Psyber Threat

Introduction

PsyberThreat is a 2-player board game that teaches about cybersecurity. One player plays as a defender and the other player plays as an attacker in a cyber war. The objective for the attacker is to destroy the network using viruses or a hidden bomb. The goal for the defender is to build a complete network and protect it from the attacker.

Network Component Capabilities

Virus: The virus infects the network of all computers which are connected to the virus in a continuous path that does not include a firewall. The infected computers become part of a botnet and capable of launching a Distributed Denial-of-Service (DDoS) against all computers in the virus' range. The red and blue shadow areas shown on the right is a virus' attacking range.
Firewall: The firewall breaks the path of computers infected by a virus.
Honeynet: If one of the computers in the connected path of a virus is a honeynet, then the virus is deactivated and none of the connected computers are infected. The honeynet can deactivate 4 viruses at most. If there are more viruses infecting the area, four of the closest viruses are deactivated. If distances are the same, the two players can negotiate a way to choose one randomly.

How to Play

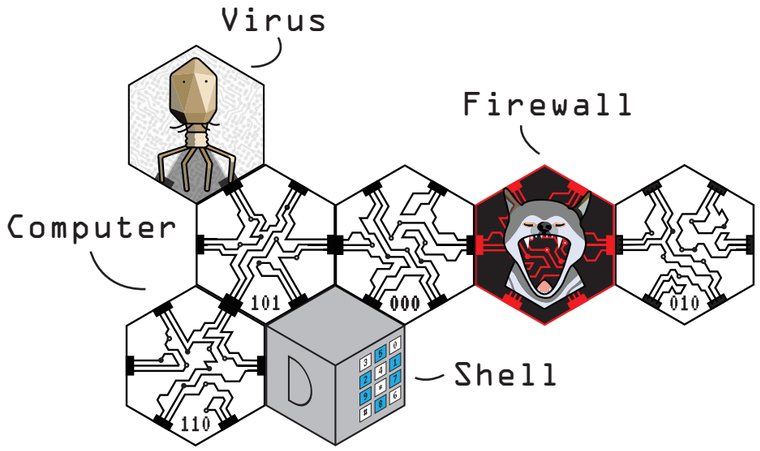
Construction Stage

Each player has 11 network components. The defender has 7 computers and 4 firewalls. The attacker has 6 viruses and 5 shells.
At the beginning of the game, the attacker selects one of the shells to place the bomb inside. And the defender selects one of the computers as a honeynet. Each player is not aware of the opponent's choice.
The game begins with the defender placing one of the computers in the middle of the table. Then the two players alternate turns, connecting pieces to the existing pieces on the table one by one. After all the pieces are placed, the defender selects one of the computers (other than honeynet) as the main server. This server holds the essential information which the defender is attempting to protect.

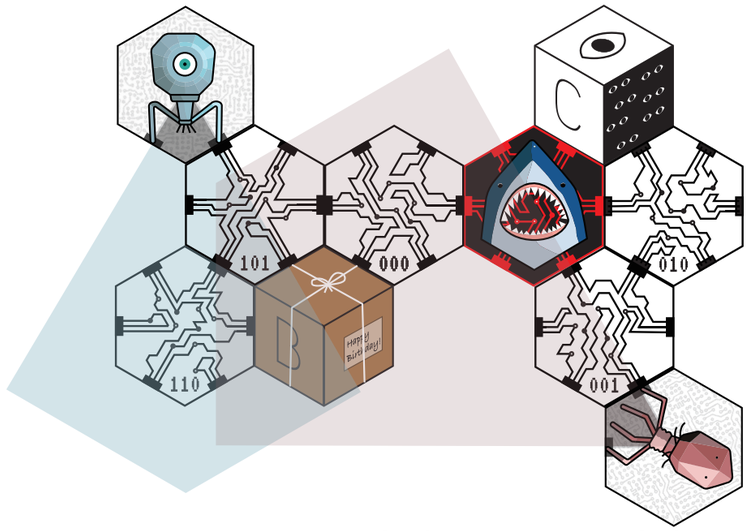
Revelation Stage

The positions of the honeynet and bomb are revealed at the end of the game. The attacker wins if the main server is placed directly adjacent to the bomb or attacked 5 times by the viruses (DDoS). The defender wins if the main server is connected to all the other computers (firewalls can also be counted as part of the connection) and not attacked by the attacker.

Examples



In this case, computer **110**, **101**, **000** become zombie computers of the blue virus, while computer **010** is not be controlled by the blue virus because of the firewall.



In the case, computer **101** is in both the range of the blue virus and the red virus. Computer **101** is attacked 3 times by 3 zombie-computers of the blue virus and 2 times by 2 zombie-computers of the red virus.

So computer **101** is attacked 5 times in total (the computer can attack itself when controlled by viruses).
Computer **000** is attacked twice because it's only in the range of the red virus.
If computer **110** turns out to the honeynet, the blue virus is deactivated and removed from the board..