

How to Create a TINA VPN Tunnel between CloudGen Firewalls

<https://campus.barracuda.com/doc/73719179/>

As the TINA protocol offers significant advantages over IPsec, it is the main protocol that is used for VPN connections between CloudGen Firewalls. Many of the advanced VPN features, such as Traffic Intelligence or WAN Optimization, are only supported for TINA site-to-site tunnels.



You must complete this configuration on both the local and the remote Barracuda CloudGen Firewall by using the respective values below:

Example values for the local firewall	Example values for the remote firewall	
VPN local networks	10.0.10.0/25	10.0.81.0/24
VPN remote networks	10.0.81.0/24	10.0.10.0/25
External IP address (listener VPN service)	62.99.0.40	212.86.0.10

The following sections use the default transport, encryption, and authentication settings. For more detailed information, see [TINA Tunnel Settings](#).

Before you Begin

If no already present, configure the **Default Server Certificate** in **CONFIGURATION > Configuration Tree > Box > Virtual Server > your virtual server > Assigned Services > VPN > VPN Settings**. For more information, see [VPN Settings](#)

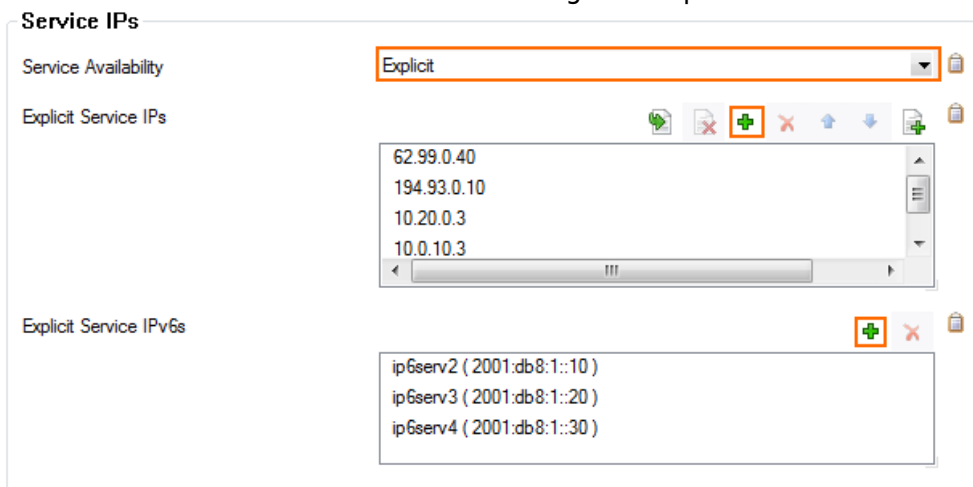
Step 1. Configure the VPN Service Listeners

Configure the IPv4 and IPv6 listener addresses for the VPN service.

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Server > your virtual**

server > Assigned Services > VPN > Service Properties.

2. Click **Lock**.
3. From the **Service Availability** list, select the source for the IPv4 listeners:
 - **First+Second-IP** – The VPN service listens on the first and second virtual server IPv4 address.
 - **First-IP** – The VPN service listens on the first virtual server IPv4 address.
 - **Second-IP** – The VPN service listens on the second virtual server IPv4 address.
 - **Explicit** – For each IP address, click + and enter the IPv4 addresses in the **Explicit Service IPs** list.
4. Click + to add an entry to the **Explicit IPv6 Service IPs**.
5. Select an IPv6 listener from the list of configured explicit IPv6 virtual server IP addresses.

