



SIG Networking

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Projects



xicada.net
the community network that makes geeks

```
Hardware is Fast Ethernet, address is 0009.e813.a881 (bia 0009.e813.a881)
MTU 1500 bytes, BW100000 Kbit, DLY 1000 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Full-duplex, 100Mb/s
input flow-control is off, output flow-control is off
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:51, output 00:00:01, output hang never
Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
31569 packets input, 5293379 bytes, 0 no buffe
0 input packets with dribble condition detected
bug out 0 babbles, 0 late collision, 0 deferred
```

- Xicada project
 - Initial goal was to create a large-scale virtual network consisting of wireless and permanently-connected nodes for the purposes of experimenting with advanced networking technologies
 - Using multipath routing, possible to increase bandwidth by utilizing wireless links



Xicada

- Virtual links:
 - OpenVPN (runs over udp)
 - IPSec
 - IPv6-in-IPv4
- Routing
 - GNU Zebra
 - Cisco
 - OSPF (OSPF6 for IPv6 links)

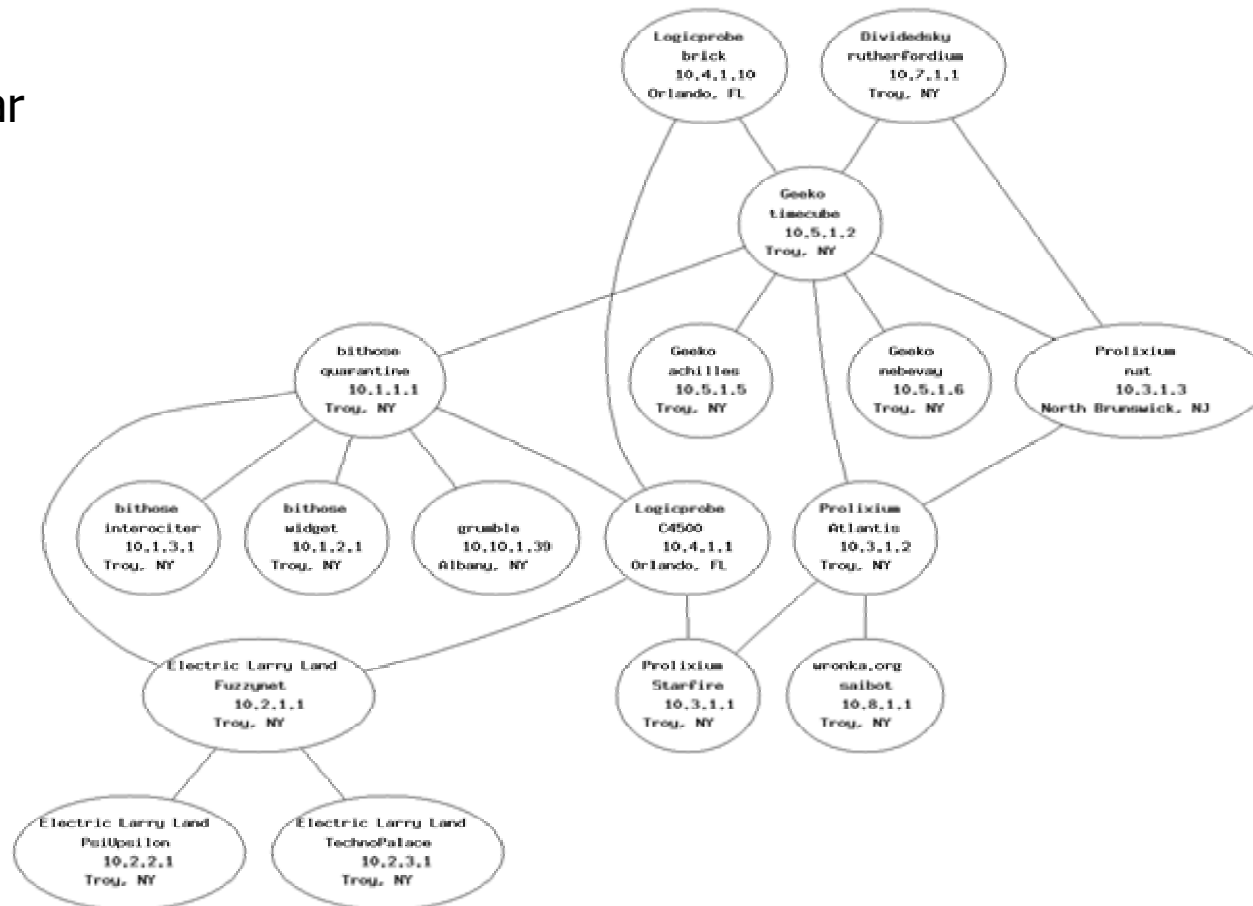


Addressing

- RFC1918 address space
 - Each network gets a /16 allocation
 - 10.<yourid>.0.0/16
 - And a /24 for VPN links
 - 172.16.<yourid>.0/24

