Questacon
cyber

CYBER TEAM RED

UNITYCO
MISSION

THE GAME MASTER'S
GUIDE TO THE GAME

ABOUT QUESTACON – THE NATIONAL SCIENCE AND TECHNOLOGY CENTRE

Questacon's role is to enable Australians from all backgrounds to access high quality, STEM-rich experiences, and to engage the next generation with inspirational STEM opportunities. We achieve this through interactive and immersive activities delivered in our centres, on the road and online.

Our programs play a role in supporting and empowering young people, educators and families to develop the attributes, skills, knowledge, confidence and agency to thrive in tomorrow's world.

For more information on Questacon's programs and resources please visit **www.questacon.edu.au**

ABOUT THIS RESOURCE

Questacon's Cyber Program aims to inspire Australia's future cyber security workforce by engaging students, teachers and the wider community with science and digital technologies and showcasing the importance of cyber security skills in the world around us.

Cyber Team Red is a role-playing game that explores cyber security concepts using teamwork, problem solving and communication. It complements other Questacon activities that enhance cyber security and digital technologies skills.

We invite all Australians to play the game, completing the challenge while extending their cyber security skills and knowledge of diverse careers in this critical industry.

Questacon acknowledges First Nations Peoples as the Traditional Custodians and first scientists, makers and innovators of this land and their continuing connection to Country. We pay respects to their Elders past and present. We extend that respect to all First Nations Peoples.

This game has been developed by Questacon on Ngunnawal Country.

WELCOME

WHAT IS CYBER TEAM RED?

Cyber Team Red is an adventure tabletop role-playing game (TTRPG) designed for 2 to 4 players aged 12 and up, plus a Game Master. You don't need prior experience in either TTRPGs or the cyber world to be part of *Cyber Team Red*.

One player is the Game Master, who narrates the game world, makes sure that players know the rules, and keeps track of the action.

The rest of the players assume the roles of elite cyber professionals: Cyber Team Red. They live within the game world, making decisions and dealing with the consequences as the mission is completed. Each character has specialist skills and talents, and it's up to the team to decide how and when to deploy them.

When there is full complement of players and they encounter an obstacle, the team will always have a character who could succeed. If you're playing the game with fewer than four players, they will need to be more considered in their approach, and will need to play to their strengths.

CONTENTS

HOW TO USE THIS BOOKLET

Hello Game Master!

Players will use their imagination to interpret your directions, creating their own version of the game world as a group.

The first section of this guide outlines the general rules needed to play *Cyber Team Red*. Only you, as the Game Master, really need to read through this and understand it fully – then you can summarise and explain it to the other players at the table. *Cyber Team Red* has been designed so that players can sit down at a table, choose a character and be ready to play within 10 minutes.

The second section of this guide contains the mission that the players will undertake. The players will encounter the obstacles presented here, and choose how their characters attempt to resolve them.

As the Game Master, you will describe and decide the action of the game. Use the **Game encounters** section as needed, reading aloud exposition to set the scene and provide options to the players.

FOR THE GAME MASTER ONLY!

This guide contains spoilers for the adventure, and should not be read by the players. It is intended for the Game Master to use to oversee the game and how it is played.

WHAT YOU NEED

- This guide
- 2–4 players
- Character Cards
- Gather Intel Cards
- Four 6-sided dice
- Pen and paper
- Time Counter and Alert Level trackers
- A timer (a phone or tablet will do)
- Your imagination!
- About 60–90 minutes to play the game

CHARACTERS

This page contains a summary for everything the players should know before they dive into the game. Bringing the players up to speed on what their characters can do and how they do it should only take about 10 minutes.

First things first: each player will need to choose a character to play in the game. Every member of Cyber Team Red has a unique set of skills, and special abilities to bring to the team.

The four characters are:

- **Milly Overdrive**, a technical expert
- **Kai Silverspring**, a persuasive charmer
- **Marli Brightline**, a logical genius
- **Jamie Edge**, a master at bypassing barriers.

Encourage the players to lean into their characters' strengths. This is especially important when playing with fewer than four players, as there won't be an expert for every type of obstacle they encounter.

Once players have chosen their character, give them a few moments before starting the game to read the Character Card and get to know their character's personality, skills and special abilities.

Note: There is a difference between the players who are sitting down at the table, talking with the Game Master and rolling dice, and the characters they are playing in the game world. In this guide, the words 'player' and 'character' are not used interchangeably – the choice of each one is intentional.

MARLI BRIGHTLINE
CYBER TEAM RED

Marli sees relationships more clearly than everyone else. She has learned how to watch for patterns in both data and the real world, including in people she meets.

AVATAR

SPECIAL ABILITY
Adaptability: Once per mission, when Marli is making any skill check, she can choose to re-roll any failed dice.

SPECIAL ITEM
Covert digital tracer – a clever and discrete piece of hardware. Marli can use this microcomputer to stealthily map out where all the data is flowing in a network segment.

You can use this feature once per mission. Marli can scan a network segment without raising the alert level.

FAVOURITE GAME
Guess Who

PHYSICAL
All types of real-world skills – like cracking codes, removing a door from its hinges or crawling through air vents.

SOCIAL
Interacting with other people in the real world and in cyberspace. This skill is used for 'social engineering' – manipulating someone into telling you secret information or letting you into places you shouldn't be.

TECH
Interacting with electronics – think devices, networks and data. You could use this skill to 'jack in' to a network, check computer logs or peek into CCTV cameras.

LOGIC
Looking for evidence and identifying patterns in systems both in the real world and cyberspace.

CYBER TEAM RED

MARLI BRIGHTLINE

CHARACTER MOVEMENT

Characters are free to move throughout the mission area unless they are blocked by an obstacle (typically a door, firewall or social interaction that acts as a gatekeeper). If there are no obstacles, the characters simply move to the new location and the Game Master describes the transition.

> **Example:** The characters are in a hallway with two doors. The name plaque on one of them reads 'Backstage'. It is locked. The other door is unlocked and reads 'Exhibition Hall'. The characters can freely move to the Exhibition Hall but must overcome the locked door obstacle to the Backstage area before they enter.

INTERACTING WITH OBSTACLES

Obstacles usually have a couple of different ways characters can interact with them. Each of these encounters have four properties:

1. skill (physical, social, tech and logic)

2. difficulty (easy, medium or hard)

3. time (0, 1 or 2)

4. alert (0, 1 or 2).

Each encounter has a difficulty rating of **easy**, **medium** or **hard**, requiring one, two or three successes on the dice for the character to succeed in the interaction. A dice roll of 5 or 6 is a success. Rolling a 4 or less means that the dice roll is a fail.

When a character is performing an action, the player rolls a number of dice equal to the character's skill as shown on their character card, plus one if another character is assisting them. That means if players choose to engage with a hard obstacle path, there is a high chance of failure!

ASSISTING

Whenever a player rolls the dice for a character interacting with an obstacle, a teammate can lend one of their dice if they describe how their character would help them with this. It might be something as simple as saying, "I keep watch to make sure no one comes by."

