

How to Configure a Local Bridge for Evaluation

<https://campus.barracuda.com/doc/79463035/>

To transparently connect your local workstation with the network across a Barracuda CloudGen Firewall use a local bridge. This configuration allows you to explore the firewall's advanced traffic and application inspection features by using traffic that your workstation generates on the LAN. To make the connection transparent you must configure a local bridge and create an access rule to allow traffic between the bridged interfaces.



Before You Begin

Before configuring a local bridge, make sure that the following services are correctly configured-

- **Firewall** - It is assumed that port 1 is the management port and the default management IP 192.168.200.200 listens on this interface.
- **Wi-Fi** - For CloudGen Firewalls with built-in Wi-Fi, the **Country** must be selected. Otherwise, IP configurations involving Wi-Fi interfaces are not possible.
- **DHCP Server** - Make sure that DHCP server and DHCP client are disabled. By default, both are disabled.

These instructions also provide example settings that assume that your workstation is connected to port 1 and that you are creating a bridge between port 2 and port 3.

Step 1. Configure the Local Bridge

1. Go to **CONFIGURATION > Configuration Tree > Box > Network**.
2. For CloudGen Firewalls with built-in Wi-Fi:
 - Select **Wi-Fi** from the **Configuration** menu in the left menu.
 - Verify the **Location** is configured correctly.
3. Open the **Forwarding Firewall Settings** page (**CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > Firewall**).


4. In the left menu, select **Layer 2 Bridging**.
5. Click **Lock**.
6. In the **Bridged Interface Group** table, add a group:
 - **Bridged Interfaces** - In this table, add all of the interfaces that must be bridged together in this group. For example, add entries for **port 2** and **3**.
For each interface, you can specify the following settings:
 - **Name** - The exact network interface label, as listed in the network configuration. For VLANs, enter the physical VLAN interface and the VLAN tag separated by a dot. For example, eth1.5 .
 - **Allowed Networks (ACL)** - Networks that are allowed to communicate over the bridged interface. You can enter complete networks, individual client/server IP addresses, or network ranges. For example, enter 0.0.0.0/0 in the configurations for **port 2** and **port 3**.
 - **Unrestricted MACs** - List of MAC address for which the **Allowed Networks (ACL)** does not apply.
 - **MAC Change Policy** - To specify if the MAC address of the interface can be changed, select **Allow-MAC-Change** (default). If the MAC address must not be changed, select **Deny-MAC-Change**.
 - **Bridge IP Address** - In this table, add an entry or edit an existing entry for the gateway to assign an IP address to this bridging group. In the entry, specify the following settings for the gateway.
 - **Bridge IP Address** - IP address for the gateway. For example, enter 10.17.11.55 or an IP address that is relative to your network.
 - **Bridge IP Netmask** - Netmask for the gateway.

To get the gateway of the LAN before you disconnect your computer from the LAN, go to **Control Panel > Network and Sharing > Change adapter settings** on your workstation. Select your LAN adapter and click the IPv4 properties. If you have a static IP address, information including the default route and DNS information is displayed. If you have a DHCP address, your information will not display.


If you have a DHCP address, enter the following at the Windows command line:

```
ipconfig/all
```


All of the network configurations display on the screen. Scroll to the top and find the **Ethernet adapter Local Area Connection** settings.

Bridged Interfaces 

Name	Des...	Allowed N...	Unrestric...	MAC Change Policy
port2		0.0.0.0/0		Allow-MAC-Change
port3		0.0.0.0/0		Allow-MAC-Change

