

Migrating the Server Node to the Assigned Services Node (optional)

https://campus.barracuda.com/doc/91128751/

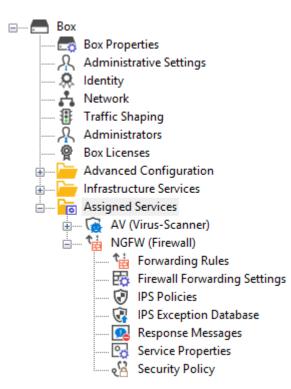
This article applies only to firewalls that are operating firmware 8.0.1 or 8.0.2 and still display the old 3-layer architecture for server-service nodes in the configuration tree.

IMPORTANT NOTE

If you are using the SCA Editor for your SCs and also operate VPN tunnels via GTI, <u>do not</u> <u>migrate</u> the Server-Service Node to the new Assigned Services Node!

This is because of a known issue that will be fixed in the next firmware release.

With the release of firmware version 8.0.2, you can now choose to transform the old 3-layer architecture to the new 2-layer architecture that was introduced with firmware version 8.0.1.



Choosing to do so is optional for firmware release 8.0.2 and will be enforced in the upcoming firmware versions.

The following table shows the different versions of how to migrate the server node to the new



Assigned Services node:

Type of Firewall	Follow Migration Instructions
Stand-alone firewalls and CC (box-level only)	How to Migrate the Server Node to the Assigned Services Node for Stand-Alone Firewall and Control Centers (Box-Level only)
	How to Migrate the Server Node to the Assigned Services Node for CC-Managed Firewalls
	How to Migrate the Server Node to the Assigned Services Node for Stand-Alone HA Pairs
	How to Migrate the Server Node to the Assigned Services Node for CC-Managed HA Pairs

It is not possible to migrate boxes that have repositories linked to

- BOX/ Properties
- BOX/Network
- BOX/Infrastructure/Control

These nodes must be unlinked before starting the Assigned-Service-Migration process!

Known Issue after Box-Server Migration

After migrating the server node for CC-managed boxes, the status of the affected box will display the incorrect status **No** in the column **Has Service Container** in **CC > CONFIGURATION**:

CONTROL CONFIGURATION DATABASE	ADMINS	STATISTICS EVENTS	PKI	NET	WORK ACCESS CL	.IENT FV	V AUDIT	C
Configuration Tree			E	HA S	e - 📑	Activate	Undo	Not Disconnect
Multi-Range Global Settings	^	Open Nodes Boxes Server Se	ervices W	/orkspace:	3			
E 1 (Central Europe)		Box	Cluster	Range	Box IP	Туре	Relea	Has Service Container
🗉 🖬 2 (Western Europe)		Brussels () [VF1000]	Belgi	2	192.1	VF1000	8.0	No
3 (Southeastern Europe)		Espoo (RMT-MGMT) [VF100]	Finla	4	192.1	VF100	8.0	No
🗉 📲 4 (Northern Europe)		Helsinki (RMT-MGMT) [VF100]	Finla	4	192.16533550	VF100	8.0	No
🛓 🔤 Repository		Innsbruck () [VF1000]	Austria	1	192.1	VF1000	8.0	No
🖨 📷 Box		Nicosia () [VF500]	Cyprus	3	192.1	VF500	8.0	No
😥 🔤 🙀 Administrative Settings		Tallinn () [VF1000]	Estonia	4	192.1	VF1000	8.0	No
		Vienna () [VF1000]	Austria	1	192.1	VF1000	8.0	No
🖮 📑 Network								
autNW								
finNW								

In addition, an incorrect status of the box is displayed in **CC > CONTROL**:

Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	▼ :	▼ =	▼ =	ΨΞ.	▼ =	▼ €.	▼ =
Name	Description	Acc	Version	Country	Appliance	Serial	Server	S	N	Li	A	R	۷	C
4 m 2	Western Europe							5	÷	P	ዲ	٣.	r.	Ė.
⊿ 🛱 2/Belgium			8.0					2	*0	P	<i>Р</i> <mark>1</mark>	:	r.	Ė.
Russels		192.1	8.0.2-0119		VF1000	904646	Brussels	5	÷	\$	Я,	÷	P	Êò
· · ··································	Southeastern Europe							5	*	®	<i>P</i> 2	-	٩	ė.
🔺 🛱 3/Bulgaria								5	*		<i>R</i>	÷	•	ŧ.



As a workaround, you can execute the command-line tool conftool r - rebuild_db which will update the database. As a result, the status of the migrated box will be displayed correctly.

Before You Begin

- Make sure you are familiar with the difference between the old 3-layer and the new 2-layer structure. For more information, see <u>Understanding Assigned Services</u>.
- The firewall/CC must have been upgraded from firmware version 7.x to 8.0.1 or 8.0.2.
- On a Control Center, the feature level for clusters must set to 8.0.
- The configuration tree must display the old 3-layer structure with a virtual server node.

