Digi Connect® Family Application Guide

How to Create a VPN between Digi and TheGreenBow VPN Client

Scenario

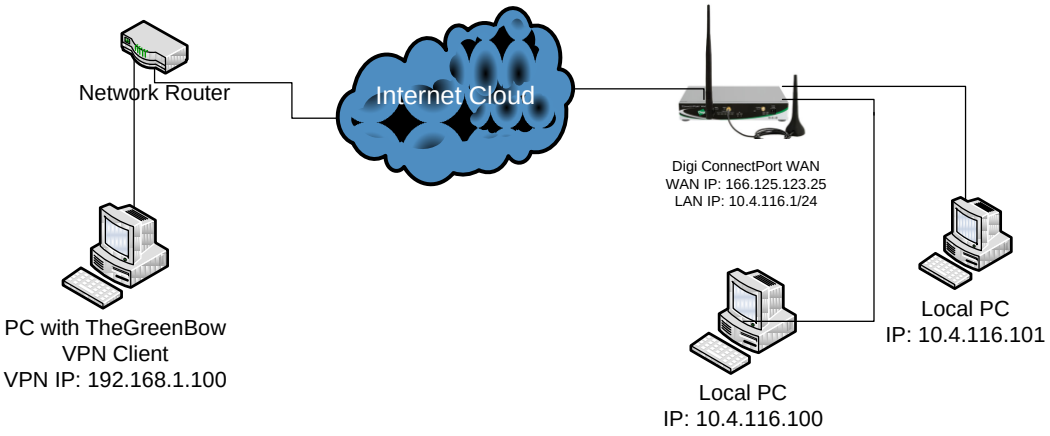
Digi Connect family VPN router (for example ConnectPort WAN or Digi Connect WAN IA) is used for primary remote site connectivity. A remote user needs to be able to VPN into the Digi Connect router for network access to devices behind the Digi.

Theory of Operation

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

The Digi Connect router is setup to accept incoming VPN connections from a VPN client using IPSec as the transport protocol.

Sample Diagram



Carrier Plan and PC / VPN Appliance Requirements

Digi Connect Router Requirements: Firmware version must be 2.8 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.

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.

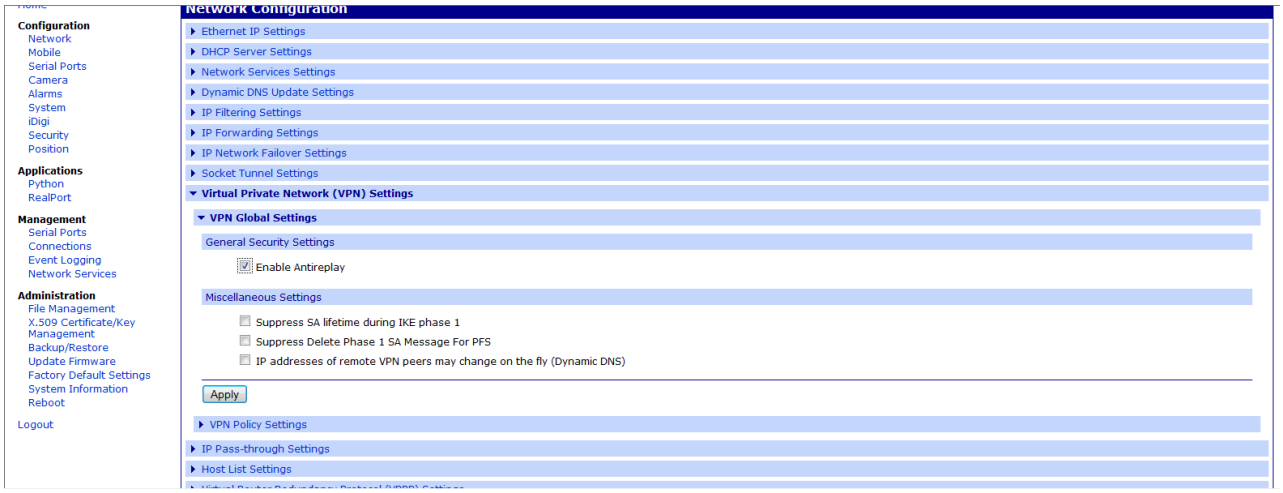
CDMA networks may also require special plans to provide static IP addresses and support mobile terminated data connections.

Check with your wireless provider on the available plan types.

