



DDoS Protection

Stop DDoS attacks before they impact your business



DDoS - Distributed Denial of Service

- 1) How often do DDoS attacks happen?
- 2) How much does the average DDoS attack cost?
- 3) How do you prevent a DDoS attack?

DDoS attacks are growing in number

DDoS attacks have become the number one threat to the availability of business networks, applications and services

DDoS attacks have increased **341%** since the start of the pandemic.

By 2023, we're likely to see over **15 million** DDoS attacks.

Approximately **30,000** DDoS attacks occur every day

DDoS Attacks can Cripple Businesses

How DDoS attacks work:

- Attackers send a large amount of illegitimate traffic down your IP circuit
- This traffic clogs your circuit and fills it completely, leaving no spare bandwidth for legitimate traffic to pass
- Targets include web servers, DNS servers, application servers, routers, firewalls, Internet bandwidth, and other network elements
- DDoS attacks are often used to distract for a larger cybercrime
- Can be perceived as an IP failure

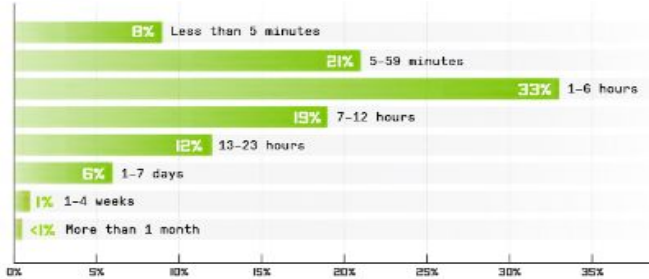
54% of enterprises report **firewall failure** during a DDoS attack.

A DDoS attack costs your business **\$30,000** hourly.

91% of enterprises report completely saturated Internet bandwidth during a **DDoS Attack**

Customer Economics of Zayo DDoS Protection

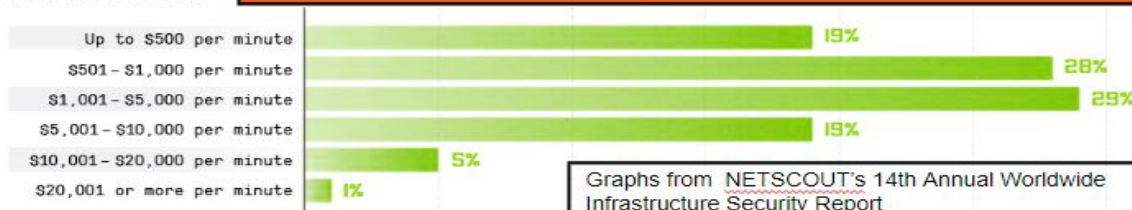
FIGURE 13
DDoS ATTACK DURATION



- 50% of DDoS attacks are about 2 Hrs.
- At \$1,000 per minute the cost of an attack is \$120K
- 64% of survey reported 1-10 DDoS Attacks in 2018
- 5 attacks: \$600K

- Speed is critical to DDoS mitigation
- Always on mitigation service of Zayo Advanced Option provides immediate response
- 36 Mo., 10G priced at: \$54K/yr
- Customer cost recovered in one attack
- Option provides Unlimited Scrubs
- 10G price covers 10G of aggregated DIA circuits

FIGURE 23
COST OF DOWNTIME



Zayo stops DDoS attacks at the network perimeter

The key is a network-based solution

Monitor:

Zayo continuously monitors customer traffic to determine normal traffic patterns

Restore:

After the attack is over and traffic has remained clean, Zayo returns traffic to its original path



Identify:

Advanced detection technologies predict, diagnose and trigger mitigation alerts when malicious traffic is detected

Protect:

Malicious traffic is routed to Zayo scrubbing centers and removed; only legitimate traffic passes

Zayo offers several plans

DDOS PROTECTION SUBSCRIPTION PLANS	BASIC COVER YOUR BASES WITH ALWAYS-ON MONITORING	STANDARD ALL-ROUND PROTECTION WITH NOTIFICATIONS	ADVANCED IMMEDIATE PROTECTION FOR STRESS-FREE SECURITY
CLOUD-BASED	✓	✓	✓
MONTHLY SUBSCRIPTION	✓	✓	✓
PROACTIVE MONITORING	✓	✓	✓
INCIDENT NOTIFICATION	✓	✓	✓
INCIDENT REPORTING	✓	✓	✓
SCHEDULED REPORTING	NO	✓	✓
PORTAL ACCESS	NO	✓	✓
MITIGATION TYPE	PER-INCIDENT	AUTHORIZED MITIGATION	AUTOMATIC MITIGATION & SELF MITIGATION
SCRUBBING COST	PER-INCIDENT FEE	UNLIMITED/INCLUDED	UNLIMITED/INCLUDED

Conclusion Q/A

1) How often do DDoS attacks happen?

Approximately 30,000 DDoS attacks happen daily.

2) How much does the average DDoS attack cost?

DDoS Attacks can cost about 60K for a one hour attack or as much as \$250K or more depending on the duration of the attack. The tables below suggest a way to build the cost of an attack based on the cost of downtime and the duration of an attack.

3) How do you prevent a DDoS attack?

DDoS Attacks are very sophisticated, intense, increasing in frequency and duration. DDoS Attacks are so prevalent that in the current environment they require specialized services to protect a network environment. Firewalls are targeted as much as any other device or network service. They are often not sufficient to protect against attacks.