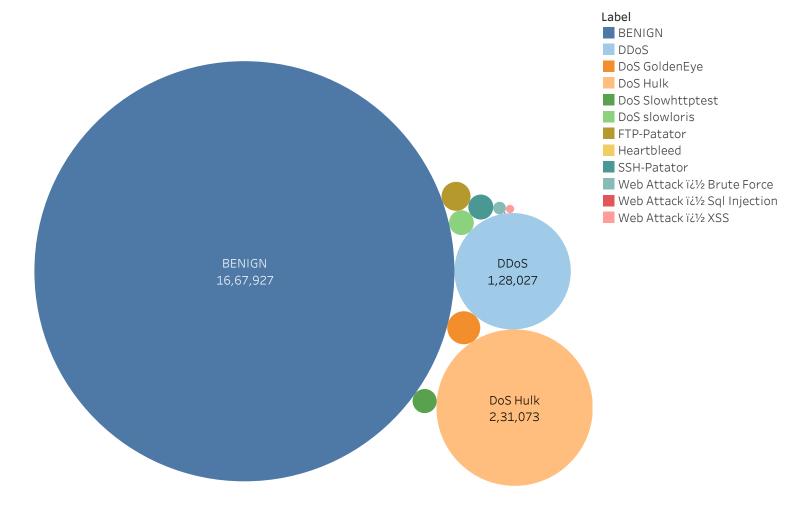
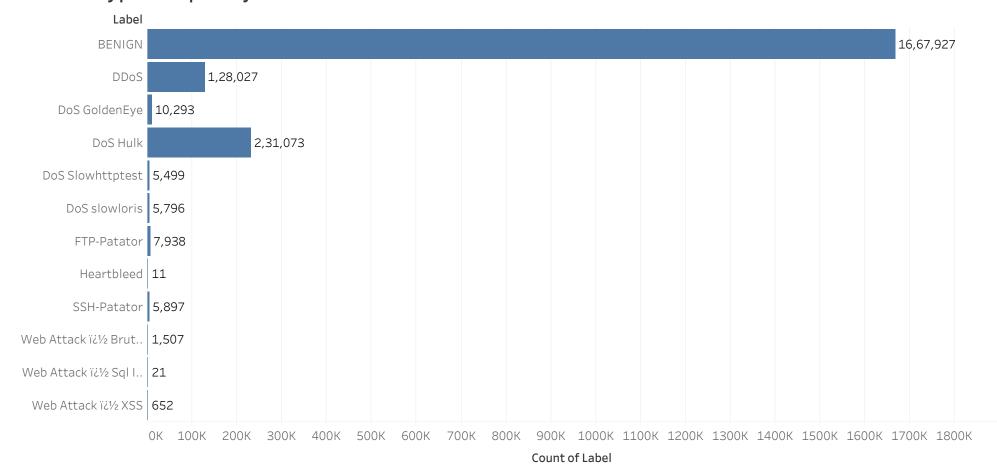
Types of Attack



Types of Attack:

- 1. Color shows details about Label. Size shows count of Label.
- 2. These are the 12 Types of Attacks occured everyday from Monday to Friday: BENIGN, DDos, DoS GoldenEye, DosHulk, DoS Slowhttptest, DoS slowloris, FTP-Patator, Heartbleed, SSH-Patator, Web Attack Brute Force, Web Attack SQL Injection, Web Attack XSS.

Attack Type Frequency



Attack Type Frequency:

- 1. From the above chart, we can see that the frequency of Benign attacks is more as compared to others i.e. 16,67,927.
- 2. The frequency of the Heartbleed attack and Web Attack SQL Injection are the lowest i.e. 11 and 21 respectively.

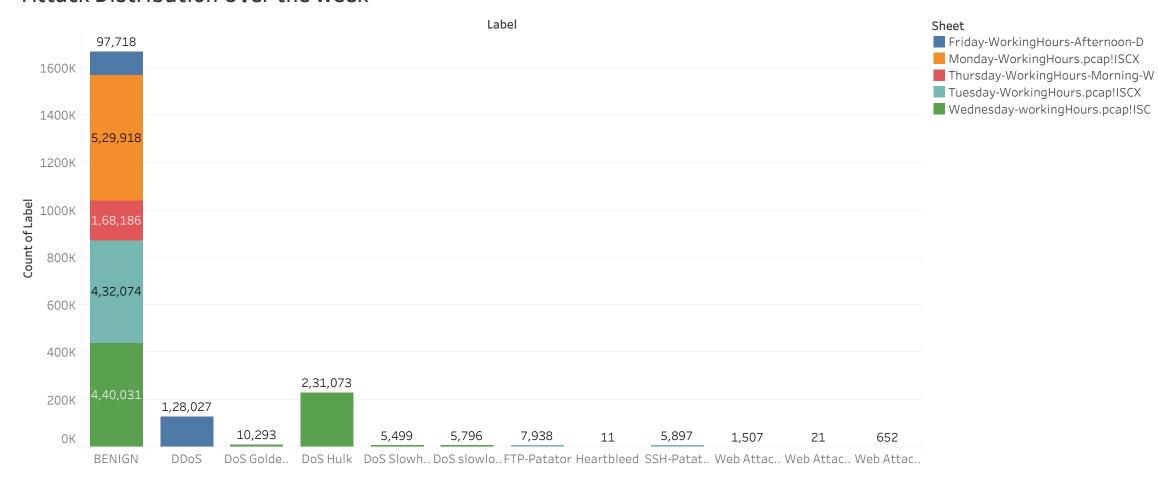
Average Packet size

Heartbleed 1,627		DoS Hulk 640	DoS GoldenEye 542	Avg. Average Pacl	
DDoS 823		Web Attack ïż⅓ Sql Injection 186	BENIGN 130		
025					
		DoS Slowhttptest 180	DoS slowloris 56		

Average Packet Size:

- 1. Color shows average of Average Packet Size. Size shows average of Average Packet Size.
- 2. The marks are labeled by Label and average of Average Packet Size. Highest Average packet size is for the Heartbleed Attack i.e. 1,627 and the Least Packet size is 12 for the FTP-Patator Attack.

