How to Configure a Wi-Fi Network

https://campus.barracuda.com/doc/79462778/

For CloudGen Firewall F-Series models equipped with Wi-Fi, the firewall can act as an access point by introducing up to three Wi-Fi services.

Before You Begin

Make sure that you have configured a DHCP service on your firewall. For more information, see How to Configure the DHCP Service.

Step 1. Enable the Wi-Fi Network

1. Go to **CONFIGURATION > Configuration Tree > Box > Network**.
2. In the left menu, expand **Configuration** and select **Wi-Fi**.
3. Select **yes** from the **Wi-Fi Enabled** list.
4. From the **Location** list, select your location.
5. From the **Channel** list, select the desired channel.
6. From the **Transmission Power** list, select the applicable transmission power level.
   Do not select the highest transmission power level for the Barracuda CloudGen Firewall F101 unless it is located in a cool and well ventilated location.
7. Click **Send Changes** and **Activate**.

Step 2. Configure the Wi-Fi Service Properties

1. Go to **CONFIGURATION > Configuration Tree > Box > Assigned Services > Wi-Fi > Service Properties**.
2. Click **Lock**.
3. In the **Service Definition** section, select *yes* from the **Enable Service** list.
4. In the **Description** field, enter an optional description of the Wi-Fi service.
5. Click **Send Changes** and **Activate**.

Step 3. Configure a Direct Attached Route for the Wi-Fi Network

If your LAN and Wi-Fi connections are in two different networks, configure a default route for the Wi-Fi LAN by completing the following steps:

1. Go to **CONFIGURATION > Configuration Tree > Box > Network**.
2. In the left menu, expand **Configuration** and click **Routing**.
3. Click **Lock**.
4. In the **Main Routing Table** section, add a new entry to the **Routes** table.
5. Enter a **Name** for the route. The **Routes** configuration window opens.
6. In the **Target Network Address** field, enter the WiFi network address. E.g., `192.168.1.0/24`
7. From the **Route Type** list, select **directly attached network**.
8. From the **Interface Name** list, select the interface the network is attached to. E.g., `ath0`
9. Click **OK**.
10. Click **Send Changes** and **Activate**.

Step 4. Add an IP Address from the Wi-Fi Network to the Box Addresses

1. Go to **CONFIGURATION > Configuration Tree > Box > Network**.
2. Click **Lock**.
3. Click **+** to add an entry to the **Additional Local IPs** table. the **Additional IPv4 Addresses** window opens.
4. Configure the IP address:
   - **Interface** – Select the Wi-Fi interface.
   - **IP Address** – Enter an IP address from the WiFi network. E.g., `192.168.1.1`
   - **Responds to Ping** – Select **yes**.
5. Click **OK**.
6. Click **Send Changes** and **Activate**.

Step 5. Activate the Network Configuration

1. Go to **CONTROL > Box**.
2. In the left menu, expand **Network** and click **Activate new network configuration**.
3. When the activation window opens, select **Failsafe** as the activation mode.
4. When the **Activation Succeeded** window opens, click **OK**.

Step 6. Configure the Wi-Fi Security Settings

1. Go to **CONFIGURATION > Configuration Tree > Box > Assigned Services > Wi-Fi > Wi-Fi AP Configuration**.
2. Click **Lock**.
3. In the **Network Name (SSID)** field, enter the network name.
4. In the **Preshared Key (PSK)** table, click **+** to add a new entry. The **Preshared Key (PSK) Combination** window opens.
5. In the **New** field, enter a new password.

6. In the **Confirm** field, re-enter the new password.
7. Click **OK**.
8. Click **Send Changes** and **Activate**.

After completing the configuration, go to the **CONTROL > Network** page and verify that the Wi-Fi interface is available. If the interface is available, a green square is displayed next to its name.

Troubleshooting

If the Wi-Fi interface is not available (indicated by a red square),

1. Verify that you completed all the configuration steps.
2. Make sure that the system is up-to-date with firmware patches.

If the Wi-Fi interface is still not available after completing these two steps, reboot the system:

1. Open the **CONTROL > Box** page.
2. In the left menu, expand **Operating System** and click **Reboot Box**.
3. After rebooting the system, go to the **CONTROL > Services** page and make sure that the service is running.
4. To restart the service, right-click it in the table and and click **Restart Service**.

If Wi-Fi still is not enabled, contact Barracuda Networks Technical Support.