

## **Scapy Programming Project Final Report with Foscam IP Cameras**

### **Data Set Used: For this dataset I used Foscam IP Cameras**

Of the 197 IP addresses given 187 of them were unique.

### **PART A: How many ICMP requests are responsive: 95/186**

51.08%

Of the 186 unique Ip addresses in the dataset 95 were responsive to ICMP echo requested

### **PART B: constant: 21/186 incremental: 39/186 random: 35/186**

11.3% of the addresses are constant

20.97% of the addresses are incremental

18.82% of the addresses are random

### **PART C: How many TCP requests are responsive: 39/186**

20.97% of the addresses were responsive to TCP requests

### **PART D: constant: 33/186 incremental: 4/186 random: 2/186**

17.74% of the addresses were deploying constant IP-ID values for TCP SYN requests

2.15% of the addresses were deploying incremental IP-ID values for TCP SYN requests

1.08% of the addresses were deploying random IP-ID values for TCP SYN requests

### **PART E: no cookies: 13/186 yes cookies: 24/186 no longer working: 0/186**

6.99% of the addresses are not deploying syn cookies(they sent multiple SYN ACK's back)

12.9% of the addresses are deploying syn cookies(they only on SYN ACK back)

## PART F: Likely OS system deployed on the device [Linux/Windows]:

### WHERE ONLY TTL VALUES WERE GIVEN:

FOR TTL VALUE 255: 1/186 --- 0.54% (CISCO or SOLARIS)

FOR TTL VALUE 128: 0/186 --- 0% (WINDOWS)

FOR TTL VALUE 64: 56/186 --- 30.11% (LINUX)

### WHERE TTL AND WINDOW VALUES WERE GIVEN:

FOR TTL VALUE 64: 35/186 --- 30.11% (LINUX)

FOR TTL VALUE 255: 2/186 --- 0.54% (CISCO or SOLARIS)

### ALL PARTS TOGETHER STATISTICS:

FOR TTL VALUE 255: 3/186 --- 1.61% (CISCO or SOLARIS)

FOR TTL VALUE 128: 0/186 --- 0% (WINDOWS)

FOR TTL VALUE 64: 91/186 --- 48.92% (LINUX)

TTL	WINDOW SIZE	POSSIBLE OS:
55	8192	PROBABLY LINUX
50	8192	PROBABLY LINUX
49	8192	PROBABLY LINUX
54	8192	PROBABLY LINUX
45	64240	PROBABLY LINUX
55	8192	PROBABLY LINUX
52	0	PROBABLY LINUX
43	1460	PROBABLY LINUX
55	59120	PROBABLY LINUX
55	8192	PROBABLY LINUX
54	8192	PROBABLY LINUX
39	28280	PROBABLY LINUX
43	0	PROBABLY LINUX
49	8192	PROBABLY LINUX
52	1460	PROBABLY LINUX
50	1460	PROBABLY LINUX
242	8192	SOLARIS or CISCO
53	8192	PROBABLY LINUX
50	8192	PROBABLY LINUX
50	8192	PROBABLY LINUX
54	8192	PROBABLY LINUX
241	0	SOLARIS or CISCO
55	8192	PROBABLY LINUX
44	64240	PROBABLY LINUX
50	8192	PROBABLY LINUX
54	0	PROBABLY LINUX
43	28280	PROBABLY LINUX
54	8192	PROBABLY LINUX
49	1460	PROBABLY LINUX
51	1460	PROBABLY LINUX
48	0	PROBABLY LINUX
52	8192	PROBABLY LINUX
45	64240	PROBABLY LINUX
44	1460	PROBABLY LINUX
54	8192	PROBABLY LINUX
45	64240	PROBABLY LINUX
49	0	PROBABLY LINUX