Permanent VPN connection in Windows

http://blog.degree.no/2011/10/permanent-vpn-connection-in-windows/

Windows does not really offer any good ways of setting up a permanent VPN connection that is stable. People are literally loosing their minds over it.

We came up with a pretty nice solution to this problem by combining

- Windows Powershell
- Windows VPN Client
- Windows Task scheduler

At the server side

- Make sure your VPN Server is set up and working. This will not be covered here.

At the client side

1. Set up a new VPN Connection. Just follow the usual "Connecto to a workplace" wizard. Make sure that the VPN connection works.
2. After creating the connection – set these Redial properties. The redial functionality works as it should most of the time, but it's not 100% trustable.
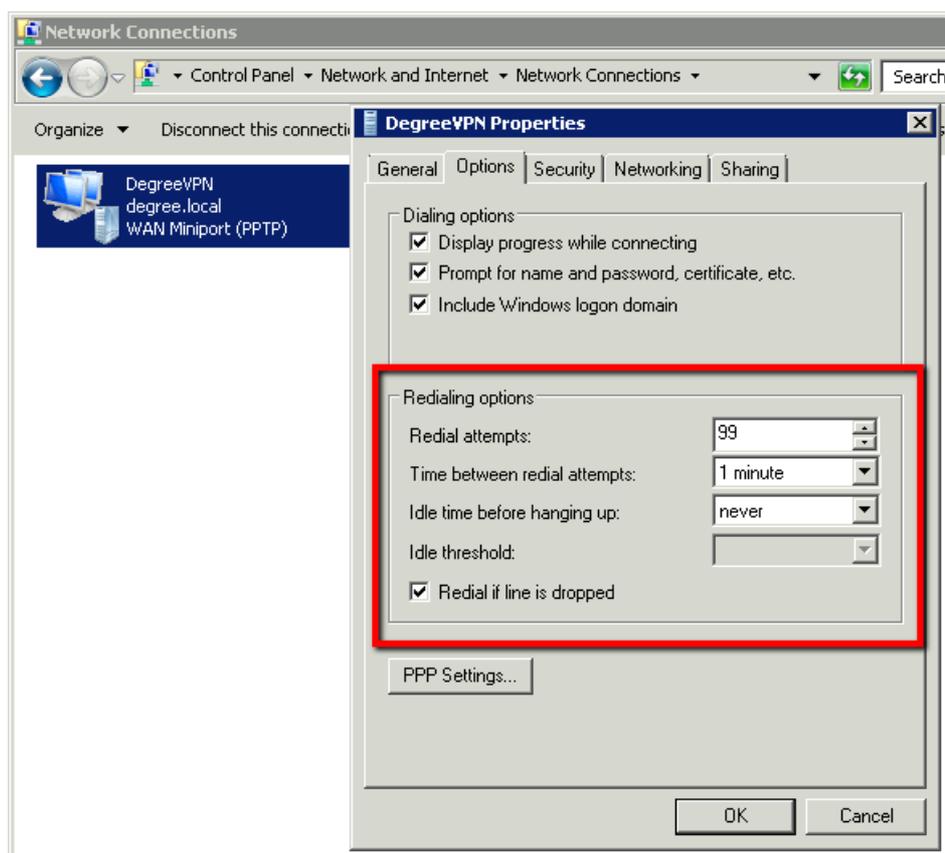
3. Also – Uncheck "Use default gateway on remote network" – in order to prevent all network/internet traffic to go through the VPN (unless this is what you want).
