How to Replace a Barracuda Load Balancer in a High Availability Environment

https://campus.barracuda.com/doc/9011834/

High availability (HA) is an advanced feature; *contact Barracuda Networks Technical Support* **before replacing a Barracuda Load Balancer in a cluster**.

The steps for replacing a Barracuda Load Balancer differ based on whether the system is the *Primary* or the *Secondary* device in the cluster.

The High Availability (HA) environment is available on the Barracuda Load Balancer 340 and higher; note that *both Barracuda Load Balancers in HA must be the same model and on the same firmware*.

Replace the *Primary* System in a High Availability Environment

This section describes the most common scenarios for replacing the Primary system in HA.

Because the Primary system is offline during replacement, you must schedule downtime when replacing the Primary system in HA.

Select the scenario that best fits your use case, and complete the associated steps when replacing the *Primary* system in an HA environment.

Scenario 1. New Replacement Primary Device

Follow the steps in this procedure carefully; on firmware version 4.1.0.034 or higher, it is necessary to perform a hot swap and delete the *Primary* device from the *Secondary* device configuration *at the end of this procedure* to avoid wiping out the configuration of the *Secondary* device.
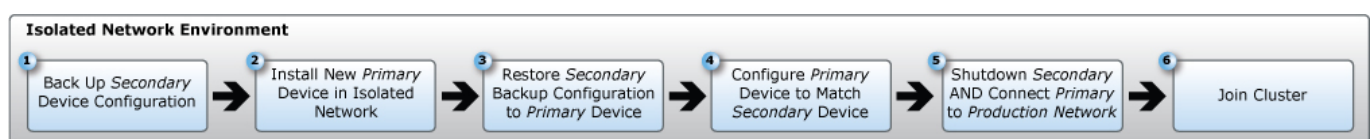
Figure 1. New Primary Device Replacement.
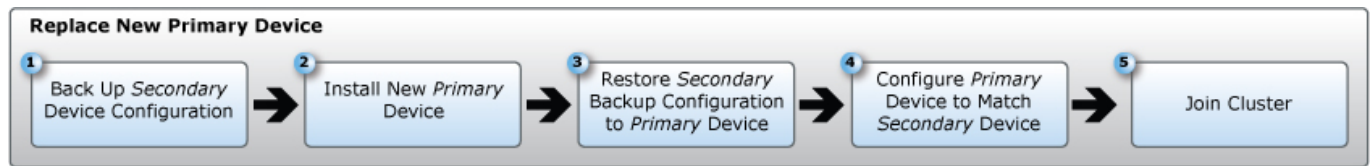
Replace New Primary Device

1. Back up the system configuration on the *Secondary* device.
   Note that the *Secondary* device must remain <u>active</u> since the *Primary* device is down during this replacement procedure.
2. Complete the following steps on the *Secondary* device:
   1. Log in to the *Secondary* device, and navigate to the **ADVANCED > Backup** page.
   2. In the **Configuration Backup** section, click **Backup** to download a backup to your desktop.
3. Install the new replacement *Primary* device and assign the WAN IP address of your <u>old Primary</u> device to the *new Primary* device. Verify the new *Primary* device is on the same firmware version as the existing devices.
4. Once the new device is installed, log in to the *Primary* System, go to the **ADVANCED > Backup** page, and complete the following steps:
   1. In the **Restoring Backups** section, click **Browse** after the **Restore Backup File**; navigate to and select the configuration backup saved to your desktop.
   2. Click **Upload** to upload the configuration backup file to the *Primary* device.
      Connections on the primary and secondary devices may go down intermittently during this procedure.
5. On the *Primary* device, go to the **ADVANCED > High Availability** page, and configure *all* attributes in the exact same manner as those on the *Secondary* device; the **Cluster Shared Secret** must match exactly.
6. On the *Secondary* device, navigate to the **ADVANCED > High Availability** page, and complete the following steps:
   1. In the **Clustered Systems** section, delete the IP address of the *old Primary* device; the system refreshes and wipes out all of the configuration settings.
   2. Once the device is back online, go to the **BASIC > IP Configuration** page and set the domain name.
   3. Navigate to the **ADVANCED > High Availability** page, and under **Clustered Systems**, assign the IP address of the *Primary* device, and click **Join Cluster**.

Scenario 2. Activate the New Primary Device in an Isolated Network

Figure 2. Isolated Network Environment.

Isolated Network Environment

1. Back up the system configuration on the *Secondary* device.
   Note that the *Secondary* device must remain <u>active</u> until step 6 in this procedure.

2. Log in to the *Secondary* device, and navigate to the **ADVANCED > Backup** page.
3. In the **Configuration Backup** section, click **Backup** to download a backup to your desktop.
4. Install the new replacement *Primary* device in an isolated network, and complete the following steps:
    1. Go to the **ADVANCED > Backup** page on the Primary device, and in the **Restoring Backups** section, click **Browse** after the **Restore Backup File**.
    2. Navigate to and select the configuration backup saved to your desktop in step 3 above.
    3. Click **Upload** to upload the configuration backup file to the *Primary* device.
    4. Assign the WAN IP address of the old Primary device to the new *Primary* device.
5. Verify the configuration on the new *Primary* device.
6. After verifying the configuration, complete the following at the *same* time:
    - Shutdown the *Secondary* device, and
    - Connect and power up the new *Primary* device to the production network.
7. Put the *Secondary* device in an isolated network.
8. On the *Primary* device, go to the **ADVANCED > High Availability** page, and configure *all* attributes in the exact same manner as those on the *Secondary* device; the **Cluster Shared Secret** must match exactly.
9. Remove the *Secondary* device from the cluster by deleting the IP address of the old Primary device from the **Clustered Systems** section.
10. Put the *Secondary* device back in the production network.

Replace the *Secondary* System in a High Availability Environment

Figure 3. Secondary System Replacement.

1. Remove the old *Secondary* device using the instructions in the article How to Remove a Barracuda Load Balancer from a High Availability Environment.
2. Install the new replacement *Secondary* device using the Barracuda Load Balancer Quick Start Guide.
3. Once the new device is installed, follow the steps in the article How to Configure the Barracuda Load Balancers for High Availability to complete the system replacement in the HA configuration.

    When replacing a system in a cluster, both systems must be on the same firmware version.

Related Articles

- [Understanding Barracuda Load Balancer High Availability](#)
- [How to Configure the Barracuda Load Balancers for High Availability](#)
- [How to Manage a High Availability Environment with Two Barracuda Load Balancers](#)
- [How to Update Firmware on Clustered Systems](#)
- [How to Remove a Barracuda Load Balancer from a High Availability Environment](#)
- [Barracuda Load Balancer Deployment Options](#)

Figures

1. HA-scenario01.jpg
2. HA-scenario02.jpg
3. HA-scenario03.jpg