

OARnet
An OH-TECH Consortium Member

## DDoS Trends 2015

**Kevin Nastase** 

OARsec

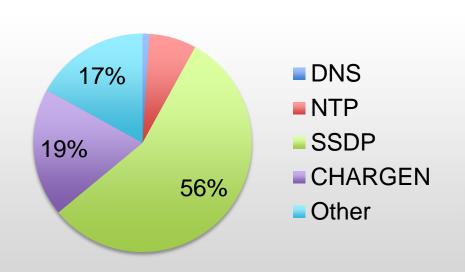
June 10, 2015



#### **Attacks**

- UDP Amplification
  - SSDP
  - NTP
  - DNS
  - CHARGEN
- TCP SYN Floods
- Combination of both

#### **Protocol Usage**



Commodity Internet AND Internet2





#### Fun Facts

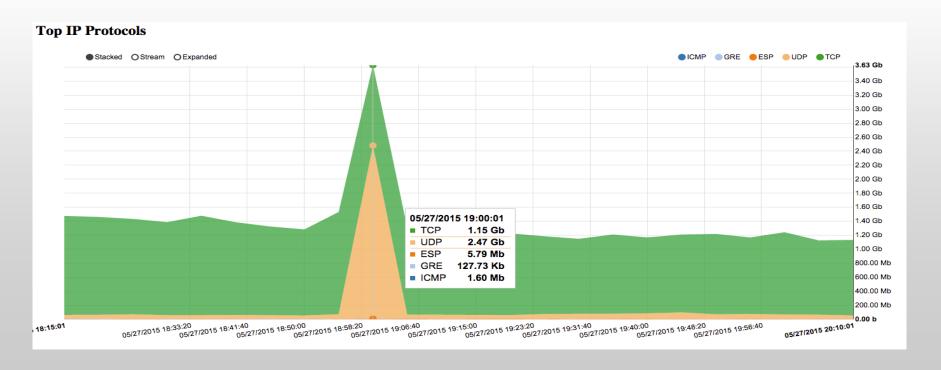
- Common Targeted Ports:
  - -0,53,123,80,443,3074
- Largest Attack:
  - 7.9 Gbps (SSDP)
- Longest Attack:
  - 5 hours
- Top Source AS:
  - 4134 (ChinaNet)





#### **Detection**

- Netflow
  - Sampled







# **OARnet Mitigation Techniques**

- IP filtered at customer edge (Black hole)
  - Discard all packets destined for IP
- Protocol/IP/Port discard or police
  - Granular packet filtering
- RTBH
  - Requires setup by both parties
  - Send host route with BGP community to activate







### Questions

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