

# DEPLOYING VYATTA VPN SERVER ON DYNAMIC IP

Yes, I'm really found of using Vyatta these days. Easy command line, not a resource-hungry system, runs in a VM,... Loving it. I do have to point out that my success with it is mostly from online tutorials and a lot of trail-and-error, as I find the official documentation is unclear about a lot of details. But 'basic' network stuff, like setting up a VPN server, works fine. Too bad I haven't quite figured out yet how to use Vyatta (or any other software) as an IPv6 VPN server, so the following tutorial covers IPv4 only.

First thing to check when deploying a client-server VPN is making sure there's no subnet overlap. Earlier experiments with VPN and a remote connection behind NAT, both in the same subnet, did not work. For this reason I migrated my own network to the 192.168.168.0/24 subnet a month ago.

Second thing is making sure a remote VPN connection is possible. I'm behind a NAT device so port forwarding is needed. I'm setting up a standard Windows PPTP VPN, which uses TCP port 1723 for control, and a GRE tunnel for the actual transport. In this case, forwarding port 1723 usually is sufficient.

Once this is done, the actual configuration of the VPN server on the Vyatta:

```
reggle@vyatta# set vpn pptp
```

```
[edit]
```

```
reggle@vyatta# set vpn pptp remote-access authentication mode local
```

```
[edit]
```

```
reggle@vyatta# set vpn pptp remote-access authentication local-users username reggle  
password 123
```

```
[edit]
```

```
reggle@vyatta# set vpn pptp remote-access client-ip-pool start 192.168.168.10
```

```
[edit]
```

```
reggle@vyatta# set vpn pptp remote-access client-ip-pool stop 192.168.168.29
```

*[edit]*

```
reggle@vyatta# commit
```

This is the minimum configuration. It configures the VPN server and allows one user to log in. You can add as many users as you like by repeating the command with the username and password, or you can configure a remote RADIUS server:

```
reggle@vyatta# set vpn pptp remote-access authentication mode radius
```

*[edit]*

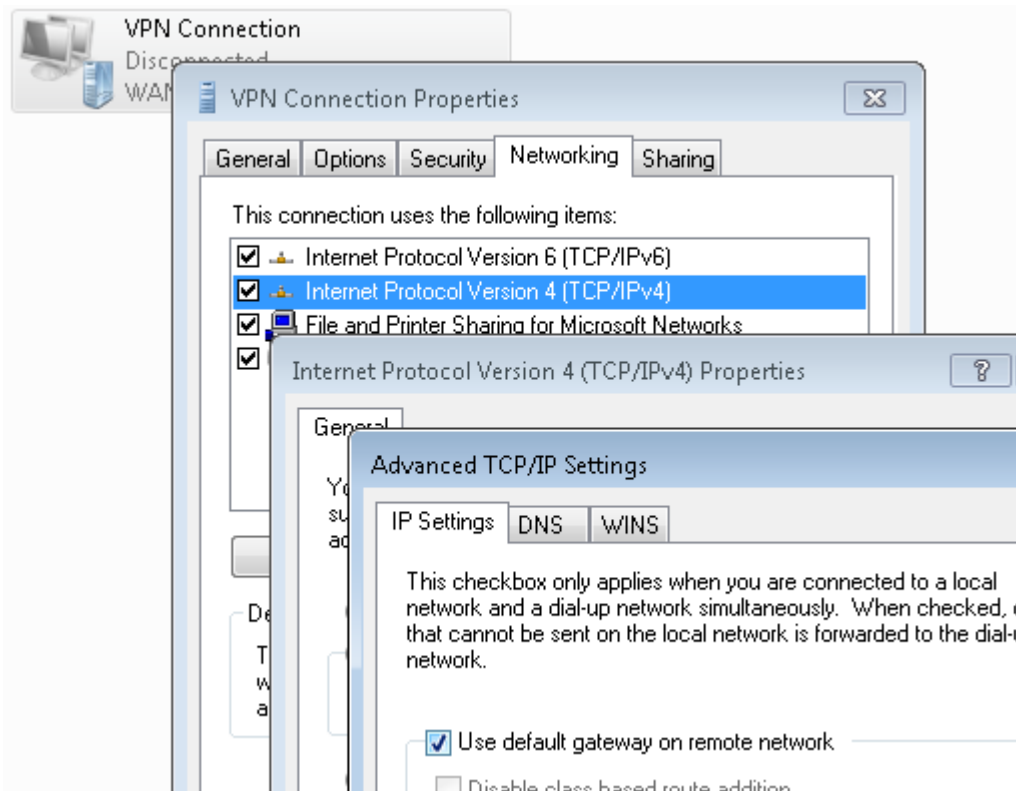
```
reggle@vyatta# set vpn pptp remote-access authentication radius-server 192.168.168.5 key  
456
```

*[edit]*

Also, you can define a DNS server with 'set vpn pptp remote-access dns-servers server-1 192.168.168.2'. Don't forget to exclude the addresses used for VPN on your network's DHCP server to avoid duplicate IPs.

To set up a Windows 7 client computer, go to 'Network and Sharing Center', next 'Set up a new connection', and enter the details asked (type VPN, IP, username, password). Sometimes, this does not work. If this is the case, go to the VPN properties in the 'Network Connections' page, and under the tab 'Security' choose PPTP instead of Automatic for the Type of VPN.

One thing to keep in mind now is that, when dialing in from a Windows computer, by default all traffic including internet access, will flow through the VPN. You can change this on the client only: go to the VPN properties, tab 'Networking', select 'Internet Protocol Version 4' and choose 'Properties' again, next 'Advanced...', and there should be a check box 'Use default gateway on remote network'. Unchecking it makes sure the local internet connection is used.



That enables proper VPN connectivity, but if you don't have a business-grade internet connection like me, you'll most likely have a dynamic IP that changes from time to time. It's possible to bind that dynamic IP to a DNS record using a public free dynamic DNS service. I

Source : <http://reggle.wordpress.com/2011/11/09/deploying-vyatta-vpn-server-on-dynamic-ip/>