

What is an internet? A miserable little pile of packets?

Networking Presentation

ITMS 448

Henry Post

There is no formatting because LibreOffice Impress themes are broken for flat ODP files :)

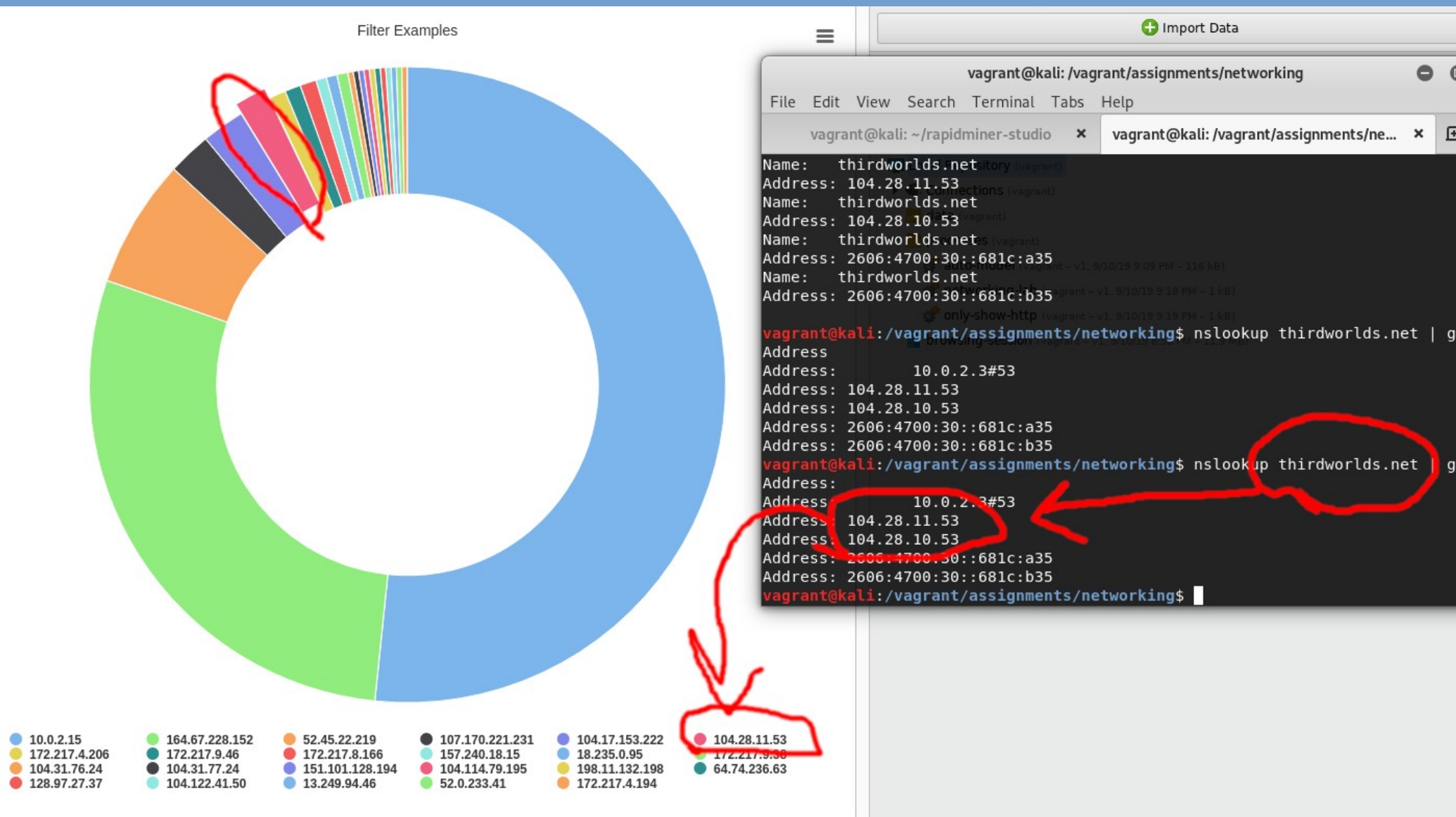
Analysis of Wireshark



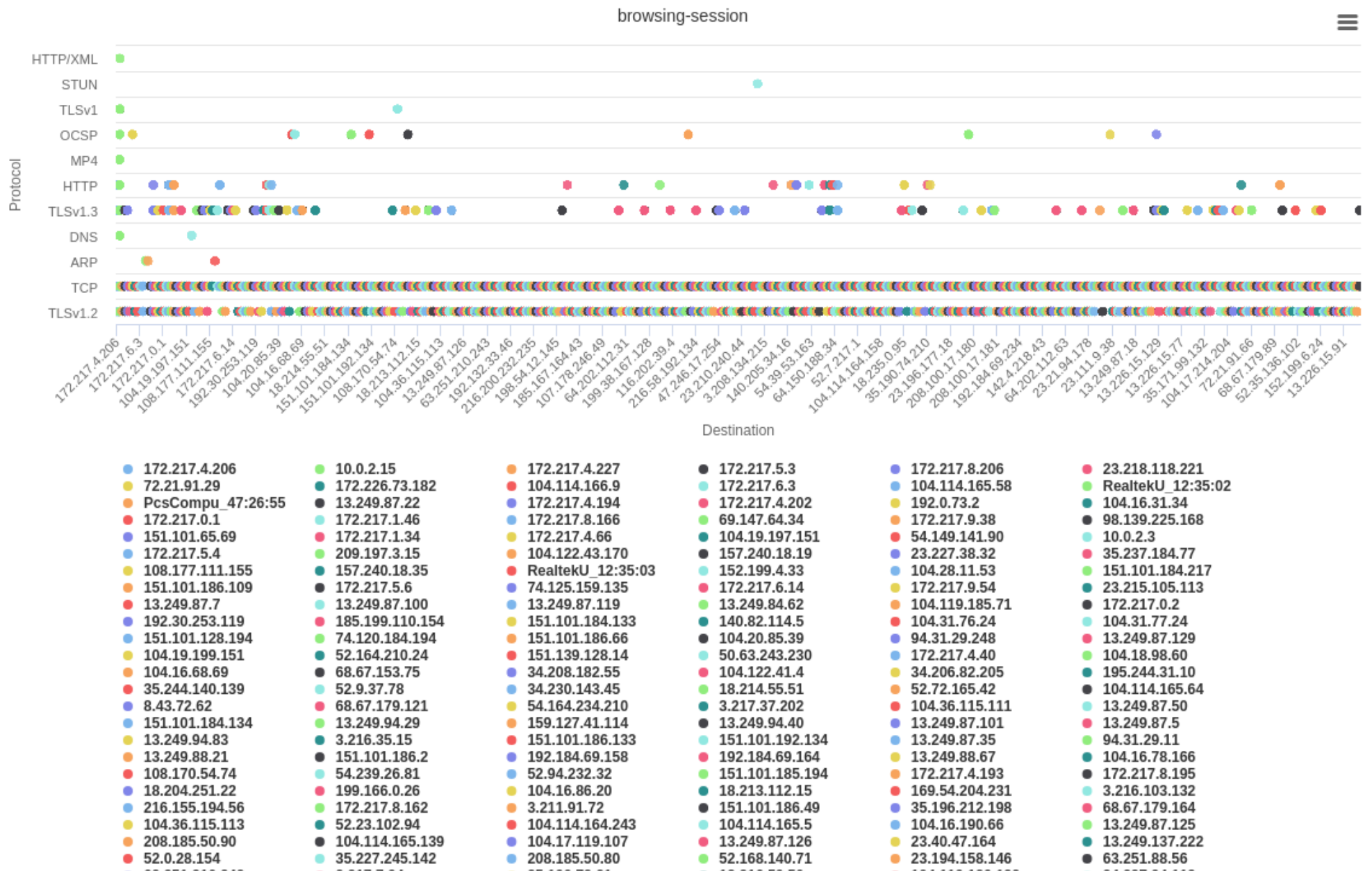
- I browsed news sites, music sites, and watched videos while capturing my packets.
- Some was on HTTPS, some on HTTP, and some was other protocols.
- I mainly focused on seeing what I could find out from the HTTP/S traffic because that's web browsing activity, which is often *interesting*.



