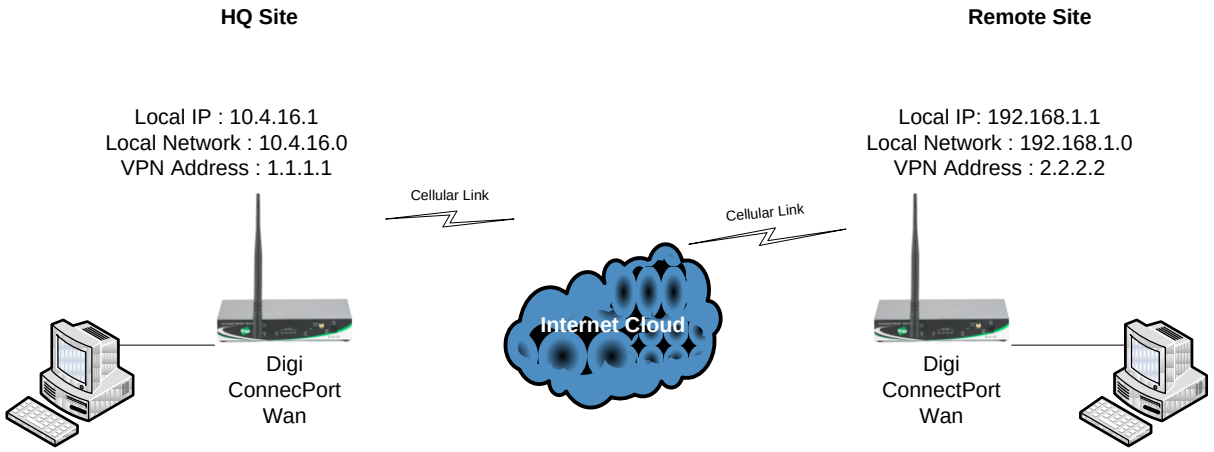
Scenario

Digi Connect family VPN router (for example Digi Connect WAN 3G) is used for primary and remote site connectivity. The data needs to be encrypted between the two devices.

Theory of Operation

A location needs to be able to build a secure tunnel between the main site and a remote branch. Both locations have Digi Connect routers to provide primary internet connectivity. The Digi Connect router will create a VPN tunnel to the opposite Digi Connect router, creating a secure connection

Sample Diagram



Carrier Plan and VPN Appliance Requirements

Digi Connect Router Requirements: This document assumes that Firmware version 2.14 or later is installed. To download the latest firmware, go to http://www.digi.com/support.

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. The connection must also support Mobile-to- Mobile communication, as not all APNs allow for this.

CDMA networks may also require special plans to provide static IP addresses and support mobile terminated data connections. The connection must also support Mobile-to-Mobile communication, as not all service plans allow for this.

Check with your wireless provider on the available plan types.

