



Cyber Threat Defender

Cyber Threat Defender™ | The Collectible Card Game

Introduction

In Cyber Threat Defender (CTD), the cybersecurity collectible card game, the goal is to build your network as quickly as possible so you can “do more business” and gain more points. While you are doing this, you have to remember to defend your network because your opponent is going to try and disrupt your systems and network. For every attack there is a defense. For every defense there is an attack to get around it. The player with the most complete set of security defenses will be the one who is able to protect their critical systems and emerge victorious.

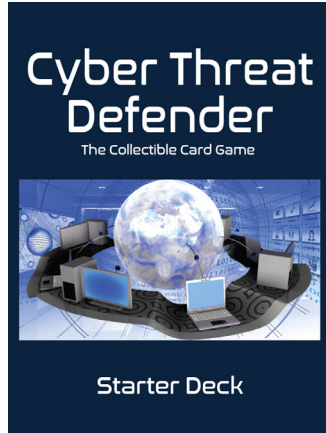
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Preparation

- A. You will need to have paper and pencil, or some other way to keep track of scores.
- B. All players will need to have their own CTD deck of at least 50 cards.
- C. Players may add to their CTD deck by way of booster cards. Customizing is allowed.
- D. See the Player Options section for alternative ways to play the game.



Game Objectives

- A. The game is played until a player obtains at least 30 points. If both players reach 30 points during the same round, then the player with the highest total wins. If both have the same total after reaching 30 points in the same round, the game continues until one player has more points than their opponent (with more than 30 points).
- B. If a player has no cards in their deck and they must draw a card, they lose the game.
- C. If a player has -45 points or less at the end of a round, they lose the game.
- D. Points are calculated at the end of each round.

Game Over

DefenderBot	WINNER: ChaoticBot
Points Earned	Points Earned
18	35
OK	

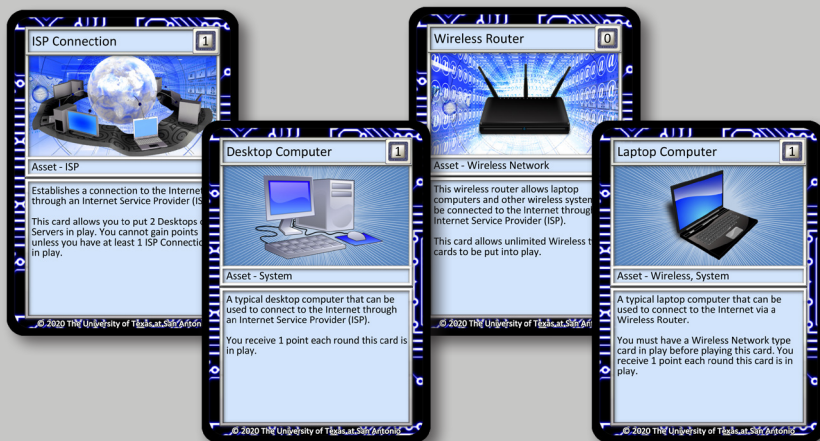
Note: Image taken from PC Version of Cyber Threat Defender.



CTD Card Types

Asset Cards

These are your primary cards to build your network infrastructure. They represent the core of your physical assets you would encounter in a business or organization. Your starting cards are the foundation of your network.