Help your players by suggesting some ways they can help each other out if they get stuck. Only one player may assist the active player at a time, but there is no limit to the number of times players can do this in a mission. A team that works together well and assists each other all the time will always be able to roll at least two dice to solve an obstacle.
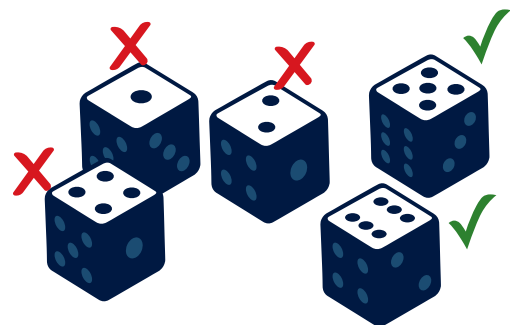
MISSION FORMAT

A mission has five distinct phases that flow one after another:

Mission Briefing
▼
Gather Intel
▼
Mission
▼
Exfil
▼
Debrief

MISSION BRIEFING

First, characters will get the **Mission Briefing**. This exposition tells them their location and objective and gives a quick rundown of the rules of engagement. The Game Master uses the briefing outlined on page 17.

GATHER INTEL

Second, the characters will use their abilities to **Gather Intel**. Each character will learn unique pieces of information as they research the mission environment. Characters can use this information to formulate a plan of attack. Be wary of spending too long in this stage – players can go down a rabbit hole of contingencies that might never come to pass.

> **Tip:** No plan survives first contact, so it's best to encourage the players to come up with a broad overarching plan and deal with details as they pop up.

MISSION

Third, the characters embark on their **Mission**. This is where most of the game takes place as the characters move through the game world, solving problems as they arise and dealing with any consequences.

EXFIL

Regardless of whether they complete their objective, run out of time or blow their cover, the characters will need to **Exfil** – they need to get out of there! This usually takes only a couple of minutes. Ask the players how they exit the building. Do they go back the way they came in? Or do they slip out another way?

DEBRIEF

Finally, the characters will have a quick **Debrief** back at base. As players (including the Game Master), this is the chance to discuss the successes, surprises and obstacles you encountered and how the characters responded to them. This phase is great for checking what each of the players learned from their experiences in the mission.

TIME

Each mission has a window of time in which the characters need to complete their objective, just like most cyber penetration tests in the real world. It can get tense! Keep the players moving forward instead of ending up in planning loops.

Time in the game is represented by a 12-segment Time Counter. A segment is filled in every 10 minutes of real time **and** whenever the characters choose an action in the game that says to fill in a segment. Note that in the latter case, the Time Counter segment is filled in regardless of whether the player's dice roll succeeds or fails.

> **Example:** A character may choose to attempt to pick a lock. Whether the attempt succeeds or fails, colour in one segment of the Time Counter, representing 10 minutes of in-game time passing.

Use the Time Counter provided and set out a timer (any timer app on a phone or tablet works well for this) and set it to 10 minutes (make sure it has a loud alarm!). Begin the timer at the start of the Gather Intel phase. Every time the alarm goes off, colour in another segment of the Time Counter, then reset the timer and begin again.

ALERT

When the characters do something suspicious, the alert level is raised. Suspicious activity includes things like lingering in an area for too long, getting bounced back from a failed firewall hacking attempt or breaking the lock on a door. The alert level rises regardless of whether the player's dice roll succeeds or fails.

The alert level is represented in a similar way to the Time Counter, with a notable difference being that the Alert Level Tracker only has six segments. When all segments are coloured in, the characters have failed the mission by blowing their cover and will need to exfil before they get caught!

IMPROVISING

Sometimes, the players may come up with a way they want to interact with an obstacle that isn't written down in this mission document. If their suggestion sounds plausible, you (as Game Master) can decide the interaction by:

1. assigning an action skill
2. providing a difficulty
3. assigning a reasonable time and alert level consequence.

Then the players roll for it!

EXAMPLE OF PLAY

Jordan is the Game Master (GM), running this mission for two players, Jin and Michaela. Jin is playing Jamie Edge, an expert at breaking through barriers in the physical world, while Michaela is playing Milly Overdrive, a tech guru. They have just slipped into the fire escape of a building and are making their way up to Level 1.

Jordan (as the GM): You walk up the concrete stairs, hearing your footsteps echo above and below you. On the Level 1 landing, you come up to a fire door that is locked tight with an electronic swipe card access point. Since you're on the same side as the door's hinges, you could try removing the hinges to open the door. It's a sturdy door, designed for emergencies, so it will be a Hard Physical roll. Also, it'll take a bit of time – one segment of time – and it's quite noisy and would leave marks on the hinges, so the alert level would go up by two.

Jin (as Jamie): I'm good at Physical things, but this isn't going to be easy. It sounds a bit too risky. Is there any other way to get past it?

Jordan: Yeah, there is! You could also try to bypass the electronic lock with your Tech skills. That's only Medium difficulty and would take the same time. Also, since it's quiet, you won't leave any traces behind.

Michaela (as Milly): I'm great at Tech! Can I give that a go?

Jin: I'll assist by prying the cover off the electronic card reader for you.

Jordan: Great! Michaela, you get to roll your Tech skill, and add an extra dice because Jamie is Assisting Milly. You need to get two Successes to bypass the lock.

Michaela: Okay, my Tech skill has three dice, plus the one extra from Jamie to make four.

Michaela rolls the dice, getting a 1, 3, 5, and 6.

Michaela: That's exactly two Successes! I send the right signal from my cyberdeck to the lock, what happens?

Jordan: You see the door lock flash green and it makes a "bing!" noise. The door handle opens easily, and you can step into the hallway on Level 1.

Jordan flips through the book to reach the page for Level 1 Hallway, and reads out what the characters can see …

THE REAL WORLD VS CYBERSPACE

The characters in the game are cyber experts who are equally comfortable navigating their real world and the world of cyberspace. There are points in the mission where the players can access the cyber network at their mission location (called 'jacking in').

Cyberspace is a totally different place to their real world. In cyberspace, the characters take on the look of their cyber avatar (as shown on their Character Card) and can see the elements of the cyber network (such as personal computers, servers and firewalls) represented in digital light. Draw inspiration from popular culture representations, such as in *Tron*, *Ready Player One*, or *The Matrix*.

Describe this to the players as vividly as possible, for example:

- "Packets of data look like beads of light and flow along copper wires or across the air between network elements."

- "Firewalls look like the walls of a fortress compound, with only some gateways open to allow traffic through."

- "Servers look like huge, towering monoliths with many open channels for data packets to flow in and out."

The characters' 'real-world' bodies stay where they are in the physical world while they explore and interact with the cyberspace elements of the mission. Get ready to fire up your imaginations!

If the characters fail an interaction with a cyberspace obstacle, like trying to bypass a firewall, they arouse the suspicion of the countermeasures software defending the network and are 'booted off', returning to their physical bodies.

MISSION DEBRIEF

It is entirely possible for the players to run out of mission time or blow their cover by filling all spaces on the Alert Level Tracker. Should this happen, don't feel discouraged – this is an opportunity to retreat and debrief. Some helpful questions to ask as the Game Master are:

- Why do you think you ran out of time?
- What didn't work out the way you expected?
- Did your plan hold up?
- What would you do differently next time?