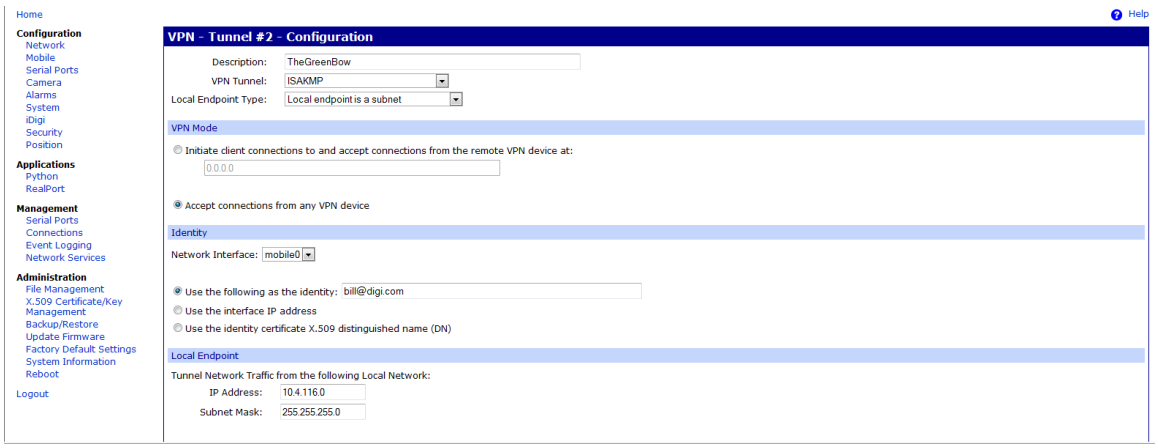
Digi Connect Router Configuration

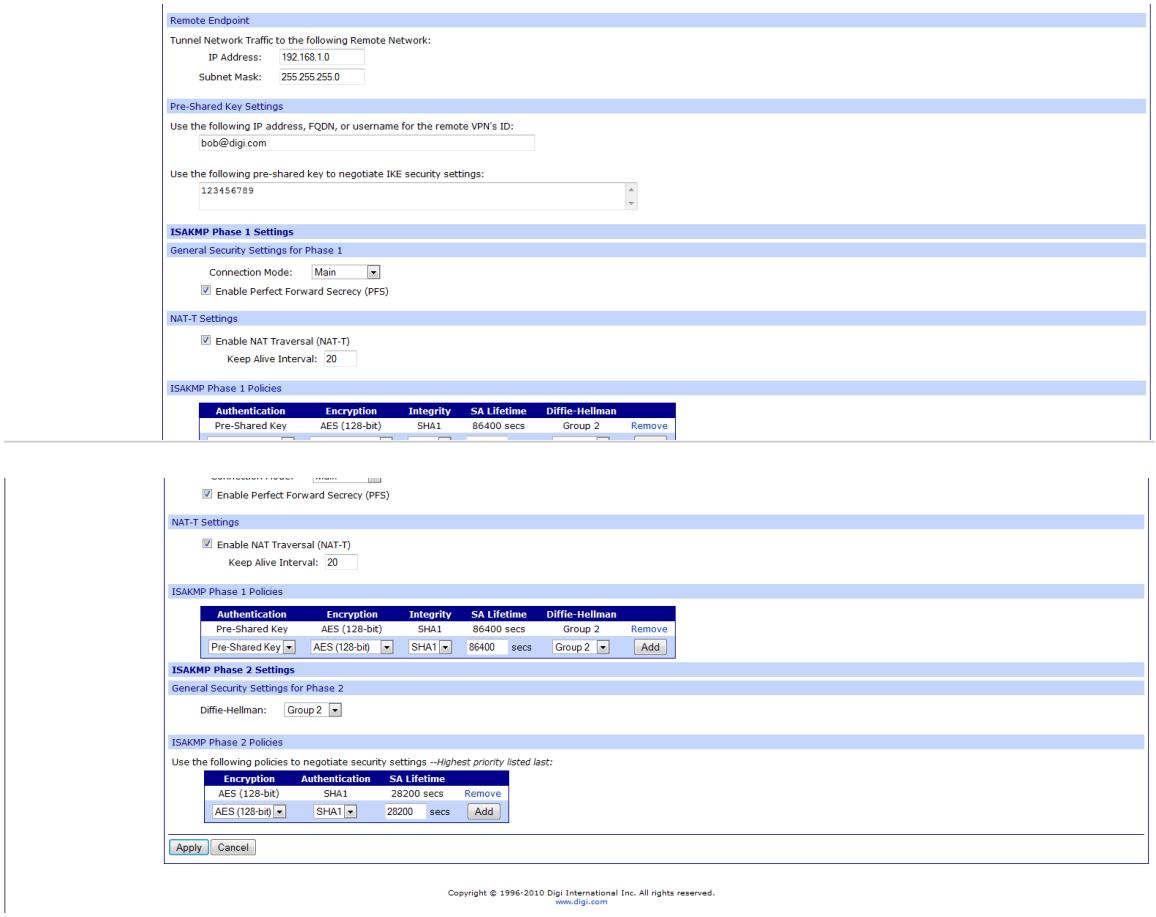
1. Read and follow the quick-start guide for the Digi Connect router and optionally for Digi Connectware® Manager if used.
2. Assign a static IP address to the Ethernet port (the default address is 192.168.1.1). Note the default gateway may show or change to an address such as 10.6.6.6. This is normal as it is the cellular provider's network default gateway.
3. Configure the Digi Connect router settings:

