

Example How many packets are needed?

HOW MANY PACKETS ARE NEEDED?

❑ **Example 1:** In a DoS attack using ICMP Echo Request (ping) packets of 500 bytes in size are sent to flood a target organization.

❑ The numbers of packets sent by the attacker to launch a successful DoS attack will depend on speed of the link.

1. On a 1.5 Megabit per second (Mbps) link

❑ $1500000 / (500 * 8) = 375$ packets per second.

2. On a 2 Mbps link

❑ $2000000 / (500 * 8) = 500$ packets per second.

3. On a 10 Mbps link

❑ $10000000 / (500 * 8) = 2500$ packets per second

4. On a 100 Mbps link

❑ $100000000 / (500 * 8) = 25000$ packets per second

Solution ① 500 ^B bytes = 500 x 8 bits
1.5 Megabit/s Mbps

$$\frac{1.5 \times 10^6}{500 \times 8} = 375 \text{ packets}$$

$$\textcircled{2} \frac{2 \times 10^6}{500 \times 8} = 500$$

$$\textcircled{3} \frac{10 \times 10^6}{500 \times 8} = 2500$$

$$\textcircled{4} \frac{100 \times 10^6}{500 \times 8} = 25000$$