


# Heist

An adversarial cyber security game



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## Background

The Lucky Star Hotel is famous throughout the galaxy as the playground of the rich, the famous and the ethically flexible. Perched on the fringes of the Galilean system beyond the rings of Zeramis Alpha, and the watchful eyes of the Central Galactic Police, the hotel has developed a stellar reputation if you want to be off the radar and truly relax.

Part of the hotel's continued popularity is the amazing service they can offer for a fraction of the price you would pay in the central systems. The only problem is that they manage to make a profit by ignoring the rules. You name it, and they cut corners doing it, whether that is pumping pollution into the surrounding star systems or paying their employees next to nothing.

The hotel owners have done their best to stay beyond the reach of the authorities, but as they become more brazen in their hunt for a profit, they have started to develop some cracks in their armour. This is where you, and your team of like-minded ethical hackers come in.

The time has come to show the galaxy the true face of The Lucky Star Hotel by targeting the thing that they value more than anything else: **their reputation.**

Engage your cyber security skills and tools to breach the physical and cyber defences of the hotel and take their reputation down to zero to finally put them out of business.

It's not going to be easy, and it's going to be dangerous at times, so work together and be as quick and as quiet as you can. The hotel's owner isn't going to go down without a fight, and they're going to throw all their considerable resources at you to protect their reputation and find out just who you are. If they get their hands on enough evidence, you will be discovered and could end up behind bars!

Be careful and good luck!

## Overview

Heist is a one-versus-all deck building card game that sees a group of renegade hacktivists working together to decimate the **reputation** of The Lucky Star Hotel and its unscrupulous owners.

One player will act as the **defender** of the hotel, tasked with shoring up the defences and identifying the hackers to bring them to justice.

The other players are the **attackers**, a hacktivist group working together to bring to light all of the wrongdoing at the hotel.

- o The **attackers** need to reduce the hotel's reputation to zero.
- o The **defender** must find five pieces of evidence from the system log to identify the attackers.

## Components

- o **Casino board**
- o **4x Player boards**
- o **20x System log cards**
- o **25x Reference cards**
- o **10x System Upgrade Lock cards**
- o **Reputation cube**
- o **Heist Cards**
  - o 116x Attackers
  - o 86x Defenders
  - o 16x Specialist cards
- o **Resources**
  - o 50x Data
  - o 50x Credits
  - o 50x Time
- o **Player tokens**
  - o 10x Blue
  - o 10x Yellow

- o 10x Green
- o 10x Red
- o 10x Black

## Setup

- I. Place the **casino board** in the middle of the table.
- II. Give each player their **player board**.
- III. Place **resources** in easy reach of all players.
- IV. Remove the start cards (with a circle in the bottom left), specialist cards, Lucky Break, All In! and market cards from the **attacker** and **defender decks**. Shuffle the remaining deck.
- V. Deal a **starting deck** to each player.
- VI. Shuffle the **attacker's specialist cards** and deal two to each player.
- VII. Shuffle the **defender's specialist cards** and deal two to the **defender**.
- VIII. Give each player a set of **reference cards**.
- IX. Draw four cards from the top of each pile and lay them out face up to form the **attacker** and **defender markets**.
- X. Place the Lucky Break and All In! cards in separate piles. These are always available to purchase.
- XI. Place the **system log** cards in a pile in the stop marked on the **defender's** board.
- XII. Place the reputation cube on the track, based on the number of players (4-players = 10, 3-

players = 9, 2-players = 8, 1-player = 7).

## Before Play

- I. Each player shuffles their starting deck and place it face down to the side of their player board.
- II. Draw the first five cards from their deck, this is the **starting hand**.
- III. Each player must decide which specialist they wish to keep and discard the other.
- IV. **<Defender>** take 5-credits from the supply.
- V. **<Defender>** place a cube on the first space of the **System Log Search Capacity**, this indicates how many cards you can search from the **System Log** during the **Report Phase**.

## How to Play

Heist is split into 12 rounds and each round consists of three phases:

- I. Planning
- II. Execution
- III. Incident response

### I. Planning **<Attackers and Defender>**

Play starts with the **Defender** and moves in a clockwise order. Players can take up to 2 actions each turn, or they must pass and end their turn. Play continues clockwise around the table until all players have passed.

Available actions:

- I. **Play a card from your hand.** Check the

requirements of the card, pay for the card and resolve it and then move the card to the necessary space.

- II. **Play a card to the server.** Players may choose to play the card face up or face down. If it is face up the cost is paid immediately, otherwise the cost is paid when revealed. If the player cannot pay the cost the card cannot be revealed.

- III. **Play a card to the hotel.** These cards represent things that you physically do in attacking or defending. These cards are identified by the **HOTEL** type. Unlike **Server** cards these cards must be revealed during the **Execution** or **Incident Response** phases. The cost is paid once revealed.