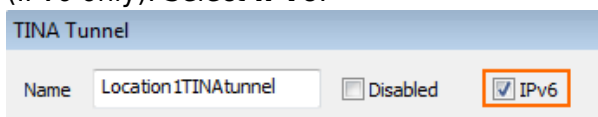


6. Click **Send Changes** and **Activate**.

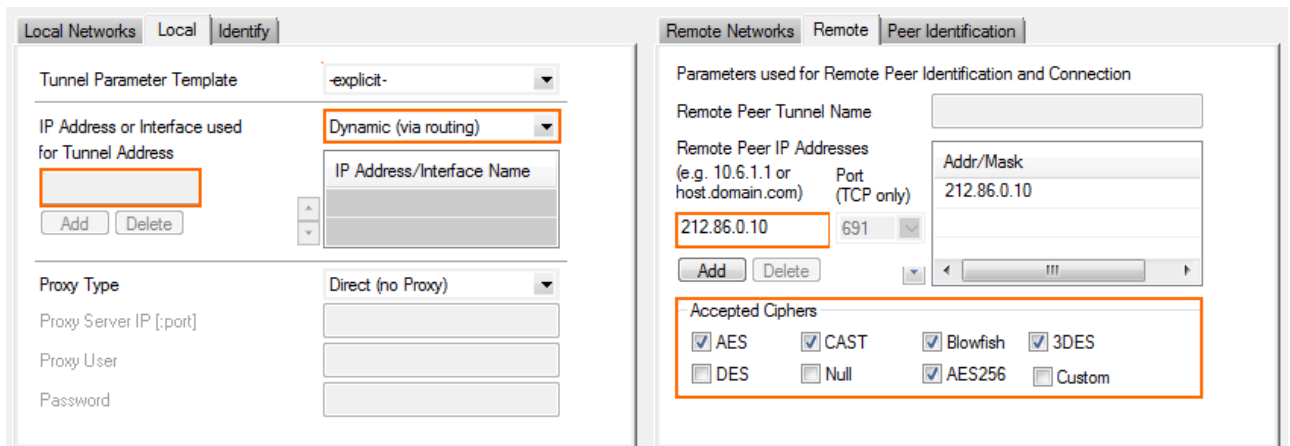
Step 2. Configure the TINA Tunnel at Location 1

For the firewall at location 1, configure the network settings and export the public key. For more information on specific settings, see [TINA Tunnel Settings](#)

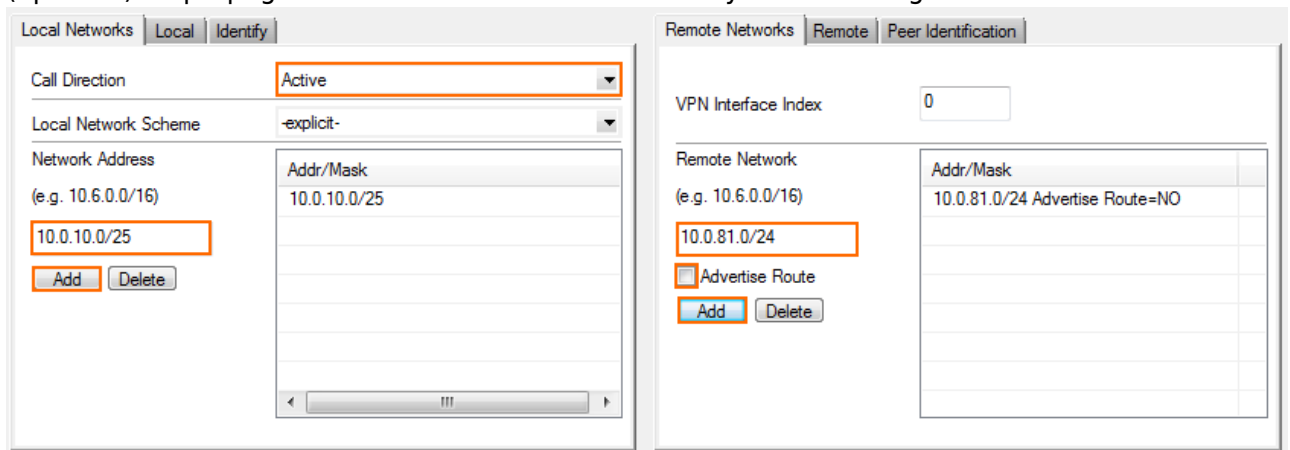
1. Log into the firewall at location 1.
2. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > VPN > Site to Site**.
3. Click **Lock**.
4. Click the **TINA Tunnels** tab.
5. Right-click the table, and select **New TINA tunnel**.
6. In the **Name** field, enter the name for the new VPN tunnel.
7. (IPv6 only). Select **IPv6**.



