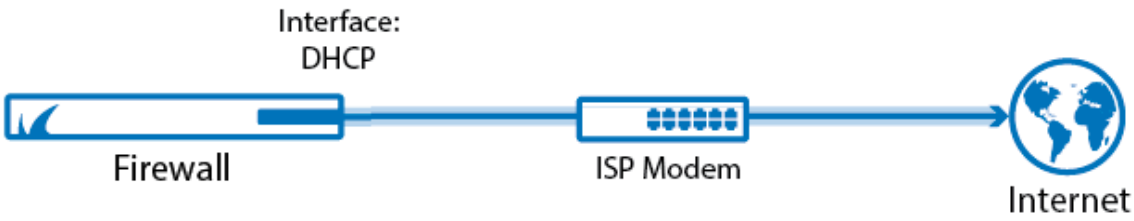
How to Configure an ISP with Dynamic IP Addresses (DHCP)

https://campus.barracuda.com/doc/72516272/

If the IP address is dynamically assigned by your ISP, follow the instructions below to configure the interface.

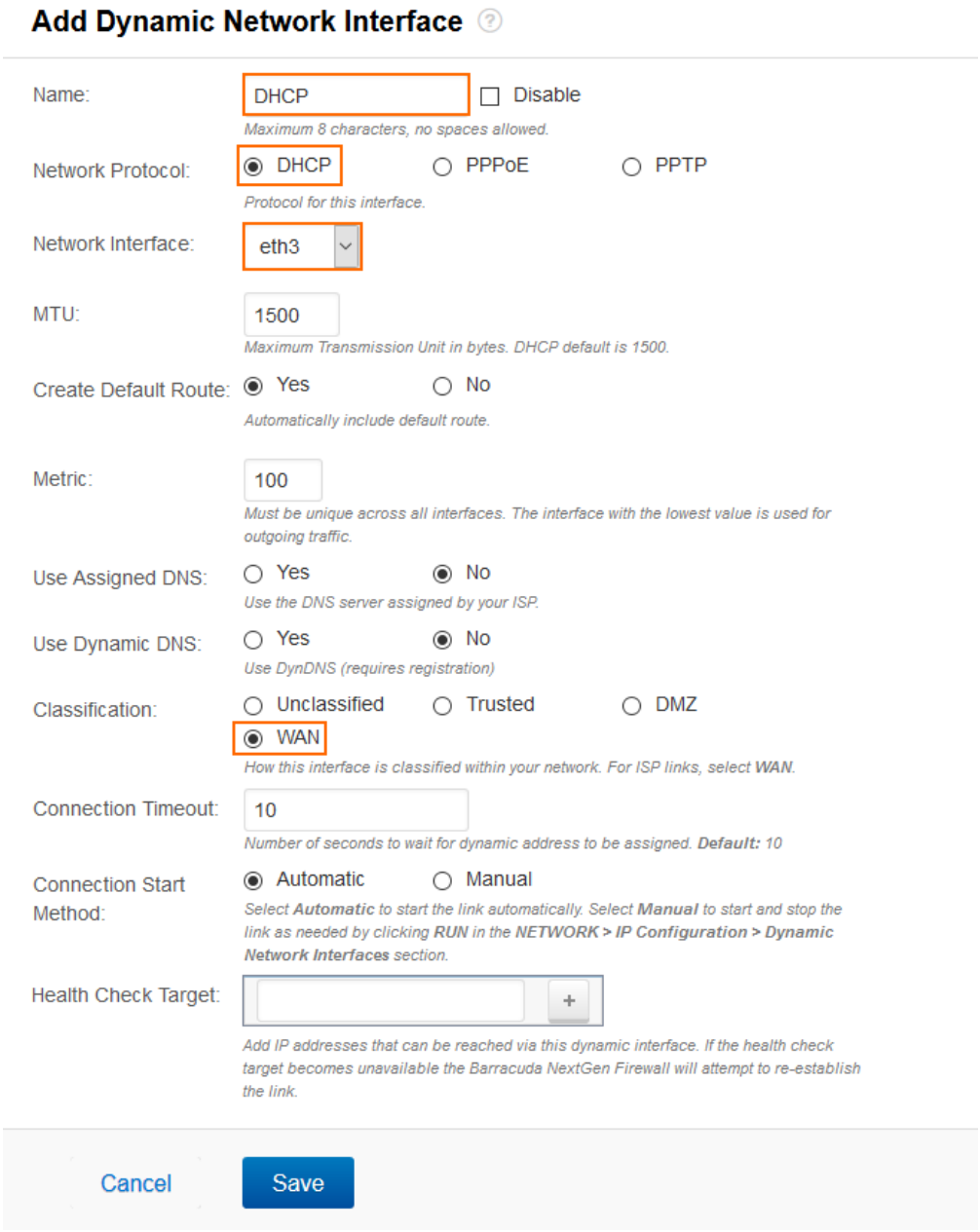


Before You Begin

If your ISP provides a modem, connect the Ethernet port of the modem to a free network interface on the back of your firewall. Use the Ethernet cable that is delivered with the modem. If a cable was not delivered with the modem, determine if the modem must be connected to another device with a standard Ethernet cable or a crossover cable.