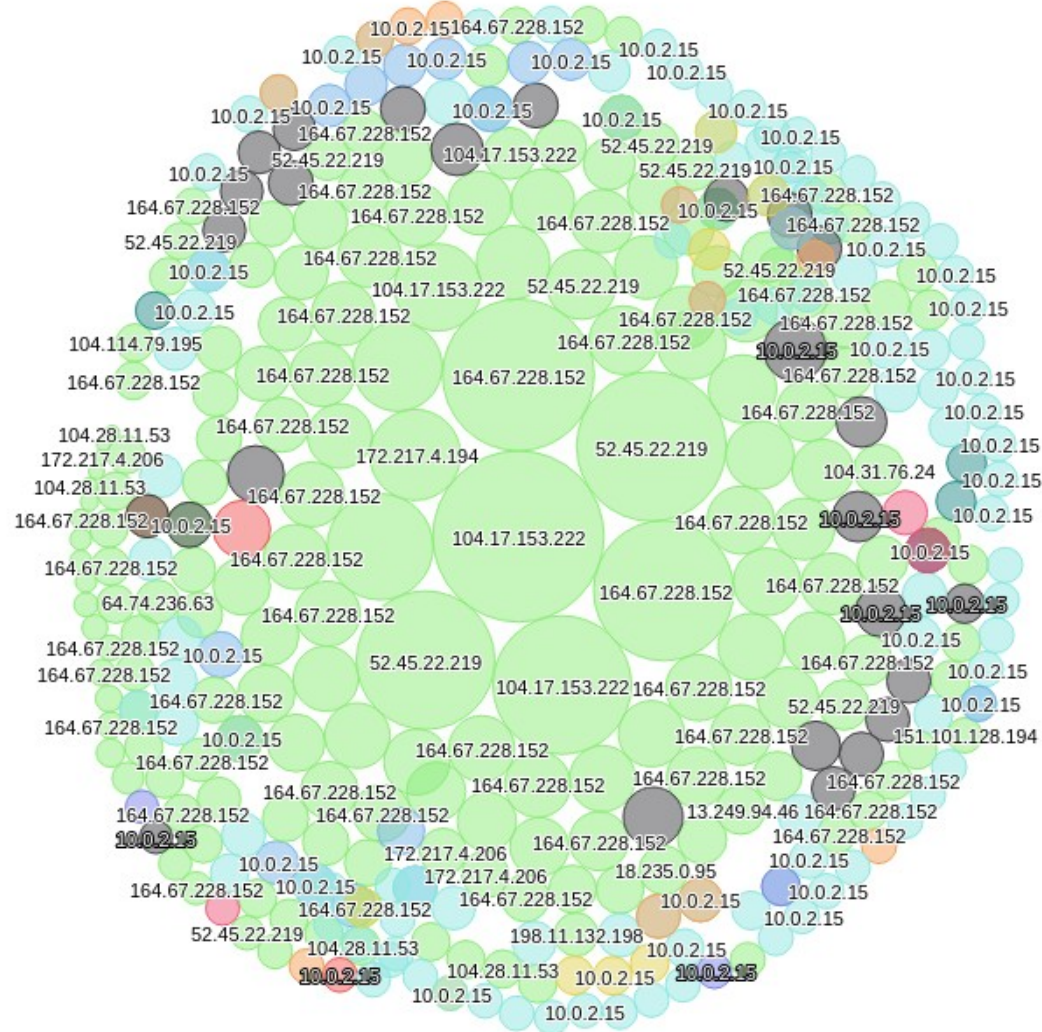
Most HTTP packets tx/rx by IP



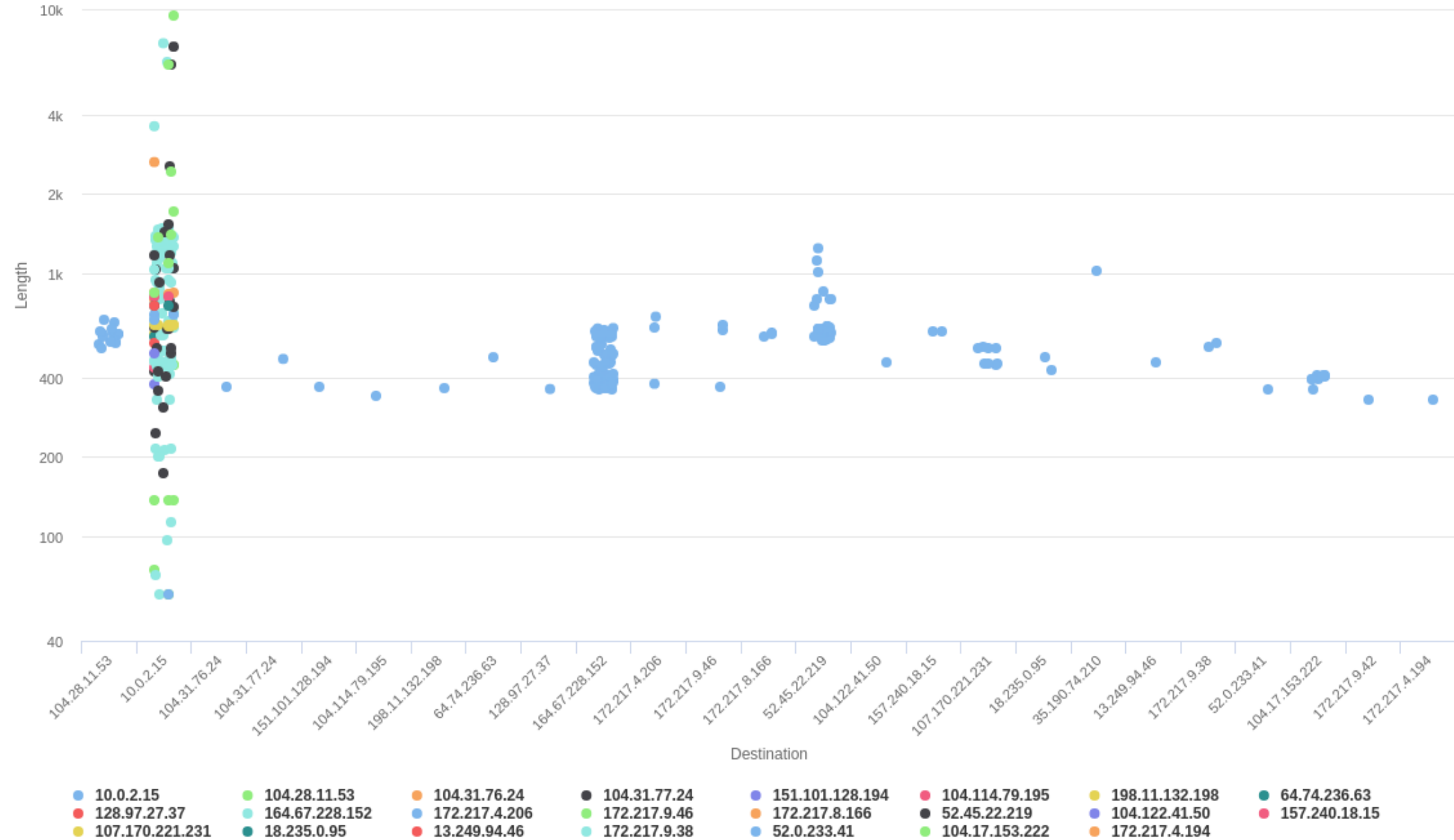
Popular protocols per host



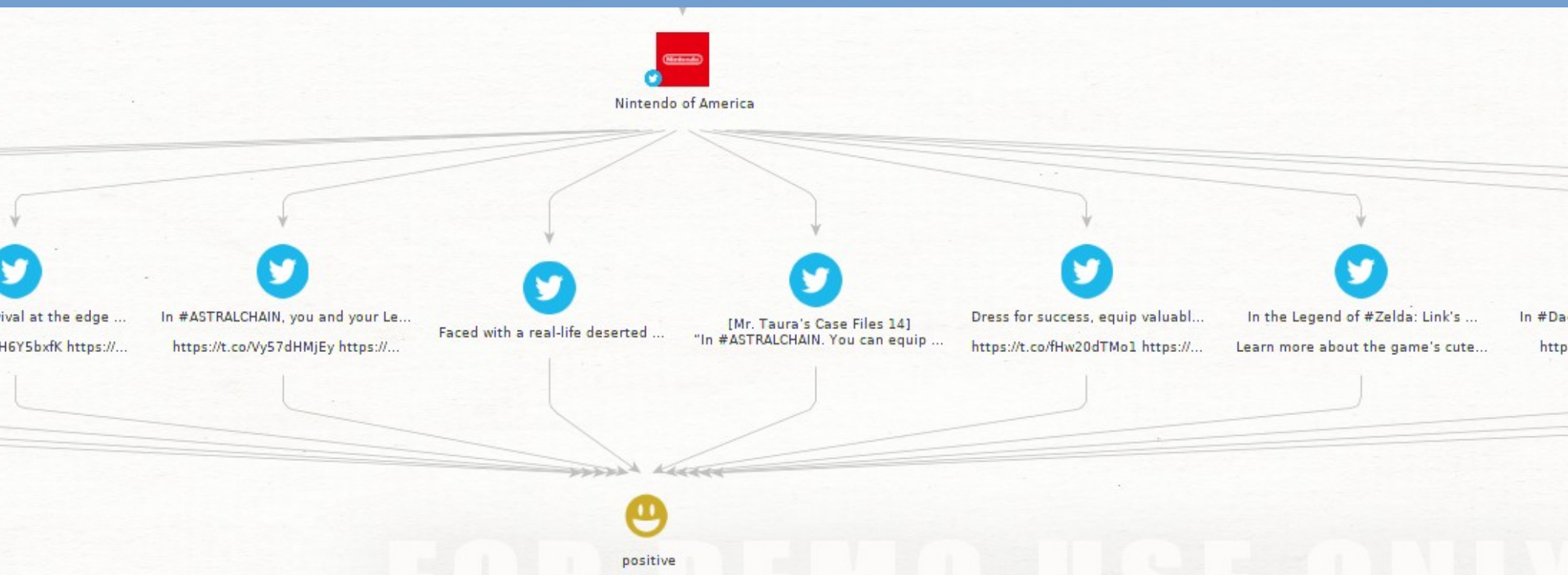
Most HTTP packets, bubble graph



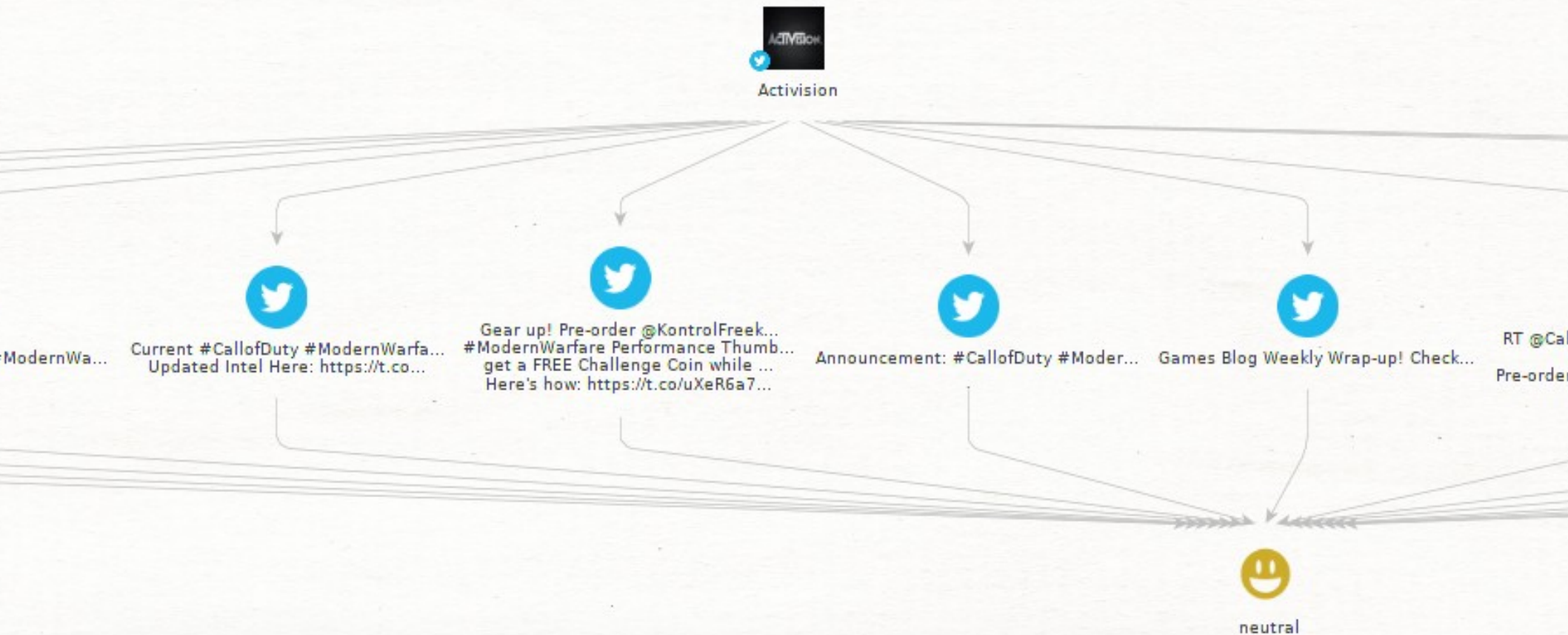
Longest packet sequences per host



Game Retail Twitter Sentiments



Game Retail Twitter Sentiments



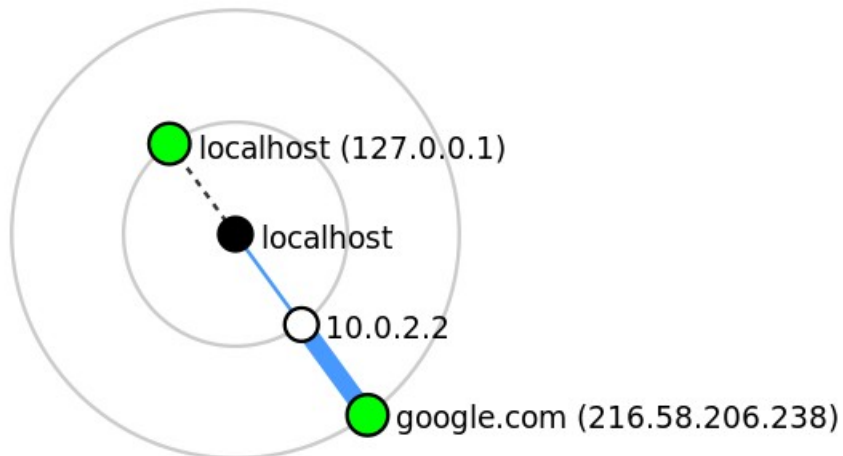
nmap and traceroute

Target: Profile:

Command:

Hosts Services Nmap Output Ports / Hosts Topology Host Details Scans

