

How to Configure a Local Bridge for Evaluation

<https://campus.barracuda.com/doc/46209385/>

To transparently connect your local workstation with the network across a Barracuda NextGen Firewall F-Series use a local bridge. This configuration allows you to explore the F-Series 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.



In this article

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 F-Series 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 F-Series 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

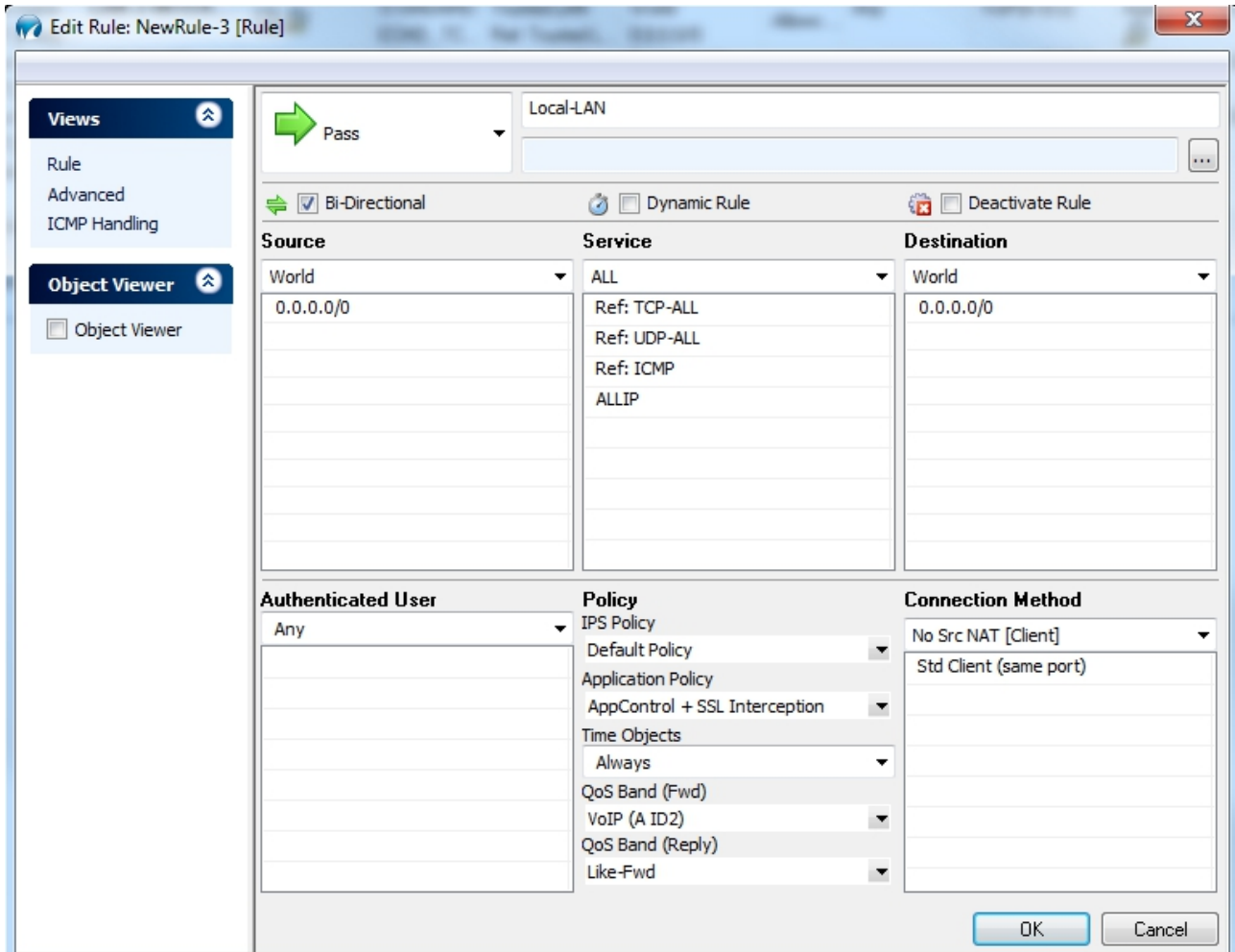
Use IP BARP Entries 

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. [How to Create a Pass Access Rule](#) with the following settings:
 - o **Bi-Directional** - Enable
 - o **Source** - Select **Any 0.0.0.0/0**
 - o **Service** - Select **Any**
 - o **Destination** - Select **Any 0.0.0.0/0**
 - o **Connection Method** - Select **No Src NAT [Client]**



The screenshot shows the 'Edit Rule: NewRule-3 [Rule]' configuration window. The interface includes a sidebar with 'Views' (Rule, Advanced, ICMP Handling) and 'Object Viewer' (Object Viewer). The main configuration area is divided into several sections:

- Action:** A dropdown menu set to 'Pass' with a green arrow icon.
- Location:** A text field containing 'Local-LAN'.
- Options:** Checkboxes for 'Bi-Directional' (checked), 'Dynamic Rule', and 'Deactivate Rule'.
- Source:** A dropdown menu set to 'World' with a list of IP addresses below it, including '0.0.0.0/0'.
- Service:** A dropdown menu set to 'ALL' with a list of protocols below it, including 'Ref: TCP-ALL', 'Ref: UDP-ALL', 'Ref: ICMP', and 'ALLIP'.
- Destination:** A dropdown menu set to 'World' with a list of IP addresses below it, including '0.0.0.0/0'.
- Authenticated User:** A dropdown menu set to 'Any' with a list of users below it.
- Policy:** A list of policy options including 'IPS Policy', 'Default Policy', 'Application Policy', 'AppControl + SSL Interception', 'Time Objects', 'Always', 'QoS Band (Fwd)', 'VoIP (A ID2)', 'QoS Band (Reply)', and 'Like-Fwd'.
- Connection Method:** A dropdown menu set to 'No Src NAT [Client]' with a list of methods below it, including 'Std Client (same port)'.

At the bottom right, there are 'OK' and 'Cancel' buttons.

- (Optional) Enable **Application Control** and **SSL Interception**. 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

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