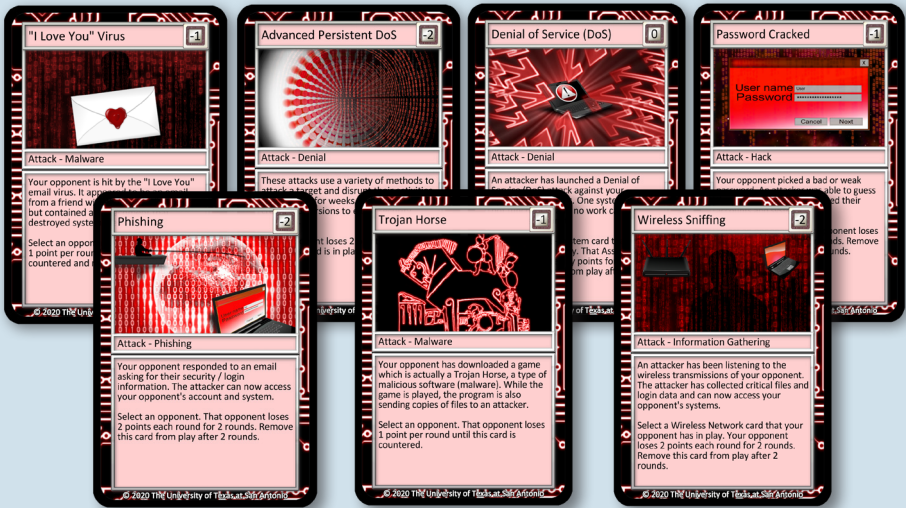
Defense Cards

These cards are utilized to protect your network just as you would at home or in an organization. Defenses must be kept up to date. Failure to do so could have significant consequences for your network.



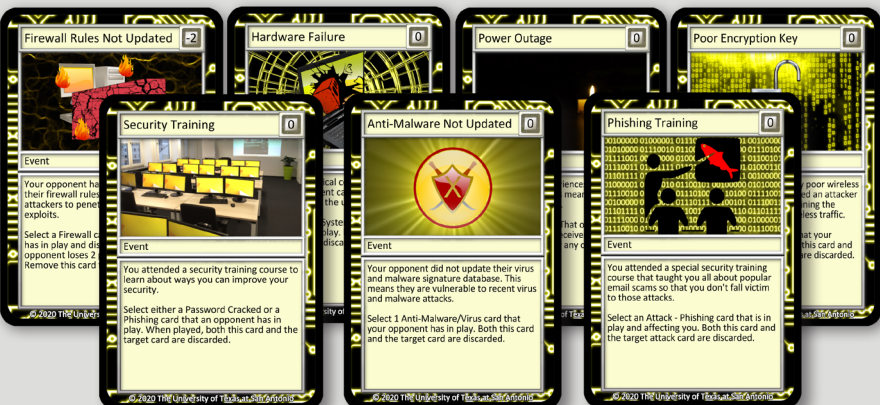
Attack Cards

These cards represent the various disreputable forces that exist on the Internet today and not the player playing the card. Each of these cards can be protected against with proper use of your defense cards.



Event Cards

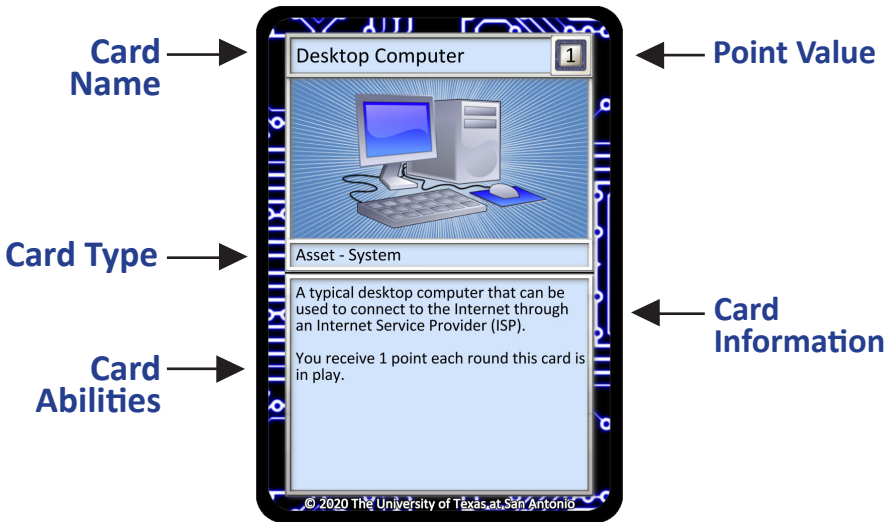
These cards can help or hinder your network. These are various scenarios or events that take place in the real world. Carefully played, these cards can lead to a winning strategy. **NOTE: Events cards can be played at any time, except during scoring, and there is no limit to the number that can be played per turn. Additionally, Event cards are not counted as part of the three cards that can be played during a turn.**





Anatomy of a Card

A description of information found on a typical playing card:



Game Setup

- A. Each player places one (1) **Asset - System** and one (1) **Asset - Service Provider** card face up on the table to start their network. (*see figures to right*) From the starter deck, the Desktop Computer and ISP Connection are your starting network, which you must defend.
- B. Players then shuffle the rest of their cards and deal themselves 7 cards. The remaining cards are placed face down in the Draw Pile. A Discard Pile will be placed next to the Draw Pile when a card is discarded.
- C. Decide who will go first. The turn order will remain the same for every round of play.