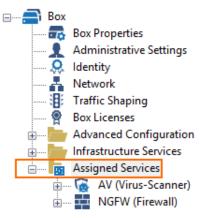
How to Migrate the Server Node to the Assigned Services Node for Stand-Alone Firewall and Control Centers (Box-Level Only)

- 1. Log into the firewall or Control Center on box level.
- 2. Right-click **Box**.
- 3. The window with the menu is displayed.

DASHBOARD	CONFIGURATION	CONTROL	FIREWALL	AT
Configuration Tree				
Box	Collapse All			
<u> </u>	Migrate box's virtual s	erver to Service o	ontainer	
	Emergency Override			
	Refresh Complete Tree			
	Collapse			
÷	Expand			
••••••••••••••••	Create Repository			
	Create PAR file			
	Restore from PAR file			

- 4. In the list, click Migrate box's virtual server to Service container.
- 5. The old 3-layer server-service node with the name **Virtual Servers** will be transformed into the new 2-layer service node with the name **Assigned Services**.
- 6. When the conversion is completed, the configuration tree will contain the node **Assigned Services**.





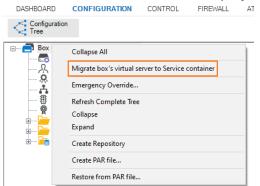
How to Migrate the Server Node to the Assigned Services Node for CC-Managed Firewalls

Before You Begin

 On a Control Center, the feature level for the cluster the firewall lives in must be set to 8.0. For more information, see <u>How to Manage Ranges and Clusters</u>.

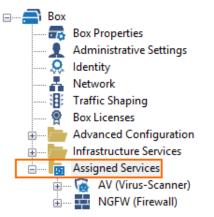
Migrating the Server Node

- 1. Log into the Control Center that manages the target firewall.
- 2. Go to CONFIGURATION > Configuration Tree > Multi Range > your range > your cluster > Boxes > your box.
- 3. Right-click **Box**.
- 4. The window with the menu is displayed.



- 5. In the list, click Migrate box's virtual server to Service container.
- 6. When the conversion is completed, the configuration tree will contain the node **Assigned Services**.





How to Migrate the Server Node to the Assigned Services Node for Stand-Alone HA Pairs

Before You Begin

• This example assumes that you have an unmanaged/stand-alone pair of HA firewalls running.

Migrating the Server Node

Step 1. Block the Server on the Secondary Firewall.

- 1. Log into the secondary firewall.
- 2. Go to CONTROL.
- 3. Click Block server.

Step 2. Remove the HA Box Node for the Secondary on the Primary Firewall.

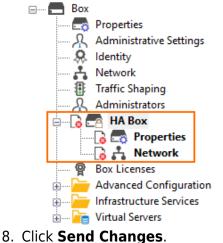
- 1. Log into the primary firewall.
- 2. Go to **CONFIGURATION > Box > HA Box**.
- 3. Right-click **HA Box**.
- 4. In the list, click **Lock**.

Barracuda CloudGen Firewall



🖃 🔚 Box		
	Properties	
	Administrative Settings	
- 😣	Identity	
- . *.	Network	
	Traffic Shaping	
	Administrators	
÷ <u>-</u> 2	HA Box	
	- 🛃 Properties	
	Network	
@	Box Licenses	
÷ 듣	Advanced Configuration	
÷ 🚞	Infrastructure Services	
÷ 🛅	Virtual Servers	

- 5. Right-click HA Box.
- 6. In the list, click **Remove**.
- 7. The node for HA box will be marked for deletion.



9. Click Activate.

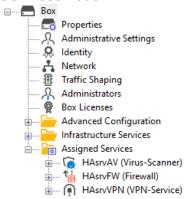
Step 3. Migrate the Virtual Server on the Primary Box.

- 1. Right-click **Box**.
- 2. In the list, click Migrate box's virtual server to Service container.
- 3. The window for Migrating Box's Server to Container Server is displayed.
- 4. Click **OK**.
- 5. The configuration tree will display the following:
 - 1. A new **Network** node.
 - 2. A new container for the services, CSC(Service Container).
 - 3. A red deletion symbol on the old server node.



<	Configuration
	Administrative Settings Administrative Settings Identity Administrative Settings Administrators Box Licenses Advanced Configuration Infrastructure Services Virtual Servers Virtual Servers HAsrv (Virtual server hosting all services)
	🗄 🗋 🥃 CSC (Service Container)

- 6. Click Activate.
- 7. After the server node has been migrated, the configuration tree will display the new **Assigned Services** node.



8. The names of the services will now consist of 'HAsrv' appended with the name of the service, e.g., HAsrvAV, HAsrvFW, HAsrvVPN.

