VPN Tracker for Mac OS X

How-to:

Interoperability with

NETGEAR FVS318v3

Rev. 1.0

1. Introduction

This document describes how VPN Tracker can be used to establish a connection between a Macintosh running Mac OS X and a NETGEAR FVS318v3 Internet Security Appliance.

The NETGEAR FVS318v3 is configured as a router connecting a company LAN to the Internet.

This paper is only a supplement to, not a replacement for, the instructions that have been included with your NETGEAR router. Please be sure to read those instructions and understand them before starting.

2. Prerequisites

First you have to make sure that you use a recent NETGEAR FVS318v3 fimware version. The latest firmware release for your NETGEAR appliance can be obtained from

http://www.NETGEAR.com/

For this document, firmware version 3.0_16 has been used.

Please note: Firmware version 3.0_20 has some issues in conjunction with VPN Tracker.

Please refer for howto documentation of NETGEAR's FVS318 and FVS318v2 models to http://www.vpntracker.com/interop/.

When using Pre-shared key authentication you need one VPN Tracker Personal Edition license for each Mac connecting to the NETGEAR.

We recommend one VPN Tracker Professional Edition for the administrator's Mac in order to export configuration files to the clients.

VPN Tracker is compatible with Mac OS X 10.2.5+, 10.3 and 10.4

3. Connecting a VPN Tracker host to a NETGEAR FVS318v3

In this example the Mac running VPN Tracker is directly connected to the Internet via a dialup or PPP connection.

The NETGEAR FVS318v3 is configured in NAT mode and has the static WAN IP address 169.1.2.3 and the private LAN IP address 192.168.1.1. The Stations in the LAN behind the NETGEAR router use 192.168.1.1 as their default gateway and should have a working Internet connection.

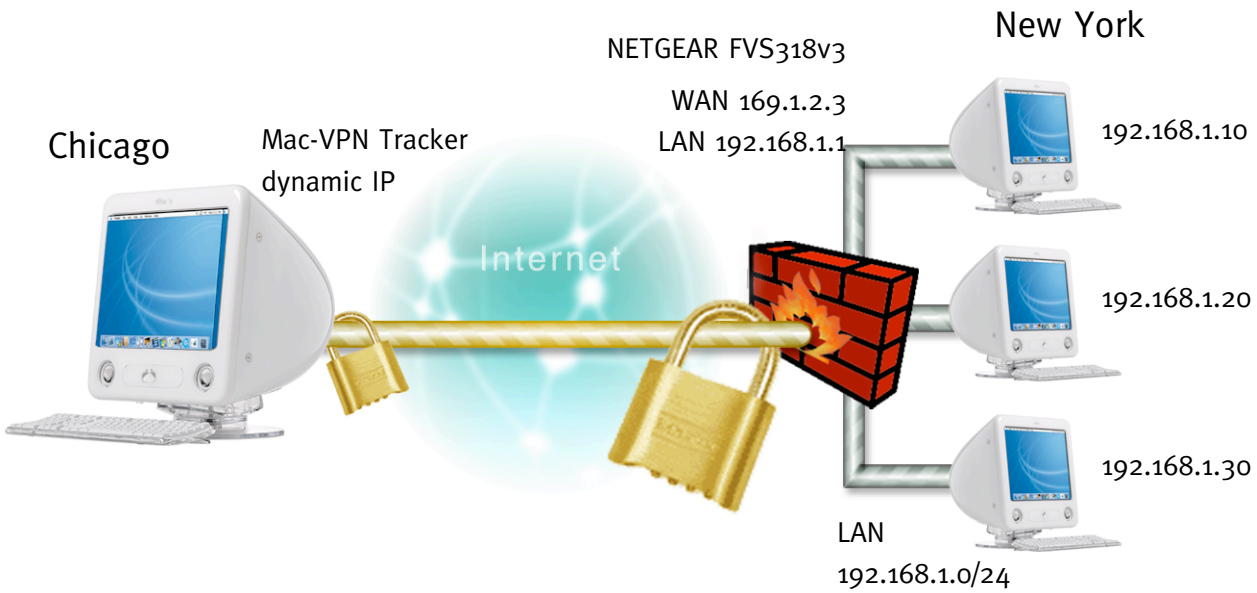

Figure 1: VPN Tracker – NETGEAR FVS318v3 connection diagram

3.1 NETGEAR Configuration

The pre-defined VPN Tracker connection type has been created using the default settings for your NETGEAR FVS318v3 appliance. If you change any of the settings on the NETGEAR router, you will eventually have to adjust the connection type in VPN Tracker.