Keeping Score

- A.** A round consists of one turn for each player.
- B.** At the end of each round, scores are tallied. Each player will add the points gained from cards in play.
- C.** In the images below, the active player would gain 1 Point from the Desktop Computer, 1 Point from the ISP Connection and 1 Point from the Laptop Computer that is connected to the Wireless Router. For this turn, the active player is awarded 3 Points.



Additional Player Notes

A. Sharing One Deck Between Two Players:

Cyber Threat Defender (CTD) is designed for each player to have their own deck. However, if two players have only one Starter Deck to share, they can either randomly distribute or remove one copy of each of the following cards:

Desktop Computer; Laptop Computer; OS Update/Patch; Poor Encryption Key; Security Training

The rest of the cards can be split evenly between each player.

- B.** More than two players can compete in a game of CTD. The rules are the same, but the game may take longer to complete.

C. Number of Cards Allowed Per Hand:

During a turn, a player may choose to play up to three cards or choose to NOT play any cards. They must, however, discard and draw cards. Example: A player chooses not to play any cards, but they already have seven (7) cards in their hand. **They must discard two cards and must draw two cards from their draw pile.**

D. If Your Turn is Skipped:

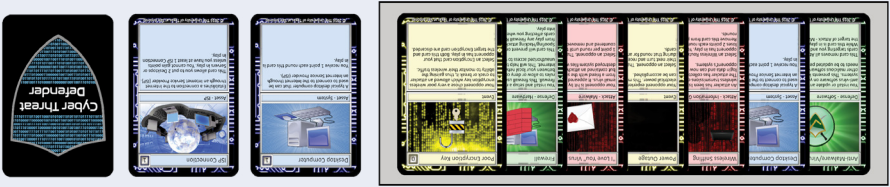
If your turn is skipped, or a card states you receive no points this round or turn, you do not receive any points for assets that you own this round. If any other card gives you points, you may keep those points. Additionally, you may still gain these points at the end of the round as normal.



A Players Turn

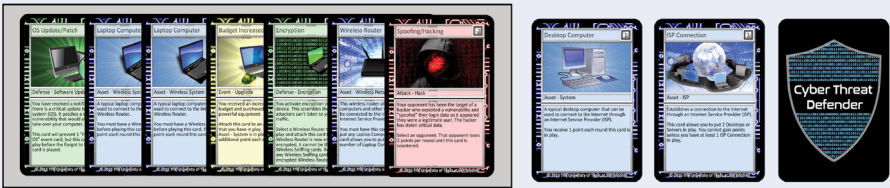
Step 1

Start of the game. Each player puts out one (1) Asset – System and one (1) Asset – Service provider card (in image below, a Desktop Computer and an ISP Connection). Players then shuffle their decks and draw seven cards. Player One goes first.



Player Two's Hand ▲

▼ Player One's Hand



Step 2

Up to three non-Event cards can be played during a turn. Player One puts a Spoofing/Hacking card into play. This counts towards the limit of three non-Event cards that can be played during the turn.

