

CONTROL-ALT HACK™

RULEBOOK



SUMMARY

You and your fellow players work for Hackers, Inc.: a small, elite computer security company of ethical (a.k.a., white hat) hackers who perform security audits and provide consultation services. Their motto? “You Pay Us to Hack You.”

Your job is centered around Missions—tasks that require you to apply your hacker skills (and a bit of luck) in order to succeed. Gameplay proceeds in rounds. In each round, all players take turns attempting their assigned Missions. You gain Hacker Cred by successfully completing Missions and you lose Hacker Cred when you fail. You are helped along the way by advantages that you purchase and hindered by unexpected obstacles. If you gain enough Hacker Cred, you’ll become the CEO of your very own consulting company! Sweet, sweet, victory.

There are four main card decks: Hacker, Mission, Entropy, and Attendance.

- > Hacker cards give the descriptions and abilities of the characters that you play.
- > Mission cards contain tasks, which you attempt during your turn.
- > Entropy cards give you advantages by improving your skills, creating difficulties for other players, or otherwise altering gameplay. There are 5 kinds of Entropy cards: Bag of Tricks, Extensive Experience, Lightning Strikes, Meta, and Shared Fate.
- > Each player has 2 Attendance cards (Attending and Not Attending), one of which is played face-down before the Staff Video Conference.

QUICKSTART

Separate and shuffle the decks. (Except Attendance. No need to shuffle that one unless you really want to.) Leave room for discard piles.

Each player gets:

- > 3 Hacker cards (2 Hacker cards if playing with 6 players)
- > 3 Entropy cards
- > 1 Attending card (Attendance)
- > 1 Not Attending card (Attendance)
- > 6 Hacker Cred

Each player picks one of the three Hacker characters to represent him or her in the game and discards the others. Reshuffle the discarded characters into the Hacker deck.

You can jump right into *Gameplay* (page 4) and look up information as questions come up.

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GAMEPLAY

The game is played in rounds. In each round, hackers will take turns trying to complete their assigned Missions. Each round is divided into 7 phases:

1. **Distribute Money and Draw Entropy Cards**
2. **Draw Mission Cards**
3. **Staff Video Conference**
4. **The Missions (Player Turns)**
5. **Hacker Cred Bonus/Penalty**
6. **Discard Entropy Cards**
7. **Check Hacker Cred**

At the beginning of the round, determine which hacker will go first in each phase of the round. The hacker who has the highest Hacker Cred score goes first, and gameplay proceeds clockwise. If two or more hackers are tied for the high score, they roll the dice and the person with the *lowest* roll goes first.

THE ROUND



Phase 1

Distribute Money and Draw Entropy Cards. By default, everyone gets a discretionary budget of \$2K. The hacker with the highest Hacker Cred score gets an extra \$1K. If there is a tie for highest Hacker Cred, nobody gets the \$1K. Everyone also draws one Entropy card.



Phase 2

Draw Mission Cards. Everyone draws a Mission card. This is the task assigned by the CEO (or, in some cases, an extracurricular project that you decide to take on). Look at your Mission without showing it to anyone else, and decide if you will join the staff meeting. Since many hackers travel the world as part of their professional responsibilities, the staff meeting is held via video conference. You'll need to decide if you want to join the Staff Video Conference or choose to

have “connectivity issues” and sleep in instead. (Advantages and disadvantages are given below, and summarized on the Attending and Not Attending cards.) Play one of your Attendance cards face down on the table.



Phase 3

Staff Video Conference. Once everyone has played their Attendance cards, flip them all over. Players who are joining the Staff Video Conference expose their Mission cards; those who are not attending leave their Mission cards face-down. Everyone at the Staff Video Conference draws another Entropy card. These players can now trade their Missions—they can even choose to sweeten the deal by exchanging money or Bag of Tricks cards (see *Card Management*, page 13). However, hackers with low Hacker Cred scores may get stuck with a Newb Job (see *Newb Jobs*, page 11). Everyone must end up with exactly one Mission.

