

## Configuration of the router:

- 1- Go to the router's configuration
- 2- Go to VPN settings
- 3- Enable IPSec VPN and NAT Traversal and click on apply changes
- 4- In the connection table, select profile # 1 and click edit to create a profile.
- 5- In VPN setup enable tunnel 1
- 6- Enter a name for example test
- 7- We are using PSK for authentication. Pre Shared Key is an auth. type that the user has to enter a key to establish a connection.
- 8- For local site you can use access to a single IP or to the whole subnet behind the router. Select subnet address for now.
- 9- Local IP is the network address of the router ie. 192.168.1.0
- 10- Local subnet is the router's subnet mask 255.255.255.0
- 11- For remote site we have several options. For the test use VPN from any address.
- 12- Local and remote ID type should be IP and local ID and remote ID box should be blank.
- 13- Key management select IKE
- 14- For ESP (encapsulated security payload) we use 3DES for Encryption and MD5 for authentication
- 15- Enter a Pre Shared Key for example 1234567890. This is the same key that the client will use to create the VPN to the router.
- 16- Leave other boxes blank and click on Apply Changes.
- 17- Router configuration is done.

## Client configuration

- 1- Run the VPN client software "GreenBow"
- 2- Right click on configuration to add phase 1 setting.
- 3- For name enter test like we did in the router.
- 4- Interface should show the IP address of the client system
- 5- Remote gateway should be the IP address of the WAN port of the router.
- 6- Select preshared key and enter the key we used on the router.
- 7- In the IKE section we use 3DES and MD5 for encryption and authentication.
- 8- Key group should be DH1024.
- 9- Click save & apply to go to phase 2 setting.
- 10- Right click on phase 1 to create phase 2
- 11- Enter a name ...test
- 12- Enter the IP address of the VPN client system.
- 13- For the address type select subnet address (this will allow connection to the whole subnet behind the router)
- 14- Remote LAN address is the LAN address of the router like 192.168.1.0/255.255.255.0.
- 15- ESP settings should be 3DES, MD5 and mode should be Tunnel.
- 16- Click save and apply.
- 17- Client configuration is done.

Before establishing the connection it is always good to see if you can see the router. The best way is to ping the WAN IP of the router from the client system. If you get a reply you're ready to create a VPN connection. Just go back to the GreenBow and click on Open Tunnel. If Ping is not good, make sure that remote management is enabled on the router.