Step 1 Create an IKE Policy with following settings:

- Policy Name: an arbitrary name (e.g. **vpntracker**)
- Direction/Type: **Remote Access**
- Exchange Mode: **Aggressive**
- Local Identity Type: **Fully Qualified Domain Name**
- Local Identity Data: an arbitrary identifier (e.g. **netgear**)
- Remote Identity Type: **Fully Qualified Domain Name**
- Remote Identity Data: an arbitrary identifier (e.g. **vpntracker**)
- Encryption Algorithm: **3DES**
- Authentication Algorithm: **MD5**
- Pre-shared Key: an arbitrary key (e.g **secretkey**)

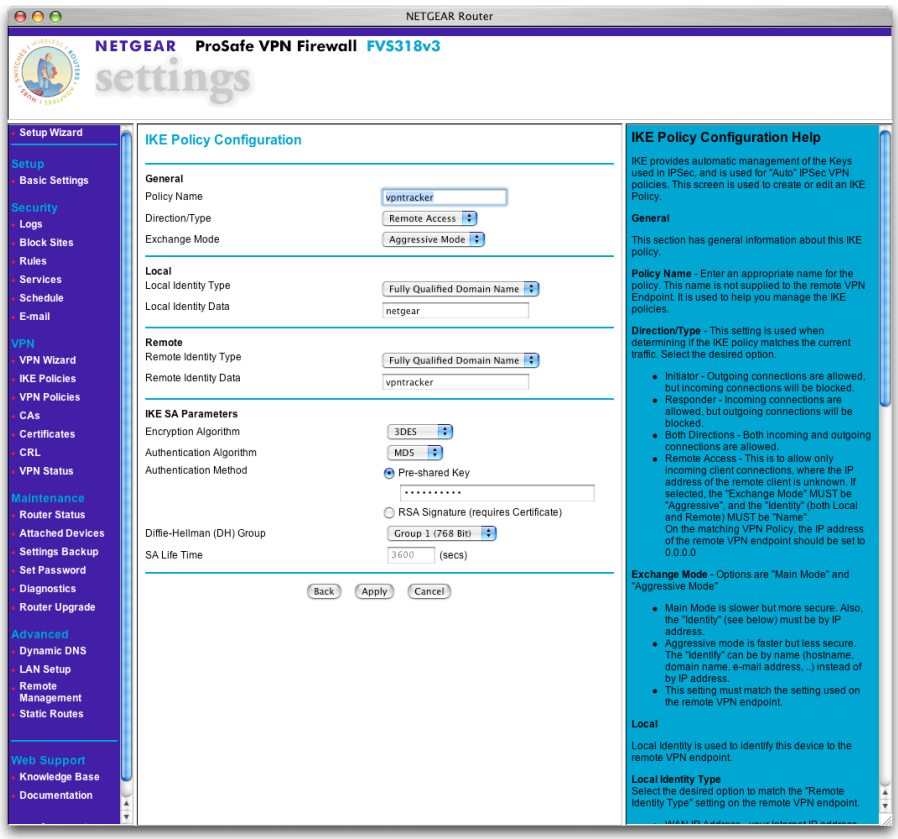

Figure 2: NETGEAR FVS318v3 - IKE Policy Configuration

Step 2

Create a VPN Auto Policy with following settings:

- Policy Name: an arbritary name (e.g. **autopolicy**)
- IKE policy: your previously create IKE policy (e.g. **vpntracker**)
- Remote VPN Endpoint:
  - Address Type: **IP Address**
  - Address Data: **0.0.0.0**
- Local IP: **Subnet address**
  - Start IP address: network address of the NETGEAR lan (e.g. **192.168.1.0**)
  - Subnet Mask: e.g. **255.255.255.0**
- Remote IP: **Single address**
  - Start IP address: Virtual IP address for the client (e.g. **10.1.2.3**)
- ESP -› Enable Encryption: **3DES**
- ESP -› Enable Authentication: **SHA1**