After the debrief, offer the players a chance to replay this mission next time you meet up. Since the missions are written in an open scenario format, the characters can come at it with a fresh approach while still knowing the information they learned in their previous attempt. This is a great way to build resilience and show the players that failure isn't final – just a rung on the ladder to success.

In this mission, the team of characters will attempt to infiltrate UnityCo's office building and gain access to the company's servers to protect them from cyber crime.

As the Game Master, use the tables in the following **Game encounters** section to guide the outcomes of the team's actions. The players are likely to come up with ideas not described in this booklet, so become familiar with the types of interactions characters can have, and what happens as a result. Use these to inform any improvised encounters.

DESCRIBING THE CYBER TEAM RED WORLD

Players use their imagination to construct the game world in their mind. They are solely guided by your descriptions, making the choice of words to depict the world very important.

As the Game Master, you should create an air of tension – but not panic! Encourage the need for quick thinking and fast decisions without making the players feeling rushed.

Tip: If the players are getting stuck at a decision point, try giving a summary of the scene once more and add a phrase like, "You can feel the time slipping away" or "You feel the need to press on" or even "You're starting to look suspicious standing around here".

Cyber Team Red works best when the Game Master is on the players' side. You are there to provide the challenges for the players to overcome, not to be their adversary.

USING GATHER INTEL CARDS

Give the players time at the start of the game to gather intelligence on their mission target.

Each character uses their best skill to perform research for the mission. This is shown on the Character Card (Physical, Social, Tech or Logic ability). Give each player three dice to roll. Roll them until each shows a unique number.

Hand out the corresponding Gather Intel Cards – these cards have both the ability and the numbers shown on them, as well as information for the players. Players should share this information with the team.

Example: Sarah is playing Kai Silverspring, whose best ability is 'Social'. Sarah rolls three dice and gets 2, 2, 4. Sarah re-rolls one of the 2s and gets a 1. She then tells the Game Master that she rolled 1, 2 and 4 for Social ability, and is given Social Gather Intel Cards 1, 2 and 4.

Once everyone has their intel, start the first 10-minute timer. Encourage the team to share their intel, work out their top skills and come up with a plan of attack!

To help the planning session, here are some prompting questions you can ask the players:

• What information does everyone know? How could it be used to your advantage?

• How do people access this building?

• Who is expected to be at this building?

• How are you going to get in?

INTEL CARD 3

LOGIC

You know that server rooms can get pretty hot and that air conditioning units are kept at the top of the building. They must be connected by air ducts.

INTEL CARD

LOGIC

CYBER TEAM RED

UNITY CO MISSION

GAME MASTER UNITYCO BRIEFING

SETTING THE SCENE

Read this aloud to the players

We've detected a cyber criminal operating out of a small IT firm called UnityCo. We don't know who they are, but we do know they're using the computers from UnityCo to store and transmit valuable data. To find out who's behind this, we need to track who the data is being sent to.

There's just one problem: the criminal's program only activates for two hours every few weeks to transmit the data.

We need your squad to infiltrate the building (without being noticed by anyone, so we don't tip off the suspect) and install a 'backdoor' on the correct server, which you can do by hacking into their computer network or accessing the server directly. We've already spoken with the company's Chief Information Security Officer, and we have their permission as long as we debrief them on the vulnerabilities we discover in their company.

Good luck team!

MISSION RULES

1. No violence
2. Don't get caught
3. Move as a team
4. You have 2 hours
5. Install the backdoor
6. Escape the building
7. Debrief at the end

GATHER INTEL CARDS

SOCIAL	
1	You spend some time researching the social media profiles of Larry, the guard who works the front desk. Looking at his posting history, you see that Larry really loves donuts.
2	While monitoring who comes and goes from the building, you notice that some people – all wearing overalls – have been working in the building lately. The staff pay no attention to them.
3	While pretending to be a window washer, you notice that security guards walk around the building every hour.
4	Looking through the third-storey windows, you can see that the staff of UnityCo like to chat in the Kitchen area while having a cup of tea.
5	The receptionist, Rohan, sits at the front desk at UnityCo. He makes sure visitors have an appointment before signing them in.
6	Three different groups of people use this building: staff from UnityCo; security guards; and maintenance workers like janitors and window washers.

TECH	
1	Different groups of people that use the same building have swipe cards that allow them to enter different areas.
2	Being familiar with computer technology, you know that server rooms need to be cooled to prevent overheating.
3	There are computers that operate conference calls in each of the shared meeting rooms.
4	There are some places where you could plug a computer directly in to the building's cyber network. This should make it easier to go through their network.
5	While snooping through the unprotected Wi-Fi network from outside of the building, you find out that there's at least one firewall that blocks unauthorised traffic from outside.
6	Some user accounts have more permissions than others. If you have a good user login, you might be able to access additional information or slip through some firewalls.

LOGIC

1	In researching commonly used passwords, you find that people often use their birthdays, pet's name, and the number 1 in their passwords.
2	It's basic psychology that people rarely complain or ask questions when presented with things they like.
3	You know that server rooms can get pretty hot and that air conditioning units are kept at the top of the building. They must be connected by air ducts.
4	There are several different groups of people who use this building, so they must have different levels of access.
5	Passwords often begin with an uppercase letter and end with the number 1.
6	A business of this size likely has several segments to their cyber network. You might be able to search for devices on the 'right' side of a firewall instead of having to hack through it.

PHYSICAL

1	While staking out the building, you find that employees, visitors and delivery people all enter through the Front Door.
2	While staking out the building, you find that janitors, maintenance and security all use the Rear Entrance.
3	You know that you need a swipe card with permission to exit via the Fire Exit Stairs on any floor other than the Ground Level.
4	Researching the building, you can see that it has larger than average air ducts – large enough for a person to squeeze through.
5	Looking in from the outside, you can see that there is an Empty Office on Level 1.
6	UnityCo employees seem to prefer using Elevator 1 to get from the Foyer to their office.

THE UNITYCO BUILDING

The layout is an example of a typical office building. As Game Master, feel free to embellish descriptions of the rooms with any experiences of your own. Some key information of this location is presented below.

ACCESS

There are two access points to the building:
- a path through the Front Door that the staff and visitors use
- a path through the rear door that maintenance workers and janitors use.

LOCKED DOORS

Some of the doors in the building are electronically locked and require a swipe card with the appropriate level of access. Some are physically locked and require a key. The Server Room door is mechanically locked and requires a keypad code.

SWIPE CARDS

The electronic swipe cards have three levels of access:

	USERS	LOCATIONS
Visitor Access	Visitors	Elevators
Staff Access	Employees	UnityCo Reception (via Elevator 1), Executive Offices, Fire Exit Stairs
All Access	Security	Everywhere

One of the characters, Milly Overdrive, has the ability to copy another person's swipe card access level just by being in close proximity to them using the XGC Cyberdeck – a powerful arm-mounted computer scanner. She can use this feature on any non-player character (NPC) that she can see and interact with within the obstacle descriptions.

If there are no NPCs around and it seems reasonable, create one for the characters to interact with. Ask them how they waylay this employee and what they say to them while they wait for Milly's device to finish copying their card.

