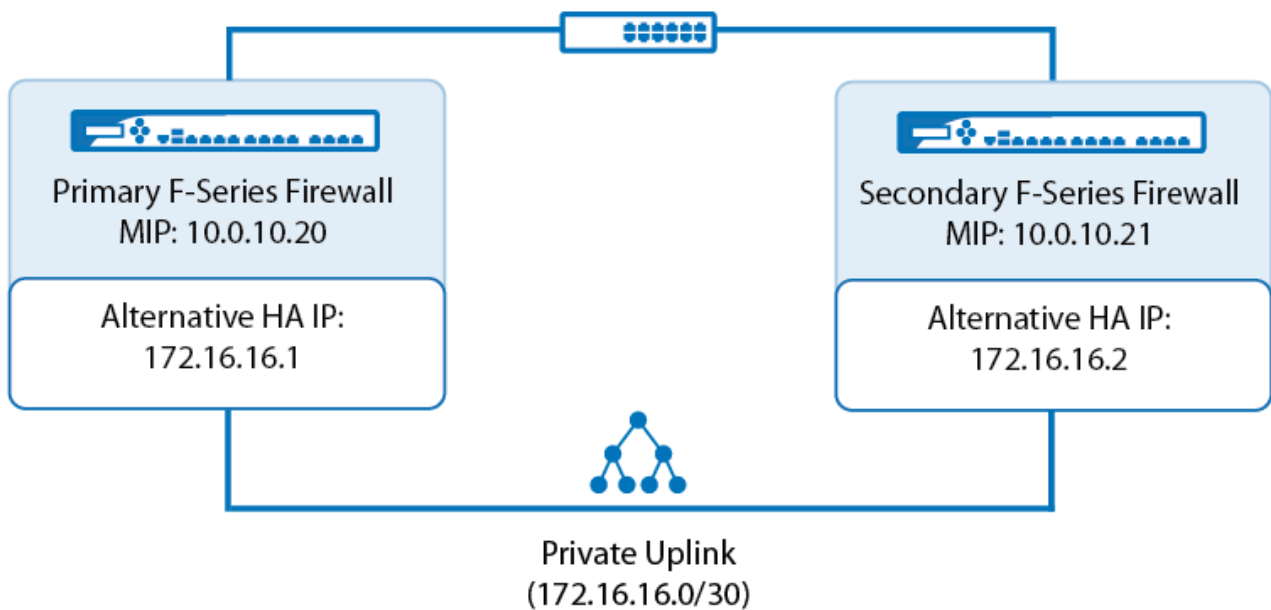


How to Configure a Private Uplink for a HA Cluster

<https://campus.barracuda.com/doc/46209136/>

After setting up an HA cluster, you can also configure a private uplink to safeguard against failure of the switch connecting the two HA units. For the private uplink, you must configure a 2-bit network as a subnet and configure the NextGen Firewall F-Series to use this connection to send the HA sync packets.



Before You Begin






- Barracuda Networks recommends directly connecting both firewalls with a crossover cable for the private uplink.
- A /30 network. E.g., 172.16.16.0/30

Step 1. Define Alternative HA IP Address for the Primary Unit

1. Log into the primary NextGen Firewall F-Series.
2. Go to **CONFIGURATION > Configuration Tree > Box > Network**.
3. Click **Lock**.
4. In the left menu, expand the **Configuration Mode** section and click **Switch to Advanced View**.
5. Click + to add the private IP address as an **Additional Local IP**. The **IP Address Configuration** window opens.

- **Interface Name** - Select the interface the crossover cable is connected to.
- **IP Address** - Enter the Alternative HA IP address for the unit. E.g., 172.16.16.1
- **Associated Netmask** - Select /30.
- **Responds to Ping** - Set to **yes**.
- **Management IP** - Set to **yes**.

IP Address Configuration






Interface Name	<input type="text" value="eth3"/> <input type="checkbox"/> Other 
IP Address	<input type="text" value="172.16.16.1"/> 
Associated Netmask	<input type="text" value="30-Bit"/> 
Responds to Ping	<input type="text" value="yes"/> 
Management IP	<input type="text" value="yes"/> 

6. Click **OK**.
7. Click **Send Changes** and **Activate**.

Step 2. Define Alternative HA IP Address for the Secondary Unit

1. Log into the primary NextGen Firewall F-Series.
2. Go to **CONFIGURATION > Configuration Tree > Box > HA Box > HA Network**.
3. Click **Lock**.
4. In the left menu, expand the **Configuration Mode** section and click **Switch to Advanced View**.
5. Click **+** to add the private IP as an **Additional Local IP**. The **IP Address Configuration** window opens.
 - **Interface Name** - Select the interface the crossover cable is connected to.
 - **IP Address** - Enter the Alternative HA IP address for the unit. E.g., 172.16.16.2 for the secondary unit.
 - **Associated Netmask** - Select /30.
 - **Responds to Ping** - Set to **yes**.
 - **Management IP** - Set to **yes**.