    a. VPN Global Settings
        i. Navigate to **Configuration > Network > VPN Settings** in the web interface of the unit.
        ii. Click on **VPN Global Settings**.
        iii. Click the check box for **Enable Antireplay**.
        iv. Click **Apply** to save the changes.



    b. VPN Policy Settings
        i. Click on **VPN Policy Settings**.
        ii. Click on the **Add** button to setup the individual tunnel.
        iii. Fill in the appropriate information, shown in the following screenshots:





iv. Click **Apply** after filling in the above information to complete the tunnel setup on the Digi Connect router.

NOTE FOR CUSTOMERS RUNNING FIRMWARE VERSION 2.13.x OR LATER

If running firmware version 2.13.x or later, there is a few additional steps to make TheGreenBow work with the Digi Connect device:

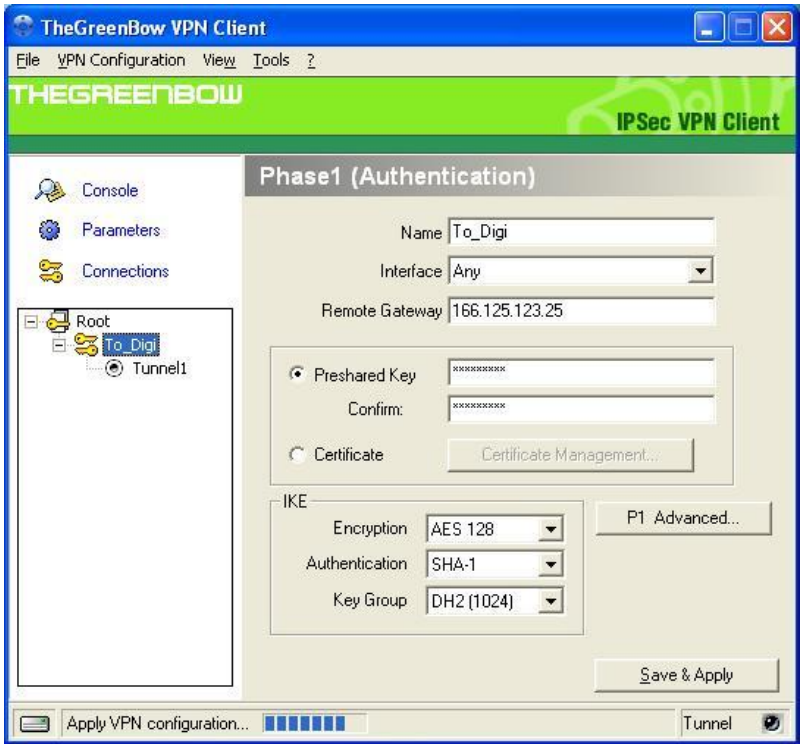
1) Telnet into the CLI of the Digi Connect device.
2) Enter in the folloiwng 3 commands, pressing Enter after each one:

   set vpn global send_natt_draft_01_id=off
   set vpn global send_natt_draft_02_id=off
   set vpn global send_natt_draft_03_id=off