Bridge IP Address 

Bridge IP Address	Bridge IP Netmask
10.17.11.55	24-Bit

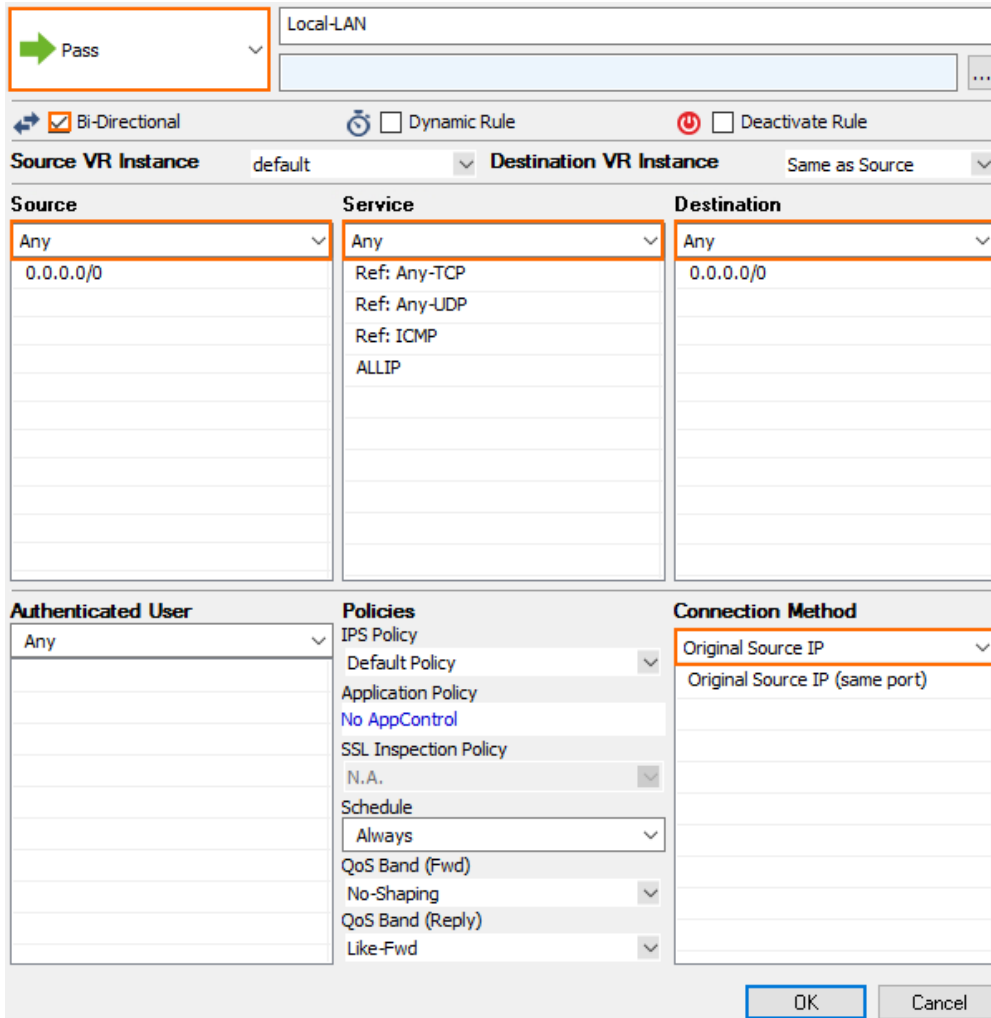
Use IP BARP Entries 

7. Click **Send Changes** and **Activate**.
8. Perform a **Failsafe Network Activation (Control > Box)**.

Step 2. Create an Access Rule for Local Bridging

After configuring the local bridge, you must create an access rule to allow traffic across the bridge and use the advanced traffic inspection features of the firewall.

1. Create a **Pass** access rule with the following settings:
 - o **Bi-Directional** - Enable
 - o **Source** - Select **Any**
 - o **Service** - Select **Any**
 - o **Destination** - Select **Any**
 - o **Connection Method** - Select **Original Source IP**



Local-LAN

Pass

Bi-Directional Dynamic Rule Deactivate Rule

Source VR Instance default Destination VR Instance Same as Source

Source	Service	Destination
Any 0.0.0.0/0	Any Ref: Any-TCP Ref: Any-UDP Ref: ICMP ALLIP	Any 0.0.0.0/0

Authenticated User	Policies	Connection Method
Any	IPS Policy Default Policy Application Policy No AppControl SSL Inspection Policy N.A. Schedule Always QoS Band (Fwd) No-Shaping QoS Band (Reply) Like-Fwd	Original Source IP Original Source IP (same port)

OK Cancel

- (Optional) Enable **Application Control** and **SSL Inspection**. For more information, see [Application Control](#).
- Click **OK**.
- Click **Send Changes** and **Activate**.

Figures

1. fw_local_bridge.png
2. br_int.png
3. br_pass_new.png

© Barracuda Networks Inc., 2020 The information contained within this document is confidential and proprietary to Barracuda Networks Inc. No portion of this document may be copied, distributed, publicized or used for other than internal documentary purposes without the written consent of an official representative of Barracuda Networks Inc. All specifications are subject to change without notice. Barracuda Networks Inc. assumes no responsibility for any inaccuracies in this document. Barracuda Networks Inc. reserves the right to change, modify, transfer, or otherwise revise this publication without notice.