



# Digi Connect® Family Application Guide

## How to Create a VPN between the Wi-Point 3G and TheGreenBow VPN Client

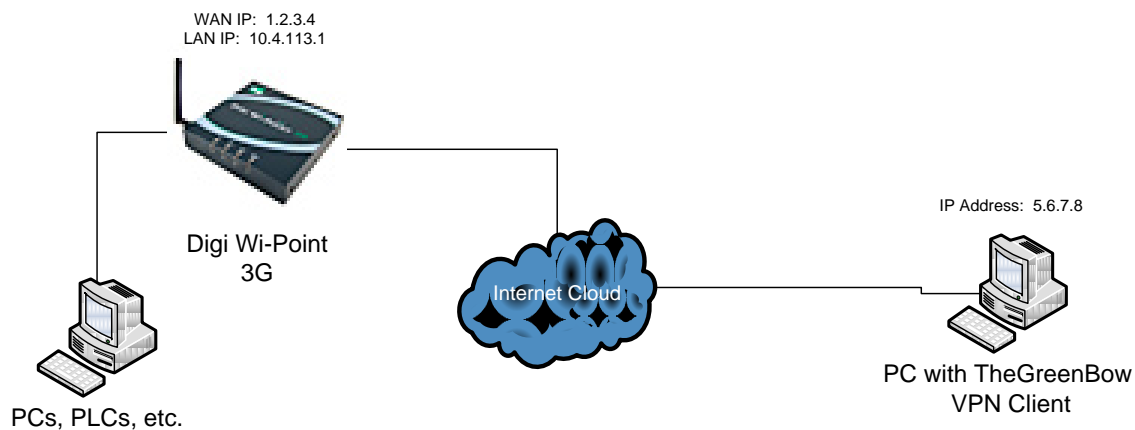
### Scenario

Digi Wi-Point 3G is used for primary remote site connectivity. A remote user needs to be able to VPN into the Digi Wi-Point 3G for network access to devices behind the Digi.

### Theory of Operation

The remote user needs a way of connecting to devices on the LAN side of the Digi Wi-Point 3G. They will have TheGreenBow VPN client installed on their PC to accommodate this function. TheGreenBow VPN client will initialize the connection to the Digi Wi-Point 3G on demand.

### Sample Diagram



### Carrier Plan and PC / VPN Appliance Requirements

**Digi Wi-Point 3G Requirements:** Firmware version must be 1.1.34-8 or later. To download the latest firmware, go to <http://www.digi.com/support>.

**PC Requirements:** TheGreenBow VPN client will need to be installed on the PC. This setup may work with other VPN clients that support IPSec tunnels, but have not been tested by Digi International. The PC must also have a Public IP address for this to work (i.e. - the PC cannot be behind a NAT)

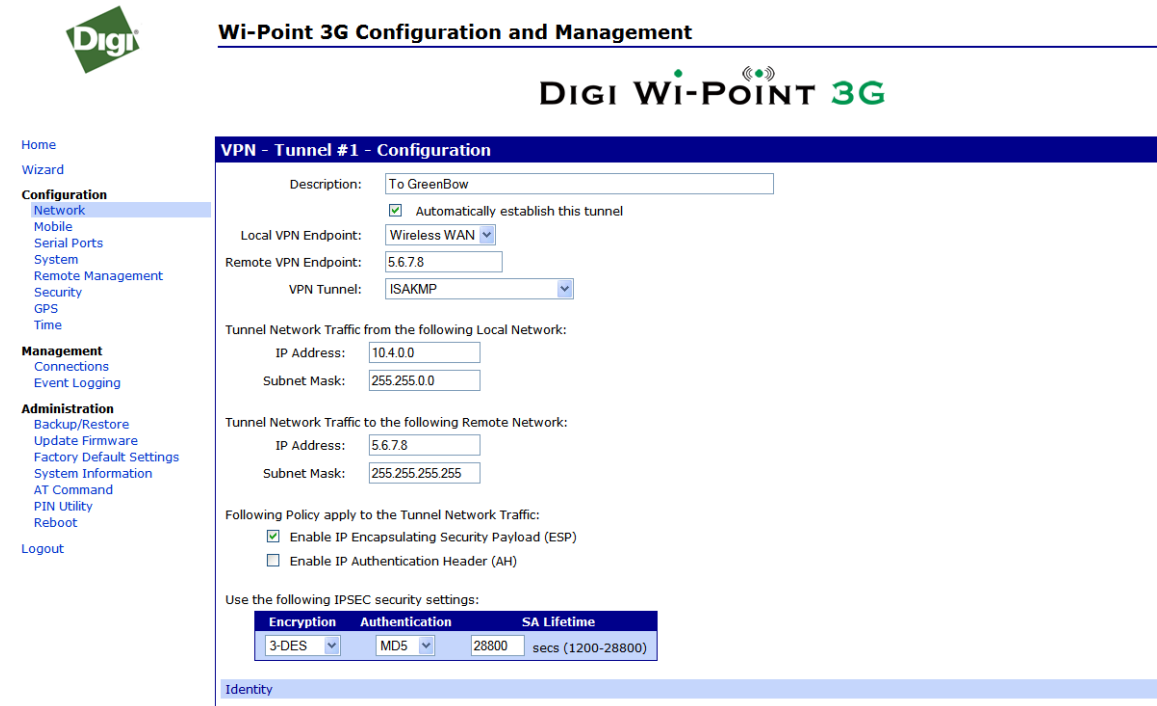
**GSM GPRS/EDGE APN Type needed:** VPN and GRE end-points usually require static (persistent) IP addresses and must support mobile terminated data connections. If mobile termination is not an option with your current APN, you will need to acquire a new one that does support mobile termination.

