

## 8.3.1 Migration Notes

<https://campus.barracuda.com/doc/96772206/>

### Important Note for Users Operating Firmware 7.2.5 or 7.2.6

#### IMPORTANT NOTE

Ensure that the partition layout of your firewall/Control Center applies to the values in the table of the paragraph "Disk Space Requirements" below.

1. If you operate a firewall that was shipped from the factory with firmware 7.2.6, or if you have already repartitioned the hard disk and performed a fresh install of firmware 7.2.6, then the hard disk already has a partition layout that is suitable for firmware 8.x. In this case, you can upgrade directly to firmware 8.x without repartitioning the hard disk.
2. If you operate a firewall with firmware version 7.2.5 or earlier, you must repartition the hard disk with the layout listed below and fresh install firmware 8.0.6. After that, you can update to 8.x without repartitioning.

### Important Note for Users Wanting to Upgrade from Firmware Release 8.2.2

As of February 6, 2023, you can now upgrade from firmware release 8.2.2 to firmware release 8.3.1. This upgrade can be installed both on CloudGen Firewalls and on Control Centers. However, as this is a special upgrade, there are two different methods of how you must perform the upgrade depending on the type of your appliance.

These two installation methods are covered at the end of this article.

#### Before You Begin

- The information contained in this article applies insofar as it was not already taken into account in the previous migration note 8.2.1.
- The following instructions apply both to firewalls and Control Centers.

## Barracuda Firewall Admin

After updating a system, you must also download Firewall Admin with the same version. Firewall Admin is backward-compatible. That means you can manage 7.x and 8.x F-Series Firewalls and Control Centers with Firewall Admin 8.x.

Always use the latest version of Barracuda Firewall Admin.

## New 2-Layer Service Architecture

With firmware release 8.0.2, Barracuda introduced a new 2-layer service architecture that makes the former server node in the configuration tree obsolete. As already announced in previous migration notes, converting the former 3-layer server-service architecture to the new 2-layer service architecture was optional within the period of firmware version 8.0.2 to 8.0.4

If you have not yet done so, you must now transform the former 3-layer architecture to the new 2-layer service architecture on the box level before upgrading to firmware version 8.3.1.

This applies both to firewalls and Control Centers.

## New IPS Implementation

Firmware version 8.3.1 includes a new implementation of the IPS system with a new signature database. IPS exceptions created with a version earlier than 8.3 will be deleted after the update.

There are certain restrictions for Control Centers and clusters:

- IPS pattern updates of 8.3.x firewalls in Control Centers with firmware earlier than or equal to 8.2.x is not supported.

## Client-to-Site VPN

If you use Client-to-Site VPN and after updating to 8.3.0, you must also either update all NAC clients to 5.3.0 or manually set the MTU size as a pre-update value to 1398 for pvpn0 interface until all clients are updated.

If you do not do this, uploads from the clients to or over the firewall may lead to packet drops because the uploads are too large.

After updating the clients, you can remove the workaround of manually setting the MTU size of 1398 for pvpn0.

## Supported Models for Firmware Version 8.3.1

The following models are capable of running firmware version 8.3.1:

<b>Barracuda CloudGen F-Series and Control Center Models</b>	
<b>Hardware Systems</b>	F12 Rev A, F18 Rev A/B, F80 Rev A/B, F82 Rev A, F93 Rev A, F180 Rev A/B, F183 Rev A, F183R Rev A, F193 Rev A, F280 Rev B/C, F380 Rev A/B, F400 Rev B/C, F600 Rev C/D, F800 Rev C, F900 Rev B, F1000 Rev A
<b>Virtual Systems</b>	VF10, VF25, VF50, VF100, VF250, VF500, VF1000, VF2000, VF4000, VF8000, VC400, VC610, VC820, Proxmox running with KVM images
<b>Public Cloud</b>	AWS, Azure, Google Cloud
<b>WWAN USB Modems</b>	M30, M40, M41, M42
<b>Standard Hardware Systems</b>	
<b>Standard Hardware</b>	A standard hardware system is a Barracuda CloudGen Firewall F-Series running on 3rd-party server hardware using an SF license. Consult the Barracuda Networks Technical Support to find out if your specific standard hardware is supported.