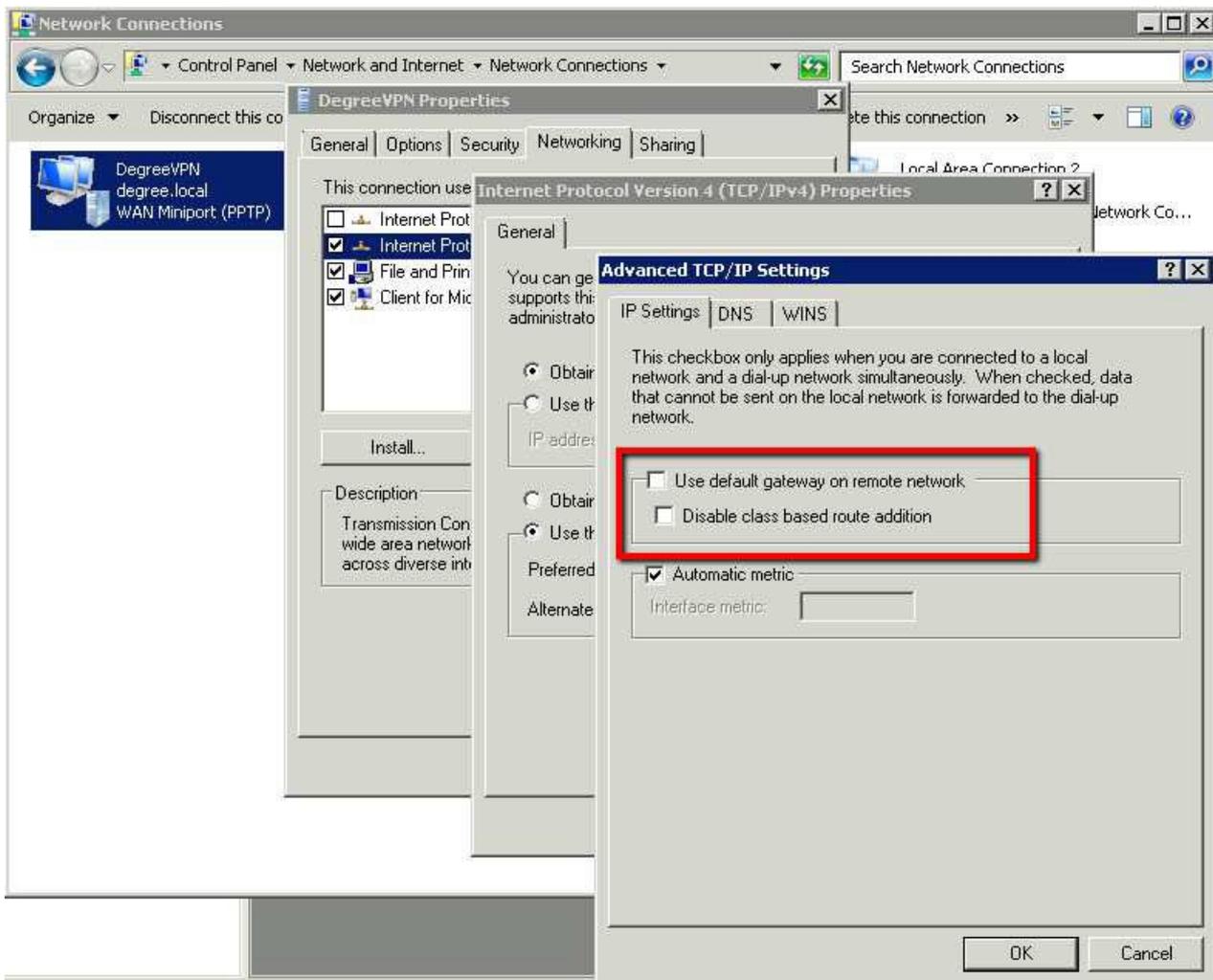
4. Since the Redial functionality of the VPN Connection isn't trustable – it's best to deal with this yourself. It's powershell time. Create **c:\pn.ps1** and add the following:

```
$ip = "10.20.30.40"
$result = gwmi -query "SELECT * FROM Win32_PingStatus WHERE Address = '$ip'"
if ($result.StatusCode -eq 0) {
    Write-Host "$ip is up."
}
else{
    Write-Host "$ip is down."
    Write-Host "Disconnecting..."
    rasdial.exe DegreeVPN /DISCONNECT
    Write-Host "Connecting..."
    rasdial.exe DegreeVPN vpnUsername vpnPassword12345
}
```

The script pings an IP that should be available through the VPN. If the ping is unsucecssfull – the connection is reestablished. You can also set up routes here (and get notifications by email every time the VPN was disconnected) if you add a few more lines to the script.

