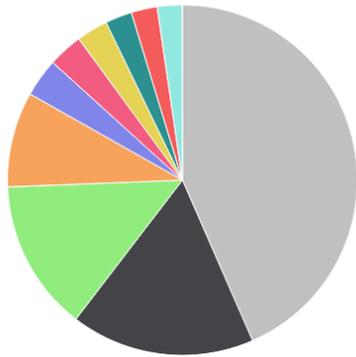


Using NetFlow/IPFIX for Incident Response with opFlow

When a network breach is detected you need to take action, you don't have time to look over terabytes of packet data. You and your team need know when and where the incident occurred. NetFlow data provides valuable information about all network activity, this data can be very useful for incident response and can help you detect if your network has been compromised. opFlow is well equipped to read and organize flow data to help you quickly understand when breaches occur and where to take action.

When logging into opFlow the default landing page is the Top 10 App Sources. This page displays information in a visually pleasing way notifying you of the top application/sources of flow data. You may be able to detect a breach simply by noticing an unusual or unrecognized application/source on this page. However, there is a much more detailed way in detecting a breach.



Top 10 App Sources

Source	Application	Bits	Pkts
Other	Other	516,764,552	395,504
magni.opmanteck.com	UDP:32760	202,266,776	76,107
kraken.opmanteck.com	UDP:32760	165,983,064	63,971
eight.opmanteck.com	snmp	104,851,816	81,936
thor	snmp	41,964,744	30,962
thor	https	38,063,048	11,336
media-router-fp1.prod.media.vip.tp2.yahoo.com	https	34,437,968	3,122
demo.opmanteck.com	ICMP:Echo Request	29,584,128	44,024
irukandji.opmanteck.com	UDP:32760	28,615,392	21,100
a118-215.112-27.deploy.akamaitechnologies.com	https	27,382,768	2,515

Showing 1 to 10 of 10 entries

Figure 1 - Top 10 App Sources

In opFlow, navigate to menu -> Views -> TopN. The TopN feature can display the top Applications, Top Application Sources, Top Application Conversations, Top Listeners, Top Protocols, Top Talkers, and Top TOS. Select the Top Application Conversations and you will see what device or interface is sending and receiving the most packets. For example, in **Figure 2** below flow data captured the Source, Destination, Application, Port, as well as the number of Flows and Packets. Using this information it would be easy to identify a DoS attack on your network by identifying unusually high numbers of Flows/Packets being sent from an untrusted source. You can use NetFlow/opFlow along with DNS records to help you detect malicious traffic such as suspicious VPN requests or requests to .gov and .edu sites when you should not have traffic from there. Noticing these types of activities early will decrease your incident response time or possibly prevent an incident entirely.

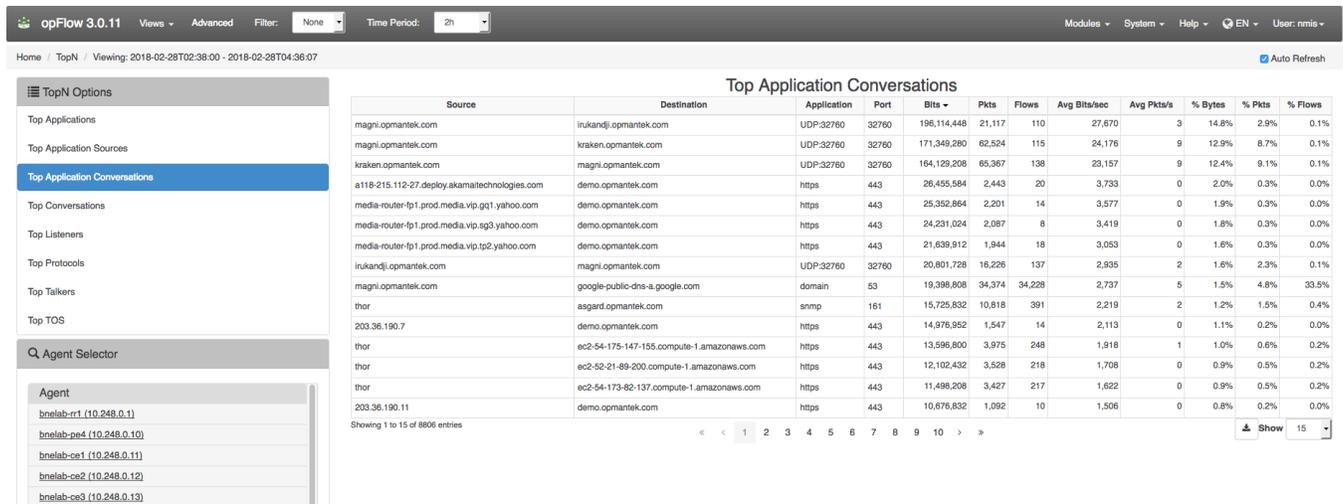


Figure 2 - Top Application Conversations

Information on detecting DoS attacks can be found [HERE: Detect DDoS attacks with opFlow](#)