

# **Linux IP-Masquerade**

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# Why IP-Masq?

- ✓ One connection, multiple hosts.
- ✓ Requires only one "real" IP address.
- ✓ Built-in firewalling.
- ✓ Free!

# How It Works

- ✓ Masquerading host modifies packets as it forwards them.
- ✓ Works on a per-port basis.
- ✓ Watches out for incoming traffic to masquerade back.

# OWhat You Need

- ✓ Linux 2.0.1 or Newer
- ✓ Modules
- ✓ TCP/IP Networking
- ✓ ipfwadm 2.3 or newer.

# Configuring the Kernel

- ✓ Experimental Code
- ✓ Module support
- ✓ Networking
- ✓ Firewalling
- ✓ TCP/IP
- ✓ IP Forwarding/Gatewaying
- ✓ IP Firewalling
- ✓ IP Masquerading
- ✓ IP Always Defragment (recommended)
- ✓ Dummy net driver (recommended)

# Loading the Modules

- ✓ ip\_masq\_ftp
- ✓ ip\_masq\_raudio
- ✓ ip\_masq\_irc
- ✓ DO NOT use kerneld!

# Setting Up IP Addresses and ipfwadm Rules

- ✓ Reserved IP addresses (RFC 1597):
  - ✓ 10.x.x.x.x/8
  - ✓ 172.16.x.x - 172.31.x.x/16
  - ✓ 192.168.x.x/24
- ✓ Default rule (deny): `ipfwadm -F -p d[eny]`
- ✓ Specific rule (allow): `ipfwadm -F -a m[asq] -S 192.168.0.0/24 -D 0.0.0.0/0`

# What Works, What Doesn't

- ✓ Telnet (and variants like POP, IMAP, HTTP)
- ✓ FTP, RealAudio, IRC (with modules)
- ✓ Kerberos and most kerberized services.
- ✓ ssh
- ✗ Zephyr
- ✗ Ping
- ✗ Talk/YTalk



# For Further Information

- ✓ Home Page  
<http://www.hwy401.com/achau/ipmasq/>
- ✓ Mailing List  
[masq-request@indyramp.com](mailto:masq-request@indyramp.com)
- ✓ List archive, FAQ, and mini-HOWTO  
<http://www.indyramp.com/masq/>