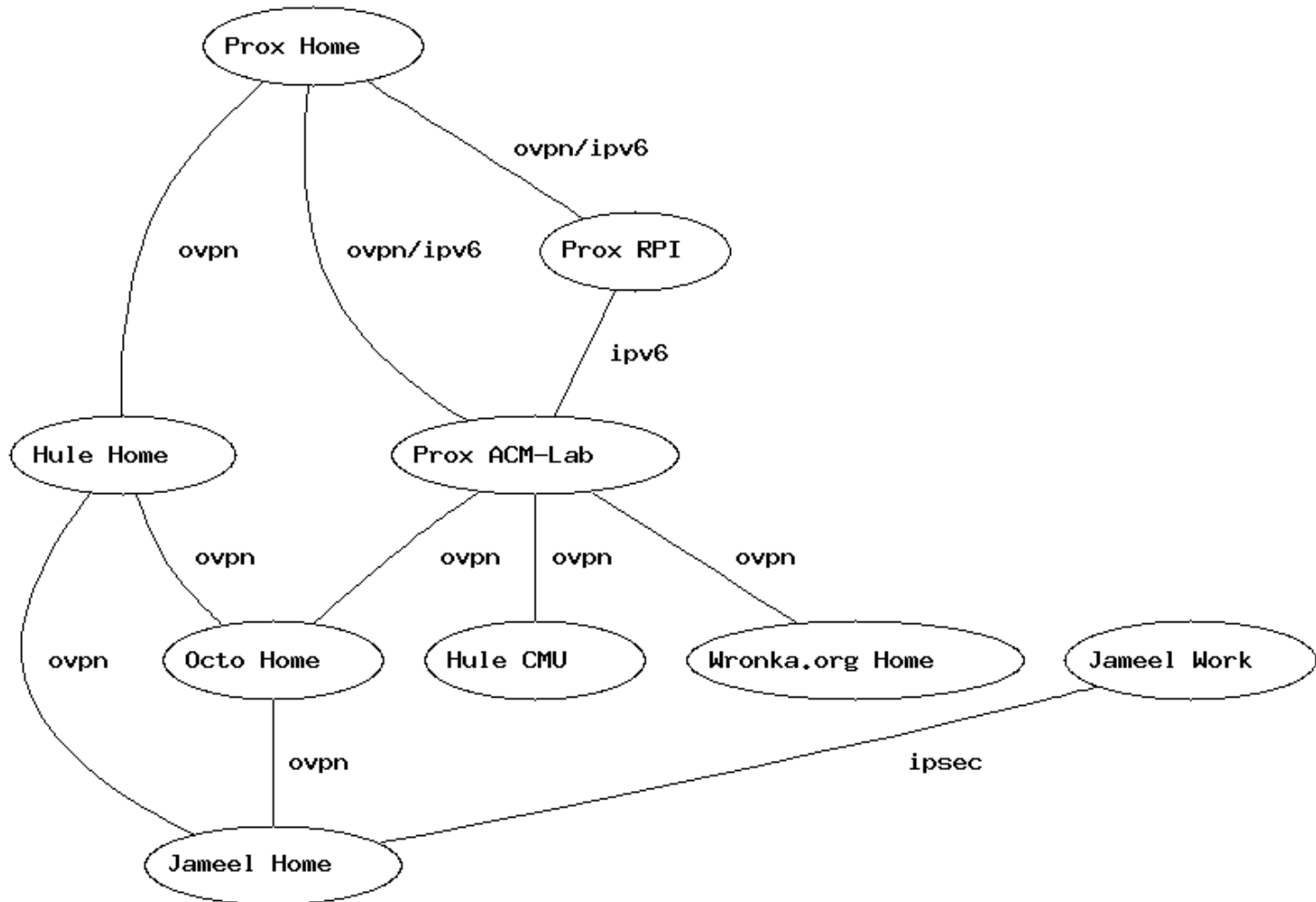
Xicada (map)

Last year



Xicada (map)

Current





Xicada (cont.)

- Need
 - More wireless links
 - More nodes (more paths == good!)
 - Ideas for internal DNS
 - Current method is not very expandable



Xicada (end)

- Links

- <http://xicada.sf.net/>
- <http://prolixium.com/looking-glass/>
- <http://prolixium.com/xicada/>
- <http://www.logicprobe.org/xicada/>
- <http://openvpn.sf.net/>

- Meetings

- TBA – Usually on Saturdays