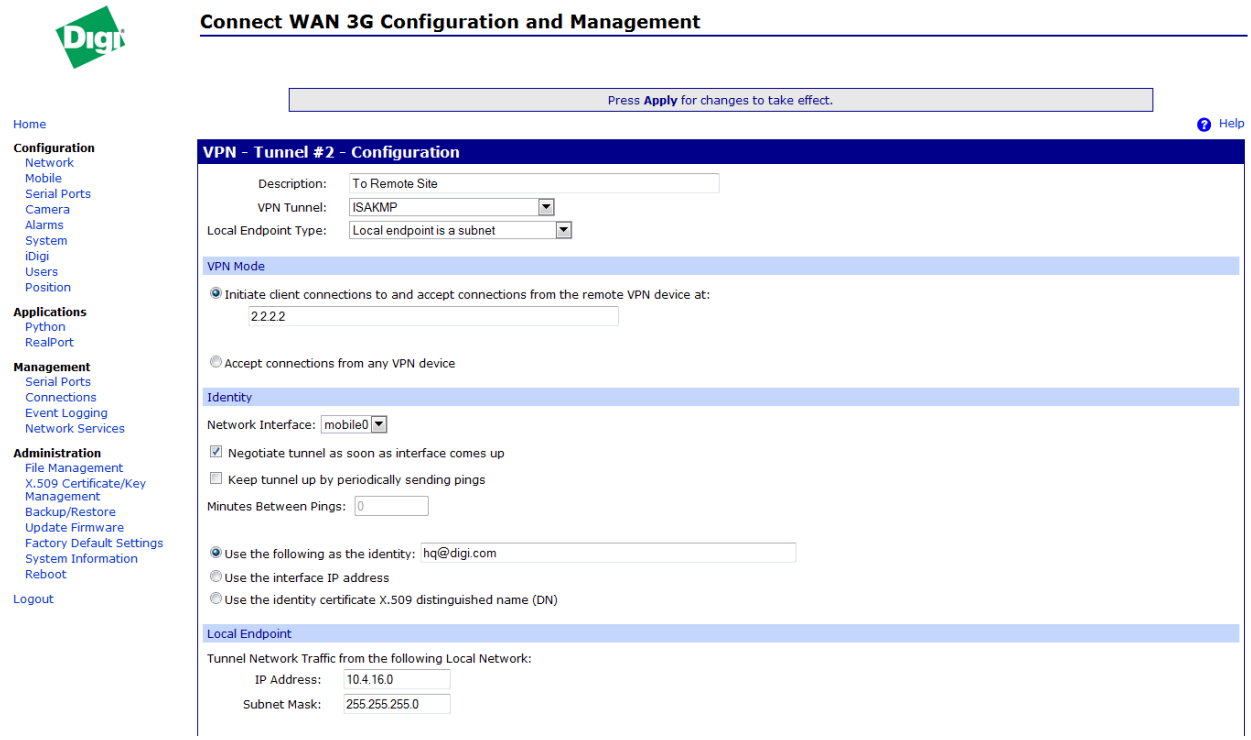
Digi Connect Router Configuration

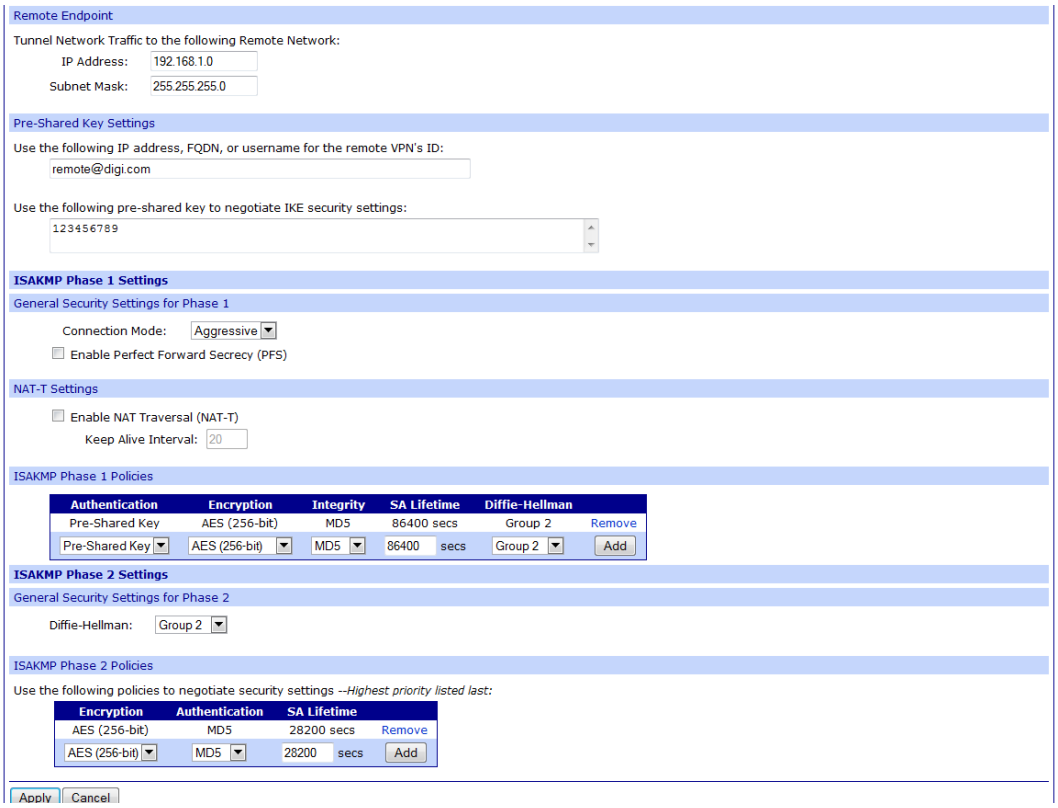
1. Read and follow the quick-start guide for the Digi Connect router and optionally visit http://www.idigi.com if the device is connected to the iDigi device cloud.

