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Network Appliance How To Guide: PPTP Client

# How To Guide

EDGE NETWORK APPLIANCE

# How To Guide PPTP Client

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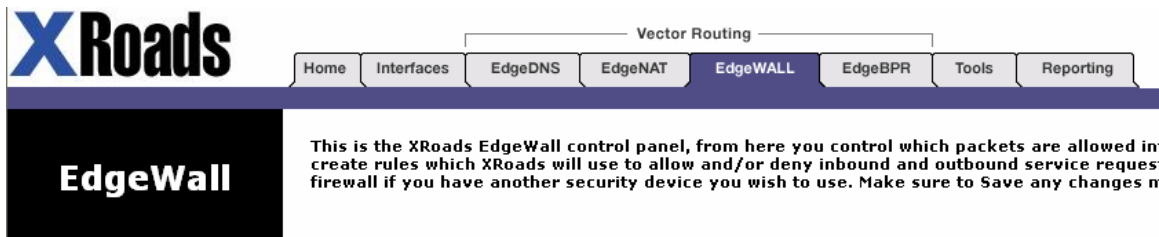
# Table of Contents

<b>PPTP Client Overview</b>	<b>3</b>
<b>C O M P O N E N T S</b>	
<b>Setting Up The PPTP Client</b>	<b>4</b>
<b>Configuring the Edge Appliance</b>	<b>10</b>
<b>Firewall Settings</b>	<b>11</b>
<b>PPTP Client Failover</b>	<b>12</b>

# Edge Configuration Series

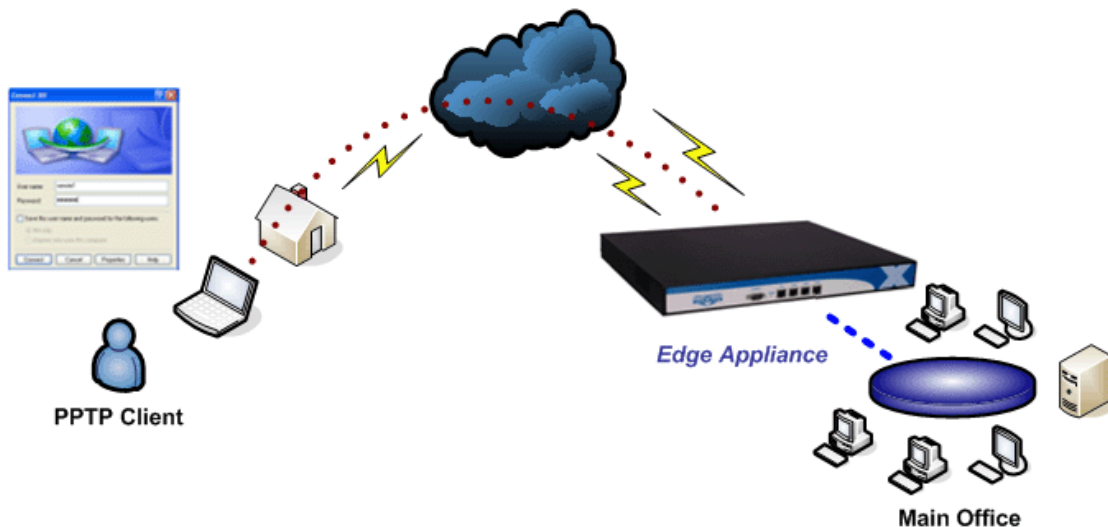
## PPTP Client Overview

XRoads Networks has developed a full featured PPTP Client for easy remote access from Microsoft platforms. This client allows any Windows PC (NT, 2000, XP) to connect to an Edge appliance through a secure PPTP tunnel. Configuration of the PPTP is performed under the EdgeWALL tab of the web interface.



### PPTP Client Overview (Network Diagram)

The typical method for setting up a PPTP client tunnel is between an Edge appliance acting as a hub and a remote client using a Microsoft OS. The hub may have either a static or dynamic IP address; the client may also have a dynamic address as it initiates the PPTP connection.



The next sections detail the setup and configuration of a PPTP client and how to setup PPTP failover.

## Setting Up The PPTP Client (Example Configuration)

This section provides a step-by-step overview of how to setup the PPTP client on a Windows platform.