OS	Host	Port	Protocol	State	Service	Version
✓	scanme.nmap	22	tcp	open	ssh	OpenSSH 6.6.1p1 Ubuntu 2ubuntu2.13 (Ubuntu Linux; protocol 2.0)
✗		25	tcp	filtered	smtp	
✓		80	tcp	open	http	Apache httpd 2.4.7 ((Ubuntu))
✗		139	tcp	filtered	netbios-ssn	
✗		445	tcp	filtered	microsoft-ds	
✗		465	tcp	filtered	smtps	
✗		587	tcp	filtered	submission	
✓		9929	tcp	open	nping-echo	Nping echo
✓		31337	tcp	open	tcpwrapped	



(Don't worry, I only ran traceroute on google.)

Thank you!

Questions?

(Prof. Dawson, go past this slide for other deliverables.)

Installed Programs Proof

vagrant@kali: ~

File Edit View Search Terminal Help

```
vagrant@kali:~$ hash zenmap nmap maltego wireshark
```

```
vagrant@kali:~$ hash idontexist
```

```
bash: hash: idontexist: not found
```

```
vagrant@kali:~$ hash idontexist neitherdoi
```

```
bash: hash: idontexist: not found
```

```
bash: hash: neitherdoi: not found
```

```
vagrant@kali:~$
```

UFW config proof

```
Rules updated
Firewall is active and enabled on system startup
Status: active

To Action From
--
SSH ALLOW Anywhere
224.0.0.251 mDNS ALLOW Anywhere
443 ALLOW Anywhere
80 ALLOW Anywhere
21 ALLOW Anywhere
Anywhere ALLOW 10.0.0.0/24
5000:5100/udp ALLOW Anywhere
22 ALLOW 192.0.2.0
SSH (v6) ALLOW Anywhere (v6)
ff02::fb mDNS ALLOW Anywhere (v6)
443 (v6) ALLOW Anywhere (v6)
80 (v6) ALLOW Anywhere (v6)
21 (v6) ALLOW Anywhere (v6)
5000:5100/udp (v6) ALLOW Anywhere (v6)
```

Raw data/graphs/CSV

- See other files in the ZIP file for raw data/graphs/CSV files