If you don't attend the meeting, you don't get the extra Entropy card—out of sight, out of mind, so no goodies for you! However, you do start your Mission extra rested, so you get a free re-roll on any one failed roll during that Mission.

If only one hacker comes to the meeting, he or she gets the extra Entropy card *and* gets one free re-roll during the Mission.



Phase 4

The Missions (Player Turns). Starting with the hacker with the highest Hacker Cred score and going clockwise, each player takes his or her turn: the player reveals his or her Mission (if it was still face down) and tries to perform it. See *Missions* (page 9), for details.



Phase 5

Hacker Cred Bonus/Penalty. After all hackers have attempted their Missions:

- > If only one hacker succeeded, that hacker gets an extra Hacker Cred point.
- > If only one hacker failed, that hacker loses an extra Hacker Cred point.
- > If no hacker failed a Mission this round, the entire company reaps the reward: each hacker gets an additional Hacker Cred point.



Phase 6

Discard Entropy Cards. All players must now use or discard cards to get their hand down to 5 (or fewer) Entropy cards.



Phase 7

Check Hacker Cred. The round is over. Check to see if the hacker with the highest Hacker Cred score has 5 more points than the *next closest* rival. If so, that player wins. Game over!

Otherwise, check to see if the total Hacker Cred score of the company is high enough or low enough that the CEO's position becomes open (see *How to Win*, page 14).

Fired!

If your Hacker Cred score is zero at the end of a round, you receive a personal visit from the CEO letting you know that your services will no longer be required. Lose all your cards (including your Hacker card) and money. Have the player to your right shuffle and deal you a new Hacker card. Draw three Entropy cards, start with 6 Hacker Cred points, and see if your new character does better than your last one.

Proceed to next round.

The five skills essential for every Hacker are **Hardware Hacking**, **Software Wizardry**, **Network Ninja**, **Social Engineering**, and **Cryptanalysis**.



Hardware Hacking

includes the use of soldering irons, scanning electron microscopes, dremels, duct tape, laser cutters, and anything else you have lying around that might help you take apart and analyze computer hardware. Taking things apart is, of course, only half the battle... sometimes you have to *make* useful things to enable your hacking.



Software Wizardry

is an indispensable tool for the white hat hacker. If you fear low-level assembly code or can't whip out a Python script to send packets, you're going to be at a disadvantage.



Network Ninja

is all about data packets and how they move from one part of a network to another. It doesn't matter if it's plain old telephony, Ethernet, or radio protocols like Wi-Fi or RFID—understanding the raw data and how to make it dance is what gets the true network ninja up before noon.



Social Engineering

is the fine art of using (and sometimes abusing) people to get what you want. It is the first step in many attacks: convincing your target to click a link, open a door, or share system details. Whether you achieve your goals with a confident smile, discreet bribes, or blend in with a second-hand uniform, social engineering helps you manipulate the human components of any system.



Cryptanalysis

is the skill to construct and deconstruct codes and cryptographic ciphers. *Juvyr pelcgbtencul unf tbggra n ybg orggre fvapr Pnrfne'f gvzr, gur tbny vf gur fnzr: thnenagrrvat gur pbasvqragvnyvgl, vagrtevgl, naq nhguragvpvgl bs vasbezngvba.*

While all Hackers are reasonably competent at other stuff, a few Hackers are particularly good—or particularly lousy—at the following skills.



Barista

is proficiency in crafting fine espresso- and coffee-based beverages. The green apron is optional.



Connections

is all about who you know and what favors they owe you. A little mutual backscratching makes the world go 'round.



Web Procurement

is the skill to navigate online auctions and shopping with expertise. Rare, discontinued, or miscategorized goods? No problem! You can deliver—and at a bargain.



Forensics

is all about deconstructing, reconstructing, and studying digital evidence. Logs, logs, and more logs!



