

How to Configure VPN Access via a Dynamic WAN IP Address

<https://campus.barracuda.com/doc/48203195/>

Services running on a virtual server can not be configured to listen on dynamic IP addresses on the box layer of the Barracuda NextGen Firewall F-Series. To use a VPN service on a Barracuda NextGen Firewall F-Series with dynamic WAN connections, configure the VPN service to listen on a localhost IP address (127.0.0.X) and then create an app redirect access rule to redirect all incoming VPN traffic to the local VPN service. For IPsec you can alternatively, configure the VPN service to create a listener on every available IP address, making the app redirect access rule unnecessary.

Configure VPN Service Listener on 127.0.0.9

Configure the virtual server and the VPN service to listen on 127.0.0.9 and then use an app redirect access rule to redirect VPN traffic to the VPN service on the localhost.

Step 1. Add the Virtual Server IP Address

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Server Properties**.
2. Click **Lock**.
3. In the **Additional IP** table, click +. The **Additional IP** window opens:
 - **Additional IP** – Enter 127.0.0.9.
 - **Reply to Ping** – Select **Yes**.
4. Click **OK**.
5. Click **Send Changes** and **Activate**.

Services running on the virtual server can now use 127.0.0.9 as a listening IP address.

Step 2. Configure the VPN Service IP

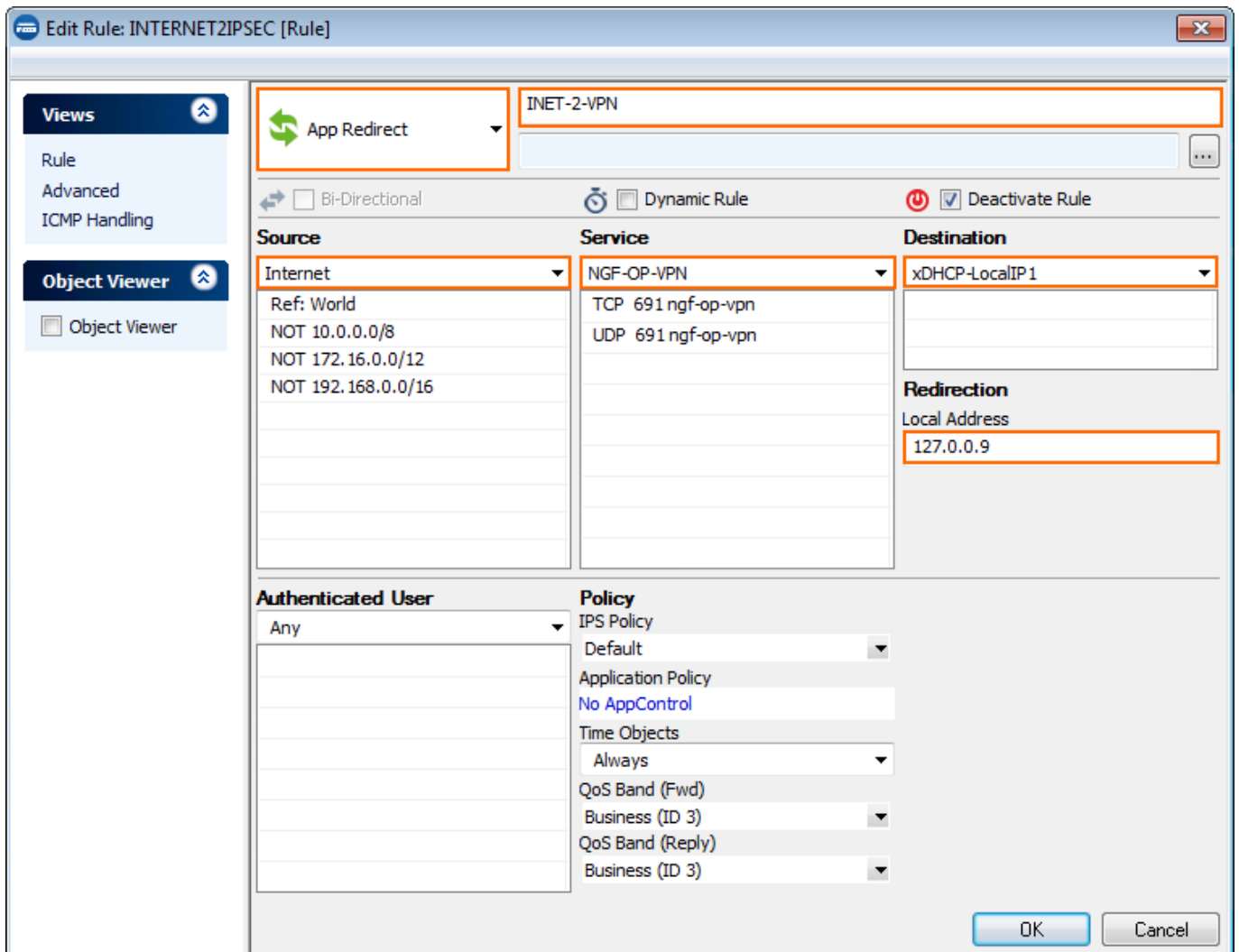
Configure the VPN service to use the 127.0.0.9 listening IP address configured in step 1 as a Service IP address.

