

Sector Down

Objective:

Learn how to properly defend infrastructure through a card game that simulates real world cyber attacks and defenses.

Terms:

Blue team:

Team of up to **16 players** who focus on defending their corresponding facilities and indirectly helping each other

Red team:

A team of **1-4 attacker(s)** who focuses on attacking facilities to bring down the infrastructures that the blue team is defending. The number of attackers is based on the team size of the blue team where every 4 blue players equals one more red player up to a max of 4 red players.

White Team:

Drive the general flow of the game by drawing from a negative and positive deck which imitates large events and news that affect most or all sectors.

Infrastructure:

The basic physical and organizational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society or enterprise

Sector of infrastructure:

A subsection of the overall infrastructure. These sectors are the critical infrastructure sectors which are required for normal operations of the American people and businesses.

1. Chemical sector:
2. Commercial Facilities sector:
3. Communications sector:
4. Critical Manufacturing sector:
5. Dams sector:
6. Defense Industrial Base sector:

7. Emergency Services sector:
8. Energy sector:
9. Financial Services sector:
10. Agriculture sector:
11. Government Facilities sector:
12. Healthcare sector:
13. Information Technology sector:
14. Nuclear sector:
15. Transportation System sector:
16. Water and wastewater sector:

Core Sectors:

Core sectors are sectors where if they were to go down then it would lead to a large crisis within America. In the game, if one of these core sectors were to fall then the players would receive the Doom Clock effect. There must be at least one of these facilities in play to start a game.

1. Energy
2. Communication
3. Water
4. Information Technology

Facility:

A facility is **1 node in the chain** that makes up a sector of infrastructure. If any facility in the chain goes down then the entire sector goes down.

Sector Products:

All facilities have connected sector products that they depend on to function properly. If any facility in the chain loses access to all of its sector products then the facility goes down and the sector of infrastructure along with it. These connected sectors are shown as the three sector icons connected to any given facility.

Facility resistance points:

Network:

The amount of points to indicate how strong a facility's current resistance to network attacks are. These are indicated by the blue bars under each facility

Physical:

The amount of points to indicate how strong a facility's current resistance to physical attacks are. These are indicated by the green bars under each facility

Financial:

The amount of points to indicate how strong a facility's current resistance to financial attacks are. These are indicated by the red bars under each facility

Turn Limit:

The default turn limit is 30 turns. If you wish to play for shorter then you can choose your own turn limit.

Doom Clock:

Whenever the Doom Clock Threshold has been crossed then all players receive a Doom Clock. The situation is considered critical as all players have only 3 turns to assist in bringing up the core sector or fall back under the 1/4th threshold. If the significant sector(s) has not been brought back then the game ends. If the players bring up the significant sectors then the doom clock resets to 3 turns

Doom Clock Threshold:

To cross the Doom Clock Threshold one of two events must happen.

1. A core sector (as outlined in "Core Sectors") must have at least 2 of their facilities down at the same time. If only one of a core sector's facilities go down then this event is not triggered.
2. Half of all sectors must be down at the same time. This can only happen if there are at least 8 blue team members.

Meeples:

Meeples are the people who work at any given sector and are differentiated by specialization. Each specialization corresponds to a certain color with network specialists being blue, physical being purple, and financial being black. Each card has a certain Meeple cost associated with the given action. You must have the correct color and number of meeples at a given facility in order to activate the card for its duration. Once the duration of the card is over the meeples return to their facility and can be used for other cards.

Overtime and Exhaustion:

Overtime is an effect both teams can impose on their meeples. During the start of your turn after you draw cards you are able to activate and impose overtime on all of your meeples which doubles the amount of meeples of each color that you currently have. The Overtime effect lasts for 2 turns. Once Overtime is over then the meeples go into Exhaustion where they are too tired from the mandated overtime to work as effectively. As such your meeples of each color are halved (from the original amount) for 4 turns. A player can use up to 2 overtime charges unless otherwise stated by a white card. You cannot have less than 1 meeple of any color as a result of exhaustion and you can only use Overtime while the Doom Clock is active.

