

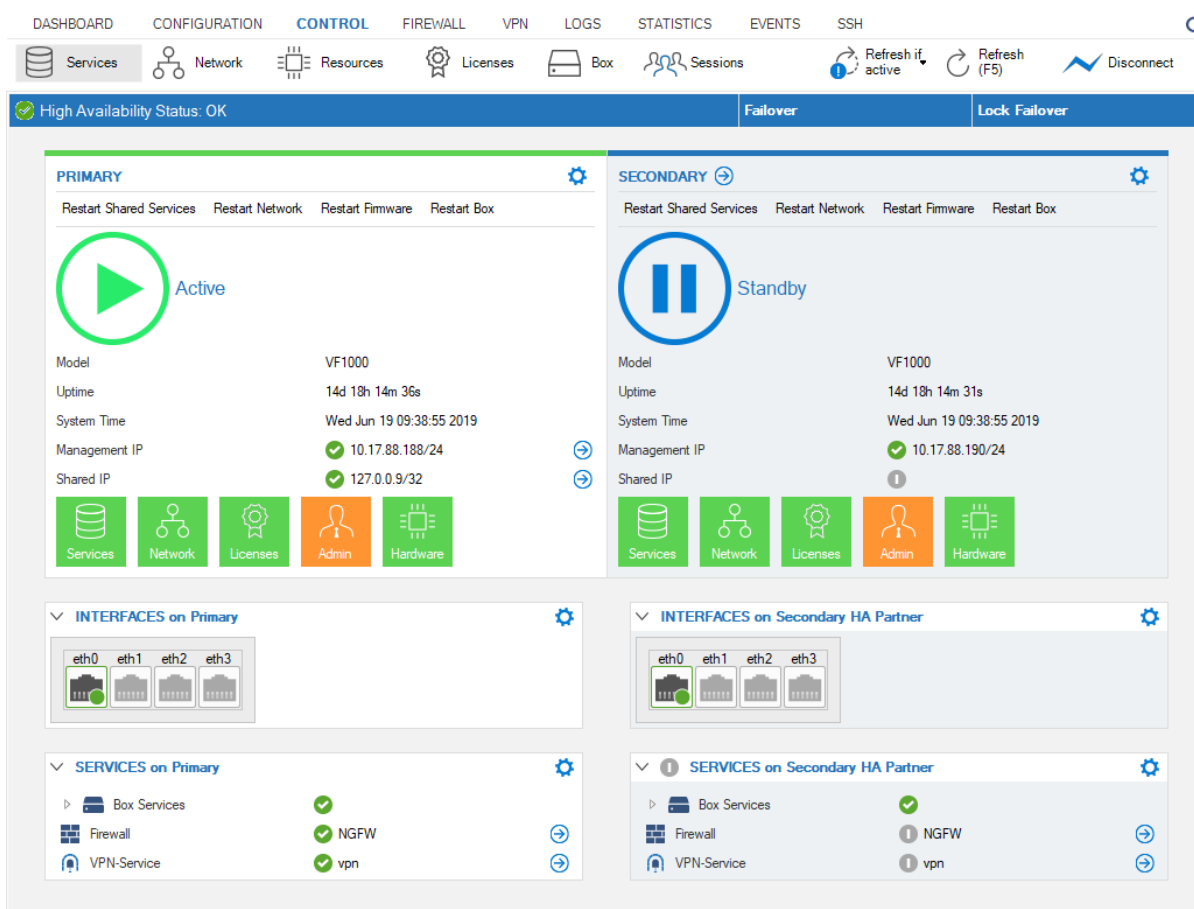
Monitoring, Managing, and Rebuilding HA Clusters

<https://campus.barracuda.com/doc/96026370/>

Manage configuration updates and monitoring for your HA clusters. Configuration changes on the primary unit are transferred instantly to the secondary unit. The sync status can be viewed from Barracuda Firewall Admin. If the primary unit fails, configuration changes must be made on the secondary unit. After the primary unit is re-established, synchronization must be started manually.

Check the Services Status

- On the primary and secondary unit:
 - Go to **CONTROL > Services**.
 - Verify that the status of the **PRIMARY** is **Active** and the status of the **SECONDARY** is **Standby**.



The screenshot displays the Barracuda Firewall Admin interface for a High Availability (HA) cluster. The top navigation bar includes tabs for DASHBOARD, CONFIGURATION, CONTROL, FIREWALL, VPN, LOGS, STATISTICS, EVENTS, and SSH. The 'CONTROL' tab is selected, and the 'Services' sub-tab is active. The interface shows the status of the PRIMARY and SECONDARY units. The PRIMARY unit is 'Active' (indicated by a green play button icon), and the SECONDARY unit is 'Standby' (indicated by a blue pause button icon). Both units are VF1000 models with an uptime of 14d 18h 14m 36s. The PRIMARY unit has a management IP of 10.17.88.188/24 and a shared IP of 127.0.0.9/32. The SECONDARY unit has a management IP of 10.17.88.190/24. Below the status sections, there are tabs for INTERFACES and SERVICES. The PRIMARY unit shows interfaces eth0, eth1, eth2, and eth3, and services Box Services, Firewall, and VPN-Service. The SECONDARY unit shows the same interfaces and services, but with a warning icon next to the Firewall service.