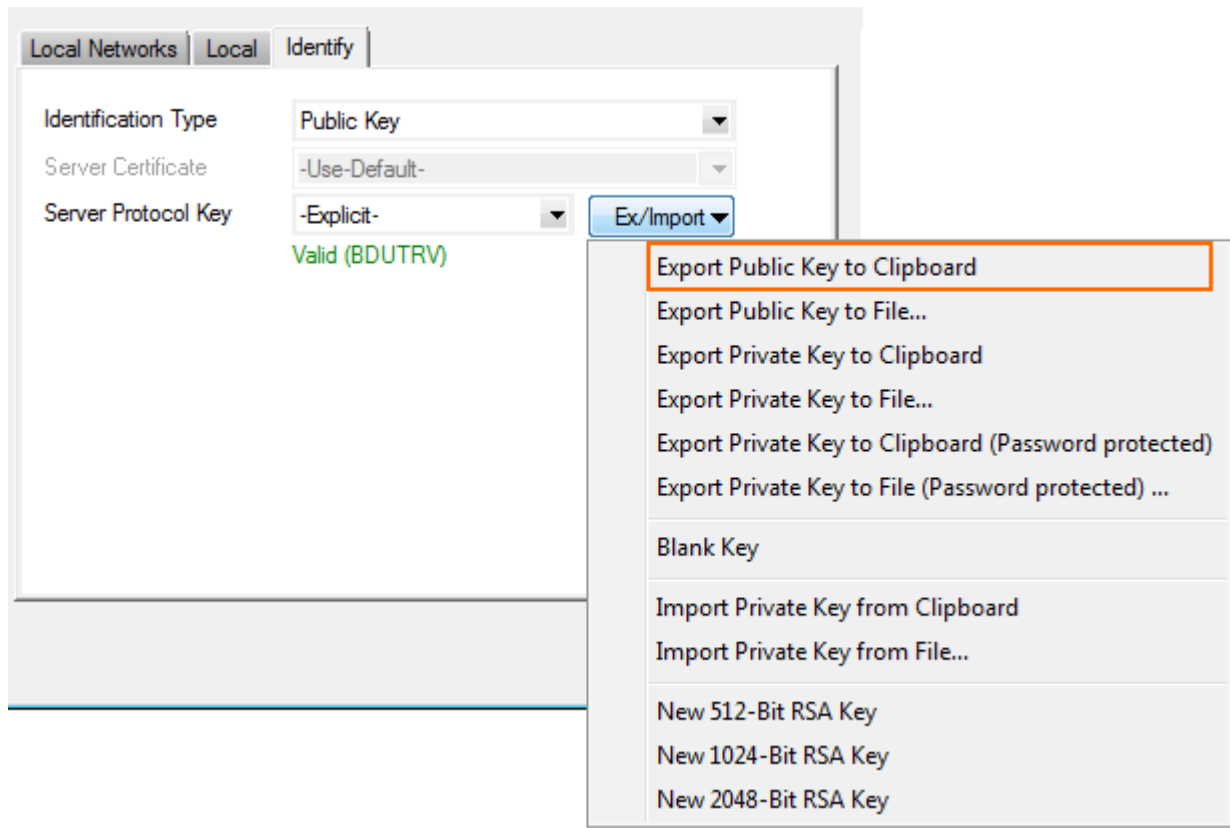
8. Configure the **Basic** TINA tunnel settings. For more information, see [TINA Tunnel Settings](#).



11. In the **Remote** tab, select the **Accepted Ciphers**. To use a cipher, the list must match the **Encryption** settings previously configured.
12. For each local network, enter the **Network Address** in the **Local Networks** tab and click **Add**. E.g., 10.0.10.0/25
13. For each remote network enter the **Network Address** in the **Remote Networks** tab and click **Add**. E.g., 10.0.81.0/24
14. (optional) To propagate the remote VPN network via dynamic routing enable **Advertise Route**.



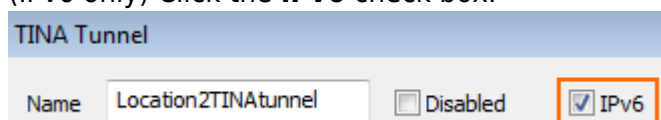
15. Click on the **Identity** tab.
16. From the **Identification Type** list, select **Public Key**.
17. Click **Ex/Import** and select **Export Public Key to Clipboard**.



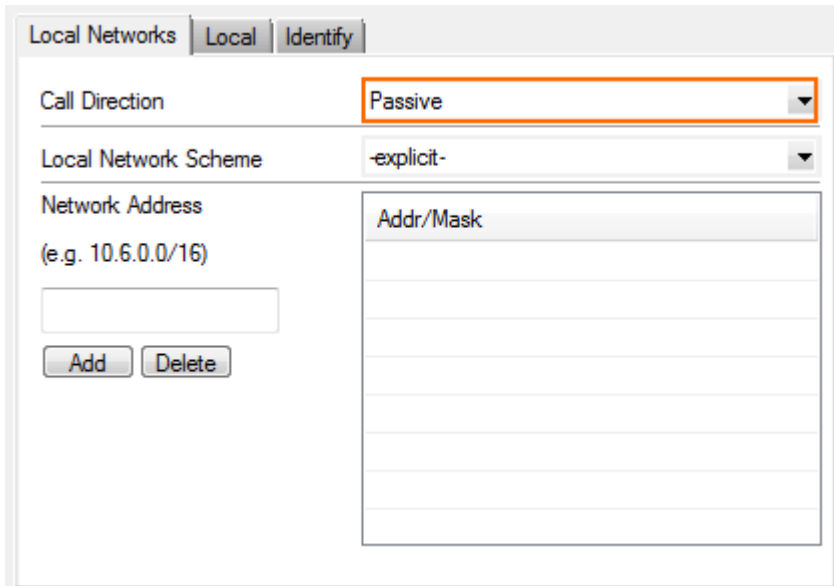
18. Click **OK**.
19. Click **Send Changes** and **Activate**.

