

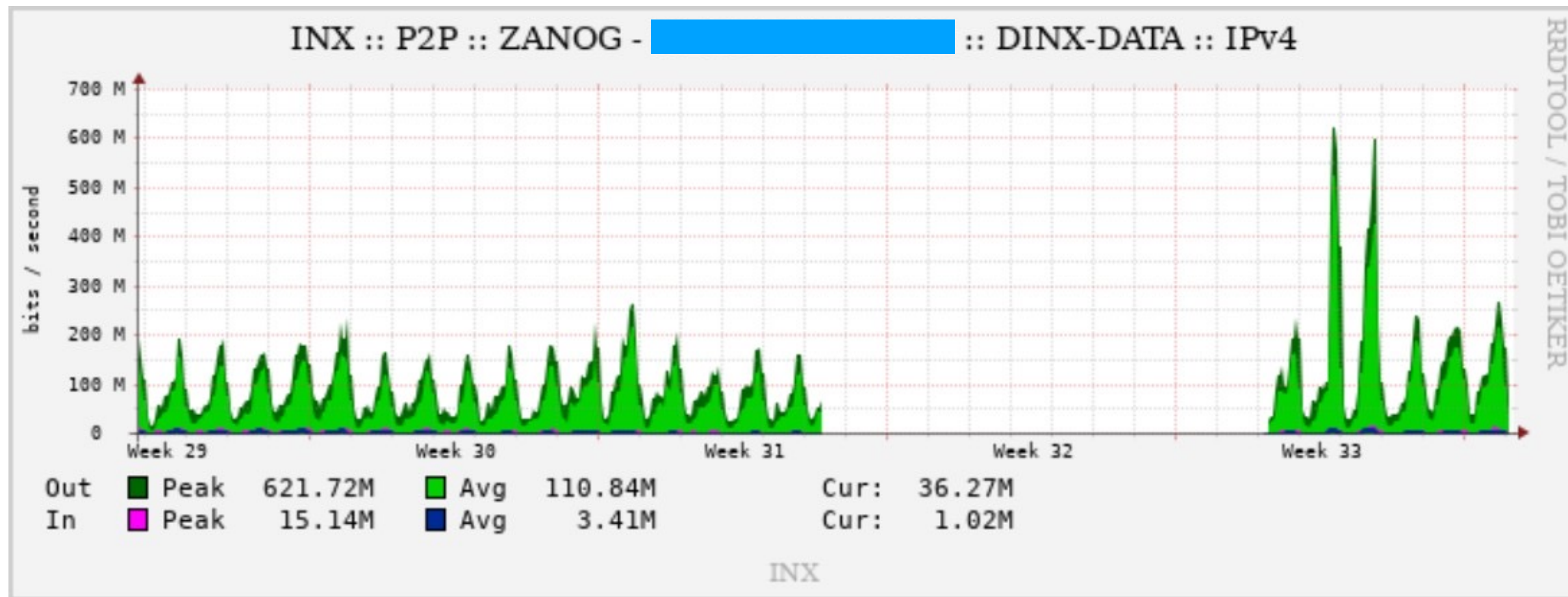
Anonymising *flow

“With whom am I changing traffic”



- Professional flow tools are often expensive / de-prioritised by smaller operators.
- Some (operator) solutions are incredibly privacy invasive.

And yet ..



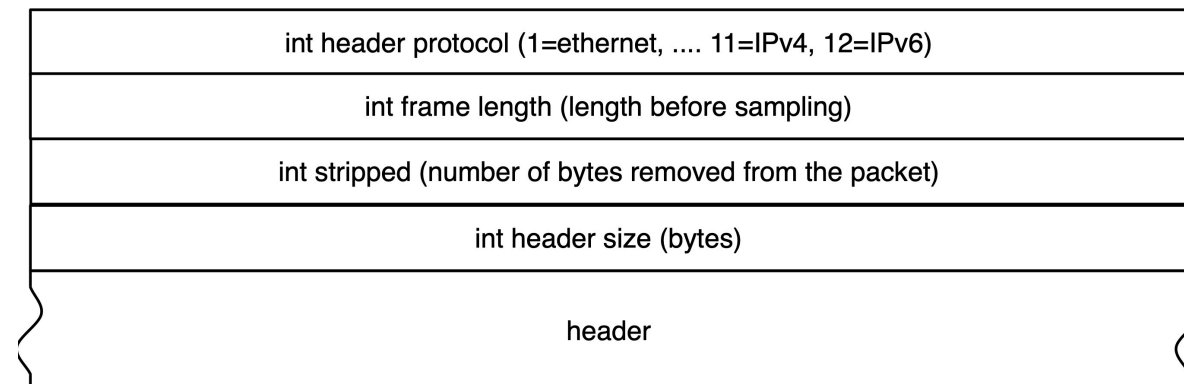
Being able to show peer-to-peer statistics is a fantastic value add to small and medium sized peers.

Protect the PII

- INX produces peer-to-peer statistics at all our IXPs. (s/o to @ixpmanager team)
- Statistics are produced from *sampled* sflow exports.
- No PII is ever stored / saved; and of course, no payload information is ever seen.

sFlow Samples Flow Data

enterprise = 0, format = 1 Raw Packet Header == packet data header + stripped length



How do we do better?

- We'd like to provide better analysis to peers. This may mean working with external partners.
- We don't want to expose any PII.



What if ...

- .. we removed the 8bits (IPv4) or last 64 bits (IPv6) in the flow export process?
- ie. 198.51.100.**1** <-> 203.0.113.**1** became
198.51.100.**0** <-> 203.0.113.**0**
- 2001:db8:100:d351:**b0b3:193a:9087:ea35** <->
2001:db8:900:3193:**3fb7:55a7:dcda:ccaf** became
2001:db8:100:d351::**0** <-> 2001:db8:900:3193::**0**

More questions than answers



- As a community-IX, we don't really have on-staff developers
- What if other IXPs wanted to do something similar?
- How do we make this work in the long term?

sflowtool -a

- <https://github.com/cyberstormdotmu/sflowtool>
- “-a” introduces the anonymisation feature
- IN PRODUCTION today!