**CDMA networks** may also require special plans to provide static IP addresses and support mobile terminated data connections.

Check with your wireless provider on the available plan types.

## Digi Wi-Point 3G Configuration

1. Read and follow the quick-start guide for the Digi Wi-Point 3G.
2. Assign a static IP address to the Ethernet port (the default address is 192.168.1.1).
3. Configure the Wi-Point 3G settings
  - a. Open the Web Interface of the unit, if not open already.
  - b. Navigate to **Configuration > Network > VPN Settings**
  - c. Click **VPN Tunnel Settings**
  - d. Click **Add**
  - e. Fill in the appropriate information shown in the screenshots below (NOTE: Your IP addresses may be different that what is shown)



The screenshot displays the 'VPN - Tunnel #1 - Configuration' page in the Digi Wi-Point 3G web interface. The interface includes a left-hand navigation menu with categories like Home, Wizard, Configuration, Management, and Administration. The main content area is titled 'VPN - Tunnel #1 - Configuration' and contains the following settings:

- Description:** To GreenBow
- Automatically establish this tunnel
- Local VPN Endpoint:** Wireless WAN
- Remote VPN Endpoint:** 5.6.7.8
- VPN Tunnel:** ISAKMP
- Tunnel Network Traffic from the following Local Network:**
  - IP Address:** 10.4.0.0
  - Subnet Mask:** 255.255.0.0
- Tunnel Network Traffic to the following Remote Network:**
  - IP Address:** 5.6.7.8
  - Subnet Mask:** 255.255.255.255
- Following Policy apply to the Tunnel Network Traffic:**
  - Enable IP Encapsulating Security Payload (ESP)
  - Enable IP Authentication Header (AH)
- Use the following IPSEC security settings:**

Encryption	Authentication	SA Lifetime
3-DES	MD5	28800 secs (1200-28800)

The 'Identity' section is partially visible at the bottom of the configuration page.

## Digi Connect Family Application Guide – VPN Client Connection

[PIN Utility](#)  
[Reboot](#)  
[Logout](#)

Following Policy apply to the Tunnel Network Traffic:

- Enable IP Encapsulating Security Payload (ESP)
- Enable IP Authentication Header (AH)

Use the following IPSEC security settings:

Encryption	Authentication	SA Lifetime
3-DES	MD5	28800 secs (1200-28800)

**Identity**

Use the following as the identity:  
Identity string:

Use the Mobile IP address as the identity

**Security Settings**

Connection Mode:

Diffie-Hellman:

Enable Perfect Forward Secrecy (PFS)

Use the following pre-shared key to negotiate IKE security settings:

Use the following policy to negotiate IKE security settings:

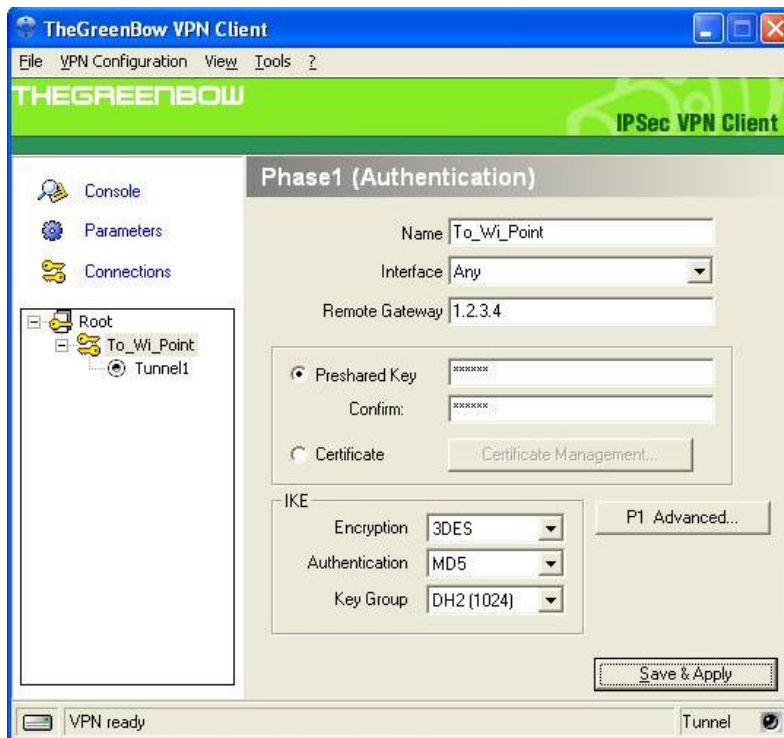
Authentication	Encryption	Integrity	SA Lifetime
Pre-Shared Key	3-DES (192-bit)	MD5	86400 secs (1200-86400)