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > VPN-Service > Service Properties**.
2. Click **Lock**.
3. From the **Service Availability** drop down, select **Explicit**.
4. Click + and add the IP address 127.0.0.9 to the **Explicit Service IPs** table.
5. Click **Send Changes** and **Activate**.

Step 3. Create an App Redirect Access Rule

Create an access rule to redirect all incoming VPN traffic on the dynamic WAN interface to the VPN service:

- **Action** – Select **App Redirect**.
- **Source** – Select **Internet**.
- **Service** – Select **NGF-OP-VPN**.
- **Destination** – Select the network object for your dynamic WAN connection. E.g., **xDHCP-LocalIP1** or **xDSL-LocalIP1**.
- **Redirection** – Enter **127.0.0.9**.



Edit Rule: INTERNET2IPSEC [Rule]

Views: Rule, Advanced, ICMP Handling

Object Viewer: Object Viewer

App Redirect

INET-2-VPN

Bi-Directional Dynamic Rule Deactivate Rule

Source	Service	Destination
Internet	NGF-OP-VPN	xDHCP-LocalIP1
Ref: World	TCP 691 ngf-op-vpn	
NOT 10.0.0.0/8	UDP 691 ngf-op-vpn	
NOT 172.16.0.0/12		
NOT 192.168.0.0/16		

Authenticated User: Any

Policy: IPS Policy, Default, Application Policy, No AppControl, Time Objects, Always, QoS Band (Fwd), Business (ID 3), QoS Band (Reply), Business (ID 3)

Redirection: Local Address, 127.0.0.9

OK Cancel

For more information, see [How to Create an App Redirect Access Rule](#).

All incoming VPN traffic is now redirected to the VPN service listening on 127.0.0.9.

IPsec VPN Service Listener on all IP Addresses

Configure the VPN service to listen on all available IP addresses including all dynamic IP addresses. No additional access rules are required.

This parameter is limited to IPsec VPN configurations.

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > VPN-Service > VPN Settings**.
2. Click **Lock**.
3. Click the **Click here for Server Settings** link. The **Server Settings** window opens.
4. Click on the **Advanced** tab.
5. In the **IKE Parameter** section, set **Use IPsec dynamic IPs** to **Yes**.
6. Click **OK**.
7. Click **Send Changes** and **Activate**.