Lockpicking

is the skill to...well...pick locks. Okay, it's also about cracking safes.



Search Fu

is the ability to search and sift through information online. It's not just about hitting the Search button; creative search queries can uncover the darndest things.



Kitchen Sink

is the catchall that covers all skills not explicitly named on a Hacker card; however, if a Hacker does have a particular skill, it must be used—you can't choose to use Kitchen Sink just because it's higher!

MISSIONS

Mission cards consist of one or more tasks. To attempt a skill roll, roll all three dice, and try to roll low! You succeed if you roll less than or equal to the corresponding skill value on your Hacker card.

Be careful to read the success and failure conditions in their entirety! You may gain or lose something besides Hacker Cred.

MISSION

Baby, You Can Fly My Plane
The U.S. government asked you to improve the security systems for their unmanned aerial vehicles (UAVs).

- **SOFTWARE WIZARDRY**
Don't let enemy troops view the live video stream!
- **SOFTWARE WIZARDRY -1**
Prevent unauthorized personnel from accessing flight or weapons controls.

Success: 1 Hacker Cred

Failure: As the icing on the cake, you fell down the stairs and broke your arm. -2 on all Software Wizardry rolls during your next turn (keep this card until then as a reminder). -1 Hacker Cred

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Consider reading the card's text out loud. Hopefully, it's entertaining... and in any case, it gives your rivals a chance to figure out how they're going to sabotage you.

Mission tasks must be completed in order, and all tasks must be completed in order to succeed.

SKILL ROLLS

Each Mission consists of one more tests of your hacker skill. These tasks must be completed in order: you cannot attempt to complete the second task until you have succeeded at the first one, and so on. For each task, you roll all three dice to determine your performance. If the number rolled is *less than or equal to* your current level in that skill, you succeed. If the number rolled is greater, you fail. Initially, your skill levels are equal to the numbers given on your Hacker card; however, as gameplay proceeds you may receive bonuses from Entropy cards. If you fail any roll and cannot turn your failure into a success by making a legal re-roll or playing a helpful card (see *Skill Rolls: Special Conditions* on page 11), then you have failed the task, and failed the Mission.

Sometimes, you get a choice of which skill to use. You must announce which roll you are making *before* you make the roll.

When you are called on to make any skill roll for a skill that is not listed on your character card, roll against Kitchen Sink. If you have the listed skill, you must use it.

pwnage!

A skill roll of 3 or 4 represents a brilliant success, and the hacker immediately gains an extra Hacker Cred point.

Sometimes a Mission task is particularly easy or particularly difficult; these times are indicated as +’s or –’s on the Mission cards. These numbers modify your skill during that roll. For instance, if you have a Cryptography skill of 12, but your Mission says to roll “Cryptography -2,” your effective skill for that roll is only 10. Likewise, if it says to roll “Cryptography +2,” you roll against your skill plus 2, so you succeed on a 14 or less.

As you go through your Mission, state each roll before you make it. This both lets other players enjoy your hacker’s prowess and gives them time to figure out whether or not they want to play any Lightning Strikes to affect your Mission. Actually, we recommend reading the whole card out loud, but we’re not picky.

SUCCESS AND FAILURE

Each Mission card shows the consequences of succeeding or failing at the Mission. If you succeed, you (usually) get a reward; take this reward immediately. If you fail, you (usually) suffer a penalty. Take the penalty immediately.

If you are required to discard more cards than you have, or lose more money than you have, you simply lose as much as you have and proceed. There is no extra penalty.

While you can turn a failure into a success by purchasing Bag of Tricks cards (see *Skill Rolls: Special Conditions* on page 11), you cannot spend money or play cards in order to avoid losing them to a penalty!

NEWB JOBS

Some of the Missions are not elite, high-paying jobs; they are less desirable tasks that must nevertheless be performed, and are best suited to the skills of a newbie. The reward for successfully completing a Newb Job is often less than the reward for completing a regular Mission.

