh**. You will be notified when the download is complete.
4. Click **Apply Now** to apply the firmware.
5. Click **OK** to acknowledge the reboot message. Applying the firmware takes a few minutes to complete.

After the firmware has been applied, the Barracuda Link Balancer automatically reboots. When the system comes back up, the login page is displayed. Log in again.

Step 4. Disable the Barracuda Link Balancer Firewall

To use your existing firewall, you must disable the Barracuda Link Balancer firewall:

1. Go to the **BASIC > IP Configuration** page and disable the **Network Firewall**.
2. Click **OK** to acknowledge the reboot message.

The Barracuda Link Balancer will reboot.

Step 5. Configure WAN and LAN Permanent Settings

Configure the permanent settings for the WAN links that will be connected to the Barracuda Link Balancer. Some of the configuration information for the WAN links is provided by your ISP. Be sure to enter these values correctly.

1. Unplug the Ethernet cable connecting the WAN port to your office network.
2. After the Barracuda Link Balancer has rebooted, log into the web interface and go to the **BASIC > Links** page.
3. For each link that will be connected to this unit:
    1. Click the relevant WAN port displayed in the graphic.
    2. In the **Links Configuration** section, enter the details for the link to be connected to the WAN port.
    3. If the interface uses a static IP address, then you will see the **Additional IP Addresses** list. These are the public IP addresses that can be reached via the Internet behind the Barracuda Link Balancer, including the address of your firewall. These need to be identified so that traffic can be accepted and directed to them. The Barracuda Link Balancer is able to locate these addresses automatically, so creating this list is optional but may slightly improve efficiency. To manually create the list, enter the IP addresses or click **Discover** to populate a list of IP addresses of live systems that are on the same Class C network as this WAN interface. The **Discover** button is only visible if there are no entries in the **Additional IP Addresses** list and if the built-in firewall is disabled.
        > If you are enabling inbound access to resources behind the Barracuda Link Balancer, such as a web server, you must provide at least one WAN link with a static IP address for receiving the incoming traffic.
4. Click **Save Changes**.
5. If desired, change the LAN/Management IP address of the Barracuda Link Balancer to its permanent setting.
    The LAN IP address is only used for management of the Barracuda Link Balancer. (The WAN IP addresses can also be used to access the management interface). The LAN IP address can be any private or public address reachable through your existing firewall from the LAN. If the default address of *192.168.200.200* meets this criteria, there is no need to change it.
    To change the LAN/Management IP address,
        1. Go to the **BASIC > IP Configuration** page.

2. Change the **IP Address** and **Subnet Mask** .
3. Click **Save Changes** . If the address is on a different subnet, your connection will terminate.

> In *Firewall disabled* mode, the IP addresses of LAN (Ethernet) and WAN1 ports must NOT reside within the same subnet.

6. Power down your Barracuda Link Balancer using the power button on the front of the unit.

> If you connect more than one ISP link to your Barracuda Link Balancer, you need to perform a few additional configuration steps. Please refer to How to Add an Additional ISP Link in Firewall Disabled Mode.

Step 6. Install in the Production Network

Now that the Barracuda Link Balancer is configured, install it in its permanent location and connect it to your WAN links:

1. Mount the Barracuda Link Balancer in a 19-inch rack or place it in a stable location. To ensure proper ventilation, do not block the cooling vents on the front and back of the unit.
2. Connect each of the cables from the Internet links into a WAN port on the front of the Barracuda Link Balancer. The ports are labeled WAN1, WAN2, etc. These ports correspond to the WAN ports that you configured in the web interface. Be sure to connect them according to your configuration.
3. If there is a LAN port on the front of the Barracuda Link Balancer, connect an Ethernet cable from the outside interface of your existing network firewall to that LAN port. If there is no LAN port on the front, connect the outside interface of your existing network firewall to the LAN Ethernet port on the back panel of the Barracuda Link Balancer. You should see some activity on both the yellow and green lights on the LAN port. If not, you may need to use a crossover cable.

Step 7. Test Connectivity

Now you are ready to test the connectivity to your existing firewall and the systems connected to it. There is no need to change your firewall network configuration - your network firewall should continue to use the ISP-provided gateway address.

1. Confirm that you can access the Internet from a client computer on your LAN. If this works, continue.
2. On the test system, log into the web interface using the permanent LAN IP address.
3. Go to the **BASIC > Links** page. The status of each link should appear as *Connected*. You can see the utilization of each link by moving the mouse over the graphic.
4. On the test system, generate some traffic, by, for example, opening more tabs in the browser of the test system and downloading files from the internet. You can FTP files from a number of

different sites or use torrent to get the traffic to flow on multiple links.

5. Go to the **BASIC > Status** page to view graphs that show the incoming and outgoing traffic for each link.

> If you have connectivity issues, clear the ARP caches of your existing network components such as the firewall, routers and modems. In some cases, you may need to reboot these devices.

You do not need to update your existing firewall configuration unless you want to make it aware of the new WAN link(s). To do so:

- Add firewall rules so that traffic from the new links is handled correctly.
- If you want to be able to manage your existing firewall remotely, add an alias on your firewall for the other links in case the first link is unavailable.

Your Barracuda Link Balancer should be ready for operation. There are a number of other configuration options available referred to on the following pages.

Step 8. Configure your Local Network

If you have disabled the firewall for the Barracuda Link Balancer, you must configure your local network to meet certain prerequisites before adding new ISP links in addition to your existing ISP. To do so, follow the instructions given in How to Add an Additional ISP Link in Firewall Disabled Mode.

After completing all installation instructions, continue with the basic configuration Step 1: Configure Administrative Settings.

Figures

1. linkbal-frontpanel.png
2. backpanel.png