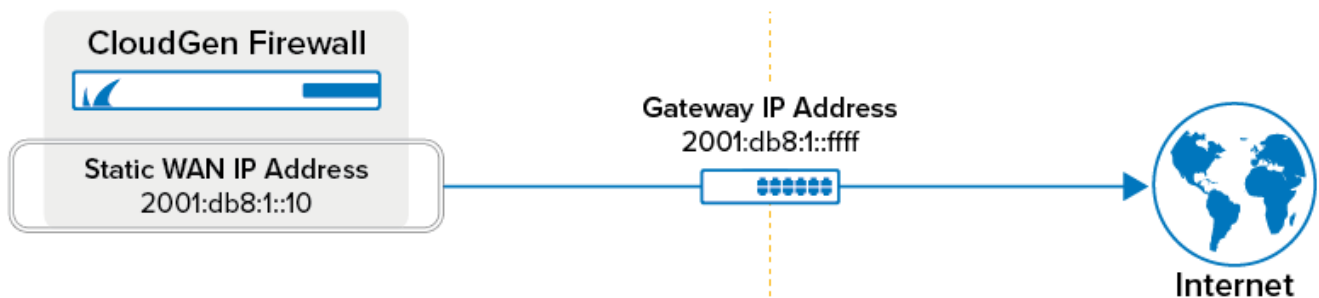


How to Configure Static IPv6 WAN Connections

<https://campus.barracuda.com/doc/96026013/>

If you are assigned static IPv6 addresses for your WAN connection, you must create a default gateway on box level and then assign the IP address(es) to the firewall.



Before You Begin











- Connect the network equipment installed by your provider to an unused port (not the management port) of your Barracuda CloudGen Firewall.
- Enable IPv6. For more information, see [How to Enable IPv6](#).

Step 1. Add a Direct Route

Create a direct attached route entry to create the network on box level of the Barracuda CloudGen Firewall. Be sure to create the route on the port the ISP is plugged into.

1. Go to **CONFIGURATION > Configuration Tree > Box > Network**.
2. In the left menu, select **Routing**.
3. Click **Lock**.
4. In the **IPv6 Routing Table**, click **+** to add a new route.
5. Enter a **Name** for the route and click **OK**.
6. In the **Target Network Address** field, enter the IP address of the target network.
7. Select **directly attached network** as the **Route Type**.
8. From the **Interface Name** list, select the port the ISP is connected to. E.g.,: **eth1**
9. If the default route will be introduced in an environment where multiple dynamic links are available, specify a **Route Metric**.
10. Select **Untrusted** as the **Trust Level**.

IPv6 Route Configuration

Target Network Address	2001:db8:1::/64	
Route Type	directly attached network	
Interface	eth1 	<input type="checkbox"/> Other 
Gateway		
Source Address		
Foreign IP Sufficient	no	
Trust Level	Untrusted	
Route Metric	100	
Active	yes	










11. Click **OK**.
12. Click **Send Changes** and **Activate**.

Step 2. Add a Default Route

Create a direct attached route entry to create the network on box level of the Barracuda CloudGen Firewall. Be sure to create the route on the port the ISP is plugged into.

1. Go to **CONFIGURATION > Configuration Tree > Box > Network**.
2. In the left menu, select **Routing**.
3. Click **Lock**.
4. In the **IPv6 Routing Table**, click **+** to add a new route.
5. Enter a **Name** for the route and click **OK**.
6. In the **Target Network Address** field, enter **::0/0**
7. From the **Route Type** list, select **gateway**.
8. Enter the IPv6 address of the **Gateway**.
9. (optional) Enter the **Route Metric**.
10. From the **Trust Level** list, select **Untrusted**.

IPv6 Route Configuration

Target Network Address	::0/0	
Route Type	gateway	
Interface	<div><div></div><div>Other</div></div>	
Gateway	2001:db8:1::ffff	
Source Address		
Foreign IP Sufficient	no	
Trust Level	Untrusted	
Route Metric	100	
Active	yes	

11. Click **OK**.
12. Click **Send Changes** and **Activate**.

Step 3. Network Activation

A network activation is required to activate the network configuration changes. Active sessions might time out during the activation.

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

Your route is now displayed as a disabled route (grey X icon) in **CONTROL > Network**.











Step 4. Add the Static IP Address to the Firewall

Assign the individual WAN IP addresses you want to use as a **Shared IP** on the Barracuda CloudGen Firewall. By introducing the external IP addresses as a shared IP address, you can use a [high availability \(HA\) cluster](#) to transfer the WAN address to the secondary firewall and still be reachable under the same IP address. In our example, you would enter 2001:db8:1::10 to **Shared Networks and IPs** and label it as the **First-IP**, **Second-IP** or **Additional IP** address.

For more information, see [Assigned Services](#).





Verify the Network Configuration

Open the **CONTROL > Network** page to verify that all network routes have been introduced successfully. Verify that the WAN IP addresses are displayed with a green status icon and that the introduced routes are available in the **Main** and **Default** tables. In addition, ensure that the default route is directing traffic through your ISP connection.

Interfaces/IPs	IPs	Interfaces	Proxy ARP	ARP	Statistics	OSPF	RIP	BGP	Switch Info	IPv6 ND Cache
Interface/IP	Label	Ping	MAC of duplicate IP	Info						
 eth0, Speed=10000Mb/s, Duplex=Full										
 eth1, Speed=10000Mb/s, Duplex=Full										
 62.99.0.40/32	VIRT1	ok	-							
 62.99.0.41/32	VIRT1	ok	-							
 2001:470:7501:1::1/64	VIRT1	ok	-							
 2001:db8:1::10/64	VIRT1	ok	-							
 fe80::20c:29ff:fe85:3f4...		ok	-							
 eth2, Speed=10000Mb/s, Duplex=Full										
 eth3, Speed=10000Mb/s, Duplex=Full										
 eth4, Speed=10000Mb/s, Duplex=Full										

TABLES

ALL

Table / Src Filter	State	Type	Interface	Src IP	Pref	Gateway	Name
 2001:470:7501:1::/64	up	direct-k...	eth1	-	100	-	RoutedIPv6-ISP
 2001:470:7501::/64	up	direct-k...	eth0	-	100	-	RoutedIPv6-LAN
 62.99.0.0/24	up	direct-b...	eth1	62.99.0.40	100	-	HQ-ISP1
 ::/0	up	gateway...	eth1	-	100	2001:db8:1::ffff	IPv604

Figures

1. st_wan_v6.png
2. static_IPv6_WAN_01.png
3. static_IPv6_WAN_02.png
4. static_IPv6_WAN_03.png

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