If you draw a Newb Job and attend the Staff Video Conference, you may be able to push your Newb Job off onto someone with a lower Hacker Cred score. Starting with the player with the highest Hacker Cred and proceeding in order of descending Hacker Cred (ties settled by die roll, low roll goes first):

- > You may trade your Newb Job for the Mission card of whoever at the meeting has the lowest Hacker Cred score *and* who does not already have a Newb Job.
- > If rivals are tied for lowest, you choose who receives the Newb Job.
- > If *you* are tied for lowest, you may not get rid of your Newb Job.

SKILL ROLLS: SPECIAL CONDITIONS

Lightning Strikes

Extra tasks required by Lightning Strikes cards are treated as part of the Mission. If all tasks for a Mission are at a penalty (e.g., “Lightning Strikes: Extra Challenging”), this penalty applies to any Lightning Strikes tasks as well. Similarly, you can use your re-rolls on Lightning Strikes tasks. If a Lightning Strikes card says that it must be played before any die rolls are made, this includes rolls required by other Lightning Strikes cards.

Skill Modifiers

If one card raises your skill to a specific number, and another card gives you a bonus or penalty, go to the specific number first, and then take the bonus or penalty. For example: Anya may start with a Hardware Hacking skill of 9, but suppose that she purchases “Bag of Tricks: Outstanding Oscilloscope,” then later acquires “Extensive Experience: Hardware Hacking.” First her skill is raised to 12, then the +2 from the Outstanding Oscilloscope is applied—so she has an effective skill of 14.

If an Entropy card modifies a skill which is not listed on a Hacker's card, the Hacker rolls that skill as Kitchen Sink plus the bonus. All other unlisted skills are unchanged. For example, if Deborah purchases "Bag of Tricks: Auction Expertise," her Web Procurement skill becomes 12, but her Forensics skill is still 9.

Retroactive Purchases

If you fail a roll but have a useful Bag of Tricks card, you may play that card (as long as you can afford it) to retroactively improve your roll. If the card gives you an automatic success or increases your skill by enough that you succeed, then you made your roll, even if it initially failed. For instance, you might fail your Social Engineering roll by 1 or 2, but if you can pay for "Bag of Tricks: Acting Class," then your failure becomes a success.

Skill Substitutions

Some special abilities and cards allow a hacker to substitute one skill for another. In this case, the task is treated as using the substituted skill instead of the listed skill. If the Mission card specifies bonuses or penalties to the task, they still apply to the new skill; for example, a skill substitution would turn a Hardware Hacking -2 into a Software Wizardry -2. However, Entropy cards relating to the original skill no longer apply. For example, "Lightning Strikes: Awareness Training" affects the Social Engineering skill. If you can substitute another skill for Social Engineering, then the Awareness Training no longer affects this task.

You must announce skill substitutions *before* you make a roll, but you can choose to substitute a skill midway through a task; the substitution will apply for the rest of the task.

Re-rolls

A re-roll means a re-roll of all three dice. Some characters have special re-roll abilities, some cards give you re-rolls, and anyone who decided to skip the Staff Video Conference gets one free re-roll. There is no limit on the number of allowed (legal) re-rolls. Unused re-rolls do not carry over to the next round.

CARD MANAGEMENT

Hacker and Mission cards are meant to be set in front of you on your board, and most of the time, they are face-up. Discard Mission cards when you're done with them (you might want to keep them around until the end of the round as a reminder of who succeeded and who failed).

If the decks of available Mission or Entropy cards run out, reshuffle the discards and reuse them.



Entropy cards are kept in your hand until played. You must pay for Bag of Tricks cards before they can be put into play; this is a one-time charge, after which the card is available for use. There is no limit to the number of Bag of Tricks cards that you may have in play. Generally, an Entropy card will specify when it can be used; otherwise, it can be used (or bought) at any time, during any player's turn.