## Disk Space Requirements

Upgrading to version 8.3.1 requires your disk partitions to have enough free disk space. Firmware 8.3.1 requires the following partition spaces:

Disk Space Requirements **FIREWALL**:

<b>Hard Drive Partition</b>	<b>Disk Space Required</b>
swap	2 GB
boot	1 GB
/	8 GB
/phion0	4 GB
/art	3 GB

Disk Space Requirements **CONTROL CENTER**:

<b>Hard Drive Partition</b>	<b>Disk Space Required</b>
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swap	2 GB
boot	1 GB
/	10 GB
/phion0	4 GB
/art	10 GB

## Migration Path to 8.3.1

You can upgrade to firmware 8.3.1 via 8.0.6 from the following firmware versions:

Current Version	Via 8.0.6	Follow Migration Instructions
7.0.0 - 7.0.4	Yes	<a href="#">Migration from 7.x - 8.0.0 to 8.0.6</a>
7.1.0 EA - 7.1.5	Yes	
7.2.0 - 7.2.6	Yes	
8.0.0	Yes	
8.0.1 - 8.0.5	Yes	<a href="#">Migration from 8.0.1/8.0.2/8.0.3/8.0.4/8.0.5 to 8.0.6</a>

Your firewall is now prepared to upgrade to firmware version 8.3.1.

## Important Note before Upgrading to Release 8.3.1

If you are connecting from an iOS device via Client-to-Site VPN using IPsec, you must change the settings according to the example in the article [Example - Client-to-Site IKEv1 IPsec VPN with PSK](#).

Otherwise, the iOS device won't be able to connect and report the error "Negotiation with the VPN server failed".

## Migration Instructions for 8.3.1

Before upgrading to firmware version 8.3.1, you may first need to complete a few additional steps. Check the following topic(s) and, if applicable, complete the migration steps listed below:

### 1. Upgrade of Virtual Machines for Forward Error Correction (FEC), and IPS

- Firmware version 8.3.1 now contains the new VPN feature Forward Error Correction (FEC).
- The IPS system has been replaced with a new implementation from Barracuda.

In order for these features to work as expected on virtual deployments, the virtual hardware must be upgraded to the newest version to work on the ESXi hypervisor directly after the deployment of the virtual machine. For using FEC, the supported version of your hypervisor must be greater than or equal to version 6.5.

For more information, see Step 2 in [How to Deploy a CloudGen Firewall Vx OVA on VMware Hypervisors](#).

### 2. VPN, Usage of VPN Next Hop IPs

The following instructions apply only if you just have transformed your firewall from the former 3-layer server-service architecture to the new 2-layer assigned services architecture.

Before firmware version 8.3.0, certain VPN scenarios required you to configure next-hop interface IP addresses for the shared networks. Due to the new 2-layer service architecture, which is represented through the **Assigned Services** node in the configuration tree, it is no longer necessary to explicitly configure these IP addresses.

However, in this special case, it is necessary to apply some additions to the host firewall rule set.

If you have made changes/additions manually to your host firewall rule set, you must back up these host firewall rules to restore them later.

For updating the host firewall rule set, you have two options:

1. Add the missing rules manually
2. Update the host firewall rule set with Copy from Default.

### How to Update the Host Firewall Rule Set

**Step 1. (optional) In case you have made additions/changes to the host firewall rule set manually:**

Create a copy of all these firewall rules.

**Option 2.1 (recommended): Add the missing rules to the host firewall rule set manually.**

For more information on how to create a pass rule, see [How to Create a Pass Access Rule](#).

1. Go to **CONFIGURATION > Configuration Tree > Box > Infrastructure Service > Host Firewall Rules**.
2. Ensure that **Inbound** is selected in the top-left corner of the rule list display area.
3. Click **Lock**.
4. Add each of the rules in the list to the **Inbound Host Firewall Rule Set**.

Action	Name	Features	Service	Source	Destination
→ Pass Original Source IP (same port)	OP-SRV-OSPF		OSPF OSPFv2	Any 0.0.0.0/0	Ref: OSPF-Nets , Ref: ServerIPs , Ref: VPN Next Hop IPs 224.0.0.5, 224.0.0.6
→ Pass Original Source IP (same port)	OP-SRV-RIP		RIP UDP 520	Any 0.0.0.0/0	Ref: ServerIPs , 224.0.0.9 , Ref: VPN Next Hop IPs 224.0.0.9
→ Pass Original Source IP (same port)	OP-SRV-BGP		BGP TCP 179	Any 0.0.0.0/0	Ref: ServerIPs , Ref: VPN Next Hop IPs
→ Pass Original Source IP (same port)	OP-SRV-BFD		BFD UDP 3784, UDP 3785, UD...	Any 0.0.0.0/0	Ref: ServerIPs , Ref: VPN Next Hop IPs
→ Pass Original Source IP (same port)	OP-SRV-ICMP		ICMP ECHO	Any 0.0.0.0/0	Ref: ServerIPs , Ref: VPN Next Hop IPs

5. Click **Outbound** in the top-left corner of the rule list display area.
6. Add each of the rules in the list to the **Outbound Host Firewall Rule Set**.