ROAMING PATROLS

Once an hour, a security guard leaves the Security Office to roam around the building. This occurs when 6 segments of the Time Counter have been filled. If the players are out in a space such as the Hallways, Fire Exit Stairs, Empty Office or Storage Room, the Roaming Security Guard encounter on page 45 is triggered.

USER CREDENTIALS

UnityCo employees have staff logins to their computer systems. There are three logins throughout the mission that the characters can find (these are listed in the **Game encounters** section). If they have a login, they can bypass the firewalls that segment the computer network.
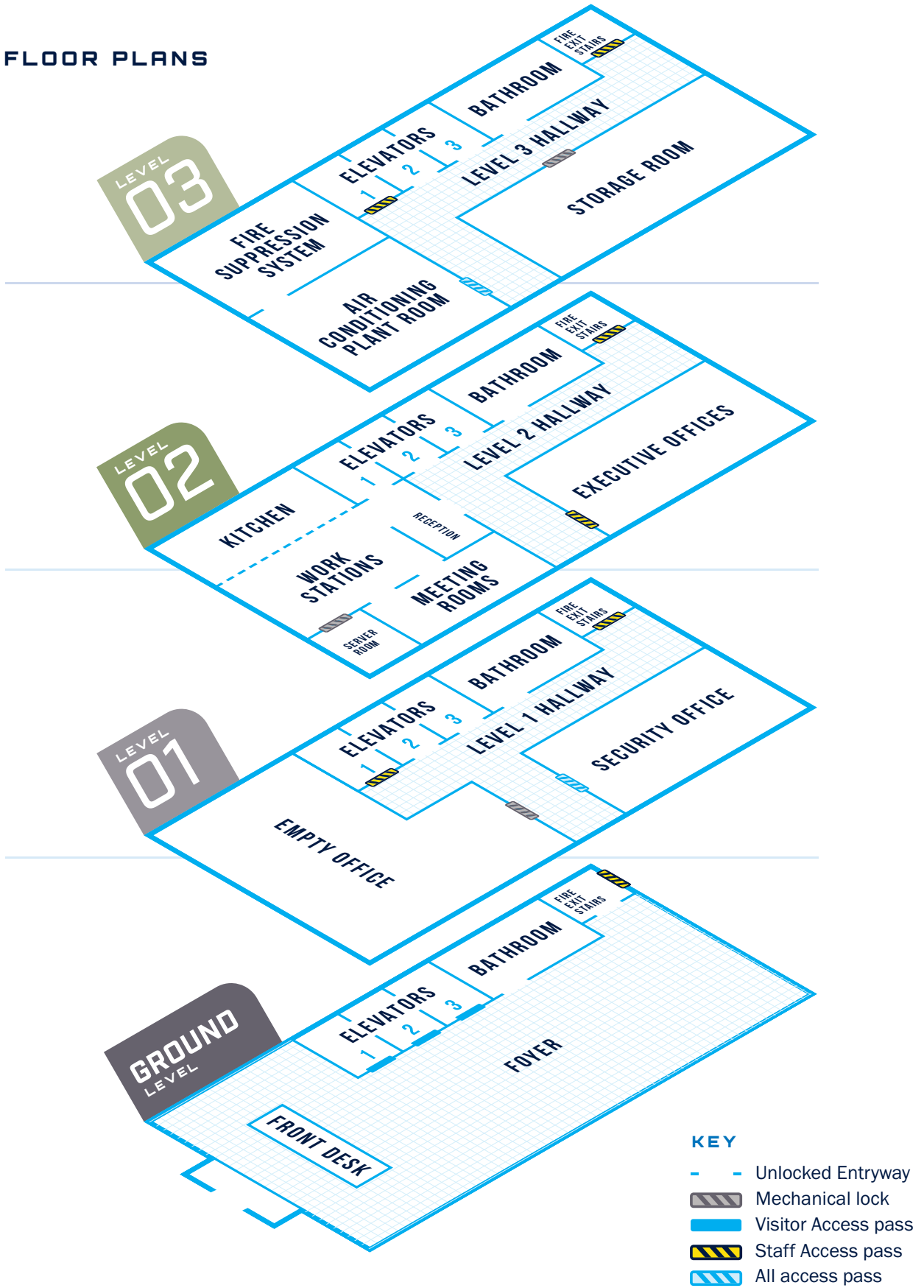
FIRE EXIT STAIRS AND ELEVATORS

There are Fire Exit Stairs and Elevators that provide access to all levels of the building. The Fire Exit Stairs can be freely accessed from the Hallways and Foyer, but they are electronically locked from the other side, requiring a swipe card with at least **Staff Access** permission to open.

The Elevator doors on the ground floor require a swipe card with at least **Visitor Access** to open.

FLOOR PLANS

LEVEL 03
- FIRE SUPPRESSION SYSTEM
- ELEVATORS 1 2 3
- BATHROOM
- FIRE EXIT STAIRS
- LEVEL 3 HALLWAY
- STORAGE ROOM
- AIR CONDITIONING PLANT ROOM

LEVEL 02
- KITCHEN
- ELEVATORS 1 2 3
- BATHROOM
- FIRE EXIT STAIRS
- LEVEL 2 HALLWAY
- EXECUTIVE OFFICES
- WORK STATIONS
- RECEPTION
- MEETING ROOMS
- SERVER ROOM

LEVEL 01
- EMPTY OFFICE
- ELEVATORS 1 2 3
- BATHROOM
- FIRE EXIT STAIRS
- LEVEL 1 HALLWAY
- SECURITY OFFICE

GROUND LEVEL
- FRONT DESK
- ELEVATORS 1 2 3
- BATHROOM
- FIRE EXIT STAIRS
- FOYER

KEY
- – – Unlocked Entryway
- Mechanical lock
- Visitor Access pass
- Staff Access pass
- All access pass

CYBER TEAM RED

GAME ENCOUNTERS

GAME ENCOUNTERS

ENCOUNTER: FRONT DESK

Coming in through the Front Door, you see a large wooden desk blocking your entry. A security guard sits behind it, and he smiles at you as you enter. You can see the name "Larry" embroidered on his shirt pocket. Behind the desk, you can see an open and well-lit foyer. Larry smiles at you as you walk in and swivels in his chair to greet you.

Extra info: Larry has a swipe card with **All Access** permission on a retractable holder on his hip.

↓

INTERACTIONS

	Social		Social		Social
Hard ●●●		**Easy ●**		**–**	
Time	Alert	Time	Alert	Time	Alert
1	2	1	0	0	0
Try to convince Larry that you're supposed to visit UnityCo today, even though you don't have an appointment.		If you're wearing maintenance overalls, it's very easy to convince Larry that you're here to fix something. What might that be?		You arrive with donuts – the fancy kind. Larry will let you right in as he chooses the one he'll eat first. Instant success!	

Failure	Larry doesn't let you in. He politely but firmly tells you that only people with an appointment are allowed into the building.	Larry doesn't let you in. He tells you cheerfully that there might be a mix-up with the calendar, but if it gets sorted you should come in the back entrance like the rest of the contractors.	N/A
Success	Larry signs you in with a visitors' pass and swipe card with **Visitor Access** permissions, but he thinks you're a bit suspicious and decides to keep an eye on you.	Larry signs you in with a visitor's pass and swipe card with **Visitor Access** permissions. He's happy he could help.	Larry seems to forget to follow the proper procedure in his excitement. He quickly and enthusiastically gives you a visitor's pass and swipe card with **Visitor Access** permissions.