Step 1. Configure the WAN Interface

1. Go to **NETWORK > IP Configuration**.
2. In the **Dynamic Interface Configuration** section, click **Add Dynamic Network Interface**.
3. Enter a name for the new connection.
4. Set **Network Protocol** to **DHCP**.
5. From the **Network Interface** list, select the network interface that the ISP modem is connected to on the firewall.
6. Set **Classification** to **WAN**.



7. Configure the remaining settings for your network requirements:
   - **MTU** – Enter the MTU size. If the MTU size is too large, network packets passing the ISP line are fragmented and might decrease the performance of your network performance. For the correct MTU size, contact your ISP.
   - **Create Default Route** – Set to Yes to automatically introduce a network route for this Internet connection.
   - **Metric** – For the initial configuration, keep the default **Metric** value of `100`. In a multi-provider configuration, the firewall chooses the interface with the lowest metric for outgoing traffic.
   - **Use Assigned DNS** – 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.
   - **Use Dynamic DNS** – To make the firewall reachable with a unique identifier (DNS-

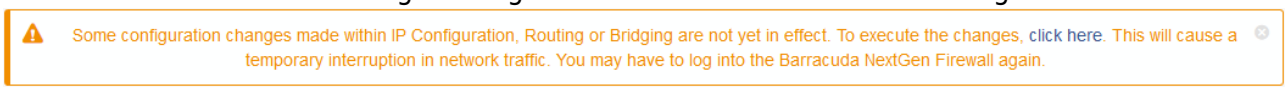
resolvable name), set **Use Dynamic DNS** to **Yes** and enter your DynDNS credentials. For more information about the DynDNS service, visit http://dyn.com/dns/.
- **Connection Timeout** – The connection timeout specifies the time in seconds that the firewall waits for an IP address to be assigned. If the defined limit is exceeded, the link is marked as unreachable.
- **Connection Start Method** – To start the link automatically, set **Connection Start Method** to **Automatic**.
- **Connection Start Method** – 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 > IP Configuration** page.
  Health Check – To monitor the Internet connection, select a type of **Health Check** to perform. 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.

8. Click **Save** to save the new configuration.

Step 2. Perform a Network Activation

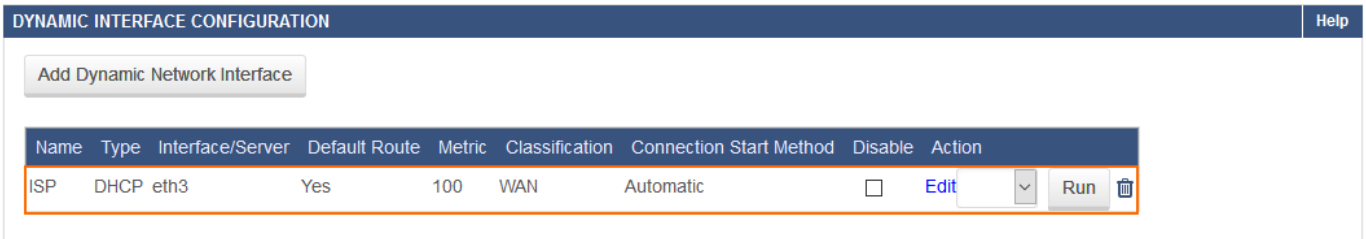
After you create or change basic network configurations such as routing, you must activate your new network configurations.

1. Scroll to the top of the page
2. Click on the link in the warning message to activate the new network configuration.



Verify the Network Configuration

After the network activation with the new DHCP the entry is in the table in the Dynamic Interface Configuration section.



The DHCP interface is now also shown in the Network Interface Configuration section.

NETWORK INTERFACE CONFIGURATION

Help

Interface Name	Application Link TCP Port	Type/Name	MAC Address	MTU	Speed	Use QoS	Duplex	Status	Action
eth0			00:0c:29:9f:b2:54	1500	10000 Mbps	No	Full	Unknown	Edit
eth1			00:0c:29:9f:b2:5e	1500		No	Unknown	Down	Edit
eth2			00:0c:29:9f:b2:68	1500		No	Unknown	Down	Edit
dhcp	eth3	ISP [DHCP]	00:0c:29:9f:b2:68			No	Unknown	Unknown	Edit

Figures

1. dhcp_wan.png
2. configure_dhcp_connection.png
3. network_activation_ip_configuration.png
4. dhcp_interface_added.png
5. dhcp_interface_shown_in_nw_itfc_conf_section.png