- IV. **Buy cards from the market.** Players discard the resources (data or credits) or cards to meet the value as indicated on the card.

- V. **Perform an action from your server.** Cards played to your server offer additional actions to enhance your play. They can be used once per round, unless stated. When you use an action from a card in your server, place a player marker on the card.

- VI. **Sell cards to gain resources.** Players can sell any number of cards from their hand as a

single action. The value of the card is indicated in the black triangle at the top right corner of the card. Any cards that are sold for credits alone are then placed in the discard pile.

*Tip: If you continue to take actions, you will get more turns!*

Once the planning phase ends, **Attackers** draw back up to their hand size.

## **II. Execution <Attackers>**

**Attackers** reveal parts of their strategy to infiltrate the hotel. The **Attackers** may reveal their cards in any order to perform an attack or upgrade. **Attackers** may choose to reveal no cards, but any revealed card must be paid for.

If the **attacker** reveals a breach card, then they collect the number of **Breaches** stated on the card. The **Defender** rolls these dice in the next phase to see if they successfully prevent the breach.

## **III. Incident Report <Defender>**

This phase is the **Defender's** chance to clean-up and limits the consequences of any breach. This is carried out as follows:

- I. Reveal cards from the server.** Choose to reveal and play cards from their server to mitigate a breach.
- II. Resolve breach attacks.** Roll the correct number

of dice to attempt to mitigate each Breach played by the **Attackers**. A score that is higher has been successfully defended. Otherwise, the Breach is successful, the card is resolved, and the Breach is shuffled into the **System Log** deck.

- III. Pay staff salary.** Pay the salary of all staff currently in play, and the ongoing cost for on each staff card (marked with ∞). If the Defender cannot pay the ongoing staff costs, they must trash the staff they cannot pay and lose one Reputation. The Defender only loses at most one reputation per round in this phase.

- IV. Search the System Log for evidence.** Draw cards from the top of the deck equal to their **System Log Search Capacity** level. If an attack card is drawn this counts as one piece of evidence. When searching the log, the Defender can discard three cards from their hand to draw an additional **System Log** card.

- V. Receive income based on reputation level.**

Following these steps, check for end of game conditions. If they have not been met, a new round begins with the **planning phase**.

## **Game End**

The game ends if either:

- I. The **Attackers** reduce the **Defenders** reputation to zero.
- II. The **Defenders** find five pieces of evidence from the **System Log**.

In case of a tie (both end conditions are met at the end of the Incident Report phase) then the play continues until either another Breach is successful, or another piece of evidence has been discovered. Whenever one of these happen, play ends immediately and the victor is decided.

## **Glossary**

### *Attackers*

The Attackers are a group of hacktivists aiming to bring down The Lucky Star Hotel.

### *Defender*

As the owner of The Lucky Star Hotel, you must do everything in your power to maintain your reputation and brings the hackers to justice!

### *Buying and Selling Cards*

Cards can be bought with data, credits, or a card from a player's hand.

The number in the diamond in the top right of a card is the market cost to buy.

When selling the card in the black triangle in the top right of a card is the sale value. A missing sale value means a value of zero. When a card is sold it is placed into the player's discard pile.

### *Resources*

**Time.** Most actions in the game take a time to complete.

**Credits.** The credits of the universe are an important currency to buy new tools, upgrades, and data.

**Data.** Equally as important as time and credits, data is essential to pull off some of the more elaborate attacks. It is a valuable currency and can be used interchangeably with credits to secure that necessary attack blueprint or server upgrade.

### *Playing a card*

Playing cards is the core of the game. Whenever you are playing a card, check which type it is to know where it must be played to. Cards with Hotel type can only be played to the Hotel board, cards with Upgrade or Server can only be played to your player board. If there is not enough space to play a card (either to your server or the Hotel) then you may discard a card to play it. If discarding from the Hotel, you can only discard cards from your side.

When you play a card, you have a choice to play it face down or face up. Whenever the card is revealed (be that when you play it or later) you must pay the costs to play it. If you reveal the card and do not have the resources, you must immediately discard the card.

**Tip!** As an Attacker, you might want to play a breach card face down so the Defender can't prepare for it during their turn.

### *Rounds, Turns, and Phases*

A game of Heist is split up into rounds made up of turns. Each round plays out the three phases: 1. Planning, 2. Execution, 3. Incident Report.

During the Planning phase, players take as many turns as they like. During their turn, a player can take up to two actions with play moving to the next player when they have completed their turn. At any point a player can choose to not take any actions and pass. If they do this, they cannot take any more turns or actions during the Planning phase this round.

Play continues like this until all players have passed.

### *Servers*

Each player has their own player board called a Server. This simulates the player's hardware used to develop intricate cyber-attacks and deploy robust defences.