Step 3. Create the TINA Tunnel at Location 2

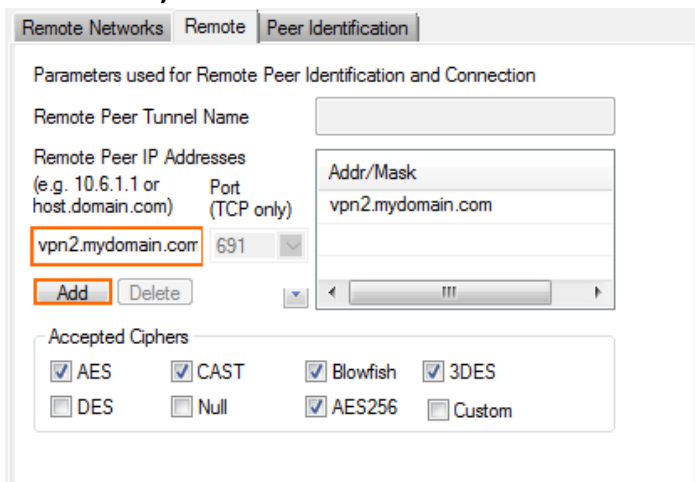
1. Log into the firewall at location 2.
2. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > VPN > Site to Site**.
3. Click **Lock**.
4. Click the **TINA Tunnels** tab.
5. Right-click the table, and select **New TINA tunnel**.
6. In the **Name** field, enter the name for the new VPN tunnel.
7. (IPv6 only) Click the **IPv6** check box.



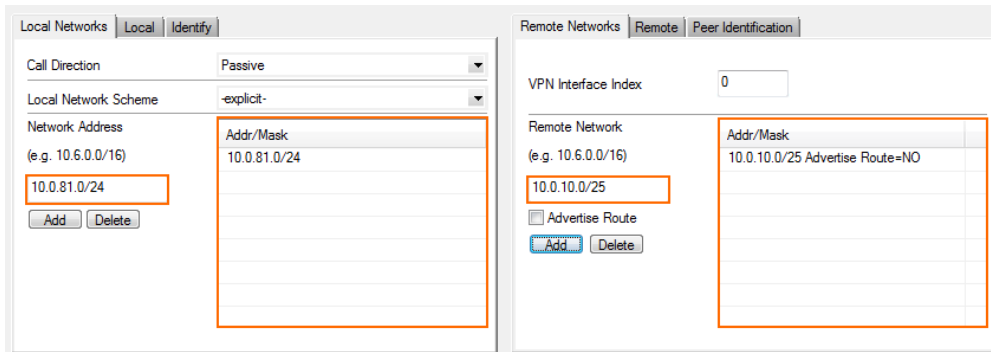
8. Configure the **Basic** TINA tunnel settings to match the settings configured for the Location1
9. In the **Local Networks** tab, select the **Call Direction**. Make sure that one or both firewalls are set to **active**.



10. Click the **Local** tab, and configure the **IP address or Interface used for Tunnel Address**:
 - **(IPv4 only) First Server IP** – First IP address of the virtual server the VPN service is running on.
 - **(IPv4 only) Second Server IP** – Second IP address of the virtual server the VPN service is running on.
 - **Dynamic (via routing)** – The firewall uses a routing table lookup to determine the IP address.
 - **Explicit List (ordered)** – Enter one or more explicit IP addresses. Multiple IP addresses are tried in the listed order.
11. Click the **Remote** tab, enter one or more IP addresses or a FQDN as the **Remote Peer IP Addresses**, and click **Add**.