When the primary unit goes down, both units change their state accordingly:

DASHBOARD CONFIGURATION **CONTROL** FIREWALL VPN LOGS STATISTICS EVENTS SSH

Services Network Resources Licenses Box Sessions Refresh if active Refresh (F5) Disconnect

High Availability Status: HA Takeover Blocked Failover Unlock Failover

PRIMARY

Restart Shared Services Restart Network Restart Firmware Restart Box

Blocked

Model VF1000
Uptime 12d 20h 59m 20s
System Time Mon Jun 17 12:23:39 2019
Management IP 10.17.88.188/24
Shared IP 10.17.88.188/24

Services Network Licenses Admin Hardware

INTERFACES on Primary

eth0 eth1 eth2 eth3

SERVICES on Primary

Box Services ✓
Firewall ✓ NGFW
VPN-Service ✓ vpn

SECONDARY

Restart Shared Services Restart Network Restart Firmware Restart Box

Active

Model VF1000
Uptime 12d 20h 59m 15s
System Time Mon Jun 17 12:23:39 2019
Management IP 10.17.88.190/24
Shared IP 127.0.0.9/32

Services Network Licenses Admin Hardware

INTERFACES on Secondary HA Partner: MSpangnelDHA-HA

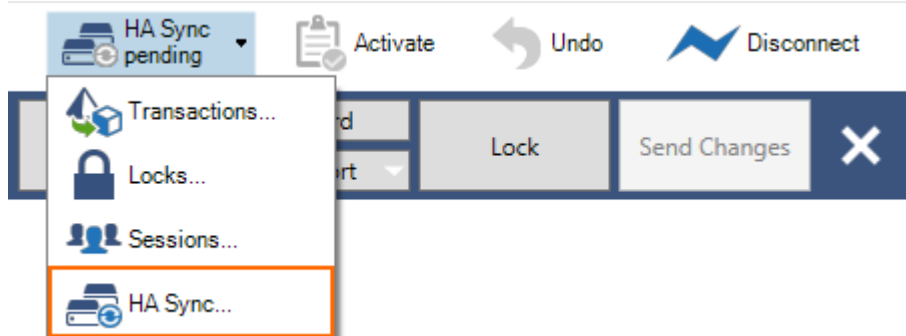
eth0 eth1 eth2 eth3

SERVICES on Secondary HA Partner: MSpangnelDHA-HA

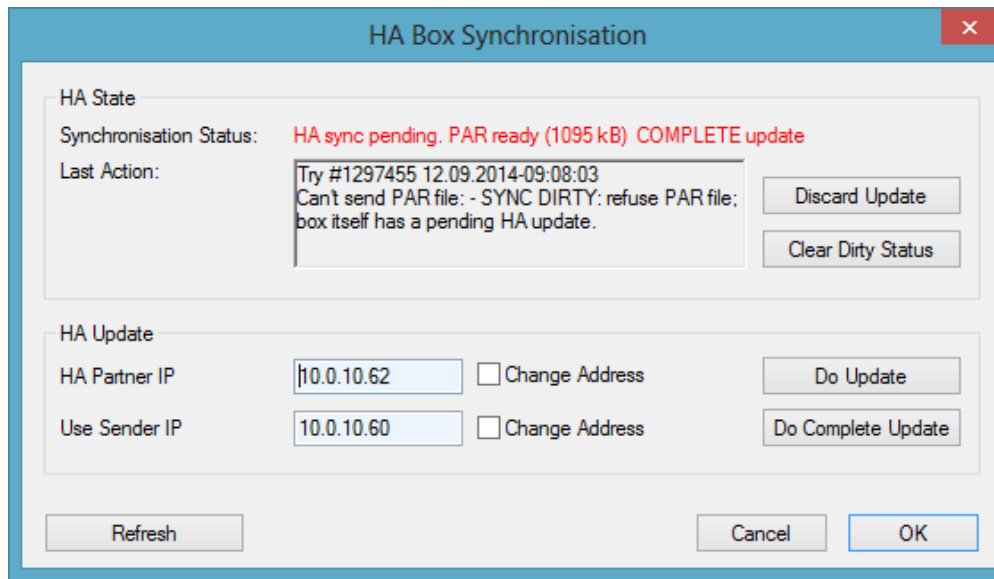
Box Services ✓
Firewall ? NGFW
VPN-Service ? vpn

HA Sync Status Setup

1. Go to **CONFIGURATION**.
2. Expand the **State Info** drop-down menu in the upper-right corner and click **HA Sync**.



3. In the **HA Box Synchronization** window, you have the option to trigger the following tasks:
 - **Do Update** – Performs an incremental update.
 - **Do Complete Update** – Performs a complete update.
 - **Discard Update** – Discards the changes. This is needed when the two HA partners are in an inconsistent state.
 - **Refresh** – Refreshes the window to see actual changes (completion of update).

