



KEY METRICS FROM THE 1H 2021 NETSCOUT THREAT INTELLIGENCE REPORT

TAIWAN

The massive shift to online life triggered by the COVID-19 pandemic prompted record-breaking levels of innovation by threat actors, and NETSCOUT's ATLAS Security Engineering and Response Team (ASERT) expects this long tail of attacker innovation to last well into 2021.

Bad actors launched approximately 5.4 million DDoS attacks in 1H 2021—yet another record-breaking number. In particular, attackers launched unprecedented numbers of DDoS attacks in the first quarter, boosting attack frequency by 20 percent over the same time period in 2020. Meanwhile, adversaries discovered or weaponized seven UDP reflection/amplification DDoS attack vectors and developed adaptive multivector attacks specifically tailored to exploit vulnerabilities of their targets. Vital components of the connectivity supply chain came under increased attack, while ransomware gangs added triple-extortion DDoS tactics to their repertoire and the Fancy Lazarus threat actor launched a new DDoS extortion campaign.

Max Multivector Attack

Max number of vectors seen in a single attack

20

ATTACK VECTORS USED

1. Chargen amplification
2. DNS
3. DNS amplification
4. ICMP
5. ISAKMP
6. L2TP amplification
7. MDNS amplification
8. Memcached amplification
9. MSSQLRS amplification
10. NetBIOS amplification
11. NTP amplification
12. OpenVPN amplification
13. rpcbnd amplification
14. SNMP amplification
15. SSDP amplification
16. STUN amplification
17. TCP ACK
18. TCP RST
19. TCP SYN
20. TCP SYN/ACK amplification

Top 5 Attack Vectors

Ta TCP ACK	Ts TCP SYN	Tr TCP RST	Tk TCP SYN/ACK	Im ICMP
NUMBER OF ATTACKS 13,658	NUMBER OF ATTACKS 13,511	NUMBER OF ATTACKS 13,225	NUMBER OF ATTACKS 11,268	NUMBER OF ATTACKS 9,979

DDoS Statistics

Attack Frequency	+101%
Max Throughput	+216%
Average Duration	+125%
Max Attack Size	+88%

Largest Attack

Size	191.04 Gbps
Speed	90.38 Mpps
Duration	2,264 Seconds

Max Peak Throughput

Date	01/01/2021
Max Throughput	273 Mpps

Max Peak Bandwidth

Date	05/01/2021
Max Bandwidth	407 Gbps



Top Ten Vertical Industries Under Attack

The following chart shows a sampling of the most targeted sectors in 1H 2021 by number of attacks.

RANK	VERTICAL	FREQUENCY	MAX ATTACK	MAX IMPACT	AVERAGE DURATION
1	 Wired Telecommunications Carriers	3,185	100.29 Gbps	87.72 Mpps	53.6 Minutes
2	 Internet Publishing, Broadcasting + Web Search Portals	695	90.18 Gbps	7.94 Mpps	57.7 Minutes
3	 Computer Training	174	6.11 Gbps	2.29 Mpps	35.0 Minutes
4	 Semiconductor + Related Device Manufacturing	151	25.99 Gbps	5.95 Mpps	65.7 Minutes
5	 All Other Telecommunications	100	64.82 Gbps	16.11 Mpps	34.4 Minutes
6	 Data Processing, Hosting + Related Services	93	166.93 Gbps	20.86 Mpps	36.8 Minutes
7	 Tire Dealers	43	5.69 Gbps	1.17 Mpps	18.3 Minutes
8	 Wireless Telecommunications Carriers (except Satellite)	37	0.84 Gbps	0.12 Mpps	12.8 Minutes
9	 Electronic Computer Manufacturing	36	1.34 Gbps	0.17 Mpps	70.2 Minutes
10	 All Other Professional, Scientific + Technical Services	2	0.31 Gbps	0.05 Mpps	12.0 Minutes

The Big Picture

Explore the full 1H 2021 NETSCOUT Threat Intelligence Report to find the latest research into trends and activities across the global DDoS threat landscape.

[VIEW THE INTERACTIVE REPORT](#)

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