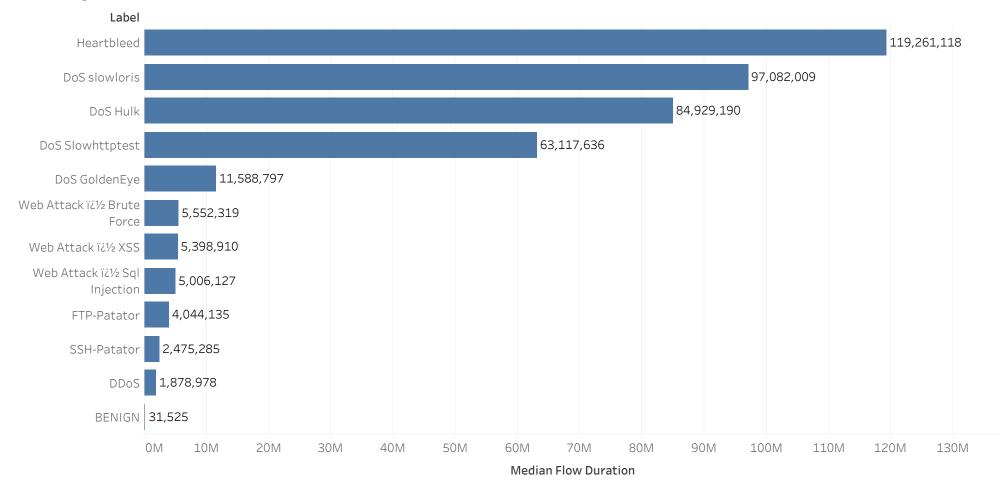
Attack Distribution Over the week



Attack Distribution Over the Week:

- 1. The above chart shows the Count of attacks made from Monday to Friday.
- 2. It is clearly seen that Benign attacks has occurred predominantly. As per the graphical representation, the most number of total attacks have occurred on Wednesday. i.e the highest being the Benign with 4,40,031, DoS GoldenEye 10,293, DoS Hulk 2,31,073, DoS Slowhttptest 5.499, DoS Slowloris 5,796 and the lowest is Heartbleed with 11.
- 3. Aldo it can be seen that the least number pf total attacks are made on Thursday, where the highest is Benign with 1,68,186 and the lowest is Web attack SQL injection with 21.

Average Flow Duration Per Attack

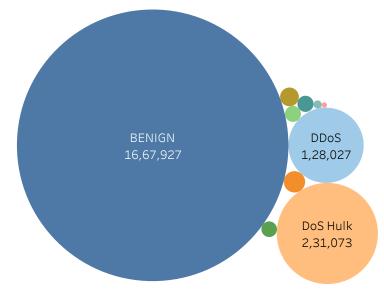


Average Flow Duration Per Attack:

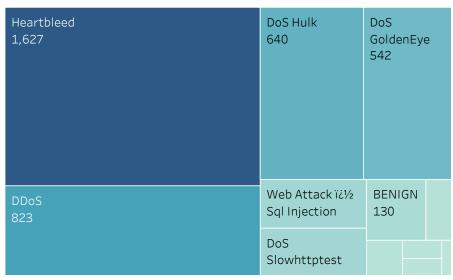
- 1. The marks are labeled by median of Flow Duration. The above is the visualization of the business aspect by analyzing the flow of duration per attack with the packet.
- 2. During the Heartbleed attack it can be seen that the packet length and size and the flow duration is the highest with 119,261,118

Label Attack Distribution Over the week Attack Type Frequency BENIGN Web Attack .. DDoS Label Label DoS Golden.. BENIGN 16,67,927 97,718 DoS Hulk DDoS 1,28,027 DoS Slowhtt.. 1500K DoS GoldenEye 10,293 DoS slowloris 5,29,918 DoS Hulk 2,31,073 FTP-Patator Heartbleed Tont 1,68,186 1,68,186 4,32,074 DoS Slowhttptest 5,499 SSH-Patator DoS slowloris 5,796 Web Attack. FTP-Patator 7,938 Heartbleed 11 Sheet Friday-Work.. Wednesday-.. SSH-Patator 5,897 Monday-Wo.. 500K Web Attack � Brut.. 1,507 Thursday-W.. Web Attack � Sql I.. 21 2,31,073 Tuesday-Wo.. 4,40,03<u>1</u>,28,027 Web Attack � XSS 652 10,293 5,499 5,796 7,938 11 5,897 1,507 0K 500K 1000K 1500K 2000K Avg. Average Packet Size BENIG.. DDoS DoS G.. DoS H.. DoS Sl.. DoS sl.. FTP-P.. Heart.. SSH-P.. Web A.. Web A.. Web A.. Count of Label 1,627

Types of Attack



Average Packet size



Average Flow Duration Per Attack