Some cards may be traded, sold, or exchanged with other players in return for favors.

Can be traded

- > Missions (at the Staff Video Conference)
- > Purchased Bag of Tricks cards (in play on your board)
- > Money

Can NOT be traded

- > Hacker Cred
- > Missions (any other times)
- > Hackers
- > Extensive Experience cards
- > Cards in your hand

HOW TO WIN

The object of the game is to become the CEO of your very own security company.

There are several ways to earn this promotion:

Mad Skillz. Gain such a personal reputation that you can strike out and create your own security company. This happens if, at the end of a round, there is a gap of 5 Hacker Cred points between you and the player with the *next highest* Hacker Cred score.

Company Reorg. You can also win by profiting from a company reorganization. The CEO's position becomes open when, at the end of a round, the combined Hacker Cred score of all players drops below or rises above certain thresholds (see table).

- > **Canned CEO.** The CEO is called to a board meeting, where the Board of Directors gives him the boot. At this point the player with the most Hacker Cred points becomes the new CEO, and that player wins. The game must play three full rounds before this can happen.
- > **Profitable Retirement.** At this point, your company has achieved such a reputation in the industry that the CEO can retire early to a beach in the Caribbean. The player with the highest Hacker Cred score is chosen to replace the CEO, and wins.

Number of Players	Canned CEO	Profitable Retirement
3	<12	≥30
4	<16	≥40
5	<20	≥50
6	<24	≥60

If two or more players have the same Hacker Cred score when the CEO pursues other opportunities, the players will decide their fates with a Hacker Showdown.

HACKER SHOWDOWN

When the CEO's position comes open, the winner is the hacker with the highest Hacker Cred score. But what if there is a tie?

In that case, the question is settled with a little friendly (or not so friendly) competition. The tied hackers must compete in a Hacker Showdown. Each hacker rolls against their Hardware Hacking skill. (See the table for what can and cannot be used in the Hacker Showdown.) Legal re-rolls are allowed after all players roll, even if the previous roll was a success, but the player *must* use the result of the last roll, regardless of whether or not it is a success.

If one hacker makes the roll, and all rivals fail, the one who made the roll is the winner.

If more than one hacker succeeds in the roll, the winner is the one who made his or her roll *by the greatest amount*. For example: if your adjusted Hardware Hacking skill—taking all your Entropy cards into account—is 14 and you roll a 13, you made your roll by 1. If you roll a 10, you make it by 4. If you use a card or ability that gives you an automatic success, it counts as a success by 0.

If there is a tie, the tied players (only) hack another round. If all players fail their rolls, they all hack another round. Hack, rinse, repeat!

Re-rolls, bonuses, and skill substitutions allowed in Hacker Showdown

- > Hacker special abilities
- > Purchased Bag of Tricks cards (in play on your board)
- > Extensive Experience cards

Re-rolls, bonuses, and skill substitutions NOT allowed in Hacker Showdown

- > Re-rolls from Staff Video Conference
- > New trades, gifts, or purchases
- > Lightning Strikes
- > Meta
- > Shared Fate

CREDITS

Game Design: **Tamara Denning, Tadayoshi Kohno, and Adam Shostack**

Tamara Denning, Tadayoshi Kohno, and Adam Shostack dedicate *Control-Alt-Hack™* to all hacked systems: past, present, and future. May they rest in peace. Check out www.ControlAltHack.com for a more in-depth look at white hat hacking.

Game Mechanics: **Steve Jackson**

Steve Jackson has been designing boardgames, cardgames, and RPGs since the Late Cretaceous. His first game, *Ogre*, appeared in 1977 and recently got nearly a million dollars in Kickstarter support for a new Designer's Edition. His other titles, all published through his creatively named company Steve Jackson Games (www.sjgames.com) include *Munchkin*, *Car Wars*, *Illuminati*, and *Hacker*.

Graphic Design: **Gravity Creative**

Character Illustrations: **Rob Kelly**

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