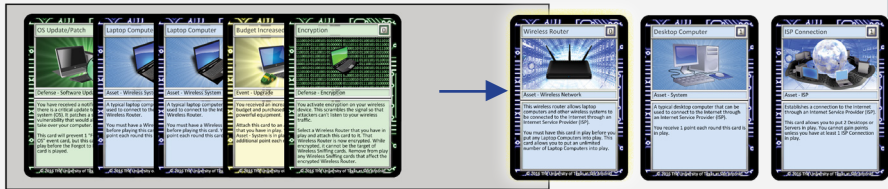


▼ Player One's Hand



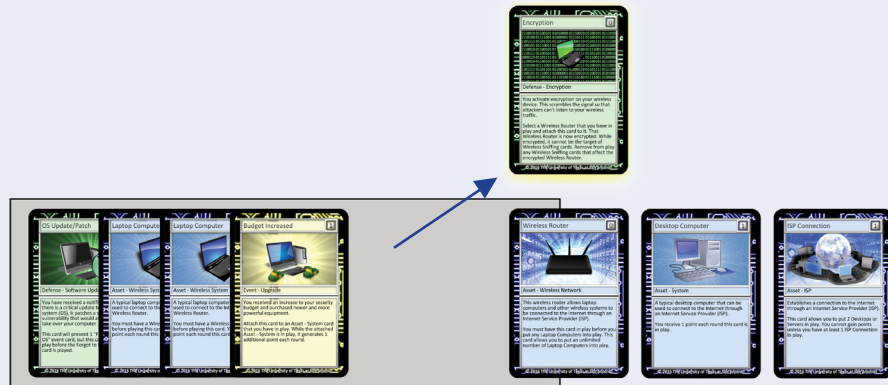
Step 3

Player One puts a Wireless Router card into play. This is the second of three non-Event cards that they can play.



Step 4

Player One puts an Encryption card into play. This is the last non-Event card that they can play.

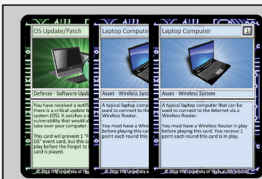




Player One uses a Budget Increased card, which is an Event card that can be played at any time and does not count toward the three card limit, and attaches it to their Desktop Computer.



Player One decides to end their turn. They do not have more than five cards in their hand, so they do not discard any cards from their hand. They proceed to draw two cards from their draw pile, and their turn ends.



Step 7

It is now Player Two's turn.



▲ Player Two's Hand



▼ Player One's Hand



Step 8

Player Two uses their Poor Encryption Key card, which is an Event card that can be played at any time, and targets the Encryption defense card of Player One.



Step 9

Per the effect of the Poor Encryption Key card, it is discarded along with its target.



Step 10

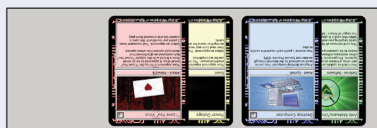
Player Two puts a Wireless Sniffing card into play (which was not usable when Player One had Encryption in play). This counts toward their three non-Event card limit.



PLAYER TWO

Step 11

Player Two puts a Firewall card into play, which removes from play any Spoofing/Hacking cards that affect the owner of the Firewall card. This is the second of three non-Event cards that they can play.



Step 12

Player Two puts an "I Love You" Virus into play. This is the last non-Event card they can play for this turn.





A Players Turn *(continued)*

Step 13

Player Two uses a Power Outage card, which will affect Player One in the next round.



Step 14

Player Two decides to end their turn. Since they do not have more than five cards in their hand, they simply draw two cards and end their turn.



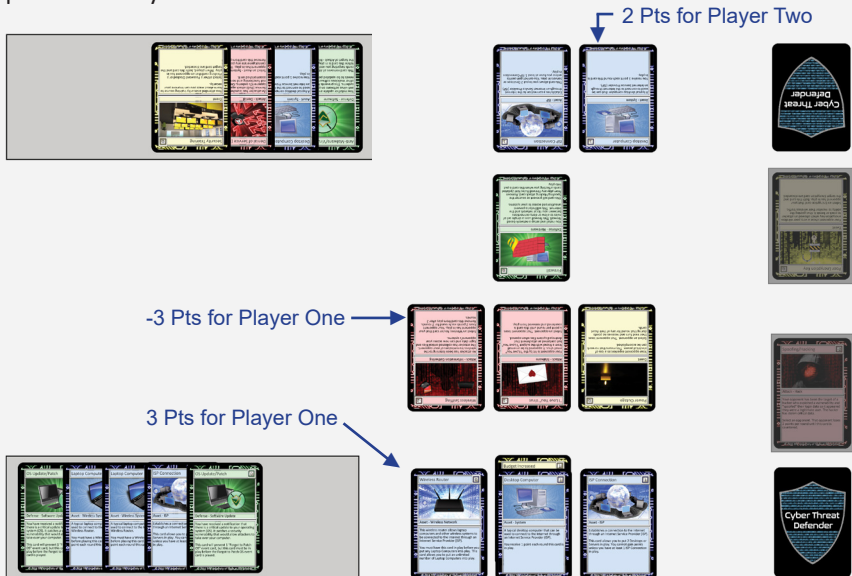
Step 15

At this time, the round has ended. It is now time to update the players' scores. While scoring occurs, no cards can be played by any player.