5. Start up a powershell and type "**Set-ExecutionPolicy Unrestricted"** order to allow the script to be executed.
6. Schedule this script to execute at startup (no user/login necessary) and also every 5 minutes.
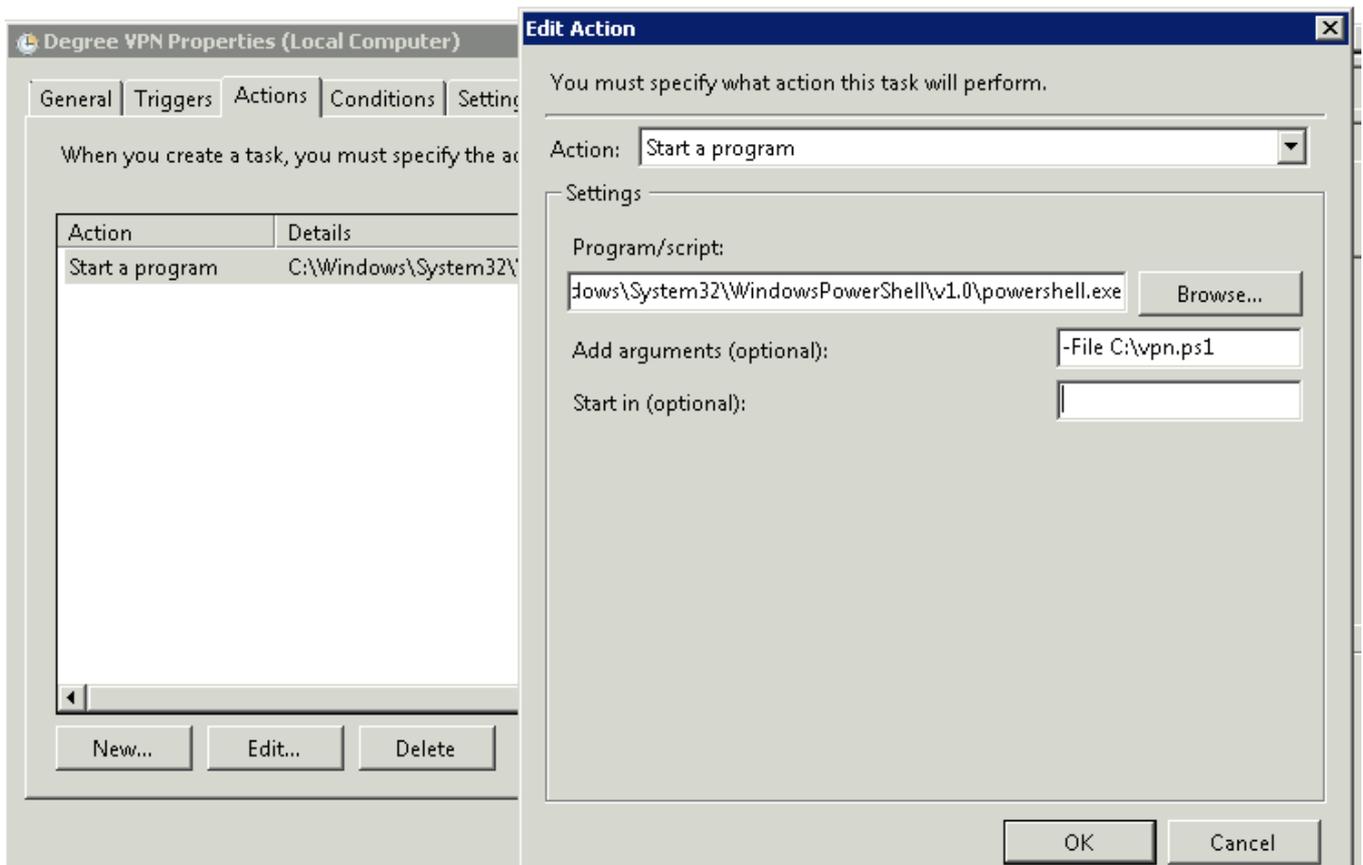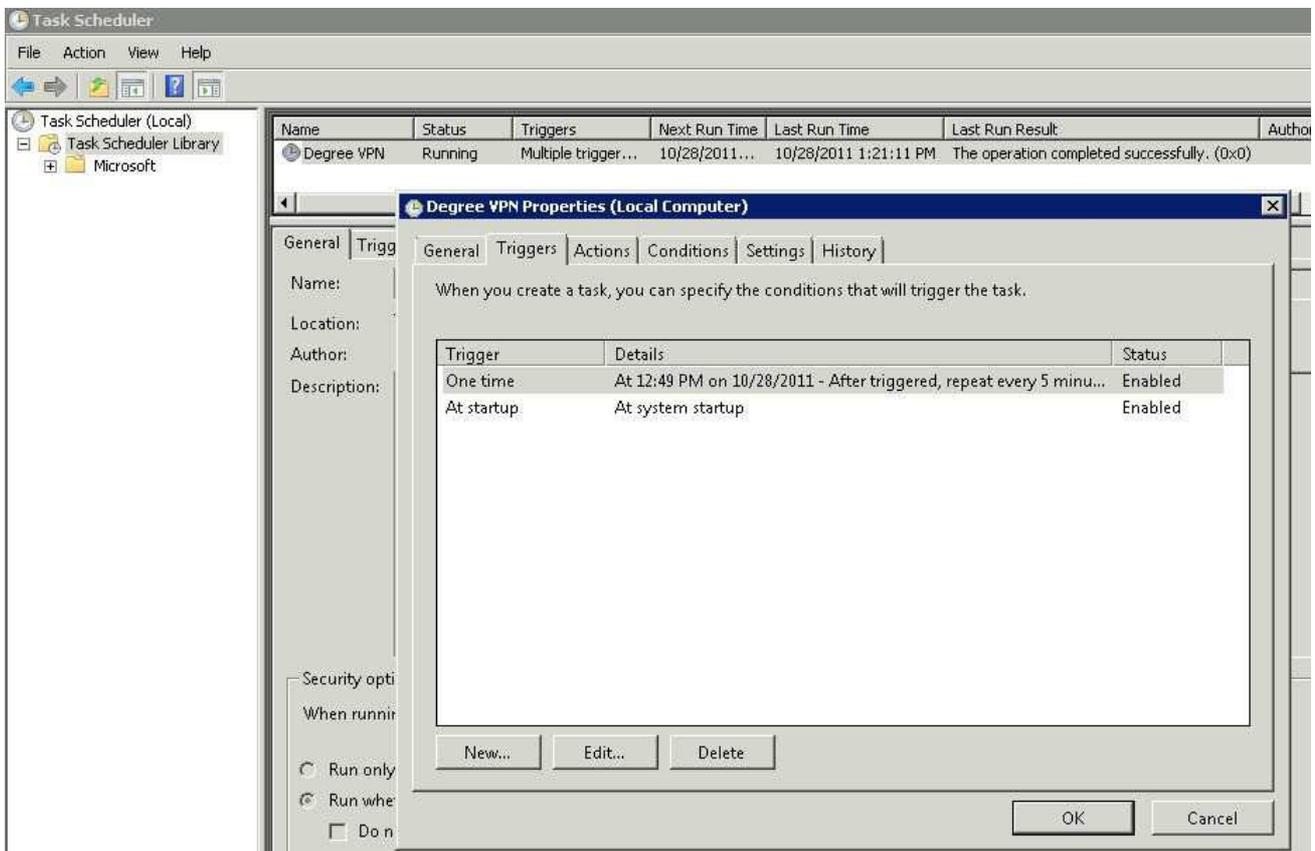
7. Bingo! You now have a robust and permanent VPN Connection in windows. This works with PPTP, L2TP, SSTP and IKEv2, and have been tested on Windows 7 and Windows 2008 R2.

Tags: Ikev2, L2TP, powershell, PPTP, SSTP, VPN, Windows 2008, Windows 7