### Setting Up The PPTP Client

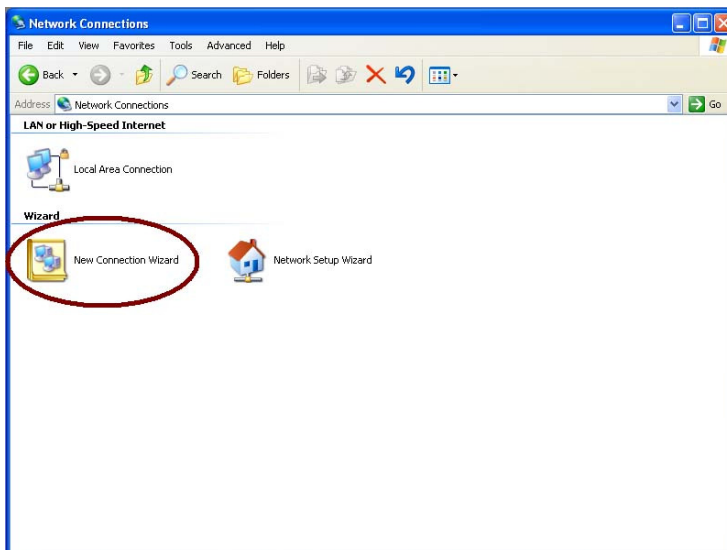
The first step is to create a VPN connection on the Windows PC. This can be done via Microsoft's built-in "New Connection Wizard".

Before getting started, here is a list of the information required:

- What will be the name of the connection?
- What is the WAN IP addresses of the Edge appliance?
- What LAN IP will be used by each PPTP client?
- What is the username / password for the PPTP connection?

### Starting the Wizard

- 1) Click the Start button on the taskbar.
- 2) Click on the Control Panel menu item.
- 3) Double-click the Network Connections option, then double-click on the New Connection Wizard icon.



## Step A – Network Connection Wizard

Once started the New Connection Wizard will show the following screen.



Click the "Next" button to display the following screen.



Select the "Connect to the network at my workplace" to create the new PPTP connection.

Click the “Next” button to display the following screen.



Select the “Virtual Private Network connection” to create the new PPTP connection.

Click the “Next” button to display the following screen.

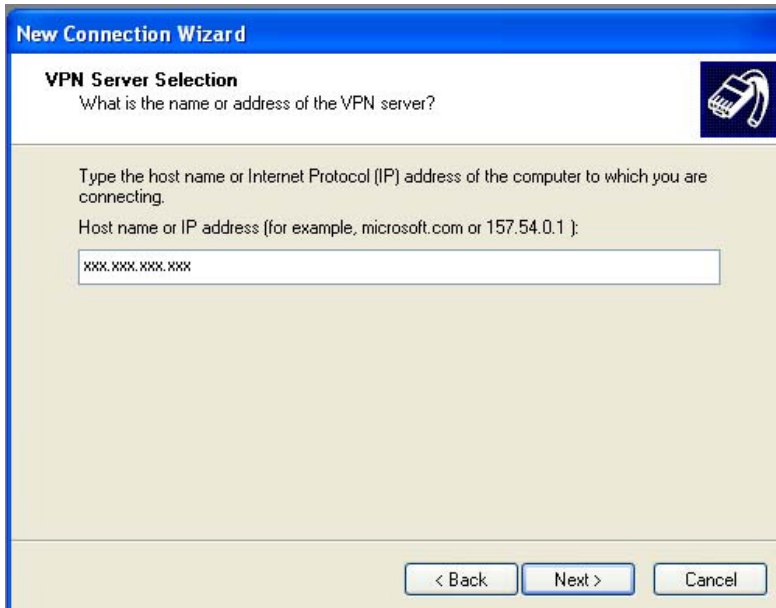


Now enter the connection name that you defined for this user.

Click the “Next” button to display the following screen.

Enter the IP address of the remote Edge appliance (a URL may also be used as long as it can be properly resolved). NOTE: Ping to test URL.

Click the “Next” button to display the following screen.



The screenshot shows a Windows dialog box titled "New Connection Wizard" with a blue header. The main area is titled "VPN Server Selection" and contains the question "What is the name or address of the VPN server?". Below this, it instructs the user to "Type the host name or Internet Protocol (IP) address of the computer to which you are connecting." and provides an example: "Host name or IP address (for example, microsoft.com or 157.54.0.1 ):". A text input field contains the placeholder "xxx.xxx.xxx.xxx". At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel".

Click the “Next” button to display the following screen.



The screenshot shows the final step of the "New Connection Wizard" dialog box. The title bar says "New Connection Wizard". On the left is a blue graphic with a globe and a hand holding a plug. The main text reads "Completing the New Connection Wizard" and "You have successfully completed the steps needed to create the following connection:". Below this, a connection named "Remote1" is listed with the property "Share with all users of this computer". It states "The connection will be saved in the Network Connections folder." and offers an option: " Add a shortcut to this connection to my desktop". A final instruction says "To create the connection and close this wizard, click Finish." At the bottom right, there are three buttons: "< Back", "Finish", and "Cancel".

That completes the first stage of the configuration.