Step 16

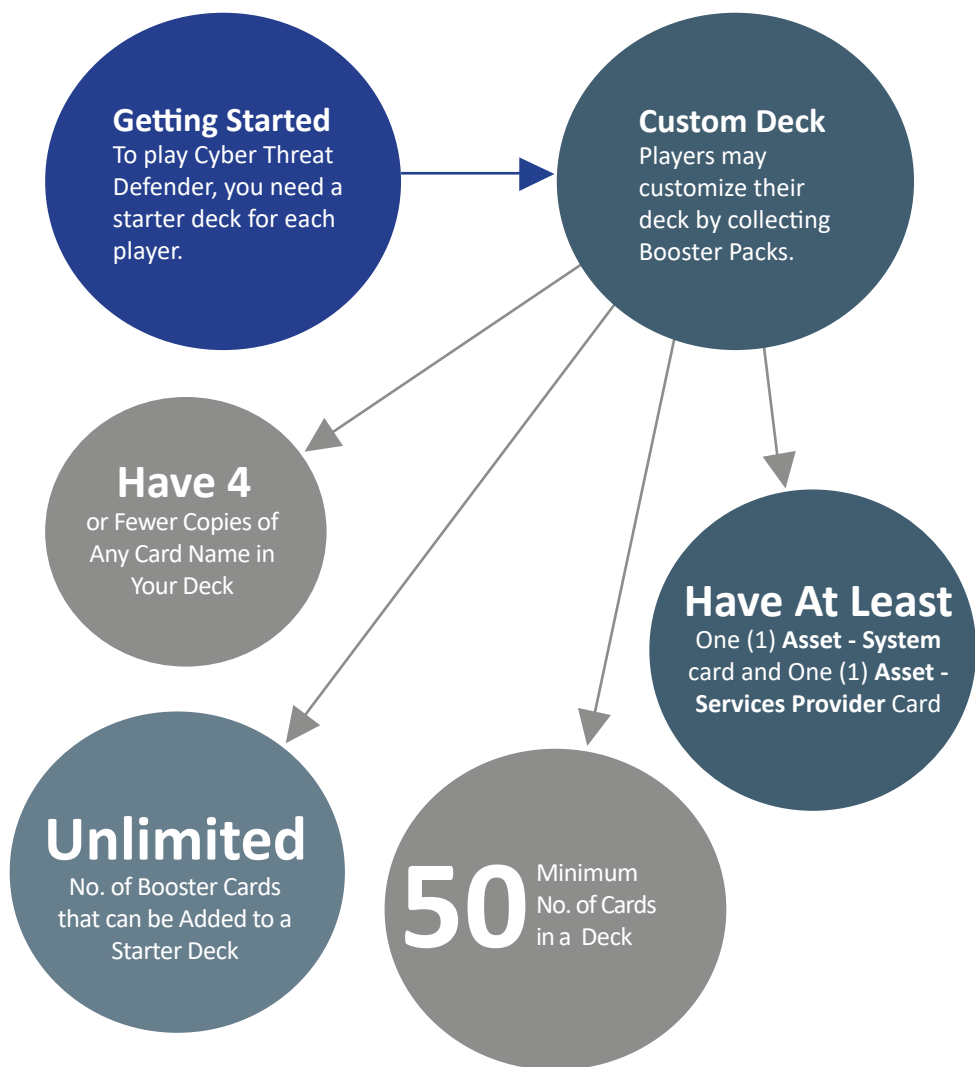
The score at the end of the first round is: zero points for Player One, two points for Player Two.



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



Building a Custom Deck



To Order additional decks or booster packs/cards, visit CIASMarketplace.com.



