EECS710: Information Security and Assurance

Professor Hossein Saiedian Fall 2014

Assignment 6: Denial of Service Attacks

Points: 20

Due: 10/09/2014

In order to implement a DNS amplification attack, an attacker must trigger the creation of a sufficiently large volume of DNS response packets from the intermediary to exceed the capacity of the link to the victim organization. Consider an attack where the DNS response packets are 500 bytes in size (ignoring framing overhead). Howe many of these packets per second must the attacker trigger to flood a target organization using a 0.5 Mbps link? Or 2 Mbps link? Or 10 Mbps link? If the DNS request packet o the intermediary is 60 bytes in size, how much bandwidth does the attacker consume to send the necessary rate of DNS request packets for each of these three cases?