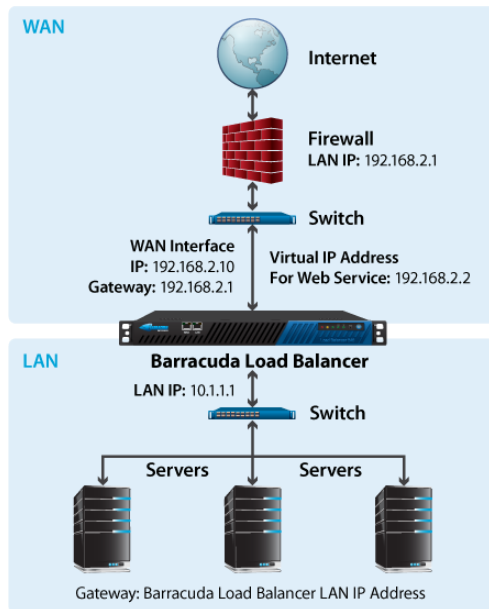
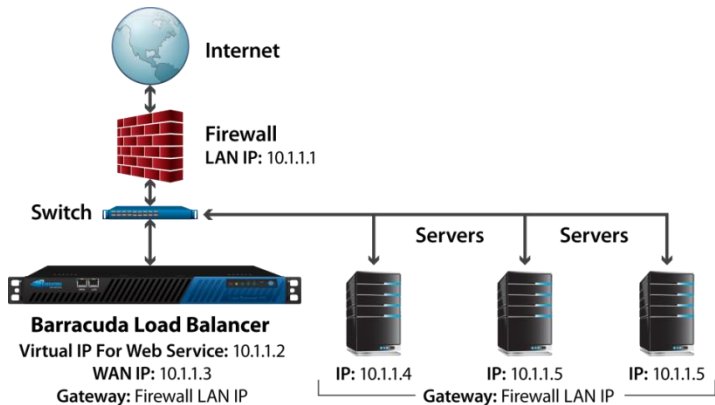


Before you install the Barracuda Load Balancer in your network, you must first determine the network layout that suits your environment.

One common option is a two-armed Route-Path deployment, where the Barracuda Load Balancer is deployed in-line, performing a NAT from the WAN network to the LAN:



Another option is a Service type of TCP Proxy in a one-armed Route-Path deployment, where the WAN port of the Barracuda Load Balancer is used for all load-balanced traffic:



For more deployment options, visit <http://techlib.barracuda.com/display/BLBv42/>.

1 Getting Started

To set up your Barracuda Load Balancer, you need the following:

- Barracuda Load Balancer, AC Power Cord (included)
- Ethernet Cables
- VGA Monitor (recommended)
- PS2 Keyboard (recommended)

2 Installation

To install the Barracuda Load Balancer:

1. Fasten the Barracuda Load Balancer to a 19-inch rack or place it in a stable location.
2. For all models: Connect an Ethernet cable from your network switch to the WAN port on the front panel of the Barracuda Load Balancer.
3. For models 240, 340 and 440: Connect an Ethernet cable from your LAN switch to the LAN port. If desired, connect an Ethernet cable from the network switch for your management network to the Ethernet port on the back of the appliance.
4. For model 640 only: Connect Port 1 through Port 10 to the Real Servers. Connect an Ethernet cable to the MGMT port from your management network.
5. Connect a VGA Monitor, PS2 Keyboard, and AC power cord to the unit. AC input voltage range is 100-240 volts at 50/60 Hz. If you prefer to connect a PC to the serial port, the settings are 9600/8-N-1.
6. Press the power button on the front panel to turn the unit on.

3 Configure the WAN IP Address

If you have a monitor connected, the Barracuda Load Balancer initially displays the Boot Menu, and the Administrative Console login prompt once fully booted. To begin the configuration:

1. Login to the Administrative Console using the admin login:

Login: admin

Password: admin

```
barracuda login: admin
password:
```

2. Configure the addresses as appropriate for your network.

If you do not have a monitor and keyboard and want to set the WAN IP address using the RESET button on the front panel, press and hold the RESET button per the following table:

IP address	Press and hold RESET for...
192.168.200.200	5 seconds
192.168.1.200	8 seconds
10.1.1.200	12 seconds

4 Open Firewall Ports

If your Barracuda Load Balancer is located behind a corporate firewall, open the following ports on your firewall to ensure proper operation:

Port	Direction	TCP	UDP	Usage
22	Out	Yes	No	Technical support services
53	Out	Yes	Yes	Domain Name Service (DNS)
80	Out	Yes	No	IPS and firmware updates
123	Out	No	Yes	Network Time Protocol (NTP)
Any ports used by Services				1:1 NATs as needed, and ports required to access the VIP address of a load-balanced Service