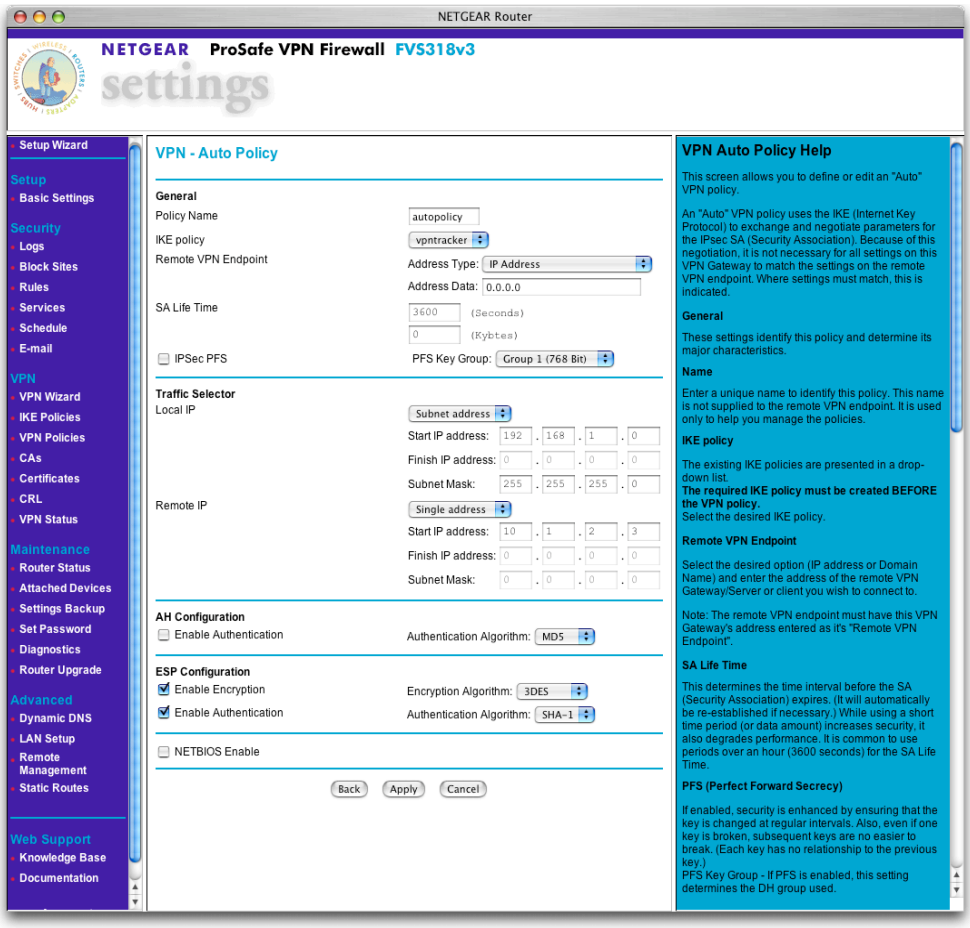

Figure 3: NETGEAR FVS318v3 - VPN Auto Policy

Multiple VPN Tracker Hosts

When connecting with more then one VPN Tracker client, you'll need to repeat step 2 and supply a different "Remote IP", like 10.1.2.4 to the client.

3.2 VPN Tracker Configuration

Step 1 Add a new connection with the following options:

- Vendor: **NETGEAR**
- Model: **NETGEAR FVS318**

Figure 4: VPN Tracker - Connection Settings

Step 2 Change your Network Settings:

- VPN Server Address: public IP address of your VPN Gateway (e.g. **169.1.2.3**)
- Local Address: the virtual IP address you've enter in section 3.1 step 2 (e.g. **10.1.2.3)**
- Remote Network/Mask: network address and netmask of the remote network (eg. **192.168.1.0/255.255.255.0**).

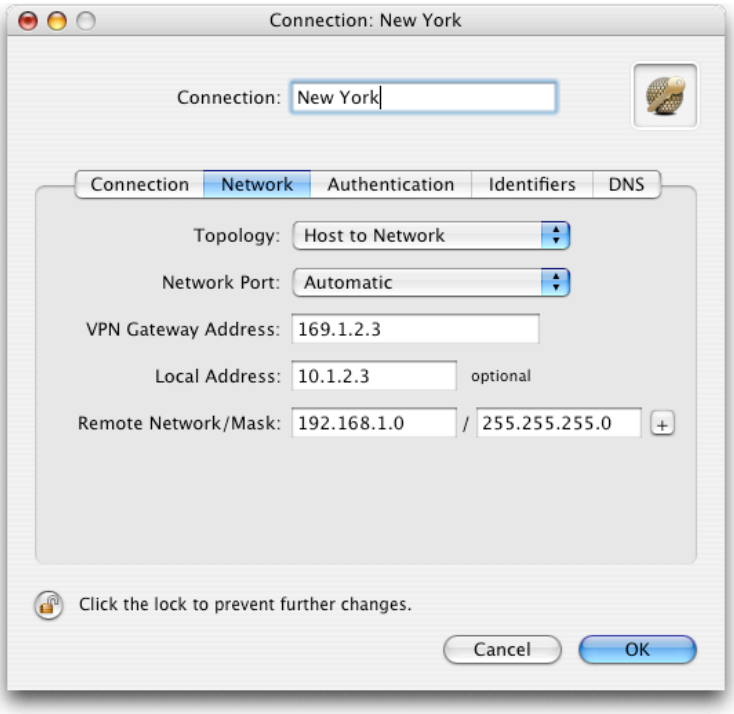

Figure 5: VPN Tracker - Network Settings

Please note: The "Local Address" field is required in order to connect to your NETGEAR FVS318v3 router.