Rebuilding the Starter Deck

Below is a list of card types, along with the quantity of each, needed to rebuild your starter deck.

- | | |
|--------------------------------|-----------------------------|
| (1) Dedicated Server | (3) Anti-Malware/Virus |
| (3) Desktop Computer | (2) Backup Power Generator |
| (3) ISP Connection | (2) Encryption |
| (3) Laptop Computer | (4) Host-based Firewall |
| (2) Wireless Router | (3) OS Update/Patch |
| (2) Anti-Malware Not Updated | (3) Advanced Persistent DoS |
| (2) Budget Increased | (2) Denial of Service (DoS) |
| (2) Firewall Rules Not Updated | (2) "I Love You" Virus |
| (2) Forgot to Patch OS | (2) Password Cracked |
| (2) Hardware Failure | (2) Phishing |
| (1) Poor Encryption Key | (2) Trojan Horse |
| (2) Power Outage | (2) Wireless Sniffing |
| (1) Security Training | |

Thank You to Our Sponsors

The CIAS is committed to providing Cyber Threat Defender: the Collectible Card Game to classrooms across the nation at no cost to middle and high school educators. We would like to take this opportunity to thank our CIAS K-12 Cybersecurity Program supporters for their continued role in helping this unique program continue to grow.

GULATECH
A D V E N T U R E S

MITRE

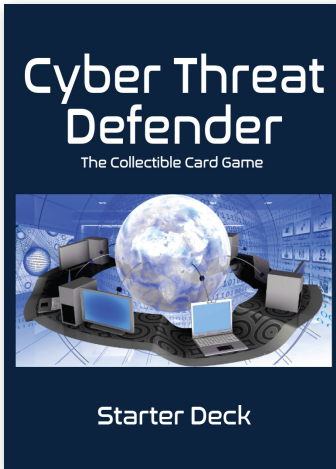
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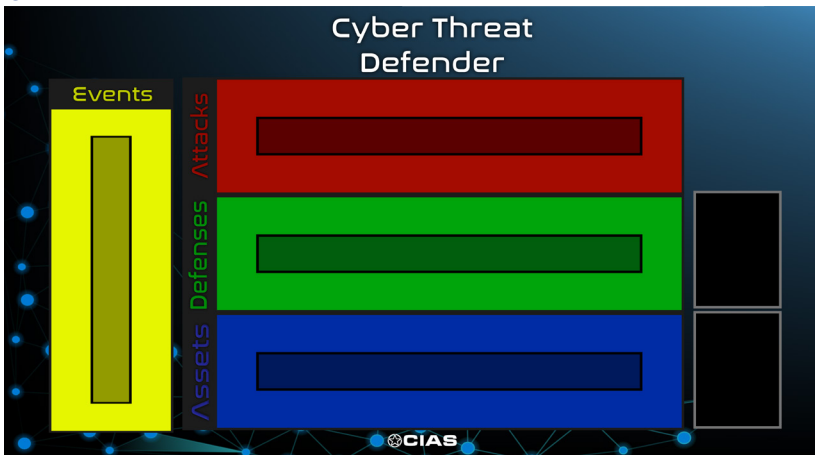


CIAS Marketplace

The CIAS online marketplace is a one-stop shopping experience that enables players to purchase additional starter decks, booster packs and game accessories. Here is a snapshot of the various Cyber Threat Defender cards and accessories available at CIASMarketplace.com.



Game Mat ▼



We'd Love Your Support!

By sponsoring Cyber Threat Defender, you are helping students nationwide learn the basics of cybersecurity in a fun and engaging game that will prepare them for their future in cybersecurity!

Cyber Level sponsors will receive a set of branded booster packs in addition to a custom sponsor card that is integrated into the game! For more information, or to sponsor the Cyber Threat Defender card game/PC version, please visit CyberThreatDefender.com.



Note to Security Professionals

In developing this game, we recognize that we have taken some liberties with how things actually work. We have attempted to keep true to the spirit of computer security, but for playability reasons have slightly modified how things might actually work in reality. We believe, however, that the game is close enough that individuals playing the game will be able to gain some understanding of basic computer security concepts.