IP Address Configuration

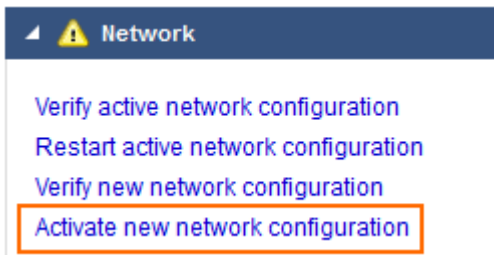
Interface Name	<input type="text" value="eth3"/> <input type="checkbox"/> Other 
IP Address	<input type="text" value="172.16.16.1"/> 
Associated Netmask	<input type="text" value="30-Bit"/> 
Responds to Ping	<input type="text" value="yes"/> 
Management IP	<input type="text" value="yes"/> 

6. Click **OK**.
7. Click **Send Changes** and **Activate**.

Step 3. Activate Network Configuration

Activate the network configuration.

1. Go to **CONTROL > Box**.
2. In the menu, expand **Network** and click **Activate new network configuration**.







3. Select **Failsafe** as the activation mode.

Step 2. Activate the Private Uplink

For the HA sync to work over the private link, you must associate the private link IPs with the corresponding management IP addresses.

1. Go to **CONFIGURATION > Configuration Tree > Box > Infrastructure Services > Control**.
2. Click **Lock**.
3. In the **HA Monitoring Parameters** section, add entries for the primary unit and secondary unit:
 - **Translated HA IP** – Enter the management IP address E.g., 10.0.10.20 for the primary unit
 - **Alternative HA IP**– Enter the additional local network IP of the unit. E.g., 172.16.16.1 for the primary unit
 - **Usage Policy** – Select **Use Both** to send the HA sync and heartbeat over both the management IP link and the private uplink. Alternatively, select **Use Alternative only** to only use the private uplink.

Translated HA IP	10.0.10.20	
Alternative HA IP	172.16.16.1	
Usage Policy	Use-Both	
Description	Primary NG	

Translated HA IP	10.0.10.21	
Alternative HA IP	172.16.16.2	
Usage Policy	Use-Both	
Description	Secondary NG	

4. Click **OK**.
5. Click **Send Changes** and **Activate**.

HA Monitoring Parameters

Translated HA IP ✔

Translated HA IP	Alternative HA IP	Usage Policy	Descrip
10.0.10.20	172.16.16.1	Use-Both	Primary
10.0.10.21	172.16.16.2	Use-Both	Second

Use this to establish HA heartbeat communication across an additional uplink.

Step 3. Add the Alternative HA IP to the ACL List

To grant administrative access rights for Alternative HA IP address usage, add the Alternative HA IP address to the ACL list:

1. Go to **CONFIGURATION > Configuration Tree > Box > Administrative Settings**.
2. Click **Lock**.
3. In the **Access Control List** section, add the /30 network containing the alternative HA IP addresses.

Access Control List

ACL

172.16.16.0/30
10.0.10.0/25
10.17.0.0/16

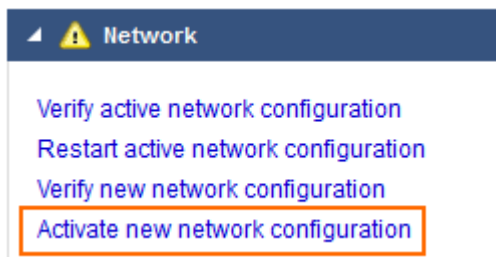
4. Click **Send Changes** and **Activate**.

Step 4. Activate Network Configuration on the Primary and Secondary NextGen

Firewall F-Series

Activate the network configuration on the primary and secondary NextGen Firewall F-Series.

1. Go to **CONTROL > Box**.
2. In the menu, expand **Network** and click **Activate new network configuration**.



3. Select **Failsafe** as the activation mode.

Figures

1. HA-private_uplink.png
2. Private_Uplink_01.png
3. Private_Uplink_01.png
4. Standalone_HA_06.png
5. Private_Uplink_02.png
6. Private_Uplink_03.png
7. Private_Uplink_04.png
8. Private_Uplink_05.png
9. Standalone_HA_06.png

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