↓

Progress to the Foyer

GAME ENCOUNTERS

ENCOUNTER: FOYER

The Foyer is a large, open space with a white tiled floor. There are a couple of comfortable lounge chairs accompanied by fake plants. Some UnityCo staff are sitting, drinking coffee and chatting. There are three Elevators that require a swipe card (**Visitor Access**), a Bathroom and Fire Exit Stairs. While here, you notice on your mobile computers there is an open Wi-Fi network.

Extra Info: the UnityCo staff have swipe cards with **Staff Access** permission on their lanyards.

INTERACTIONS

Tech	
Easy ●	
Time	Alert
1	0

Scan the Wi-Fi network for information.

Failure	The network is a jumble of different devices, blocked by a firewall.
Success	There are a number of devices accessing the internet through this Wi-Fi network. You can see a collection of computers, phones, tablets and Internet of Things (IoT) devices. The traffic is all flowing through a single firewall that stretches high above you, blocking you from peering into the inner workings.

Progress to Network Node 1

ENCOUNTER: FIRE EXIT STAIRS

The Fire Exit Stairs are made from grey concrete. They spiral upwards and have landings on each floor. While you can walk up and down the stairs easily, you can only freely exit into the Foyer or to the outside. Every landing above Ground Level requires a swipe card to be opened from this side (**Staff Access** required).

Extra info: if the Time Counter is at 6 or 7 segments, trigger the Roaming Security Guard encounter on page 45.

INTERACTIONS

Physical		Tech	
Hard ● ● ●		**Medium ● ●**	
Time	Alert	Time	Alert
1	2	1	0
Try to pop the door off its hinges.		Bypass the security device and send a signal to unlock the electronic lock directly.	

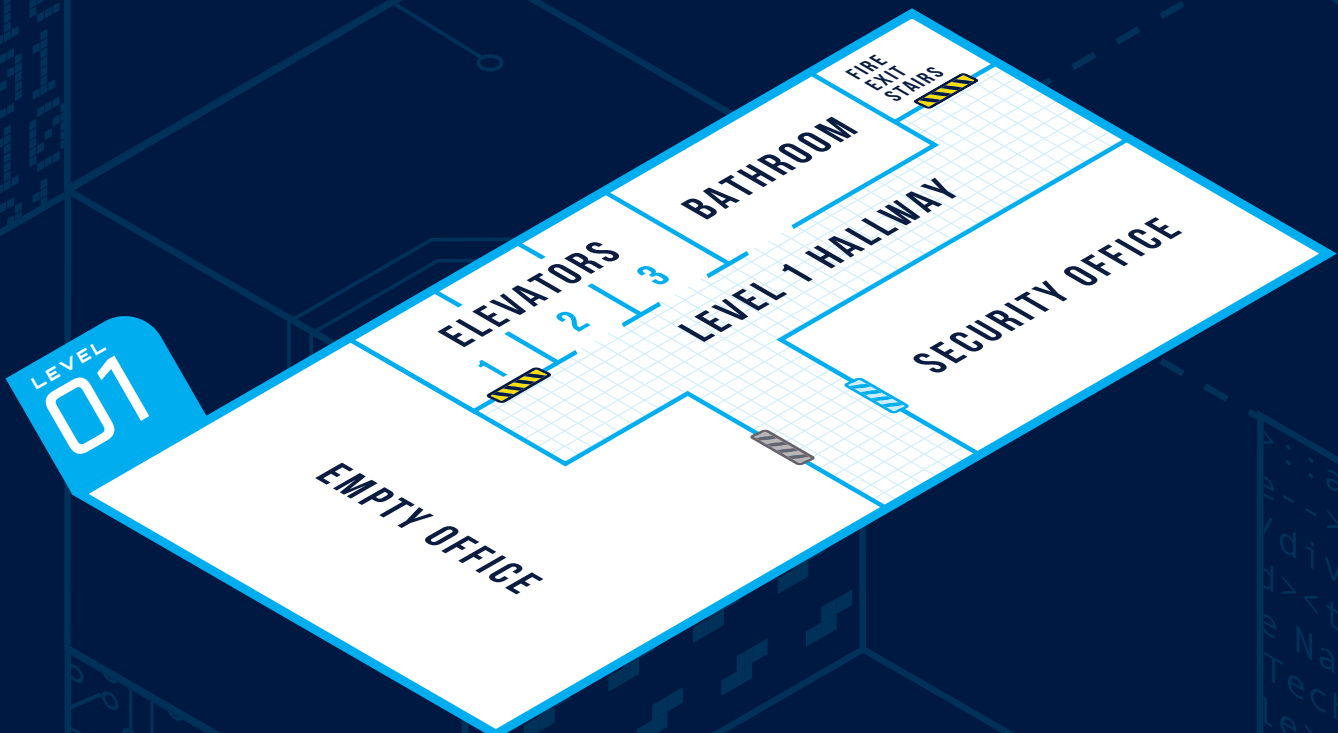|	Physical	Tech
Failure	The door holds firm. You make a lot of noise but don't succeed in getting the door off its hinges.	The electronic lock flashes red and makes a beeping noise to indicate you haven't unlocked the door.
Success	You manage to quietly remove the pins in the hinges and slide the door off. After you slip through to the other side, you can gently replace the door.	You send a signal to the locking mechanism. The door lock flashes green and gives you a 'bing!' noise. Now you can easily open the door.

Progress to the appropriate Hallway on Level 1, 2 or 3

GAME ENCOUNTERS

ENCOUNTER: ELEVATOR 1

Elevator 1 has a mirror on one side, and you catch a glimpse of yourself before the stainless steel doors close. You can see the buttons (Ground, 1, 2, 3) that will take you to the upper floors.
It seems that, to access Level 2, you need a card to be swiped before the button can be pressed (**Staff Access** required).

↓

INTERACTIONS

Tech	
Medium ● ●	
Time	Alert
1	0

There is a small control panel hidden beneath the Elevator 1 buttons. It is easily opened, providing access to a circuit board that controls Elevator 1. You can try to hack Elevator 1 to take you to floors that you don't have the right swipe card for.

Failure

Elevator 1 keeps throwing error messages – it seems like you can't circumvent the protocol.

Success

You hear the same 'bing!' noise as if you have successfully swiped an access card.
You can now press the button for Level 2.

↓

Progress to Workstations

ENCOUNTER: ELEVATORS 2 AND 3

Elevators 2 and 3 have a mirror on one side, and you catch a glimpse of yourself before the stainless steel doors close. You can see the buttons (Ground, 1, 2, 3) that will take you to the upper floors. Which button do you press?

↓

INTERACTIONS

↓

Progress to the appropriate Hallway

LEVEL 01

ELEVATORS
1 2 3
BATHROOM
FIRE EXIT STAIRS
LEVEL 1 HALLWAY
SECURITY OFFICE
EMPTY OFFICE

GAME ENCOUNTERS

ENCOUNTER: LEVEL 1 HALLWAY

There are five places to go in this L-shaped hallway:

1) The Elevators.