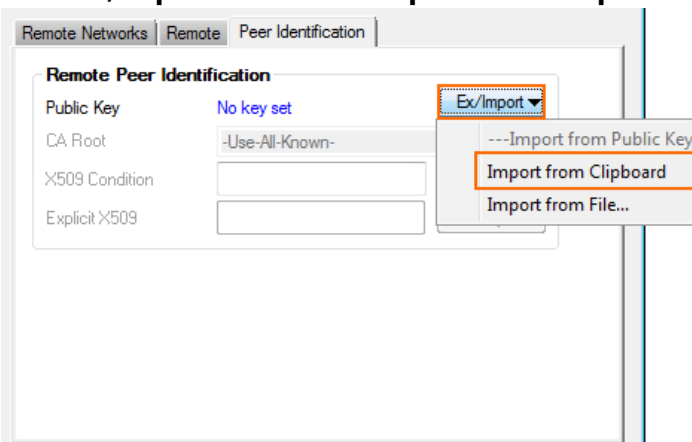


12. In the **Remote** tab, select the **Accepted Ciphers**. To use a cipher, the list must match the **Encryption** settings previously configured.
13. For each local network, enter the **Network Address** in the **Local Networks** tab and click **Add**. E.g., 10.0.81.0/24 behind Location 2 CloudGen Firewall.
14. For each remote network, enter the **Network Address** in the **Remote Networks** tab and click **Add**. E.g., 10.0.10.0/25 behind Location1 CloudGen Firewall.



The screenshot shows two configuration panels. The left panel, titled 'Local Networks', has tabs for 'Local' and 'Identify'. It includes a 'Call Direction' dropdown set to 'Passive', a 'Local Network Scheme' dropdown set to '-explicit-', and a table for 'Network Address'. The table has a header 'Addr/Mask' and one row containing '10.0.81.0/24'. Below the table are 'Add' and 'Delete' buttons. The right panel, titled 'Remote Networks', has tabs for 'Remote' and 'Peer Identification'. It includes a 'VPN Interface Index' input field set to '0', a 'Remote Network' table with header 'Addr/Mask' and one row containing '10.0.10.0/25 Advertise Route=NO'. Below the table are 'Add' and 'Delete' buttons.

15. Click on the **Peer Identification** tab.
16. Click **Ex/Import** and select **Import from Clipboard**.



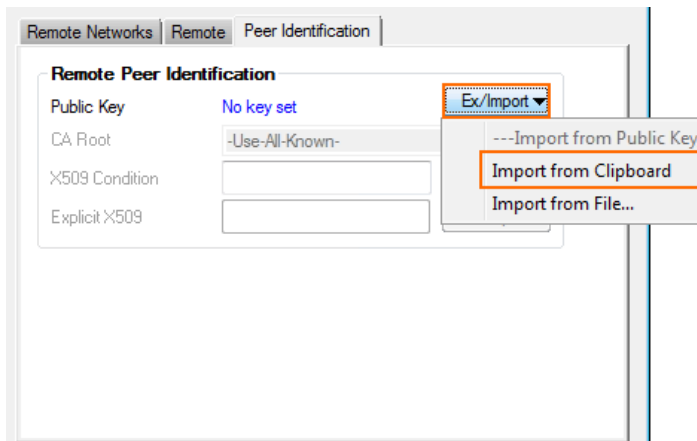
The screenshot shows the 'Remote Peer Identification' configuration window. It has tabs for 'Remote' and 'Peer Identification'. The 'Public Key' field is set to 'No key set'. The 'CA Root' field is set to '-Use-All-Known-'. The 'X509 Condition' and 'Explicit X509' fields are empty. An 'Ex/Import' dropdown menu is open, showing three options: '---Import from Public Key', 'Import from Clipboard', and 'Import from File...'. The 'Import from Clipboard' option is highlighted with an orange box.

17. Click on the **Identity** tab.
18. From the **Identification Type** list, select **Public Key**.
19. Click **Ex/Import** and select **Export Public Key to Clipboard**.
20. Click **OK**.
21. Click **Send Changes** and **Activate**.

Step 4. Import the Public Key for Location 1

The VPN tunnel is not activated until the public key of location 2 is imported to location 1.

1. Log into the firewall at location 1.
2. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > VPN-Service > Site to Site**.
3. Click **Lock**.
4. Open the configuration for the site-to-site tunnel created in Step 1.
5. Click the **Peer Identification** tab.
6. Click **Ex/Import** and select **Import from Clipboard**.



7. Click **OK**.
8. Click **Send Changes** and **Activate**.

After configuring the TINA VPN tunnel on both firewalls, you must also create an access rule on both systems to allow access to the remote networks through the VPN tunnel.

Next Step

Create access rules to allow traffic in and out of your VPN tunnel: [How to Create Access Rules for Site-to-Site VPN Access](#).

Figures

1. tina_tunnel.png
2. vpn_service_listeners.png
3. TINA_00.png
4. TINA_01.png
5. TINA_02.png
6. TINA_03.png
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10. TINA_06.png
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14. TINA_09.png

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