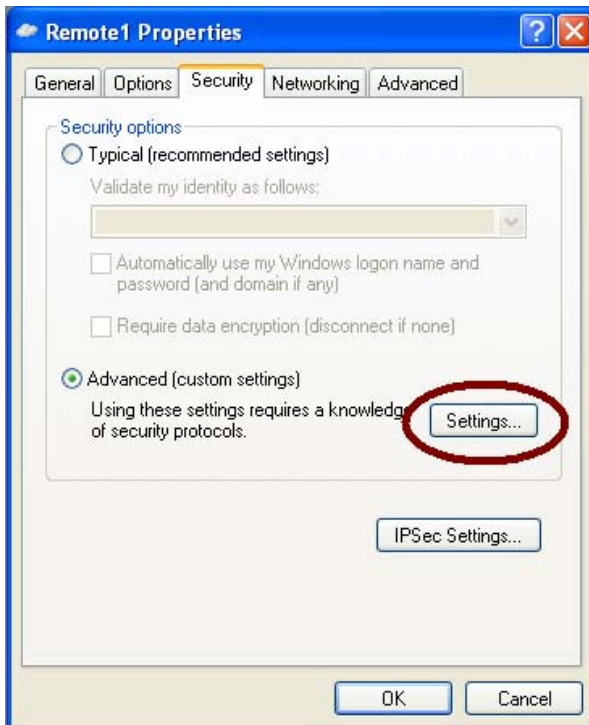
Click the “Finish” button to return to the Control Panel->Network Connections screen.

## Step B – PPTP Properties

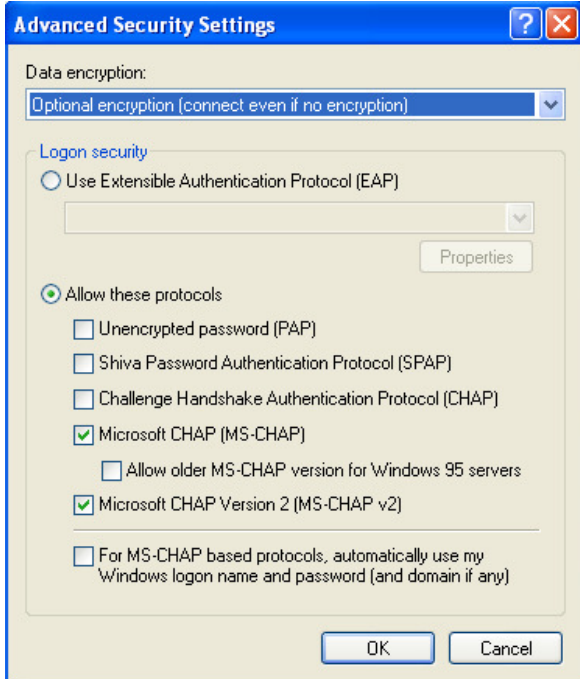
Now that the PPTP tunnel has been created, several minor modifications need to be made to get everything to work correctly with the Edge appliance.



Step 1) Click the Properties button and click the “Advanced (custom settings) radio button, then click the “Settings” button as seen below.



Step 2) Select “Optional encryption” from the dropdown menu, then click the “Allow these protocols radio button and make sure that ONLY the “Microsoft CHAP Version 2” is selected to ensure the highest authentication possible.



Step 3) Now click OK to return back to the login screen.

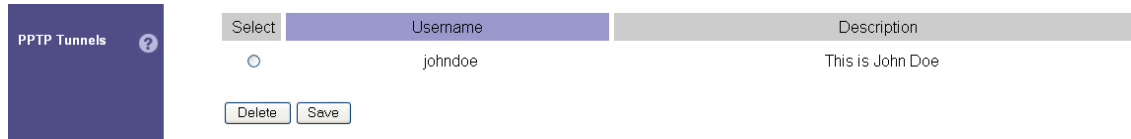


## Configuring the Edge Appliance (Example Configuration)

Now that the client has been configured, it is time to create the PPTP tunnel on the Edge appliance. The following steps outline that process.

## Tunnel Creation

Access the web GUI interface for the Edge appliance and select the EdgeWALL tab. Then select the ‘Virtual Private Networking (PPTP)’ selection from the drop-down menu. Then click the “Add Tunnel” button and use the steps below to create a new client tunnel.

