

IPv6 Roadshow

Opensource Tools

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- Graphing
- Logging
- Alerting
- Management
- Security

- <http://www.shrubbery.net/rancid/>
- Really Awesome
- Logs into routers and retrieves their running-config
- Puts configs into a version repository for analysis
- Support for many devices
- IMHO the _least_ evil config backup tool

- <http://munin-monitoring.org/>
- Lightweight 'snmp-like' host monitoring
- No need to search for MIBs
- Easy to extend with plugins (in any language)
- IMHO a very nice graphing tools for hosts

- <http://www.observium.org/>
- Autodiscovery
- No need to search for MIBs
- Written in PHP
- IPv6 address tracking
- Relatively easy to understand the code
- IMHO the best graphing tools for the network
- (alternative could be ZENOSS)

- <http://www.nagios.org/>
- Old but reliable
- Some weirdness in IPv6 approach
 - Either create double the host definitions
 - Or use special patch and cheat

- <http://oss.oetiker.ch/smokeping/>
- Graph jitter towards targets:
 - ICMP
 - DNS
 - HTTP
 - VOIP? (test with 160 byte packets – G711 20ms segment)
- Has good IPv6 support, use it to check dual-stack

- <http://www.nmap.org/>
- Just released version 6 with good IPv6 support:
 - IPv6 OS detection
 - Various host discovery methods
 - NDP
 - Binaries for windows, linux, macosx, etc

- <http://thc.org/thc-ipv6/>
- A complete toolset to attack inherent protocol weaknesses of IPv6 and ICMPv6:
 - Send fake Ra's
 - etc
- Includes library to build packets

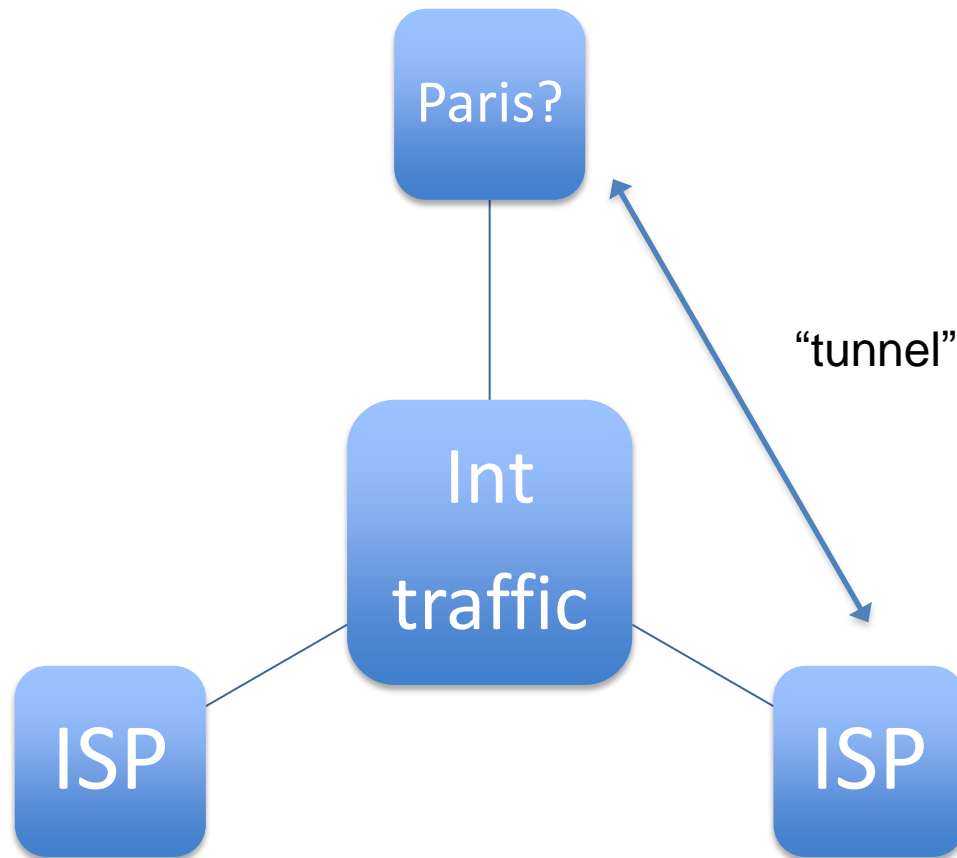
- <http://puppetlabs.com/>
- Not a network tool currently
- Manage up to thousands of servers
- Works over IPv4 and IPv6 (because https)
- Declare how you wish the world to be, puppet will make it so

- <http://nfsen.sourceforge.net/>
- Graphical interface to nfdump netflow tools
- Can be used to discover how much IPv4 vs IPv6
- Cheaper than bluecoat, also less pretty and less features ;-)

WANPROXY or Traffic squeezer

- <http://www.wanproxy.org>
- <http://www.trafficsqueezer.org/>
- TCP Proxy which makes TCP connections send less data:
 - Improves TCP performance
 - Improves throughput
 - Dictionary compression
- Maybe nice for international traffic?

WANPROXY or Traffic squeezer (2)



- <https://osl.uoregon.edu/redmine/projects/netdot>
 - (need to create an account)
- IPv4 + IPv6 address management
- Store cable plant information
- Host/network discovery: snmp, cdp, lldp, /31+/30
- Rather big and complex software
- Can export to BIND, DHCP, Nagios etc

- <http://iptrack.sourceforge.net/>
- IPv4 + IPv6 address management
- Simpler software than NETDOT

- <https://github.com/knipknap/exscript/wiki>
- Exscript is a python program for automating tasks over telnet or SSH on Juniper or Cisco devices

Example template to do something:

```
{fail "Not a Cisco router" if connection.guess_os() is not "ios"}  
show ip interface brief {extract /^(S+)\s/ as interfaces}  
{loop interfaces as interface}  
    interface $interface  
    cdp enable  
    no shut  
{end}
```

Questions?

What tool would you like? Maybe we know the name

Reminder! Setup your v6 transit

Free IPv6 Transit inside GRE Tunnel:

OCCAID (Research / Non profit org in Paris,London)

lee@occaid.org

Atrato IP (Commercial org, Amsterdam)

nmc@atrato-ip.com