The tinc VPN

Geestmerambacht, August 1, 2013

Yet another VPN?
Runs on...
How does it work?
Now in pictures:
Tinc 1.1 will be better
Invite your friends
The end

Guus Sliepen

guus@tinc-vpn.org

- Connect multiple nodes together in one VPN
- Peer-to-peer, decentralized
- Automatic full mesh
- Full support for IPv4 and IPv6
- Router or switch mode
- Adding a new node is $O(1)$
Tinc has been known to run on:

- Linux
- OpenBSD, FreeBSD, NetBSD, Dragonfly
- MacOS/X
- Windows
- Android*
- iOS*

*) rooted device required
- Configure endpoints, not tunnels
- Exchange public keys with at least one other node
- Tinc learns about all other nodes
- Autodetects TCP or UDP, PMTU, NAT
- Routes around damage
Network before VPN is configured:

Blue cloud: the Internet
Black circles: VPN nodes
Initial connections configured by user:

Green lines: initial connections
Full mesh created by tinc:

Black lines: UDP tunnels
Tinc 1.1 will be better than 1.0.x.

Stronger cryptography:

- 521 bits ECDSA keys
- AES-256-CTR + HMAC-SHA256
- Perfect Forward Secrecy
- Always end-to-end encryption

PRISM proof?
Easy setup:

```bash
myself:~# tinc -n myVPN init
myself:~# tinc -n myVPN add Subnet 93.184.216.0/24
```

Easy exchange of config files:

```bash
myself:~# tinc -n myVPN export |
| ssh remotehost tinc -n myVPN import
```

Get information from running VPN:

```bash
myself:~# tinc -n myVPN info <node|address>
myself:~# tinc -n myVPN top
```
Generate an invitation*:

```bash
myself:~# tinc -n myVPN invite myFriend example.org/vhdIF...m7rXK
```

Short enough to send it to a friend via email, IRC, SMS, ...

```bash
afriend:~# tinc join example.org/vhdIF...m7rXK
```

*) Use git or wait for version 1.1pre8.
Thank you for listening!

Visit the website:
http://tinc-vpn.org/

Workshop today @ Milliways, 17:00 - 18:00.
You are welcome!