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 (HQ Location) settings:

a. Navigate to **Configuration > Network > VPN Settings** in the web interface of the unit.
b. Click on **VPN Policy Settings**.
c. Click on the **Add** button to setup the individual tunnel.
d. Fill in the appropriate information, shown in the following screenshots
e. The remote VPN device is the IP address of the mobile interface of the Digi router

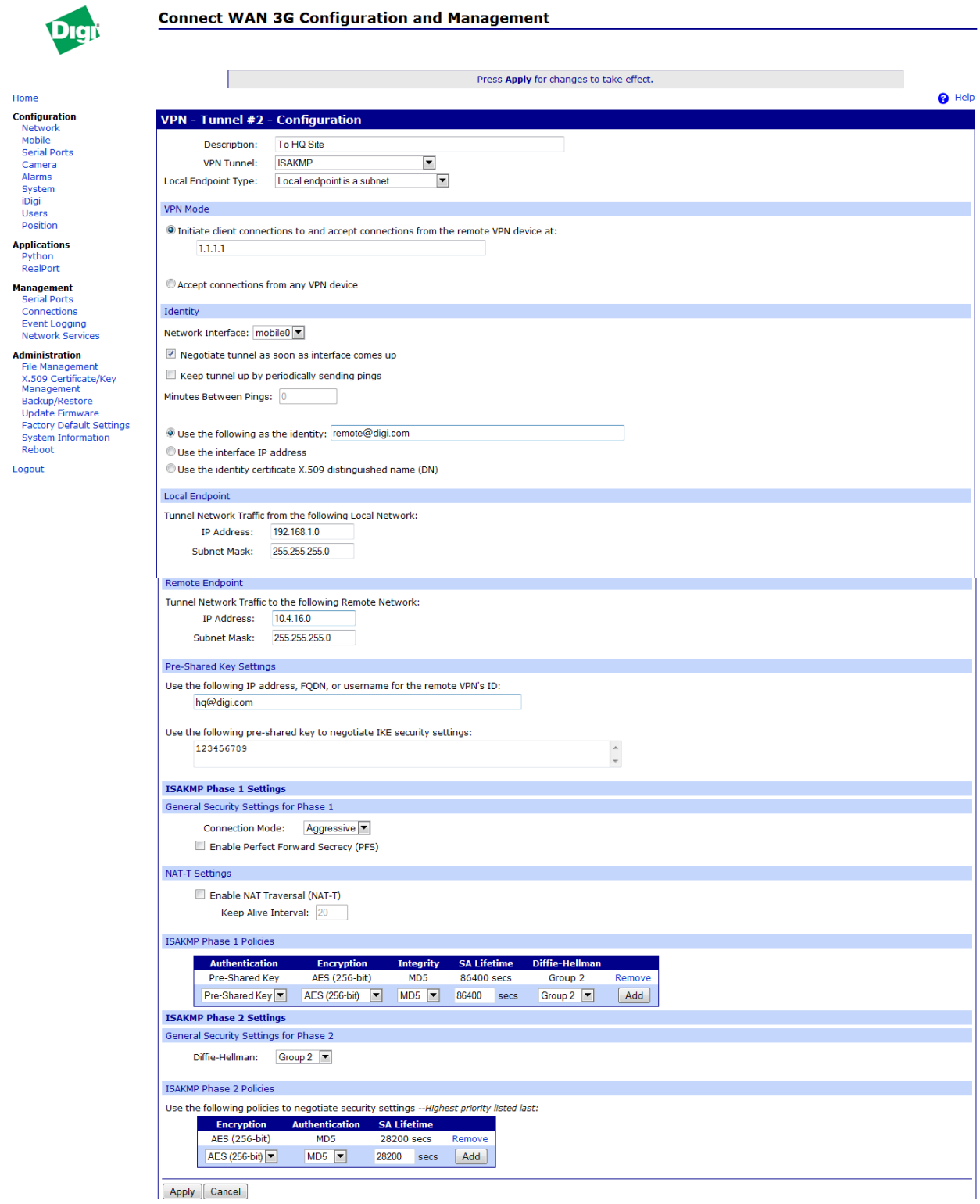




e. Click **Apply** after filling in the above information to complete the tunnel setup on the Digi Connect router (HQ location).

4. Configure the Digi Connect router (Remote Location) settings:

a. Navigate to **Configuration > Network > VPN Settings** in the web interface of the unit.
b. Click on **VPN Policy Settings**.
c. Click on the **Add** button to setup the individual tunnel.
d. Fill in the appropriate information, shown in the following screenshots:



e. Click **Apply** after filling in the above information to complete the tunnel setup on the Digi Connect router (HQ location).

ADDITIONAL NOTES

1. This configuration will work with Dynamic IP addresses or 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.

2. This configuration will work with other VPN parameters than what is listed in the screenshots. i.e. – DES, 3DES, AES 128-bit, AES 192-bit, etc.

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

4. This configuration will also work with older versions of Digi firmware. The preceding screenshots will not match the web interface of older firmware.

5. When using two Cellular devices to create a VPN tunnel, you are creating a larger than normal amount of overhead over the cellular connection. In doing so, your data charges may be higher than normal for each device.

6. Latency will be doubled (or higher) when using two Cellular devices to create a VPN tunnel. Throughput is also reduced to the lowest common denominator – typically the upload speed.

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.