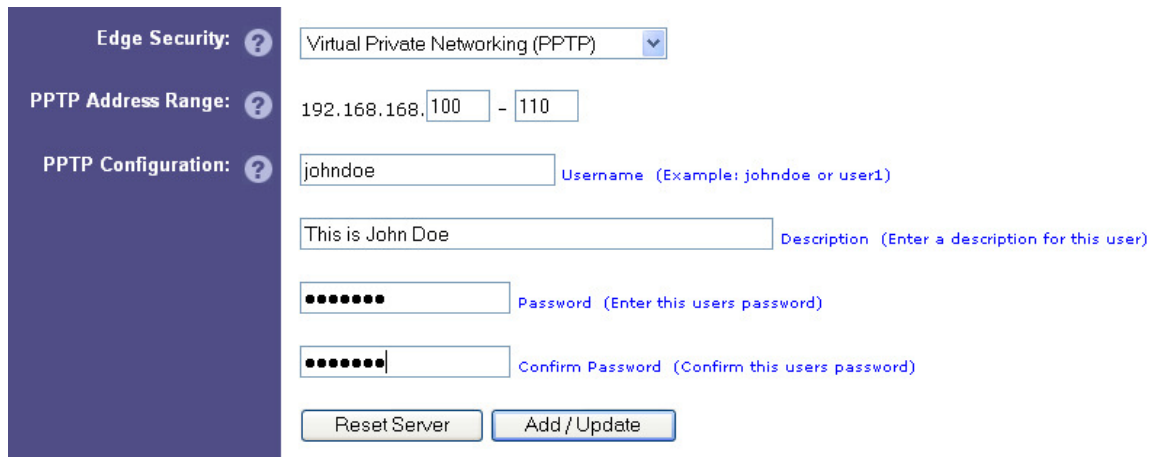


The screenshot shows a table with the following structure:

Select	Username	Description
<input type="radio"/>	johndoe	This is John Doe

Below the table are two buttons: "Delete" and "Save".

The following steps outline how to create a new client tunnel. This process should work for all remote PPTP clients.



The screenshot shows the configuration form with the following fields:

- Edge Security: ?
- PPTP Address Range: ? 192.168.168.100 - 110
- PPTP Configuration: ?
- Virtual Private Networking (PPTP) (dropdown menu)
- Username (Example: johndoe or user1): johndoe
- Description (Enter a description for this user): This is John Doe
- Password (Enter this users password): [masked]
- Confirm Password (Confirm this users password): [masked]
- Buttons: Reset Server, Add / Update

Step 1) Enter a user name (should contain no spaces or non-numeric characters).

Step 2) Enter the connection name that was assigned during the client setup.

Step 3) Enter and re-enter the users password.

Step 4) The IP address will automatically be assigned from the pool designated in the Address Range.

Step 5) Click the “Add / Update” button to create the tunnel information.

**WARNING: Make sure to create a firewall rule to allow the PPTP addresses to access the LAN network. The default is to block this access.**

## Firewall Settings

When creating PPTP clients, it is critical that you create a firewall rule to allow PPTP connections to access the rest of the LAN network.

By default, PPTP clients can only communicate with the Edge appliance and each other. By creating the firewall rule, as defined below, PPTP clients can access the rest of the LAN.

NOTE: This is a security feature designed to prevent unauthorized access to the LAN network from PPTP clients.

This example shows a LAN network, 192.168.168.0 with a subnet mask of 255.255.255.0 setup to provide PPTP client connectivity.

The rule allows the PPTP LAN addresses to communicate with the rest of the LAN network. If you are having any problems, make sure that the rule is configured similar to that which is defined below:

<b>Group Name:</b> ?	Test <input type="button" value="v"/> <- Select A Firewall Group OR Create A New One -> <input type="text"/>
<b>Inbound Interface:</b> ?	LAN <input type="button" value="v"/>
<b>Source Definition:</b> ?	192 <input type="text"/> . 168 <input type="text"/> . 168 <input type="text"/> . 0 <input type="text"/> (Source Address OR Select LAN - ANY) 255.255.255.0 <input type="button" value="v"/> (Source Network / Mask)
<b>Destination Definition:</b> ?	192 <input type="text"/> . 168 <input type="text"/> . 168 <input type="text"/> . 0 <input type="text"/> (Destination Address OR Select LAN - ANY) 255.255.255.0 <input type="button" value="v"/> (Destination Network / Default All LAN Addresses)
<b>Service:</b> ?	ANY—>ANY <input type="button" value="v"/> (Specify A Service) OR <input type="button" value="New Service"/> (Define A New Service)
<b>Action:</b> ?	ACCEPT <input type="button" value="v"/>

## PPTP Client Failover

In the event the primary PPTP tunnel fails, it should be able to re-establish itself using the URL, if a URL was used when creating the PPTP client configuration on the Windows system.

If a URL was not used, then a secondary PPTP tunnel would need to be configured to provide failover via the secondary WAN IP address on the Edge appliance.

If a URL was used, for automated failover to work properly the DNS for that record would need to be handled by the Edge appliance.

Setting up record failover via DNS is covered under the [HowToGuide-EdgeDNS](#).