Copyright © 1996-2008 Digi International Inc. All rights reserved.  
<http://www.digi.com/>

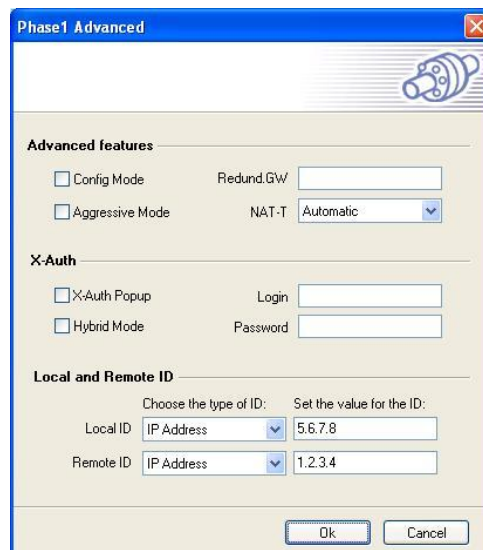
- Click **Apply** to save the settings.
- A reboot is required for the settings to take effect. **Reboot** the unit.

## TheGreenBow VPN Client Configuration

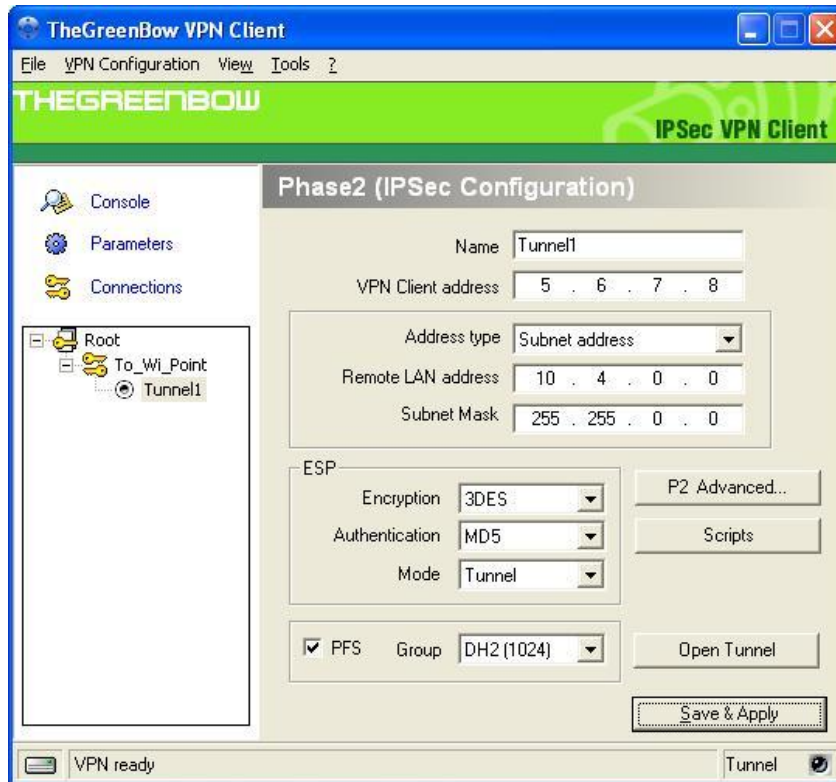
1. Configure TheGreenBow VPN Client
  - a. Install TheGreenBow VPN Client. A free trial version can be downloaded here: <http://www.thegreenbow.com/>.
  - b. Right click **Configuration** in the left hand pannel, and click **New Phase 1**.
  - c. Fill in the appropriate fields shown in the screenshot below:



- d. Click the **P1 Advanced** button.
- e. Fill in the appropriate fields show in the following screenshot:



- f. Click **Save & Apply** to save the settings.
- g. Right click the Phase 1 policy that was added in the left hand panel, and click **Add Phase 2**
- h. Fill in the appropriate fields for the Phase 2 settings, shown in the following screenshot:



- i. Click **Save & Apply** to save the configuration.
- j. Click **Open Tunnel** to establish the VPN connection to the Wi-Point 3G.

### ADDITIONAL NOTES

1. The preceding configuration will also work for the ZyXEL VPN Client. It may also work for other VPN clients that have not been tested by Digi.
2. This configuration will work with Dynamic IP addresses, using hostnames established with DynDNS.org. When using a Dynamic IP address, you will need to set the VPN tunnel to use **Aggressive Mode** to make the connection work.
3. This configuration will work with other VPN parameters than what is listed in the screenshots. i.e. – DES, 3DES, AES 192-bit, AES 256-bit, etc.

### Where to Get More Information

Refer to the Digi Connect router user documentation and Digi technical support website at [www.digi.com/support](http://www.digi.com/support) for more information. Technical assistance is available at <http://www.digi.com/support/eservice/eservicelogin.jsp>.

For sales and product information, please contact Digi International at 952-912-3444 or refer to the Digi Connect wireless pages at [www.digi.com](http://www.digi.com).