

Chapter Twenty (b): IPSec VPN

Summary of Chapter:

- How to configure an IPSec VPN connection from a Pilot or PC to Pilot.

What you need:

- Knowledge of Admin user account and valid password for your Pilot.

Software Revision Required:

- Applicable to software revision 5.2.0 > NetPilots

(NetPilot will be referred to as 'Pilot'. All image examples are of a NetPilot.)

Setting Pilot A & B:

- Log on to the Pilot as shown in Chapter One (b).

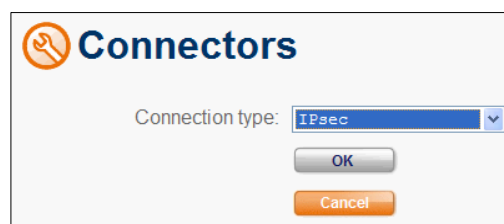
- From the left-hand side of the screen, select 'Network' and then 'Connectors'. (All links are highlighted below).



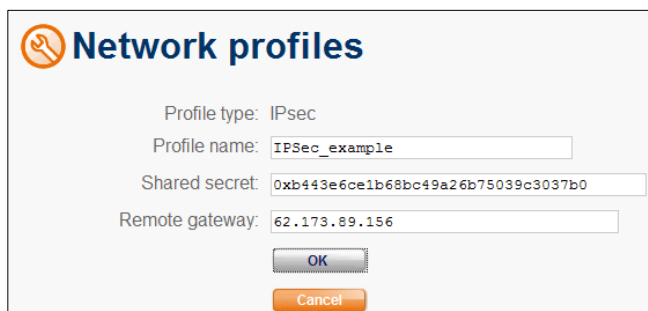
- You will be presented with the screen shown left.

- Select the 'Add' button, highlighted.

- You will see the screen below, select 'IPSec' from the drop down list and select the 'OK' button.




- Once you select 'OK', you will see a similar screen as below. Enter in the following details:




- 'Profile name': a name for your profile. The profile most not contain any special characters.

- 'Shared secret': Enter in your shared secret here.

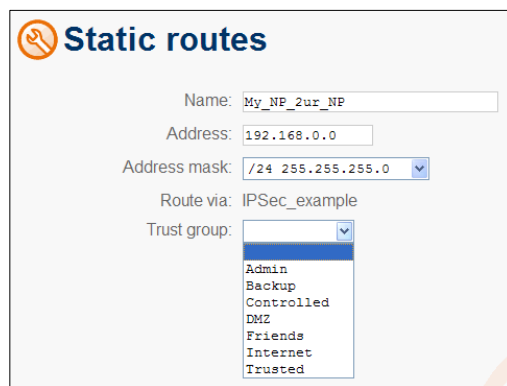
- 'Remote Gateway': Enter in the 'LAN 2' IP address of Pilot B, which you wish to create a VPN tunnel to.


 After you have entered in the correct details, select the 'OK' button. You will be taken to the screen below.




 To add a Static Route select the first 'Add' button on the screen, as highlighted on the left.


 You will be presented with the screen below. Enter in the following details.




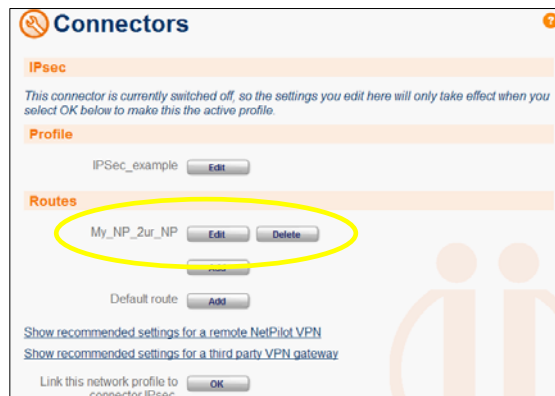
 'Name': a name for your static route. The name must not contain any special characters.


 'Address/Mask': 'LAN 1' details of Pilot B you wish to create a VPN tunnel too.