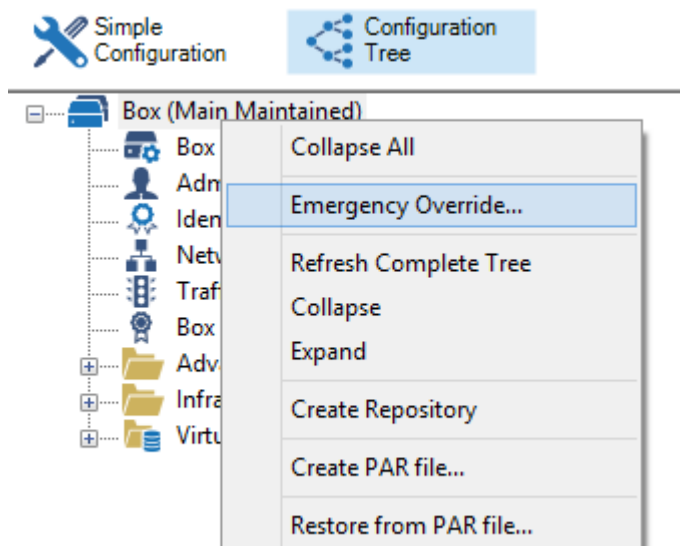


This function is deactivated if the HA system is managed by a Barracuda Firewall Control Center. You can trigger HA box synchronization only via the **Configuration Update** page on the Control Center. For more information, see [CC Configuration Updates](#).

Emergency Override

If the primary unit fails, configuration changes must be made on the secondary unit using the Emergency Override mode.

1. Log into the secondary unit.
2. From the **Configuration Tree**, right-click **Box** (Backup) and select **Emergency Override**.



- When prompted, click **Yes** to enable the Emergency Override mode. When the Emergency Override mode is active, the box icon is highlighted in yellow.

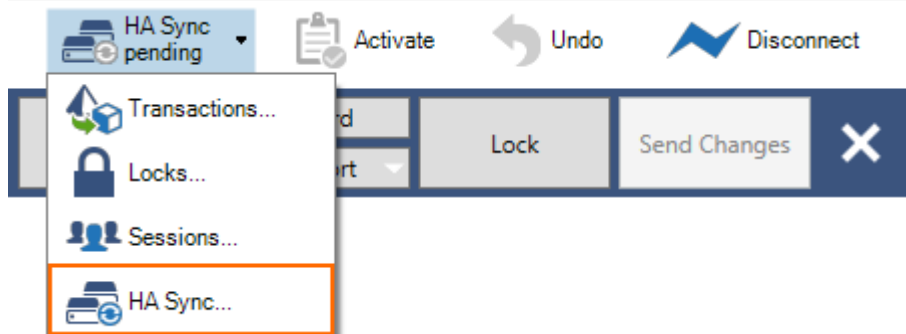
The Emergency Override mode is activated only for the current session. It must be reactivated for every new session.

- Lock and edit your configurations.
- Click **Send Changes** and **Activate**.

Manually Synchronize a Stand-Alone HA Pair

In Emergency Override mode, manually synchronize configurations from the secondary unit to the primary unit. After the connection to the primary unit is re-established, synchronization must be restarted manually. The following steps assume that services are still active on the secondary unit.

- On the primary unit, go to **CONFIGURATION**.
- From the service bar, expand the **State Info** icon and click **HA Sync**.



- Select the **Clear Dirty Status** button.

A restart of the Control Service or the CC-Conf Service can cause HA synchronization disruption. The synchronization process stops with the following error message:

HA sync pending PAR ready (13223 kb) COMPLETE update; Can't send PAR file: - SYNC DIRTY: refuse PAR file: box itself has a pending HA update.

In case of disruption, the .par file used in the synchronization process is not deleted from the file system in the final step. This disturbs the following synchronization process. Use the button **Clear Dirty Status** in the HA Sync window to restart HA sync.

- Open the **Configuration Tree** on the secondary unit and click **HA Sync**.
- Enter the IP addresses of the HA partners into the IP address fields of the **HA Box Synchronization** window.
- Click **Do Update** to transfer the configuration from the secondary unit to the primary unit.
- Enter the IP address of the primary unit into the **HA Partner IP** field.
- Enter the IP address of the secondary unit into the **Sender IP to use** field.
- Select the **Change Address** check boxes to the right of both fields.
- Click **Do Complete Update**.
- Block services on the secondary unit so that the primary unit can regain normal operation status.

Configure IP Address and Service Monitoring

To enable handling of failure conditions and to guarantee a quick takeover of services when a box or networking component becomes unavailable, configure the monitoring of IP addresses and services.

For more information, see [HA-Monitoring](#).

Figures

1. HA_state_down_secondary_01.png
2. HA_state_up_secondary_01.png
3. HA_monitoring_01.png
4. ha_sync.png
5. em_ovr.png
6. HA_monitoring_01.png

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