### *Staff*

The Defender has the option to hire and manage staff throughout their game. These cards give the Defender additional benefits but also open them up to more risks and channels of exploitation.

Staff cards can only ever be played onto the Hotel board unless stated.

When playing a Staff card there is always an initial cost and then an ongoing cost. You must pay the initial cost

when playing the card and then the ongoing cost will be paid at the end of the Incident report phase.

### *System Log deck*

The System Log cards are a unique deck that represent the log of activity the **Defender's** computer has recorded.

At the end of a Defender's turn, they will shuffle the System Log deck and draw cards equal to their **System Log Search Capacity** number. If they pull an attack, they keep that as evidence. If they pull a generic log card, they return the card to the deck and return the deck to the board; they are unsuccessful in their hunt for evidence.

### *Trash a card*

Some cards allow you to trash a card. When this happens you simply remove the card from the game.

### *Using Server cards*

During your turn you may use your actions to carry out server functions. When you do so, turn the card slightly to indicate you have used it this turn, or place one of your player tokens on the card (if you are playing with them). You can only use most Server functions once per round, unless otherwise specified.

### *Types of cards*

**Standard.** There are many Attack and Defend cards without a type. These will give players necessary boosts in resources and do not need a space on the Casino board

or player board to play them into.

**Breach.** Breach cards are any Attack card with a breach ability on it. These are the Attackers may point of assault on the Defender's infrastructure.

When playing a breach card, pay the costs as usual and place a breach dice on the card at the value stated.

During the Execution phase, the Defender must roll each breach dice present and achieve a score higher than the stated number. If they roll an equal or lower number, then they fail the roll and the breach is a success.

If the breach is a success resolve the result on the card and shuffle the card into the System Log deck.

If the breach is not a success, the card remains in play, and nothing happens. The Attacking player can choose to discard the card at this point should they wish.

**Hotel.** These cards can only be played onto the Hotel board.

Once a Hotel card is in play, it becomes available for any of the Attacking players to use that as an action on their turn providing it has not already been used this round.

**Specialist.** There are 8 Specialist cards for the Attackers and 8 for the

Defender. These help to mix things up by giving each player a unique ability to perform at different points throughout a game.

To use your ability, you must play your Specialist Ability card from your starting deck. You always have the option to sell your Specialist Ability card to get the credits rather than use your ability.

**Staff.** The backbone of the Hotel, they ensure the customers are well looked after and the Reputation is maintained. However, they offer a cost both financially and in terms of security.

All staff cards have two costs: the initial cost and the ongoing cost (in the thin black box). The initial cost is always paid when the card is first played. The ongoing costs are paid during the Incident Report phase.

**Upgrade & Server.** Upgrade and Server cards give you different abilities to help customise the way you play. These are always played into each player's board.

If there is not enough space, then players may discard a card to free up a space.

Upgrades will commonly be passive abilities that help boost what you can do. Server cards will give you different abilities and actions you can carry out on your turn.



You can find out more about the different techniques used within the game in the Cyber Security Body of Knowledge (CyBOK) as detailed below:

### **Knowledge Areas - Attackers**

Adversarial behaviours

([https://www.cybok.org/media/downloads/Adversarial Behaviours v1.0.1.pdf](https://www.cybok.org/media/downloads/Adversarial_Behaviours_v1.0.1.pdf))

Human Factors

([https://www.cybok.org/media/downloads/Human Factors v1.0.1.pdf](https://www.cybok.org/media/downloads/Human_Factors_v1.0.1.pdf))

Malware and Attack Technologies

([https://www.cybok.org/media/downloads/Malware Attack Technologies v1.0.1.pdf](https://www.cybok.org/media/downloads/Malware_Attack_Technologies_v1.0.1.pdf))

### **Knowledge Areas - Defender**

Cyber-Physical Systems Security

([https://www.cybok.org/media/downloads/Cyber Physical Systems-v1.0.1.pdf](https://www.cybok.org/media/downloads/Cyber_Physical_Systems-v1.0.1.pdf))

Authentication, Authorisation and Accountability

([https://www.cybok.org/media/downloads/Authentication Authorisation Accountability v1.0.2.pdf](https://www.cybok.org/media/downloads/Authentication_Authorisation_Accountability_v1.0.2.pdf))

Forensics

([https://www.cybok.org/media/downloads/Forensics v1.0.1.pdf](https://www.cybok.org/media/downloads/Forensics_v1.0.1.pdf))

Security Operations and Incident Management

([https://www.cybok.org/media/downloads/Security Operations Incident Management v1.0.2.pdf](https://www.cybok.org/media/downloads/Security_Operations_Incident_Management_v1.0.2.pdf))

Network Security

([https://www.cybok.org/media/downloads/Network Security v2.0.0.pdf](https://www.cybok.org/media/downloads/Network_Security_v2.0.0.pdf))