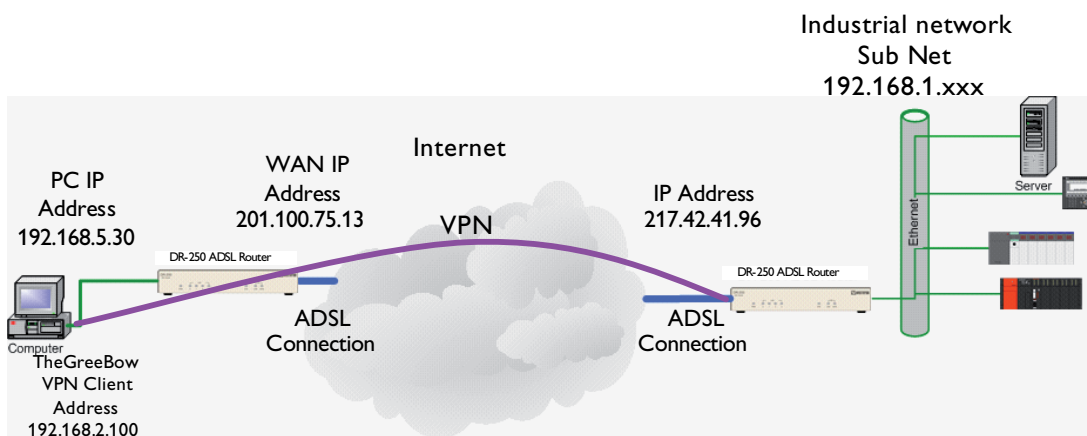




## TheGreenBow VPN client to Westermo DR-250 ADSL router

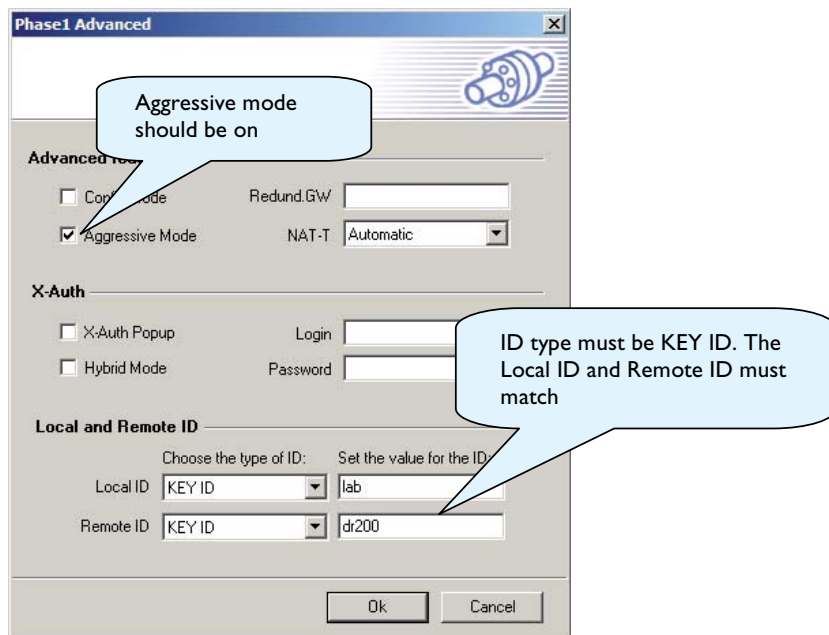
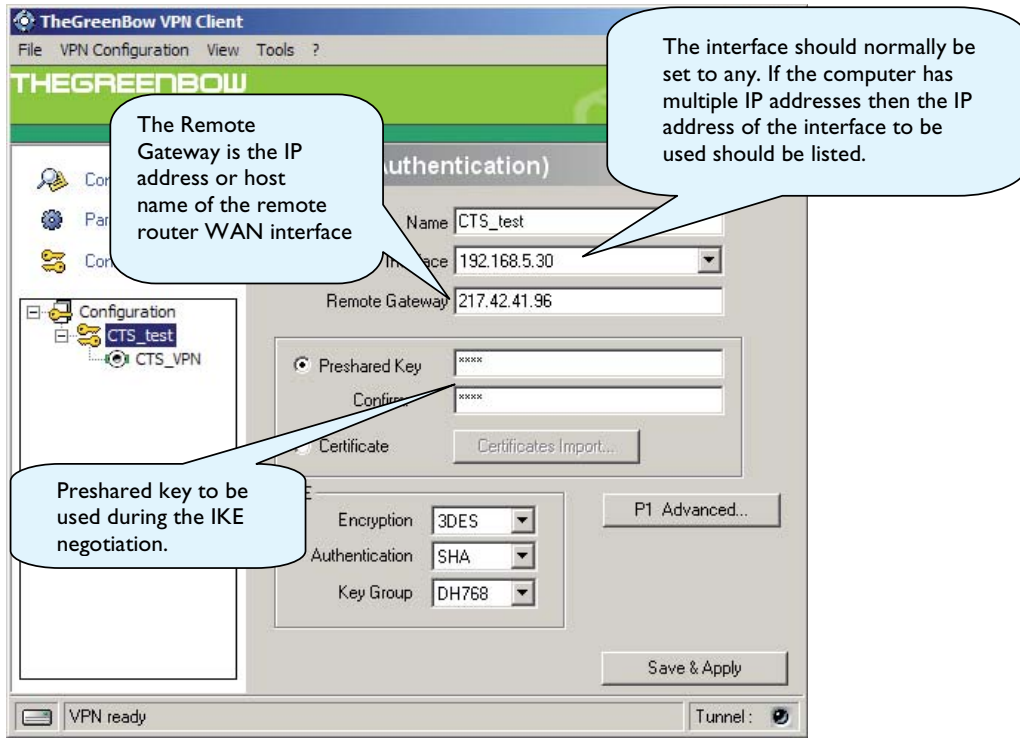
### Introduction