2) The Fire Exit Stairs.

3) The Bathroom.

4) A glass-fronted Empty Office – it is dim, as the lights are turned off. A mechanical lock sits below the handle.

5) A door labelled "Security". It requires a swipe card to enter (**All Access** permission required).

Extra info: if the Time Counter is at 6 or 7 segments, trigger the Roaming Security Guard encounter on page 45.

INTERACTIONS

Physical		Tech	
Easy ●		**Medium ●●**	
Time	Alert	Time	Alert
1	0	1	2
Attempt to pick the lock to the Empty Office.		Attempt to hack the door to the Security Room. You don't know who might be on the other side!	

	Physical	Tech
Failure	The tumblers inside the lock just won't catch correctly.	Standing outside this office, you try to interface with the high-security locking mechanism, but it just won't listen to your commands.
Success	You manage to align the tumblers, and the whole lock turns just as if you had accessed it with a key.	The swipe indicator LED lights up green and you hear the lock unlatch.

Progress to the Empty Office	**Progress to Security**

GAME ENCOUNTERS

ENCOUNTER: EMPTY OFFICE

This office is eerily quiet and dim. You trip the automatic light sensor as you enter, and the fluorescent lights flicker on. You can see some old office furniture scattered about and an abandoned printer. Otherwise, the room is empty.

Extra info: if the Time Counter is at 6 or 7 segments, trigger the Roaming Security Guard encounter on page 45.

↓

INTERACTIONS

	Physical		Tech	
	Hard ●●●		–	
	Time	Alert	Time	Alert
	1	1	1	0
	Attempt to climb into the air duct to transition to the floors above; Level 2 or Level 3.		Find a place to jack in to the network.	
Failure	The vent into the air duct is well made – you don't think you can remove it without causing damage to the building and giving yourself away.		N/A	
Success	You move some furniture around and use it to hoist yourself into the air duct. It makes a bit of noise, but you can travel to the floor above by crawling through the ducts.		N/A	

↓	↓
Progress to Server Room or Air Conditioning Plant Room	**You access the Network Node 1**

GAME ENCOUNTERS

ENCOUNTER: SECURITY OFFICE

One wall of this office is covered in monitors showing the different sections of the building. You can see the Hallways, Elevators, Fire Exit Stairs and some other locations where there must be a CCTV camera. There is a recording system off to the side and a chair positioned in front of a singular computer terminal.

Extra Info: if the Time Counter is between 5 and 7, the security guard, Ajay, who usually operates this office, is out on patrol. At any other time, she is sitting in the chair. Turn to the Roaming Security Guard encounter if she is sitting at the desk.

INTERACTIONS

Logic	
Medium ● ●	
Time	Alert
1	0

Attempt to erase any CCTV footage of your team since you entered.

Failure	After spending some time navigating the recording system, you can't figure out how to delete stored footage.
Success	After spending some time navigating the recording system, you find the menu to reformat the system and erase everything. Reduce the Alert level to zero.

ENCOUNTER: LEVEL 2 HALLWAY

There are five areas in the L-shaped Level 2 Hallway:

1) The Elevators – only Elevators 2 and 3 have visible entrances.

2) The Fire Exit Stairs.

3) The Bathroom.

4) UnityCo Reception – it has a glass front with an automatic sliding door. A young man sits behind the desk, answering phones and emails.

5) There is a suite of Executive Offices on the opposite side of the hall to the UnityCo Reception. It requires a swipe card to gain access. There is no way to force this door open without drawing too much attention (**Staff Access** required).

Extra info: if the Time Counter is at 6 or 7 segments, trigger the Roaming Security Guard encounter on page 45.

↓

INTERACTIONS

↓

Progress to the appropriate encounter
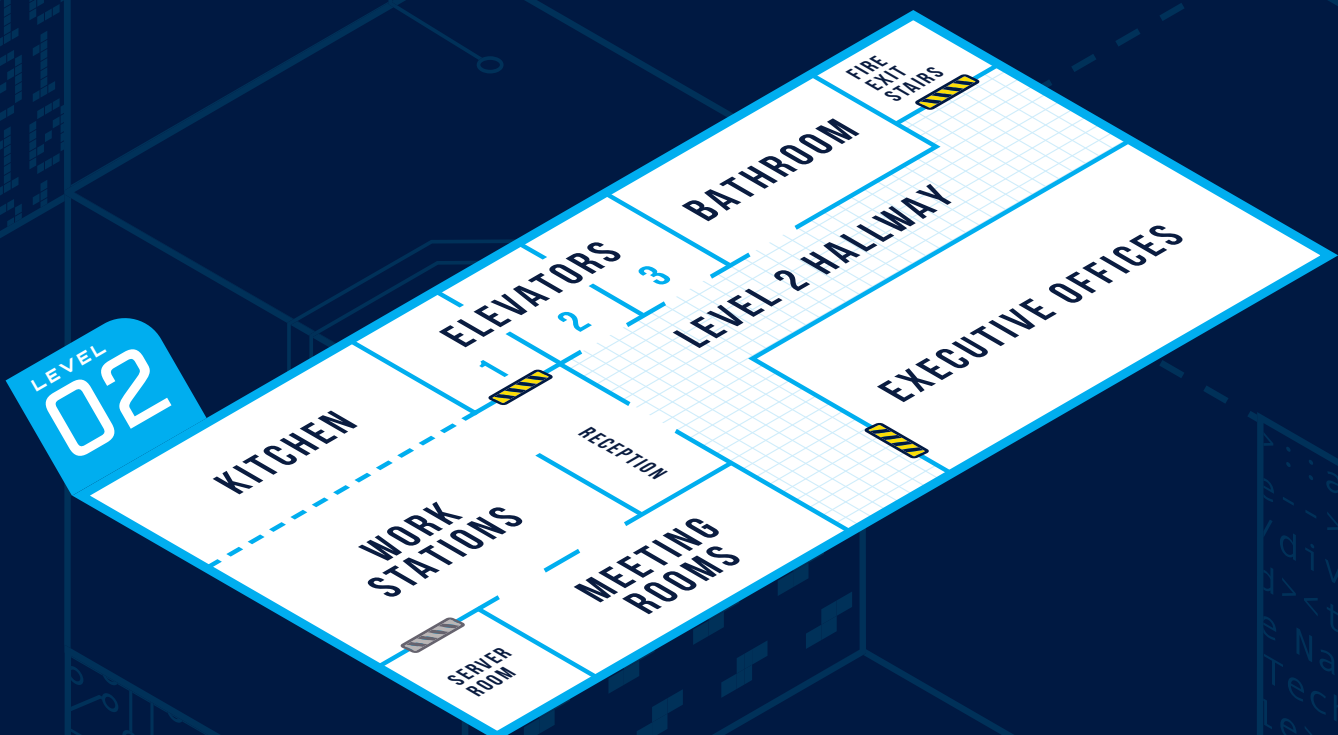
GAME ENCOUNTERS

ENCOUNTER: UNITYCO RECEPTION

The man sitting behind the desk looks up as you enter and gives you a polite smile. You can see his name badge reads "Rohan". He asks who you're here to see and if you have an appointment. You notice he has a **Staff Access** swipe card on his lanyard.