Step 3 Change your Authentication Settings:

Pre-shared key: the same Pre-shared key as in the NETGEAR FVS318v3 configuration.

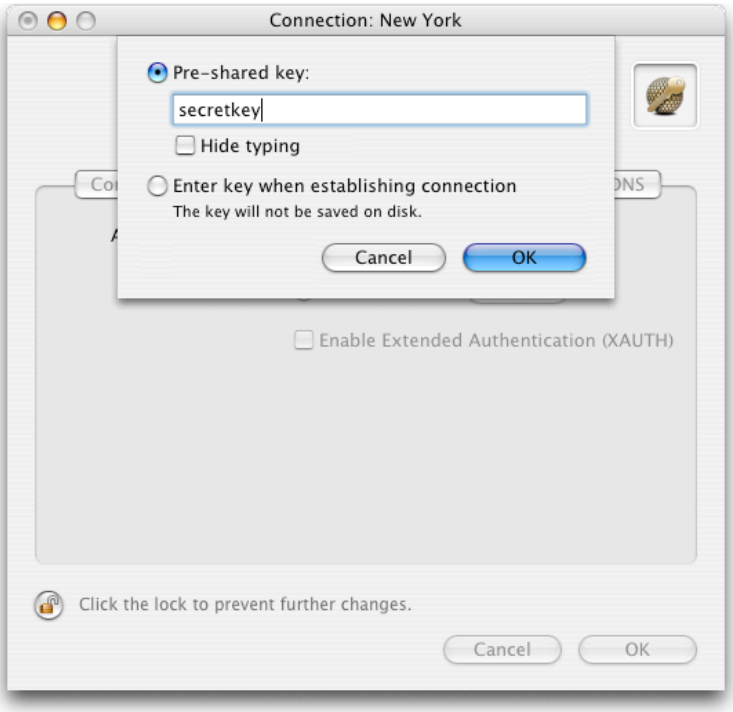

Figure 6: VPN Tracker - Authentication Settings

Step 4 Identifier Settings:

- Local Identifier: **vpntracker** (identifier type: fqdn).
- Remote Identifier: **netgear** (identifier type: fqdn).

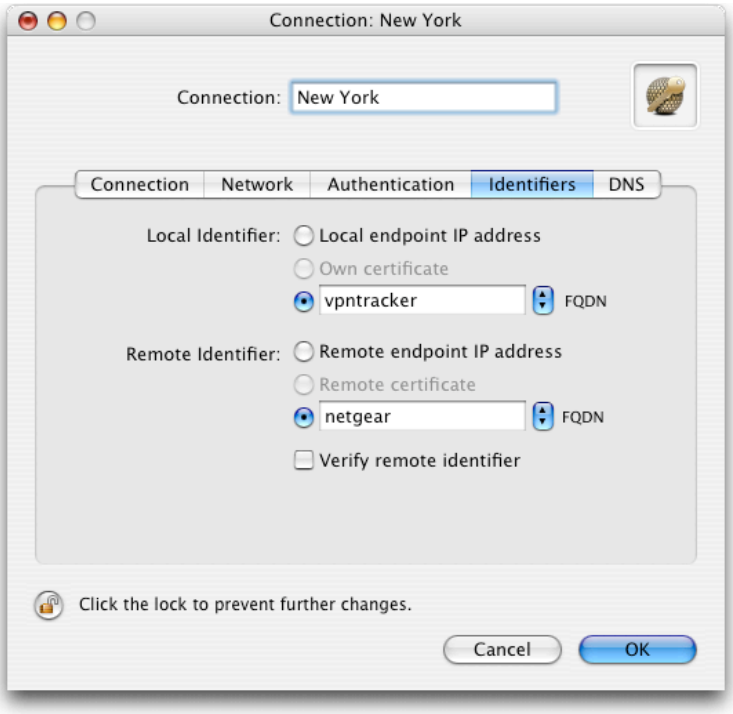

Figure 7: VPN Tracker - Identifier Settings

Step 5 Save the connection and Click „Start VPN“ in the VPN Tracker main window.

You’re done. After 10-20 seconds the red status indicator for the connection should change to green, which means you’re securely connected to the NETGEAR FVS318v3. After IPsec has been started, you may quit VPN Tracker. The IPsec service will keep running.

Now to test your connection simply ping a host in the NETGEAR network from the dialed-in Mac in the “Terminal” utility:

ping 192.168.1.10