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## How to Configure a Client-to-Site PPTP VPN

<https://campus.barracuda.com/doc/53248812/>

Barracuda NextGen Firewall F-Series supports PPTP VPNs with 40-, 56-, and 128-bit MPPE.

### Supported VPN Clients

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Use a standard-compliant PPTP client, such as the native Windows VPN client.

### Limitations

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- As of 2012, PPTP is no longer considered secure. It is highly recommended that you switch away from PPTP.
- Only IPv4 addresses are supported.

### Using PPTP with MPPE on Windows 7 and Above

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If you want to establish a PPTP connection with a 40- or 56-bit MPPE using Windows 7 or above, you must configure the AllowPPTPWeakCrypto registry key.

1. Locate the AllowPPTPWeakCrypto registry key:  
HKLM\System\CurrentControlSet\Services\Rasman\Parameters\AllowPPTPWeakCrypto
2. Change the value of the registry key to 1.
3. Reboot your system.

### Step 1. Configure General Settings

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Configure the general settings for all L2TP/IPsec and PPTP connections.

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > VPN-Service > L2TP/PPTP Settings**.
2. Click **Lock**.
3. Edit the following general settings for PPTP:
  - **First DNS | Second DNS** – The IP addresses of the first and secondary DNS servers for

use by the VPN clients.

- **First WINS | Second WINS** – The IP addresses of the primary and secondary WINS server.
  - **Static IP** – To assign static IP addresses to your VPN clients, select *yes* .
4. Click **Send Changes** and **Activate**.

## Step 2. Configure the PPTP VPN Server

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1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > VPN-Service > L2TP/PPTP Settings**.
2. In the left menu, select **PPTP**.
3. Click **Lock**.
4. From the **PPTP Enable** list, select **yes**.
5. In the **PPTP Settings** section, configure the following settings:
  - **PPTP Listen IP** – The IP address on which the Barracuda NextGen Firewall F-Series will listen for PPTP connections.
  - **Local Tunnel IP** – The local IP address that the PPTP client connects to.
  - **Pool IP Begin** – The first IP address from the reserved subnet of the local network range (e.g., *10.0.0.50*).
  - **Pool Size** – The number of IP addresses that are available for PPTP clients. You can specify a maximum of 100 IP addresses.
  - **User Authentication** – The authentication scheme used. If you are using external MS-CHAPv2 authentication, select *external MS-CHAPv2*. Otherwise, select *Local-user-database*.
6. Click **Send Changes** and **Activate**.

## Step 3. (For local authentication or static IP addresses) Configure a User List

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If you are not using an external authentication scheme or must assign static IP addresses, you can manage users locally on the Barracuda NextGen Firewall F-Series.

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > VPN-Service > L2TP/PPTP Settings**.
2. In the left menu, select **User List** .
3. Click **Lock**.
4. In the **Username** table, add users.
  - Usernames must be unique.
  - Only enter an IP address if you enabled **Static IP** in **General Settings**.
5. Click **OK**.
6. Click **Send Changes** and **Activate**.

## Troubleshooting

To troubleshoot VPN connections, see the `/yourVirtualServer/VPN/pptpd` log file. For more information, see [LOGS Tab](#)

## PPTP Settings Overview

The following table provides more details on the PPTP settings that you can configure on the **L2TP/PPTP Settings - PPTP** page.

Settings	Description
<b>PPTP Listen IP</b>	The IP address that the PPTP service listens on.
<b>Initiation Timeout [s]</b>	The maximum time for establishing the GRE tunnel. You can keep the default value for this setting. The faster the connection, the shorter this timeout can be set.
<b>Local Tunnel IP</b>	The server-side network address of the tunnel. For example, <code>10.0.8.1</code> . <ul style="list-style-type: none"> <li>Do not use a Destination NAT firewall rule to forward PPTP connections to the PPTP server IP address.</li> <li>Inside the L2TP/PPTP configuration, the PPTP bind IP address must be the IP address of the VPN point of entry (the IP address where the PPTP clients terminate).</li> </ul>
<b>Pool IP-Begin</b>	The first IP address in the address pool that is available to clients.
<b>Pool Size</b>	The number of network addresses that are available for VPN clients. The maximum number of clients allowed is 100.
<b>MPPE Encryption Strength</b>	The required encryption strength. You can keep the default value for this setting. Available options are: <ul style="list-style-type: none"> <li><b>40bit</b></li> <li><b>128bit</b></li> <li><b>election</b></li> </ul> To use the strongest available encryption, select <b>election</b> .
<b>LCP Echo Interval</b>	The interval between LCP echo requests (default: 0).
<b>Idle Timeout</b>	The maximum length of time that the VPN tunnel can remain idle before the connection is terminated (default: 300).
<b>User authentication</b>	The user authentication method. You can select either <b>Local-user-database</b> or <b>Remote MS-CHAP-v2</b> .
<b>Allowed Users</b>	In this table, add filters to include the names of allowed VPN clients. For no restrictions, leave this table blank. You can also create a statement with the asterisk (*) and question mark (?) as wildcard characters.

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<b>Allowed Groups</b>	In this table, you can enter groups or create a statement with the asterisk (*) and question mark (?) as wildcard characters. Because MS-CHAP-v2 cannot handle user groups, you must configure an additional authentication helper scheme. Group restrictions require the MSAD authentication scheme.
<b>User info helper scheme</b>	The helper authentication scheme for gathering user group information. The default scheme is <b>MSAD</b> . To use another scheme, select the <b>Other</b> check box and then enter the scheme name.

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