

# NYX: Cloudonauts

## Rule book

### The story

*In a world that we will not be able to recognize, is a city called Velatrax. This city is Cloud City which floats high above the ground. The main hero here is Nyx, the last Cloudonaut (somebody call her Cyberangel), who is a special task force in the city in the clouds. There are only very few cloudonatus that are guarding the fragile order of the cloud city.*

*She has special abilities, and she doesn't remember where she got them. She is using her special abilities to fight unknown forces that are trying to infiltrate the All-Intelligence neural network that is guarding and managing the city's civil services, computers, shops, and traffic.*

*One day, somebody breaks in the network, causing outages around the city. Nyx must go on and start to investigate. Become her guide in attacks and defenses in this story-driven threat modeling game.*

### A Story-Driven Threat Modeling Experience

**NYX** is a turn-based strategy card game where players **build, break, and defend cloud architectures** using attack, defense, and special event cards.

Every card is based on **real AWS services** and **real-world security threats** - from IAM misconfigurations to Lambda injection attacks.

We highly recommend structuring your gameplay using a **real cloud architecture diagram**. That way, you not only play a game, but you also explore your own system's vulnerabilities and defenses.

Use your **security knowledge** and **threat modeling skills** to win the game and improve your real-world architecture along the way.

CARD NAME

SITUATION

BREAK/ATTACK  
BUILD/DEFENSE

CARD TYPE



DENIAL OF WALLET



0 CREDITS REACHED

Exhaust the budget of the client or make them spend more in Cloud services

*The time has come, somebody break your bank account*

POINTS

LORE

EDITION

# Card Types (with Colors)

There are 4 main card types:

## ■ Green Cards - Special Event Cards

Represent major cloud events or takeovers.

Examples:

- Cloud exploitation
- Region outage
- Gain bonus points or trigger effects

## ■ Red Cards - Attack Cards

Used to break or compromise systems (e.g., attacks on EC2, S3, IAM). These cards are references as Break / Attack.

## ■ Blue Cards - Defense Cards

Used to protect systems or patch weak points. Some may double as build/shield cards to improve architecture.

## Duplicate Cards (Based on Attack or Defense)

They can be an Attack or a Defense duplicate. The X on the card marks the number of points it duplicates.



## Game Setup

1. Prepare your diagram. We would highly recommend to structure the game referencing to a real architecture diagram; this way, you can learn your architecture vulnerabilities and mitigate them in your real-life system design.
2. Split the cards into 3 shuffled piles (face down):
  - A. Red (Attacks/Build)
  - B. Blue (Defenses/Break)
  - C. Green (Specials)
3. The **color in the bottom-left corner** of each card indicates the **card type**.
4. Each player draws **5 cards**. We recommend the following setup. However, for more entertainment and strategy, you could choose a different combination:
  - A. 3 Attack Cards
  - B. 2 Defense Cards
5. The game is played **clockwise**.





# Game Start & Turn Flow

One person starts with a scenario (e.g., “EC2 Server-Side Injection”).

Other players may:

1. **React with a defense** if they have a matching blue card.
2. **Identify the weak spot** and **defend** it.
3. The first to successfully defend **wins the green card** (special event) tied to that round.
4. The green card goes to the player’s scoring pile.

## End of Round

- Refill hands back to 5 cards with a mix of attack and defense.
- Log who played which card during the round for tracking.

## Scoring System

- Green cards: worth points based on the points on the card.
- Attack and Defense cards: score when successfully blocking an attack, with the number of points in the circle.

## Chain bonuses:

- Get **extra points** by building a "**kill chain**" - a sequence of 2+ attack cards that logically connect (e.g., Access → Exfiltration).
- Kill chain with a sequence of 3+ attack cards that logically connect will get an award - a special green card. (e.g., Recon → Access → Exfiltration).



First in the chain

Second in the chain

+ 1 point

## Strategy tips:

- Combine attack/defense cards smartly.
- Watch for opportunities to create or break kill chains.
- Depleting a card type (e.g., no more defense cards left) changes game dynamics.

## Teams Mode (Optional)

### Split into 2 teams:

- **Team Red** (Attackers / Breakers) - Haxx
- **Team Blue** (Defense / Builders) - Cloudonauts

### During each round:

- Players take turns playing **attack** or **defense** cards based on their team role.
- **Each successful card play** (attack or defense) earns **1 point** for the team.
- If a team completes a **kill chain of 2 or more cards**, they gain:
  - **+1 bonus point** for the attacking team
  - **+2 bonus points** for the defending team **if they block the entire kill chain**

⚖️ **Note:** Defense is slightly harder to coordinate and build, thus it earns more bonus points.



**HAXX**

**VS**



**CLOUDONAUTS**