How to Configure a 3G Dial-In Connection

https://campus.barracuda.com/doc/8650776/

To establish wireless Internet connections, you can install the external Barracuda 3G USB modem on the Barracuda NextGen Firewall X-Series. 3G connections are ideal for backup lines and for use in mobile offices or locations without terrestrial Internet links.

After you connect the Barracuda USB modem to the X-Series Firewall, configure the provider settings. Then verify that the default network route and network interface of the 3G WAN link have been successfully introduced and are available.

Step 1. Connect the Barracuda 3G modem

To connect the Barracuda modem:

1. Follow the steps in the **Barracuda 3G Modem Quick Start Guide** to insert the SIM card into the Barracuda USB modem.
2. Connect the Barracuda modem to an empty USB port of the X-Series Firewall.
3. Connect the antenna to the Barracuda modem and place it in a stable location.
4. Restart your firewall so that it recognizes the Barracuda modem.
    1. Go to the **BASIC > Administration** page.
    2. In the **System Reload/Shutdown** section, click **Restart**.

Step 2. Configure the provider settings

1. Go to the **NETWORK > IP Configuration** page.
2. In the **3G Network Interface** section, select the following settings:
    - **Enable 3G Network Interface**: **Yes**
    - **Classification**: **WAN**
3. Configure the remaining **3G Network Interface** settings for your network requirements.
    - You can configure the Barracuda modem to automatically choose the transmission standard with the best transmission performance. For **Radio Preference**, click **Auto**.
    - For the initial configuration, keep the default **Metric** value of 400. In a multiprovider configuration, the firewall chooses the interface with the lowest metric for outgoing traffic.
    - If authentication is required, enter the username and password for establishing a connection to your ISP. If authentication is not required, select the **No Auth** check box.
    - If a pin number is required to unlock your SIM card, enter it in the **SIM PIN** field.
    - To use the DNS server that is assigned by your ISP, set **Use Assigned DNS** to **Yes**. The firewall then uses the DNS servers of the ISP for DNS requests.
    - To make the firewall reachable with a unique identifier (DNS-resolvable name), set **Use**

Assigned DNS to **Yes** and enter your DynDNS credentials.
For more information on the DynDNS service, see http://dyn.com/dns/.

- To start the link automatically, set **Connection Start Method** to **Automatic**.
- To manually start and stop the link , set **Connection Start Method** to **Manual**. To control the link, go to the **Dynamic Network Interfaces** section of the **NETWORK > Interfaces** page.
- To monitor the 3G Internet connection, select a test type from the **Health Check** list. Most ISPs support LCP to continuously monitor successful data transmission. However, you can use ICMP requests for monitoring the Internet connection. If you use ICMP for link monitoring, add a target IP address to the **Health Check Target** list.

4. Click **Save Changes**.
5. At the top of the page, click on the warning message to execute the new network configuration.
6. After committing your changes, log back into the X-Series Firewall.
7. To verify that the Barracuda modem can establish a connection to your ISP, check its status LED lights. For information on the meaning of the LED lights, see the Barracuda 3G USB Modem Quick Start Guide.

Step 3. Verify the uplink and default network route

Verify that the X-Series Firewall can establish an Internet connection and that the default network route was introduced.

1. Go to the **BASIC > Active Routes** page.
2. In the **Network Routes** section, verify that a default network route for the 3G WAN link was introduced.
3. In the **Network Interfaces** section, verify that the network interface of the 3G WAN link is available.

Barracuda NextGen Firewall X

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Network Routes   Help

Table	From	State	To	Gateway	Source	Interface	Trust Level	Metric
⊟ vpnlocal								
⊟ main								
		✖	192.168.202.0/24		0.0.0.0	ath2	Trusted	11
		✖	192.168.203.0/24		0.0.0.0	ath3	Trusted	11
		▪	192.168.201.0/24		192.168.201.1	ath0	Trusted	11
		▪	192.168.200.0/24		192.168.200.200	p1	Trusted	
		▪	10.64.64.69/32		10.74.144.100	ppp5	WAN	
⊟ umts1	10.74.144.100/0							
		▪	0.0.0.0/0	10.64.64.69	10.74.144.100	ppp5	Unclassified	400
⊟ default								
		▪	0.0.0.0/0	10.64.64.69	10.74.144.100	ppp5	Unclassified	400

Network Interfaces   Help

Interface	IP Address	MAC Address	Link	MTU	Speed	Duplex	Transferred	Errors	
⊞ ath0	192.168.201.1	90:f6:52:8b:90:97	✔	1500	?	?	24.83 KBytes	42	
⊞ ath2	192.168.202.1	90:f6:52:8b:90:97	✖	1500	?	?	0.00 Bytes	0	
⊞ ath3	192.168.203.1	90:f6:52:8b:90:97	✖	1500	?	?	0.00 Bytes	0	
⊞ p1		00:10:f3:27:69:b2	✔	1500	1000Mb/s	Full	377.75 KBytes	0	
⊞ p2		00:10:f3:27:69:b3	✖	1500	?	?	0.00 Bytes	0	
⊞ p3		00:10:f3:27:69:b4	✖	1500	?	?	0.00 Bytes	0	
⊞ p4		00:10:f3:27:69:b5	✖	1500	?	?	0.00 Bytes	0	
⊞ ppp5	10.74.144.100	00:00:00:00:00:00	✔	1500	?	?	25.38 KBytes	0	

Figures

1. Verify3G.png