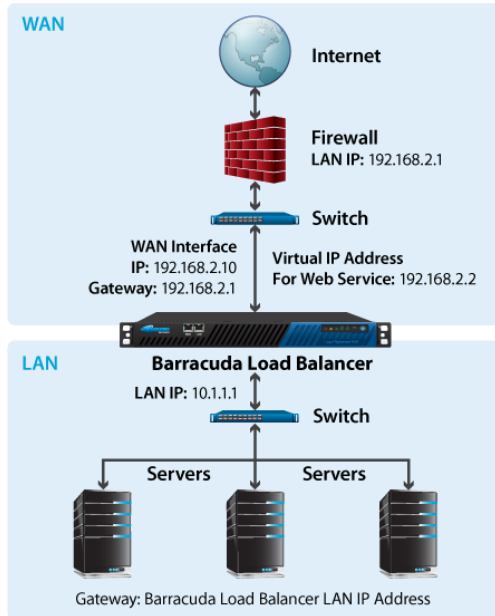
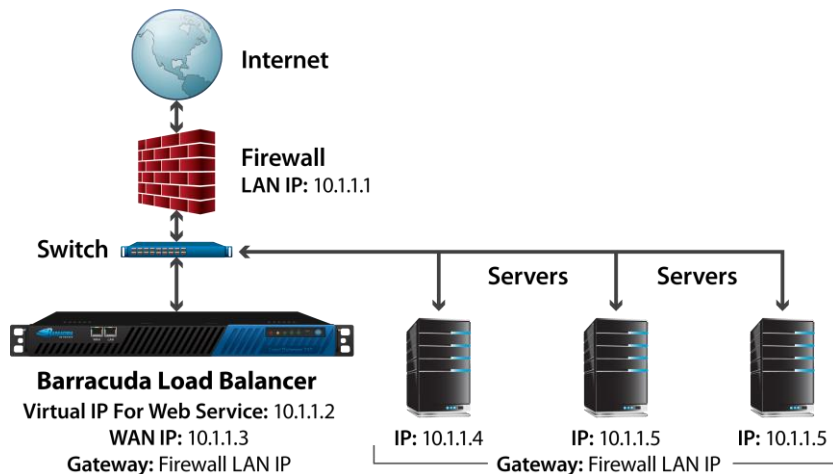


Before you install the Barracuda Load Balancer in your network, you must first determine the network layout that suits your environment.

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:



A complete list of deployment options are described in the *Barracuda Load Balancer Administrator's Guide*, which is available at <http://www.barracuda.com/documentation>.

Follow the instructions in this guide to configure the Barracuda Load Balancer for a Route-Path deployment and create a Service. Instructions for other deployments can be found in the *Barracuda Load Balancer Administrator's Guide*.

1

Getting Started

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

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

2

Install the Barracuda Load Balancer

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 Ethernet 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.
4. For model 640 only: The MGMT port is not supported at this time. Connect the ports labeled Port 1 through Port 10 to the Real Servers.
5. Connect a VGA Monitor, PS2 Keyboard, and AC power cord to the unit.
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 will display the Boot Menu initially, 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

```
barracuda login: admin
```

Password: admin

```
password:
```

2. Configure the **IP Address**, **Subnet Mask**, **Default Gateway**, **Primary DNS Server** and **Secondary DNS Server** as appropriate for your network.

If you do not have a monitor and keyboard and want to set the IP 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 any port required to access the VIP of a load-balanced Service

5

Specify the LAN IP Address

Use a computer with a Web browser that is connected to the same network as the Barracuda Load Balancer and follow these steps:

1. In your Web browser's address bar, enter `http://` followed by the Barracuda Load Balancer's IP address, followed by the default Web interface HTTP port (:8000). For example:
`http://192.168.200.200:8000`
2. Login 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.

6

Activate Subscription

Verify that the Energize Updates feature is activated on your Barracuda Load Balancer – this is required to enable further configuration.

1. Go to the **Basic > Status** page.
2. Under Subscription Status, if **Energize Updates is Not Activated**, click the activation link to be redirected to the Barracuda Networks Product Activation page. Complete activation of your subscription(s).

If it is connected to the Internet, the Barracuda Load Balancer automatically updates its activation status after you reload the browser page when viewing the **Basic > Status** page. If the network firewall prevents the Barracuda Load Balancer from updating its activation status automatically, 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 the **Download Now** button located next to the Latest General Release firmware version. Click **OK** to acknowledge the download duration message. To avoid damaging the Barracuda Load Balancer, do not power off during a download. To view the progress of the download, click **Refresh**.

2. When the download is complete, click **Apply Now** to apply the firmware. Click **OK** to acknowledge the reboot message. Applying the firmware takes a few minutes to complete.
3. After the firmware has been applied, the Barracuda Load Balancer automatically reboots. When the system comes back up, the login page is displayed. Log in again.

8

Change the Administrator Password

To prevent unauthorized use, we recommend you change the default administrator password to a more secure password.

1. Go to **Basic > Administration** to change your password.
2. Complete the rest of the fields on this page.

9

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

Refer to the *Barracuda Load Balancer Administrator's Guide* for 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 4, 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

The *Barracuda Load Balancer Administrator's Guide* and other documentation are available at <http://www.barracuda.com/documentation>.

Contact and Copyright Information

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