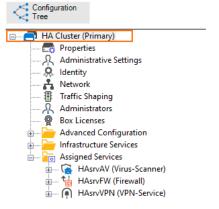
Step 4. Create the Secondary Box on the Primary Firewall.

- 1. Right-click **Box**.
- 2. In the list, click **Create Secondary Box**.
- 3. The **Network** window for entering the MIP for the secondary firewall is displayed.



Configuration	Device Name		
IP Configuration	Hostname	HAG4bit	Ē,
nterfaces /irtual LANs /irtual Router	Management Network and	l IPs	
thernet Bundles Routing	Interface	eth0	∨ Other ∎~
DSL/DHCP	Primary Management IP		Ē~
Vireless WAN	Secondary Management IP	Ø	Ē
P Tunneling ntegrity Check	Associated Netmask	24-Bit	✓
lser Scripts	Responds to Ping	yes	✓ Ē.
Configuration Mode	Use for NTPd	yes	✓
comgatation mode	Trust Level	Trusted (added to Trusted-LAN for Firewall)	✓
	IMTU		Ē~
	Advertise Route	no	> III *
	<	✓ + × at	- A 4 B-

- 4. For **Secondary Management IP**, enter the IP address.
- 5. Click Send Changes.
- 6. Click **Activate**.
- 7. After the creation of the secondary box, the configuration tree on the primary firewall will display the name **HA Cluster (Primary)**.



Step 5. Reactivate the Network Configuration

- 1. Go to **CONTROL > Box**.
- 2. In the left navigation bar, click **Network**.
- 3. In the left navigation bar, click **Activate new network configuration**.

Step 6. Create the PAR file for the Secondary Firewall

The new configuration must be propagated to the primary firewall.

- 1. Go to **CONFIGURATION > Configuration > Box**.
- 2. Right-click **Box** and select **Create PAR file for secondary box...**
- 3. Save the PAR file for the secondary firewall.
- 4. Reconnect to the primary firewall to see the new **CONTROL** window.



Step 7. Import the PAR file into the Secondary Firewall

- 1. Log into the secondary firewall.
- 2. Go to **CONFIGURATION > Configuration Tree > Box**.
- 3. Right-click **Box** and select **Emergency Override**.
- 4. Right-click **Box** and select **Restore from PAR file**.
- 5. Click **OK**.
- 6. Click Activate.

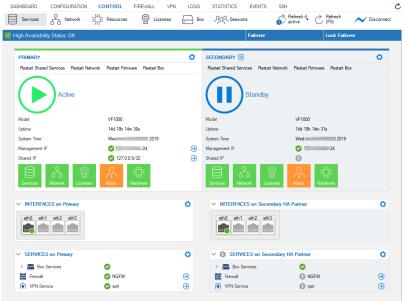
Step 8. Reactivate the Network Configuration

- 1. Go to **CONTROL > Box**.
- 2. In the left navigation bar, click **Network**.
- 3. In the left navigation bar, click Activate new network configuration.

Step 9. Reconnect to Both Firewalls to See the New CONTROL Window

Do the following steps on both the primary and secondary firewall:

- 1. Go to **CONFIGURATION**.
- 2. Click **Disconnect** on the right side of the ribbon bar.
- 3. The session to the firewall will be terminated.
- 4. Click **Connect** on the right side of the ribbon bar to reconnect to the firewall.
- 5. Go to CONFIGURATION > CONTROL.
- 6. The window now displays the new controls.



How to Migrate the Server Node to the Assigned Services Node for CC-Managed HA



Pairs

Before You Begin

• All repository links that refer to the Network node must be unlinked.

Step 1. Migrate the Primary Firewall

- 1. Right-click **Box**.
- 2. In the list, click Migrate box's virtual server to Service container.
- 3. A window is displayed that asks you if you want to keep the server or remove it.
- 4. Confirm which option is more important to you. In case you keep the server, it will stay in the configuration tree but will no longer have any function.
- 5. The window for **Migrating Box's Server to Container Server** is displayed.
- 6. Click **OK**.

Step 2. Delete the Secondary Firewall

The secondary firewall must be deleted in the configuration tree because it will be managed via the primary firewall.

- 1. Right-click **Box** of your secondary firewall.
- 2. In the list, click **Lock**.
- 3. Right-click **Box** of your secondary firewall.
- 4. In the list, click **Remove**.
- 5. Click **Activate**.

Step 3. Create the PAR File for the Secondary Firewall

On the primary firewall, right-click **Box**.

- 1. In the list, select **Create Secondary box**.
- 2. In the file selection window, provide a file name for the PAR file.
- 3. Go to Network.
- 4. Provide the IP address for the **Secondary Management IP**.