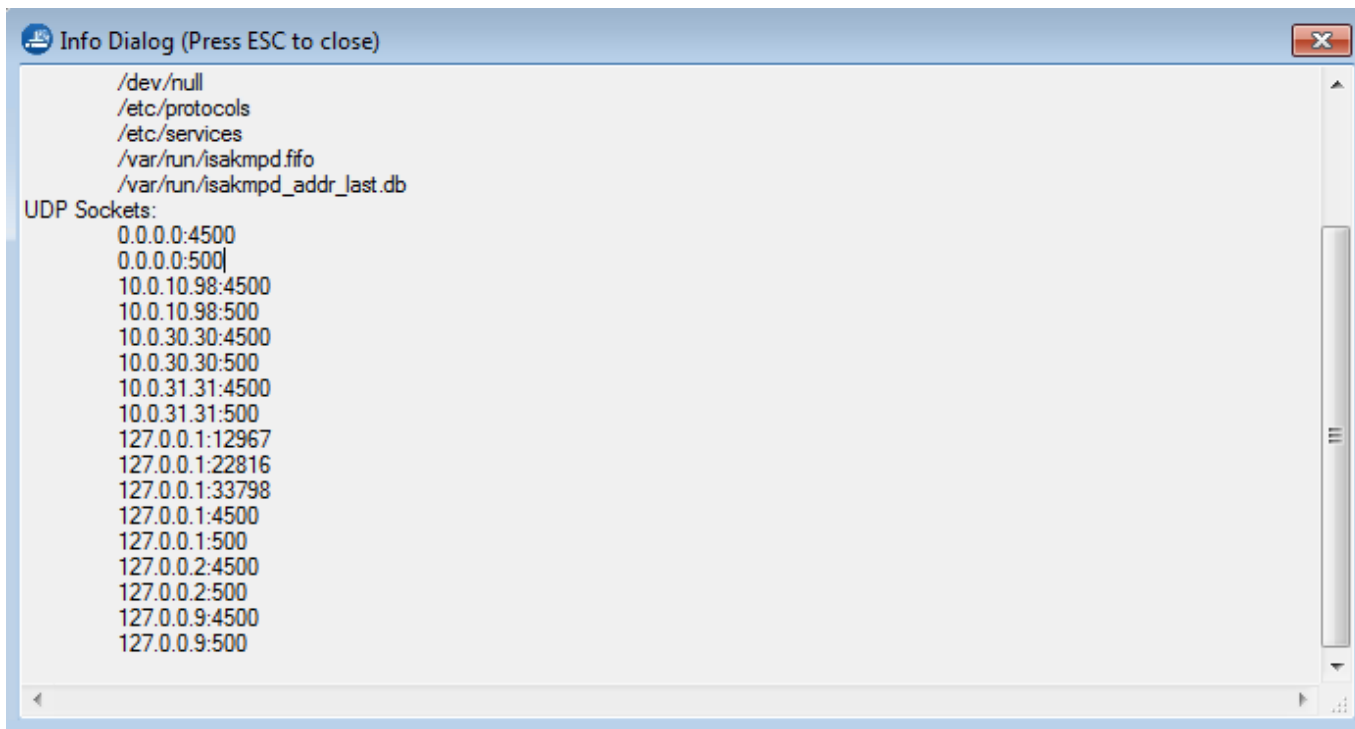
Verify the Listening IP Addresses for the VPN Service

Open the **CONTROL > Resources** page and double click on the VPN service process (e.g., S1_ARVPN) for TINA tunnels, or the **ike3** process for IPsec tunnels. In the **Info Dialog** window, check to see if the VPN service is listening on the IP addresses you configured above (e.g., 127.0.0.1 or 0.0.0.0/0).

VPN service:



ike3 process with Use dynamic IPs enabled:



DynDNS

Dynamic WAN connections may change the public IP address regularly. Configure DynDNS continuously update a DynDNS hostname to always resolve to the current public IP address used by the NextGen Firewall F-Series. VPN clients then use the DynDNS hostname to connect to the NextGen Firewall F-Series VPN service.

Figures

1. VPN_dynWAN01.png
2. VPN_dynWAN03.png
3. VPN_dynWAN02.png

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