INTERACTIONS

Social		Tech	
Hard ●●●		**Medium ●●**	
Time	Alert	Time	Alert
1	1	1	0
Convince Rohan to give you access to the Workstations.		Send an email that automatically adds an appointment into his calendar and ask him to check again.	

	Social	Tech
Failure	Rohan runs a tight ship and isn't accepting your reasons. He will not let you enter.	The email you send doesn't make it past the spam filters. You are unable to force an appointment. He will not let you enter.
Success	Rohan seems hesitant, but you convince him that sometimes people miscommunicate. He agrees to let you in.	Rohan checks the calendar and quietly berates himself for missing your appointment. He signs you in and you can progress to the Workstations.

Progress to Workstations

GAME ENCOUNTERS

ENCOUNTER: WORKSTATIONS

An open plan office stretches out before you, with many desks and workers tapping away on the computers. Nobody seems to pay you any attention (everyone probably assumes someone else has responsibility for handling visitors). You can see two meeting rooms on one side of the room and another door that is labelled "Server Room". It has a mechanical keypad lock.

↓

INTERACTIONS

	Social		Tech		Logic	
	Medium ● ●		Medium ● ●		Medium ● ●	
	Time	Alert	Time	Alert	Time	Alert
	1	1	1	2	2	2
	Wait for an employee to type in their username and password and peek over their shoulder in a shoulder surfing attack.		Find an unattended computer and attempt to gain access to the network by bypassing the login.		Use your pattern-matching skills to determine the code to the server room door.	
Failure	You can't clearly see anyone typing in their username and password.		The initial login security is too good. You can't get past it without rousing suspicion.		The door security does its job and keeps you out.	
Success	You see someone typing in their username and password combination. **Username:** xiao.min **Password:** MyVeryLongPassword1		N/A		You identify the numbers that look like they have been worn smooth, and try all the combinations. When you enter one of them, you hear a heavy lock unlatch. The door pushes open.	
			↓ **Access the Network Node 2**		↓ **Progress to Server Room**	

GAME ENCOUNTERS

ENCOUNTER: KITCHEN

There is a small group clustered around the remains of a birthday cake. You can hear people chatting away, discussing what they have planned for the weekend.

↓

INTERACTIONS

Social	
Easy ●	
Time	Alert
2	0

Eavesdrop on the conversations to see if you can find out anything helpful.

Failure

You discover that two people are gluten intolerant, but otherwise you can't make out any information that will help you.

Success

You overhear Jessica Francis talking about her birthday party on the weekend. Her actual birthday was on Friday the 13th last week and her dog Billy was wearing a cute party hat.

Username: jessica.francis
Password: Billy13

GAME ENCOUNTERS

ENCOUNTER: MEETING ROOMS

These two rooms have glass walls, whiteboards, projectors, and computer terminals. One of them has a mixture of different UnityCo employees discussing something avidly – the word "Agility" is written on the whiteboard and has been circled several times. The other meeting room is empty.

↓

INTERACTIONS

Tech	
Easy ●	
Time	Alert
1	0

Attempt to jack in to UnityCo's network by accessing an unattended network socket.

Failure	When you connect your device, it is automatically blocked from accessing the network.
Success	You manage to add your device to the trusted sources on the network, and jack in to cyberspace!

↓

**Access the
Network Node 2**

GAME ENCOUNTERS

ENCOUNTER: SERVER ROOM

This room has a collection of four computers with blinking lights lined up on a rack. Cold air blows from the air vent above them. Many cables enter and exit these computers. They are labelled:

PROD.01.01
PROD.01.02
PROD.01.03
PROD.01.04

A door leads to the outside, where you know UnityCo's main offices are located. The handle feels unlocked from this side of the door. You know it would open up to the UnityCo Workstations.

↓

INTERACTIONS

	Logic		Tech		Physical	
	Medium ●●		**–**		**Medium** ●●	
	Time	Alert	Time	Alert	Time	Alert
	1	0	0	0	1	0
	Try to map the nest of cables to determine which server is which.		Jack in to the network hub where all the computers are connected to determine which server is which.		Climb into the air duct to transition to the floor above or below.	
Failure	The nest of cables is so tangled that it is too hard to determine which one leads to each server.		N/A		It is too difficult to climb over the computers into the air duct without making it obvious you were here.	
Success	Carefully tracing each cable from the servers to the router, you manage to discover that PROD.01.03 is the File Server you need to install the backdoor on. With direct physical access, it's no trouble at all. Mission accomplished, now get out of here!		N/A		You slip through the vent and into the air duct. You climb your way up or down the ducts.	
			Progress to Network Node 3		Choose to go either up or down **Up**: progress to the Air Conditioning Plant Room **Down**: progress to the Empty Office on Level 1	

ENCOUNTER: EXECUTIVE OFFICES

There are four glass-walled offices, each with formal title plaques on the doors.
Two of them are occupied, two of them are empty.

INTERACTIONS

	Tech		Logic	
	Easy ●		**Easy** ●	
	Time	Alert	Time	Alert
	1	0	0	1
	Find an empty office and look for a way to jack in to the network.		Look around at all the computers to see if any passwords are written down. This is fast, but rouses suspicion.	
Failure	When you connect your device, it is automatically blocked from accessing the network.			
Success	You manage to connect your device, and you jack in to cyberspace inside UnityCo's outer firewall.		Inside an office with the name "Vivien Len", you find a monitor with a post-it note that has a password written on it. **Username:** vivien.len **Password:** Unityco1	

Progress to
Network Node 2

ENCOUNTER: LEVEL 3 HALLWAY

There are five places to go in this L-shaped hallway:

1) The Elevators.

2) The Fire Exit Stairs.

3) The Bathroom.

4) A door labelled "Storage" – it is locked and requires a key to open.

5) A door labelled "Air Conditioning Plant" – a hum comes from behind it.
   It requires a swipe card with at least **All Access** permission to unlock.

Extra info: if the Time Counter is at 6 or 7 segments, trigger the Roaming Security Guard encounter on page 45.

INTERACTIONS

Physical		Tech	
Medium ● ●		**Medium** ● ●	
Time	Alert	Time	Alert
1	0	1	0
Pick the lock to the Storage Room.		Access the Air Conditioning Plant Room by bypassing the security device and send a signal to unlock the electronic lock directly.	

	Physical	Tech
Failure	The tumblers inside the lock just won't catch correctly. You cannot pick the lock.	The electronic lock flashes red and makes a buzzing noise to indicate you haven't unlocked the door.
Success	You manage to align the tumblers, and the whole lock turns just as if you had accessed it with a key.	You send a signal to the locking mechanism, and the door flashes green and gives you a 'bing!' noise. You can easily open the door now.

Progress to the Storage Room	Progress to the Air Conditioning Plant Room

ENCOUNTER: AIR CONDITIONING PLANT ROOM

This room is filled with the sounds of humming machinery. A series of fans blow air through some very large ducts to distribute it to the rest of the building. They look big enough for people to fit in.

↓

INTERACTIONS

Physical	
Easy ●	
Time	Alert
1	0

Attempt to climb into the air ducts to transition to the floor below.

Failure

It's hard to climb into this duct.