✓ Configuration	Device Name		
IP Configuration	I Hostname	Vienna	÷,
Interfaces Virtual LANs	- Management Network a	nd IPs	
Virtual Router Ethernet Bundles	Interface	eth0 Other [.
Layer2 Bridging Advanced Routing	Primary Management IP	192.168.10.10	.
xDSL/DHCP Wireless WAN	Secondary Management IP	192.168.10.12	1.
IP Tunneling	Associated Netmask	24-Bit 🗸 💈	. -
Integrity Check User Scripts	Responds to Ping	yes 🗸 🗸	÷,
user seripes	Use for NTPd	yes 🗸 🖉	. -
> Configuration Mode	Trust Level	Trusted (added to Trusted-LAN for Firewall)	Ē,
	∎мт∪	1500	.
	Advertise Route	no 🗸 🗄	Ē,
	Shared IPs in this Network	💉 + 🗙 🗅 🗐	÷,
		IP Address Alias for this IP Responds to	
		< >>	

- 5. Click Send Changes / Activate.
- 6. The node for the secondary firewall will disappear from the configuration tree. From now on, the secondary firewall will be configured via the primary firewall. Therefore, only the node for the primary firewall will be visible in the configuration tree.
- 7. Right-click **Box** for the primary firewall.
- 8. In the list, click Create PAR file for secondary.

Step 4. Import the PAR File on the Secondary Firewall

- 1. In the CC, click **Status Map**.
- 2. Locate the secondary firewall in the list of managed firewalls. The name of the new secondary firewall will now have the name of the box trailed by the appendix "-HA", e.g., MyBox-HA.
- 3. In the Status Map, double-click the entry of the secondary firewall.
- 4. On the secondary firewall, go to **CONFIGURATION**.
- 5. Right-click **Box**.
- 6. Click Emergency Override.
- 7. Right-click Box.
- 8. Click Restore from PAR File.
- 9. In the file selection window, select the PAR file to restore.
- 10. Click Activate.
- 11. Go to **CONTROL > Box**.
- 12. In the left navigation bar, click **Network** to expand the list.
- 13. In the list, click Activate new network configuration.
- 14. In the ribbon bar, click **Disconnect** to close the session to the secondary firewall.
- 15. In the ribbon bar, click **Connect** to re-establish a new session to the secondary firewall.
- 16. Go to **CONTROL** to see the new window contents.



igh Availability Status: OK				Failover	Lock Failover
PRIMARY ()		ø	SECONDARY (CONNECTED TO)		
🚇 Restart Shared Services 🔏 Restart Network 🛛 🛃 Restart Firmware	C Restart Box		Restart Shared Services 🔏 Restart Network 💀 Restart Firmw	are 🕐 Restart Box	
Active			Standby		
Model	VF1000		Model	VF1000	
Uptime	3d 23h 54m 16s		Uptime	3d 23h 55m 49s	
System Time	Mon Dec 9 14:52:55 2019		System Time	Mon Dec 9 14:52:54 2019	
Management IP	192.168.10.10/24		Management IP	I 192.168.10.12/24	
Shared IP	127.0.0.9/32		Shared IP	0	
Services Network Licenses Afrin Hardware			Services Network Licenses		
INTERFACES on		0	V INTERFACES on Secondary		
eth0 eth1			eth0 eth1		
SERVICES on		0	SERVICES on Secondary		
🖻 🚍 Box Services	9		Bax Services	Ø	
A DHCP-Service	VennastDHCP	•	DHCP-Service	WennastDHCP	
🖬 Firewall	VennaatFW	€	Newall	WennaatFW	
VPN-Service	S VennaatVPN	•	VPN-Service	WennaatVPN	



Figures

- 1. assigned_services_tree.png
- 2. 7to8mig_wrong_status_display_01.png
- 3. 7to8mig_wrong_status_display_02.png
- 4. 7to8mig_boxlevel_standalone_CC_rmb_popup.png
- 5. 7to8mig_boxlevel_standalone_CC_mig_complete.png
- 6. 7to8mig_boxlevel_standalone_CC_rmb_popup.png
- 7. 7to8mig_boxlevel_standalone_CC_mig_complete.png
- 8. 7to8mig standalone HA pair lock HAbox.png
- 9. 7to8mig standalone HA pair remove HAbox.png
- 10. 7to8mig_standalone_HA_pair_transformed_server_node_HAbox.png
- 11. 7to8mig_standalone_HA_pair_server_node_transformation_complete_HAbox.png
- 12. 7to8mig standalone HA pair create secondary HAbox.png
- 13. 7to8mig_standalone_HA_pair_secondary_created_HAbox.png
- 14. HA_in_default_state.png
- 15. 7to8mig_provide_MIP_for_secondary.png
- 16. 7to8mig_new_CONTROL_window.png

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