This application note covers the setup of TheGreenBow™ VPN IPsec client to a Westermo DR-250 router. TheGreenBow™ client is a commercial licensed software. A free trial version is available at [www.thegreenbow.com](http://www.thegreenbow.com). This client has been chosen to complement the DR series of routers and provide an easy to use client. The various versions of Microsoft Windows do support IPsec clients to a lesser or greater extent. The Microsoft clients are often problematic, time consuming to configure and require changes to the registry to make them work reliably. Westermo recommend that the TheGreenBow client is used in all application where access is required from a computer to a remote LAN. For LAN to LAN applications refer to the Westermo VPN application note.



This application note was tested with version 4.10.009 of the TheGreenBow client.

## The GreenBow Setup



The screenshot shows the 'Phase 2 (IPSec configuration)' window in TheGreenBow IPsec VPN Client. The window title is 'TheGreenBow IPsec VPN Client'. The main configuration area is titled 'Phase 2 (IPSec configuration)'. The configuration includes:

- Name: CTS\_VPN
- VPN Client address: 192 . 168 . 2 . 10
- Address type: Subnet address (dropdown menu)
- Remote LAN address: 192 . 168 . 1 . 0
- Subnet Mask: 255 . 255 . 255 . 0
- Encryption: DES (dropdown menu)
- Authentication: MD5 (dropdown menu)
- Mode: Tunnel (dropdown menu)
- Group: None (dropdown menu)

Callouts provide additional information:

- Top callout: "This is the address used by the computer to access the remote network. This must be the same address as used in the VPN configuration" (points to VPN Client address).
- Left callout: "This is the subnet mask and address of the LAN on the router. This must match the 'Local subnet IP address' in the Eroute configuration" (points to Remote LAN address and Subnet Mask).
- Right callout: "Address type must be 'Subnet address'" (points to Address type dropdown).
- Bottom callout: "The ESP credentials must match the matching Eroute on the DR or MR router" (points to Encryption, Authentication, and Mode dropdowns).

Buttons at the bottom right include: P2 Advanced..., Scripts, Open Tunnel, and Save & Apply. The status bar at the bottom shows 'VPN ready' and 'Tunnel: [status icon]'.

## DR-250 Setup – Eroute-x and IKE Screen shots

The screenshot displays the Westermo web interface for configuring an IPsec VPN client. The main configuration window is titled "Configure: IPsec ROUTE 0".

**Configure: IPsec ROUTE 0**

- Description: GreenBow VPN client
- Peer IP/Hostname: [Empty]
- Peer ID: lab
- Our ID: dr200
- Local subnet IP address: 192.168.1.0
- Local subnet mask: 255.255.255.0
- Remote subnet IP address: 192.168.2.100
- Remote subnet mask: 255.255.255.255
- Mode: Tunnel
- AH authentication algorithm: Off
- ESP authentication algorithm: MD5
- ESP encryption algorithm: DES
- ESP encrypt key length (bits): Default
- Duration (s): 28800
- Duration (kb): 0
- No SA action: Drop Packet
- Create SA's automatically: No
- Authentication method: Preshared Keys

**Configure: IKE 0 (Initiator)**

- Encryption algorithm: 3DES
- Encryption key bits (AES only): 0
- Authentication algorithm: MD5
- Duration (s): 28800
- Aggressive mode: On
- NAT traversal enabled: Yes
- Debug level: Off

**Configure: User 14**

- Name: Eagle
- Password: [Masked]
- Confirm Password: [Masked]
- Access Level: Low
- Web page display mode: Auto

**Callouts:**

- "Set Aggressive Mode to ON" points to the Aggressive mode dropdown in the IKE configuration window.
- "The IP address MUST be the same as The VPN Client Address on TheGreenBow" points to the Remote subnet IP address field (192.168.2.100).
- "The Subnet Must Be 255.255.255.255 the client Subnet from TheGreenBow" points to the Remote subnet mask field (255.255.255.255).
- "The user number is not important" points to the User ID field (14) in the User configuration window.

## Extract from config.da0

Eroute configuration. The Eroute number can be any valid eroute on the router.  
 The router must have IPsec encryption enabled on the router. The DR-250 has IPsec enabled as default but the MR-200 and MR-250 requires an upgrade option.

Eroute Configuration	
eroute 0 descr "GreenBow VPN client"	
eroute 0 peerid "Eagle"	
eroute 0 ourid "Hawk"	
eroute 0 locip "192.168.1.0"	
eroute 0 locmsk "255.255.255.0"	
eroute 0 remip "192.168.2.100"	The IP address must match the client address on GreenBow
eroute 0 remmsk "255.255.255.255"	
eroute 0 ESPauth "MD5"	
eroute 0 ESPenc "DES"	
eroute 0 ltime 28800	
eroute 0 lkbytes 0	

IKE configuration
Aggressive mode must be switched ON.
ike 0 encalg "3DES"
ike 0 ltime 28800
ike 0 aggressive ON
ike 0 deblevel 4
ike 1 encalg "3DES"
ike 1 ltime 28800
ike 1 aggressive ON