Meeple Sharing:

Any player who has meeples is able to donate up to 2 meeples of any color to an allied player for 2 turns at a time as long as the Doom Clock is active.

Colorless Meeple:

The red player has access to 1 colorless meeple that replenishes every turn just like a regular meeple. A colorless meeple can be used in the place of any other regular meeple when playing a card.

Effects:

Backdoor:

An effect that red player cards can place on blue facilities. This effect stays for a period of time until its duration is up or a card is used to remove it from the field. This effect is required to play some red cards as some of the stronger red cards require the hacker to have a foothold into the blue servers.

Fortified:

An effect that Blue players cards can place on blue facilities. This effect blocks the first red card effect and any active red effect that targets the facility that this effect is attached to. This includes the backdoor effect. This effect lasts for 3 turns.

Set up:

When opening the game all blue team players will have 3 facilities in front of them. Each facility will have different sector products and facility resistance points based on the following sheet and the player's chosen sector.

(https://docs.google.com/spreadsheets/d/10M610-YCtbVM5s3eDRYZZa-pf2gQON_c/edit#gid=636793103)

Each player will have 2 meeples of each color with red having 1 colorless meeple along with their basic meeples.

The red player will have a list of all sectors which they can choose from during a turn to open and see that sector's facilities to attack.

All players begin play by drawing 5 cards from their decks

Play:

Turn order:

General turn order:

The turn order will be as follows:

1. Red player acts and sets down any cards that they would like to and are able to
2. White card is drawn based on the white player rules under "white player turns" (skip this until white cards are developed)
3. Blue player(s) acts and set down any cards that they would like to and are able to play
4. points are tallied based off of player actions

Red and Blue turn composition:

1. **DRAW PHASE:** At the start of a player's turn they must draw until they have 5 cards in their hand. If a player cannot draw any more cards they are out of the game.
2. **BONUS PHASE:** You can discard one card in your hand to draw a new card. You can do this up to 3 times in a turn. You can also choose to mandate overtime for 2 turns. This must be done prior to the Action Phase
3. **ACTION PHASE:** During this phase a player is able to activate their cards by locking in the required number and color of meeples as indicated by each card and selecting the facility which the card effect will apply to (unless otherwise stated by the card itself).
4. **END TURN PHASE:** the player discards their cards until they have 7 cards left in their hand. During this phase the player is able to donate meeples to their allies if they have any remaining.

White Player Turns:

The White player draws special white cards which affect everyone in the game. These cards are split into two decks, a positive deck and a negative deck. The white player draws a card from either deck in a rotating pattern where every 3 turns they draw a card from the negative pile and every 2 cards drawn from the negative pile equates to 1 card being drawn from the positive pile. For example, a normal white player's cycle could be:

Turn 1	nothing	Turn 11	nothing
Turn 2	nothing	Turn 12	Draws from the negative deck
Turn 3	Draws from the negative deck	Turn 13	nothing
Turn 4	nothing	Turn 14	nothing
Turn 5	nothing	Turn 15	Draws from the negative deck
Turn 6	Draws from the negative deck	Turn 16	nothing
Turn 7	nothing	Turn 17	nothing
Turn 8	nothing	Turn 18	Draws from the positive deck
Turn 9	Draws from the positive deck	Turn 19	nothing
Turn 10	nothing	Turn 20	nothing

The white player stops playing cards from the positive deck after 3 cards have been drawn from it. When this happens, the white player just draws from the negative card deck instead.

Ending the game:

The game ends based on the following conditions

Running out of cards:

When there are no more cards in a player's deck then the game is over and the opposite team wins.

Running out of turns:

When the game has reached the turn limit as specified in the "Turn Limit" section, the game ends and the Blue Team automatically wins.

Facility crash:

If all sectors are down then the red team automatically wins.

Doom Clock ending:

When the time on the doom clock expires then the red team automatically wins.