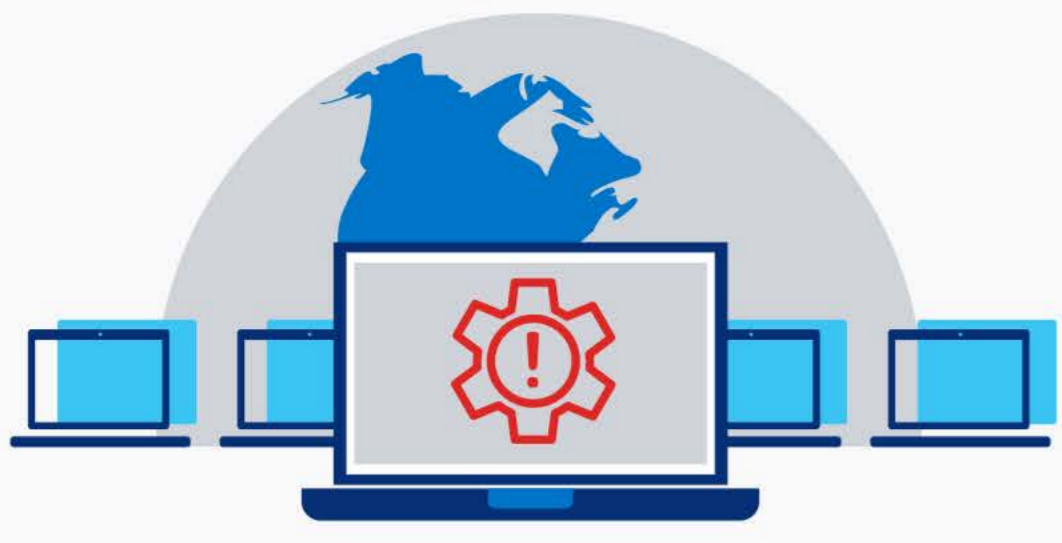


# Q4 2021 DDoS Attack Trends

Q4 saw a 17% quarterly increase in DDoS botnet hosts



## Command & Controls (C2s)

The brain of a botnet that issues the commands to launch DDoS attacks.

Total: **1,700+**

### Top 3 countries:

- United States - 554
- The Netherlands - 266
- Canada - 197



## DDoS botnet hosts

Total: **250,000+**

### Top 3 countries:

- Mexico - 45,719
- Brazil - 41,616
- India - 25,304

Q4 saw a 56% increase in unique C2s tracked for pervasive DDoS botnets Gafgyt and Mirai

Unique C2s tracked

Unique attack victims per family

Average lifespan of a C2 (in days)



	Unique C2s tracked	Unique attack victims per family	Average lifespan of a C2 (in days)
Gafgyt	507	1,117	36
Mirai	480	21,140	12

## Q4 2021 DDoS attack stats

The largest bandwidth attack Lumen scrubbed



**499 Gbps**

The largest packet rate-based attack Lumen scrubbed



**60 Mpps**

Average DDoS attack period Lumen mitigated



Longest DDoS attack period Lumen mitigated



**54%** of DDoS attack-period durations were **>30 minutes**



Single-vector attacks represented

**65%** of all DDoS attacks



**UDP-based amplification**

was the **#1** attack method, a **60% QoQ** increase

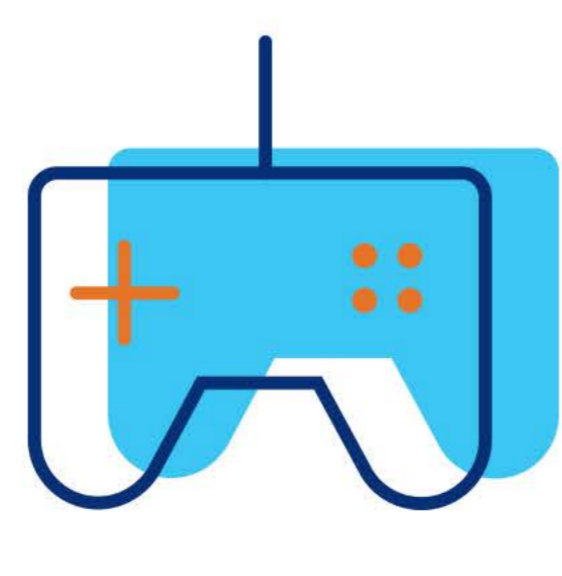
### What is UDP-based amplification?

These attacks aim to consume available bandwidth and have proven to be quite powerful with the ability to wield attacks multiple times the size of the initial bytes sent.

## Top 5 verticals targeted in the 500 largest attacks



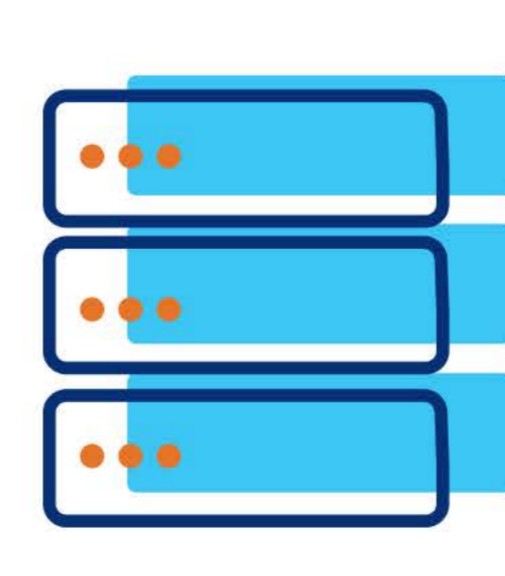
Telecomm  
54%



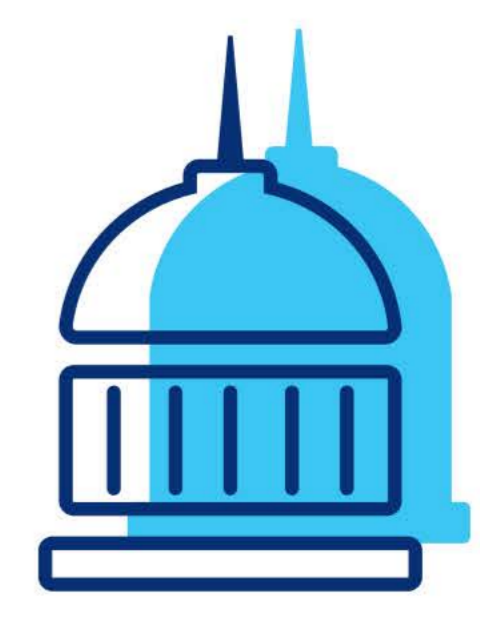
Gaming  
13%



Software & Technology  
10%



Hosting  
6%



Government  
6%

See how DDoS threats evolved over 2021 by reading the full report from Lumen and Black Lotus Labs®.

[READ THE FULL REPORT NOW](#)