5 Specify the LAN IP Address

Use a computer with a web browser connected to the same network as the Barracuda Load Balancer, and follow these steps:

1. In the browser address bar, enter `http://` followed by the Barracuda Load Balancer IP address, followed by the default web interface HTTP port (:8000). For example: `http://192.168.200.200:8000`
2. Log in to the Barracuda Load Balancer web interface as the administrator:
Username: admin **Password:** admin
3. Go to the **Basic > IP Configuration** page. Enter the LAN IP address and subnet mask. In two-armed Route-Path mode the LAN IP address acts as the default gateway for the Real Servers. In one-armed Route-Path mode the LAN IP address may be used for management.
4. Complete the rest of the fields on this page, and click **Save Changes**.

6 Activate Subscription

Go to **Basic > Status**, and under **Subscription Status**, verify the Energize Updates subscription status is *Current*. If the status is *Not Activated*, click the activation link to go to the Barracuda Networks Product Activation page, and complete activation of your subscription.

If connected to the Internet, the Barracuda Load Balancer automatically updates its activation status after you reload the **Basic > Status** page. If the network firewall prevents the Barracuda Load Balancer from automatically updating the status, you can manually enter the activation code provided after completing the details on the Barracuda Networks Product Activation page.

7 Update the Firmware

Go to **Advanced > Firmware Update**. If there is a new **Latest General Release** available, perform the following steps to update the system firmware:

1. Click **Download Now** and allow the download to complete. Do not power **OFF** during update or download to avoid damaging the Barracuda Load Balancer.
2. Click **Apply Now** to start the update process after which the unit automatically reboots.

Note: Read the Release Notes to learn about enhancements and new features included with the firmware update.

8 Change the Administrator Password

To prevent unauthorized use, Barracuda Networks recommends that you change the default administrator password to a more secure password:

1. Go to **Basic > Administration**, and enter your old and new passwords.
2. Click **Save Password**.

9 Configure a Layer 4 Service (Two-Armed Route-Path deployment)

Visit <http://techlib.barracuda.com/display/BLBv42/> for documentation on other types of Services.

For each Real Server that you wish to load balance, ensure that its IP address is within the LAN IP and subnet mask defined in Step 5, and configure its default gateway to be the LAN IP address of the Barracuda Load Balancer. Connect the Real Servers to the switch plugged into the LAN interface. Now create the Service on the Barracuda Load Balancer:

1. Go to the **Basic > Services** page.
2. In the **Service Name** box, enter a name to identify the Service.
3. In the **Virtual IP Address** box, enter a Virtual IP address for the Service. This IP address will live on the WAN interface and become the IP address used by the clients to reach the load balanced Service.
4. Select TCP or UDP.
5. In the **Port** box, enter the port for the given Service. If the Service uses multiple ports, type *ALL*.
6. In the **Real Servers** box, enter the IP addresses for the Real Servers which hold the application or content. The Real Servers must be on a separate subnet from their associated Virtual IP addresses and have the Barracuda Load Balancer's LAN interface configured as their default gateway.

10 Test Connectivity

Verify network connectivity by using a system in your existing network to access the Service you just defined. Connect to the Virtual IP address in the same way you used to go to the single server.

For more information

Barracuda Load Balancer documentation is available on the Barracuda Networks TechLibrary at <http://techlib.barracuda.com/display/BLBv42/>

Contact and Copyright Information

Barracuda Networks, Inc. 3175 S. Winchester Blvd, Campbell, CA 95008 USA • phone: 408.342.5400 • fax: 408.342.1061 • www.barracuda.com
 Copyright © 2004-2013 Barracuda Networks, Inc. All rights reserved. Use of this product and this manual is subject to license. Information in this document is subject to change without notice. Barracuda Load Balancer and Barracuda are trademarks of Barracuda Networks, Inc. All other brand and product names mentioned in this document are registered trademarks or trademarks of their respective holders. The Software supplied with this Product is provided under license from Barracuda Networks, Inc. and other licensors, and certain of the programs included in the Software may be provided under the GNU General Public License (GPL) or the Lesser General Public License (LGPL). In accordance with the terms of the GPL and LGPL, you may request a copy of the relevant source code. This offer is valid for up to three years from the date of original purchase of the Product. For terms of use for this product, please visit <http://techlib.barracuda.com/x/RgA2> (Limited Warranty and License) in the Barracuda TechLibrary.
 v4.2-120131-06-0925sk