 'Trust group': Select one of the Trust Group from the drop down list provided. (For a definition of each of these Trust Group please see the first section of Chapter 20).

 Select 'OK' and 'OK' again to confirm.


 You will come to the main page as shown below; you will see your static route profile added, highlighted below:




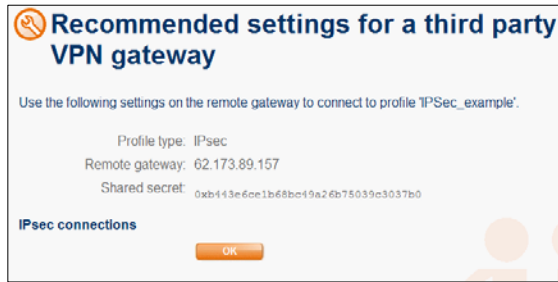
 As you can see from the screen shown left, there are two links at the bottom of the screen. These links are here to help you enter the correct details into the Pilot B or a Third Party Gateway.


 The first link 'Show recommended settings for the remote Pilot VPN', will present a similar screen as below:



 This screen tells you the details that you will need to enter into Pilot B to complete the VPN tunnel configuration.


 The second link, ‘Show recommended settings for a third party gateway’, presents you will a similar screen shown below:




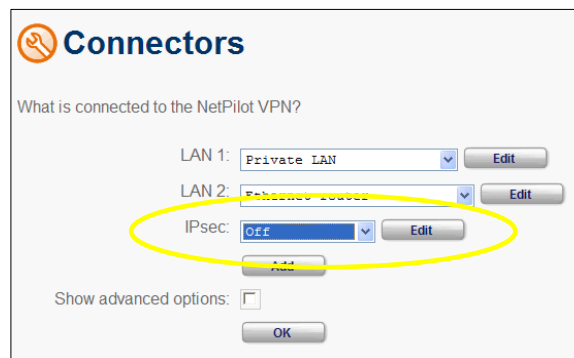
 This screen tells you the details that you will need to enter into the Third Party software i.e. WatchGuard, Cisco Pix etc.




The VPN tunnels will not operate correctly, until you have entered the details of Pilot A into Pilot B or the Third Party Software.


 Once you have all the information you need, select the ‘OK’ button on the main screen of the ‘Connector Properties’ to save the IPsec settings and ‘OK’ again to confirm.

 You will now see your VPN settings added to the Connectors screen. To deactivate this profile, select ‘Off’ from the drop down list, then select the ‘Edit’ button next to the profile. To confirm the deactivation, select ‘OK’ and ‘OK’.



Testing your VPN tunnel:

 To check that the tunnel is working, ping the ‘LAN 1’ IP address on Pilot B.

 To do this, start a Command prompt, select ‘Start’, ‘All Programs’, ‘Accessories’ and ‘Command Prompt’. Once you have selected this and it has opened, ping the ‘LAN 1’ IP Address of Pilot B. I.e. ‘ping ipaddress’ (the default ‘LAN 1’ is 10.0.0.1, but you may have changed this.)

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C:\Documents and Settings\Kayleigh Stanley>ping 192.168.0.254
Pinging 192.168.0.254 with 32 bytes of data:
Reply from 192.168.0.254: bytes=32 time=34ms TTL=126
Reply from 192.168.0.254: bytes=32 time=35ms TTL=126
Reply from 192.168.0.254: bytes=32 time=33ms TTL=126
Reply from 192.168.0.254: bytes=32 time=34ms TTL=126

Ping statistics for 192.168.0.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 33ms, Maximum = 35ms, Average = 34ms
  
```

How many VPN tunnels can you have?:

There is no hard limit and the Pilot is unlikely to be the bottleneck. There is some extra CPU overhead in encoding and decoding each packet but the most likely limiting factor is the bandwidth of the WAN link. If you can comfortably support 100 remote users without VPNs then you'll still be able to support those same 100 users with VPN, but they'll find things run about 3% slower.

