### **NAME**

nos-tun - implement "nos" or "ka9q" style IP over IP tunnel

## **SYNOPSIS**

nos-tun -t tunnel -s source -d destination -p protocol\_number [source] target

### DESCRIPTION

The **nos-tun** utility is used to establish an *nos* style tunnel, (also known as *ka9q* or *IP-IP* tunnel) using a tun(4) kernel interface.

*Tunnel* is the name of the tunnel device /dev/tun0 for example.

Source and destination are the addresses used on the tunnel device. If you configure the tunnel against a cisco router, use a netmask of "255.255.255.252" on the cisco. This is because the tunnel is a point-to-point interface in the FreeBSD end, a concept cisco does not really implement.

*Protocol number* sets tunnel mode. Original KA9Q NOS uses 94 but many people use 4 on the worldwide backbone of ampr.org.

*Target* is the address of the remote tunnel device, this must match the source address set on the remote end.

# **EXAMPLES**

This end, a FreeBSD box on address 192.168.59.34:

```
nos-tun -t /dev/tun0 -s 192.168.61.1 -d 192.168.61.2 192.168.56.45
```

Remote cisco on address 192.168.56.45:

interface tunnel 0 ip address 192.168.61.2 255.255.255.252 tunnel mode nos tunnel destination 192.168.59.34 tunnel source 192.168.56.45

## HISTORY

The **nos-tun** utility appeared in FreeBSD 3.0.

# **AUTHORS**

Nickolay N. Dudorov <nnd@itfs.nsk.su> wrote the program, Poul-Henning Kamp

<phk@FreeBSD.org> wrote the man-page. Isao SEKI <iseki@gongon.com> added a new flag, IP
protocol number.

# **BUGS**

We do not allow for setting our source address for multihomed machines.