Action	Name	Features	Service	Source	Destination
→ Pass Original Source IP (same port)	OP-SRV-OSPF		OSPF OSPFv2	Ref: ServerIPs , Ref: VPN Next Hop IPs	Any 0.0.0.0/0
→ Pass Original Source IP (same port)	OP-SRV-RIP		RIP UDP 520	Ref: ServerIPs , Ref: VPN Next Hop IPs	Any 0.0.0.0/0
→ Pass Original Source IP (same port)	OP-SRV-BGP		BGP TCP 179	Ref: ServerIPs , Ref: VPN Next Hop IPs	Any 0.0.0.0/0
→ Pass Original Source IP (same port)	OP-SRV-BFD		BFD UDP 3784, UDP 3785, UD...	Ref: ServerIPs , Ref: VPN Next Hop IPs	Any 0.0.0.0/0

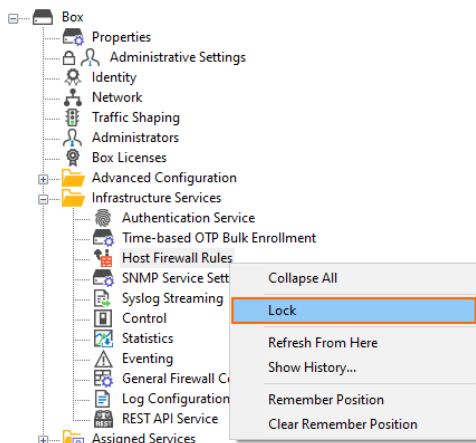
7. Click **Send Changes**.

**Option 2.2: (Only if you did not complete Option 2.1) Update the host firewall rule set with Copy from Default.**

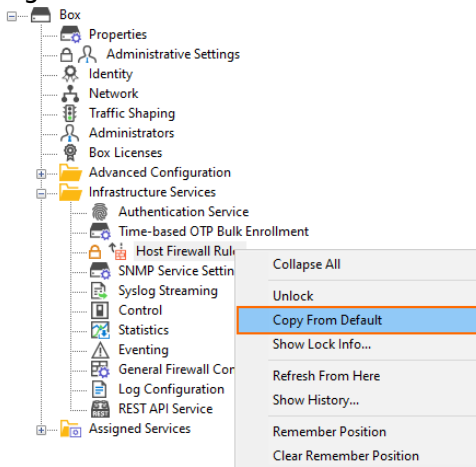
After the transformation to the new 2-layer service architecture, the host firewall rule set can be rebuilt by copying it from the default.

**Copy from Default** will overwrite your existing host firewall rule set. Any previously added custom rules will be lost!

1. Log into the firewall.
2. Go to **CONFIGURATION > Configuration Tree > Box > Infrastructure Services**.
3. Right-click **Host Firewall Rules**.
4. In the list, click **Lock**.



5. Right-click **Host Firewall Rules**.



6. In the list, click **Copy from Default**.

7. Click **Activate** in the top-right corner of the window.

**Step 3. (optional) In case you have made a copy of individual firewall rules, you must restore them now.**

Add your individual firewall rules that you copied before to the host firewall rule set.

## How to Migrate to Version 8.3.1

Download the appropriate download file:

### If You Migrate from Versions 8.0.0 - 8.2.2 to 8.3.1

1. Go to the download portal  
<https://dlportal.barracudanetworks.com/#/packages/5580/update.GWAY-8.3.1-0086+5hotfixes.tgz>
2. Download the **update** package.

## If You Migrate from Versions 8.3.0 to 8.3.1

1. Go to the download portal <https://dlportal.barracudanetworks.com/#/packages/5579/patch.GWAY-8.3.1-0086+5hotfixes.tgz>
2. Download the **patch** package.

## Start the Update

If you want to upgrade a Control Center from firmware 8.2.2 to 8.3.1, perform the following steps:

1. Log into your Control Center as root via SSH.
2. Copy the downloaded file `update.GWAY-8.3.1-0086+5hotfixes.tgz` to the directory `/phion0/packages/`.
3. Change to the directory `/phion0/packages/`.
4. Enter the following command and wait until the installation is finished: `installUpdate -f update.GWAY-8.3.1-0086+5hotfixes.tgz`

In any other case, perform the following steps:

You can now update the CloudGen Firewall or Control Center.

For more information, see [Updating CloudGen Firewalls and Control Centers](#).



## Figures

1. vpn\_routed\_hfw\_inbound\_rules\_to\_add.png
2. vpn\_routed\_hfw\_outbound\_rules\_to\_add.png
3. lock\_host\_firewall\_rules.png
4. host\_firewall\_ruleset\_copy\_from\_default.png

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