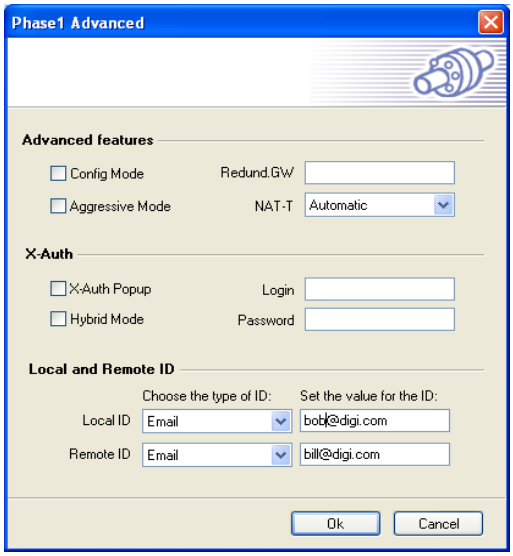
3) This will now allow TheGreenBow to build a connection to the Digi Connect product.

TheGreenBow VPN Client Configuration

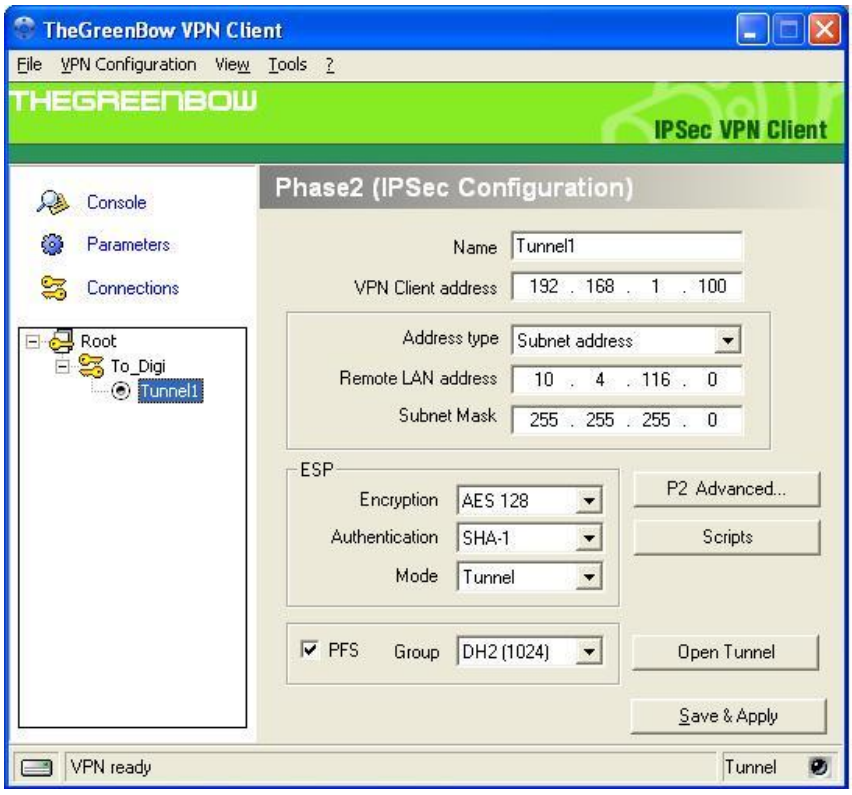
1. Configure TheGreenBow VPN Client
    a. Install TheGreenBow VPN Client. A free trial version can be downloaded here: http://www.thegreenbow.com/.
    b. Right click **Configuration** in the left hand pannel, and click **New Phase 1**.
    c. Fill in the appropriate fields shown in the screenshot below:



    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 pannel, and click **Add Phase 2**
h. Fill in the appropriate fields for the Phase 2 settings, shown in the following screenshot:



NOTE: The **VPN Client address** field above needs to match the subnet of the **Remote Endpoint** section of the Digi setup. This IP can be any IP that falls within the subnet specified on the Digi, regardless of what the actual IP of the PC running TheGreenBow is currently using. This is the IP address your PC will show up with on the other side of the VPN tunnel.

i. Click **Save & Apply** to save the configuration.
j. Click **Open Tunnel** to establish the VPN connection to the ConnectPort WAN VPN.

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.
4. This configuration will work with other Digi Cellular products, such as the Connect WAN, Connect WAN 3G, and ConnectPort WAN VPN series of products that support VPN connections.

Where to Get More Information

Refer to the Digi Connect router user documentation and Digi technical support website at 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.