Success

You remove the vent cover and filters of the air ducts and find a way to climb down to the level below.

↓

Progress to the Empty Office

GAME ENCOUNTERS

ENCOUNTER: STORAGE ROOM

A room with shelves stacked high with boxes and files.

↓

INTERACTIONS

Logic	
Easy ●	
Time	Alert
2	0

Investigate the files to see if they're important.

Failure	There's an enormous amount of paper to sort through. It's hard to find anything among these dusty old pieces of paper that could be important to your mission.
Success	You discover that these old files are from UnityCo. You find some dusty paper IT help-request forms, including one that lists a junior employee by the name of "Vivien Len" who's password was reset to "Unityco1." There is a small handwritten note that says, "Please change this password when you first log on!" **Username:** vivien.len **Password:** Unityco1

GAME ENCOUNTERS

NETWORK NODE 1 – EXTERNAL NETWORK

As you jack in, you can see an enormous collection of devices that you recognise as phones, tablets and Internet of Things (IoT) gadgets, all represented by glowing blue lights. Scanning around, you see glowing packets of data, like beads of light, flowing in to and out of a few entry points on a gigantic firewall that blocks your path and your sight. Some data packets are rejected at the entry checkpoint – they don't seem to be authorised.

INTERACTIONS

	Tech		Logic		Logic	
	Medium ● ●		**–**		**Easy ●**	
	Time	Alert	Time	Alert	Time	Alert
	2	0	0	0	1	1
	Monitor data packets to try to 'sniff' a user credential that isn't encrypted.		If you have any user logins, you can walk right through the checkpoint.		Scan the network and analyse the data traffic to create a map of the network segment.	
Failure	Though you spend a lot of time observing traffic, it seems the UnityCo employees are careful with the websites they visit.		N/A		There's simply too many things happening at once to make heads or tails of it.	
Success	You manage to intercept a packet of data leaving the firewall checkpoint and heading out into the wider internet. It seems it was destined for a poorly secured social media website, and you gain the user login credentials of UnityCo staff member, "Jessica Francis". **Username:** jessica.francis **Password:** Billy13		With a valid username and login, you jump into the flow of traffic inbound into the portal in the firewall. The portal scans you and lets you pass through to the other side.		You can tell by the types of data travelling in that UnityCo's staff computers are on the other side of that firewall. You could attempt to get through this firewall directly or jack out and find a computer that is on the other side of it. You can see outbound traffic from UnityCo tagged with the name of the computer that is sending it: • WORKSTATIONS • MEETING ROOM • SERVERS	

Progress to Network Node 2

GAME ENCOUNTERS

NETWORK NODE 2 – CORE NETWORK

As you access this part of the network, you can see that you're in the space between two firewalls. One stretches around you, boxing you in – it must lead to the outside. The other one is a midnight black void that guards a much smaller space.

In this space, there are many small, boxy hubs of light surrounding you. They are arranged into two distinct groups, with each individual box representing a computer. They are all connected to a single nexus in the middle of the space: this is a network router. Lines of light show data packets streaming between the router and a portal in the outer firewall. Another connection leaves the router and disappears into the smaller void. It is clearly a network with high security.

INTERACTIONS

	Tech		Logic		Logic	
	Easy ●		–		**Easy** ●	
	Time	Alert	Time	Alert	Time	Alert
	1	0	0	0	1	1
	If you have scanned the network, you can directly make an appointment in the UnityCo receptionist's computer.		If you have the login for Vivien Len, you can walk right through the checkpoint in the inner firewall.		Scan the network and analyse the data traffic to create a map of the network segment.	
Failure	While you're faking an appointment, the antivirus notices you and boots you off the network. Return to the place in the physical world where you jacked in.		N/A		The security in this part of the network is very good. It rejects your scan and boots you off the network. Return to the place in the physical world where you jacked in.	
Success	You manage to identify the computer that belong to the receptionist, Rohan, and insert an appointment for today. He should welcome you in now.		With an executive login, you are free to pass through the void and into the final protected subnet of UnityCo.		By watching the channels of communication entering and exiting the router, you can tell that the computers are divided into one group called WORKSTATIONS and another called MEETING ROOM. There's a Meeting Room computer that looks like it is not being used at the moment. You also see the traffic between the router and void is tagged with the identifier SERVERS.	

Progress to Network Node 3

NETWORK NODE 3 – PROTECTED SERVERS

Inside this darkened area of cyberspace, you can see four towering monoliths, each glowing vibrantly with data and traffic. Beads of light stream all over their surfaces, and highways of digital traffic flow out to the other side of the firewall encasing you. One of these servers is the one you've been looking for.

↓

INTERACTIONS

Logic
Easy ●

Time	Alert
1	0

Identify which server is the correct one.

Failure

Just when you think you've got it all figured out, you realise that the server you've chosen is a honeypot – a fake server trap designed for hackers. It triggers the antivirus, which comes and boots you off the network.

Success

Carefully mapping the specialised data on each of the servers, you find that each has a specific function:

- **Email Server:** manages communication with the outside world.
- **Print Server:** sends documents to the office printer.
- **File Server:** where data is stored and the criminal is stealing from!
- **Honeypot server:** a trap designed to catch hackers.

You install the backdoor on the File Server. Mission accomplished, now get out of here!

↓

Mission accomplished

GAME ENCOUNTERS

ENCOUNTER: ROAMING SECURITY GUARD

A security guard rounds the corner and walks up to you. You can see the name "Ajay" embroidered on her shirt. She asks you what you're doing in this part of the building.

Extra info: Ajay has a swipe card with **All Access** permission on a retractable holder on her hip.

INTERACTIONS

	Social			Social	
	Medium ●●			**Hard** ●●●	
	Time	Alert		Time	Alert
	1	0		1	0
	If it looks like you should be in this part of the building, for example you're wearing overalls in the Air Conditioning Plant Room, you can try to convince her that you're supposed to be here.			If you don't look like you should be here, it's much harder to convince Ajay that she should leave you to your business.	
Failure	She gently but firmly guides you down to the Foyer.			She gently but firmly guides you down to the Foyer.	
Success	Ajay smiles politely and leaves you to your business, wishing you good luck in your work.			Ajay smiles politely and leaves you to your business, wishing you good luck in your work.	
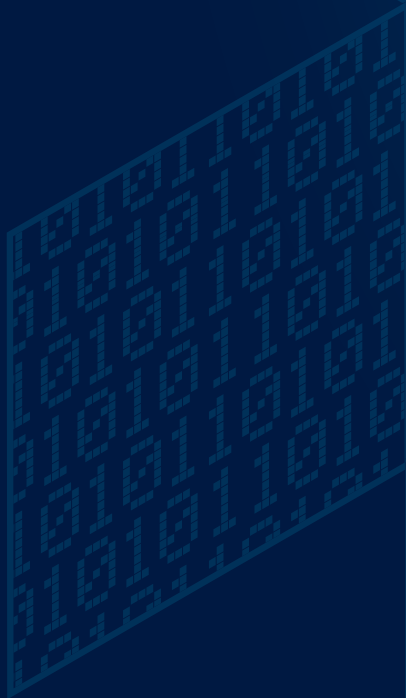
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