**TCP/IP Attack- Task 1**

Completed by Eric Adamian

VirtualBox IP addresses:

|  |  |  |  |
| --- | --- | --- | --- |
| Virtual machine: | ClientVM | ServerVM | AttackerVM |
| IP address: | 10.0.2.4 | 10.0.2.5 | 10.0.2.6 |

Test: Ping IP address (existing VM):

A close up of a newspaper

Description automatically generated

**Observation:** 0% packet loss

Test: Ping IP address(non-existent VM):

A screenshot of a cell phone

Description automatically generated

**Observation:** 100% packet loss

**Task 1: SYN Flooding Attack**

Explanation: Using Netwox 76 tool so that the client VM cannot connect to server VM

**Step 1:** Ensure proper IP address (server VM)

A screenshot of a computer

Description automatically generated

**Step 2:** Test telnet connection; ensure it is successful (client VM)

A screenshot of a cell phone

Description automatically generated

**Step 3:** Disable SYN cookies, the defense mechanism against attacker VM (server VM)

A screenshot of a computer

Description automatically generated

**Step 4:** Launch attack through attacker VM; uses Netwox 76 tool with port 23 (attacker VM)

A screenshot of text

Description automatically generated

**Step 5:** Test telnet connection between client and server VM

A screenshot of a computer

Description automatically generated

**Observation**: client VM unable to connect to server VM; **SYN flooding attack successfully launched**