

# Cyber Survivors – Specifications

## Game type

- 2D
- Sprite
- Defense/Attack against real viruses (ransomware, etc.)
- Solo/Coop 30 minutes

## Potential update

Game Mode: Ranked Mode, which restarts every week/month?

## Gameplay v1

Play with the mouse.

Keyboard shortcuts.

Survivor style game

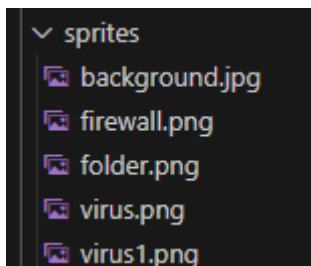
The goal is not to lose any files on your desktop or to avoid virus attacks.

Player (single player control up to 4 folders)

For 1 folder, the default folder is yellow, up to 4 folders (blue, red, green), if 1 folder is next to another folder, this reinforces these folders.

Player Inventory

Displayed on the left or right side of the page (where extension modules could be placed) by folder, one folder for excess extensions



what are extension modules

- armed
- defense (regene, detection of camouflaged viruses, etc.)

- support (buffs files near him)

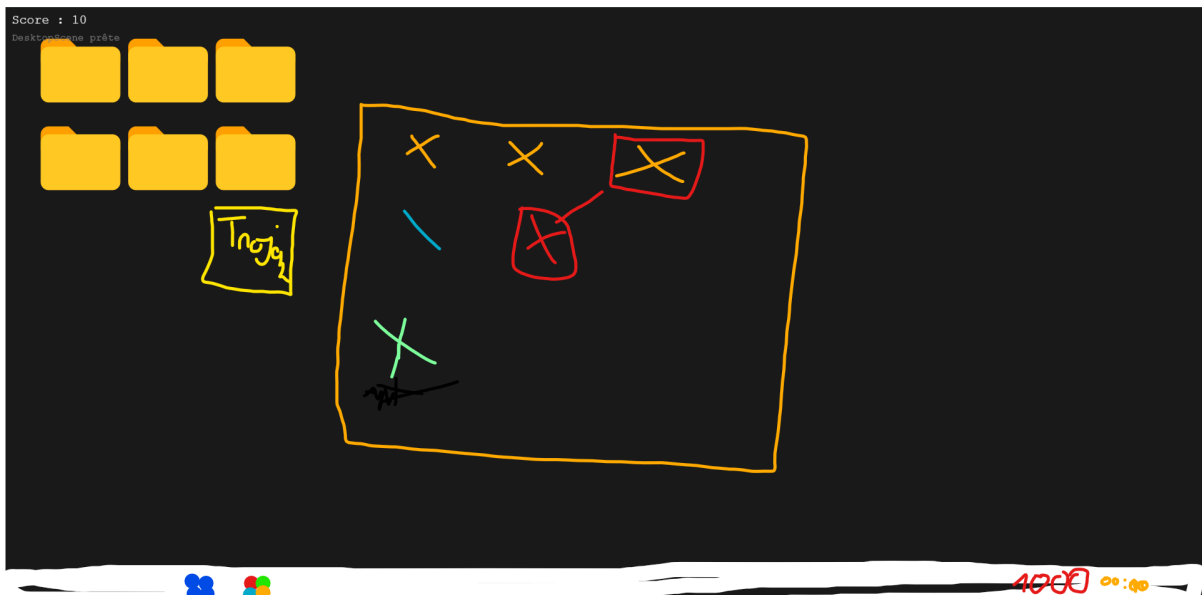
Module upgrade system: you can merge 2 expansion modules of rarity 1 into rarity 2

There is no xp in place but virtual money unlocked by killing viruses, this currency is used to open loot boxes (stage 1, 2, 3 increasingly expensive but the better the extension module) allowing you to randomly receive an extension module

A shop that displays 5 items that change every 3 minutes allows you to buy extensions but is more expensive than opening a loot box

Event :

Randomly spawn pressure plates of a defined color; the file must land on them to avoid receiving penalties.



Viruses appearing from the edges of the web page

Appearance of viruses that can come from adware

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BackdoorBazar: buy firewalls, antivirus, firewall and antivirus configurations, etc.

Interface to view the contents of folders.

Viruses can enter a folder and attack a specific file.

Defenses can be moved outside the folder or into another folder.

All in-game winnings in non-paying currency (CHF) will be returned to the starting folder. If a spyware manages to steal a maximum of 10% of the player's total currency, the currency is lost if the player does not kill it in time. Ratio: If 1000 credits, the spyware can take 10%, which makes 100 currency, but in 100 seconds.

## Virus Categories (from nicest to nastiest)

### Adware**Pop up**

**press the cross, the bosses will be more difficult to close.**

- **Description :** Although often less harmful than other types of viruses, adware displays unwanted advertisements on a computer. Some may be considered viruses if they significantly disrupt the user experience.

### Spyware**Currency theft**

- **Description :** These malicious programs stealthily collect information about a user without their consent, such as passwords, browsing habits, personal information, etc. Some can behave like viruses in the sense that they infiltrate the system.

### File Virus**Blocking the use of weapons, shields, etc., possible blocking of the market**

- **Description :** These viruses infect executable files (.exe, .com, .bat, etc.). When an infected file is launched, the virus spreads and can infect other files on the same system or other systems if the file is transferred.

### A virus from a macro

- **Description :** They infect documents containing macros (such as Microsoft Word or Excel files). These viruses are activated when an infected document is opened and the macro is executed.

### Rogueware (Faux antivirus) **affects the market**

- **Description :** This type of virus poses as legitimate antivirus software, but it is designed to trick users into purchasing a full version that offers no real protection.

### Network virus **dropped by worms -> random virus spyware, adware, file virus**

**(pare-feu?)**

- **Description :** These viruses spread primarily through computer networks, exploiting security holes in systems to infect multiple computers connected to the same network.

### Vers (Worms) **is affected by the firewall**

- **Description :** Unlike traditional viruses, worms do not require a host to spread. They exploit security vulnerabilities in systems and networks to replicate and spread from one computer to another, often without user interaction.

### Trojans (Trojan horses)

- **Description :** Although a separate type of malware, Trojans are often categorized as viruses due to their ability to disguise themselves as innocent. They do not replicate like viruses, but instead allow other forms of malware to enter a system.

#### **Botnets** **attack the firewall**

- **Description :** These are networks of computers infected with viruses and controlled remotely by a cybercriminal. Infected computers (called "bots") can be used to send spam, conduct DDoS attacks, or perform malicious activities without users being aware of it.

#### **Polymorphic viruses** **change in any form of virus**

#### **special configuration for antivirus to protect yourself**

- **Description :** This type of virus changes its code with each infection, making it more difficult for traditional antivirus software to identify it. They constantly change to avoid detection.

#### **Boot sector virus**

- **Description :** These viruses infect the boot sector of a disk (hard drive, USB flash drive, etc.). They launch when the computer starts up before the operating system is loaded, making their removal more complicated.

#### **Shapeshifting Viruses**

- **Description :** Similar to polymorphic viruses, but they change not only their code but also their structure in more complex ways. They are more difficult to detect and disinfect.

#### **Rootkits**

- **Description :** These viruses are designed to hide other malware, often deep within the operating system. Their goal is to allow an attacker to gain unauthorized access to a system without detection.

#### **Ransomware** **Take a file hostage**

- **Description :** This type of malware takes a user's or organization's files hostage by encrypting them and demanding a ransom to decrypt them. Although it is often classified as a virus, its specific purpose (extortion) sets it apart.

#### **Feature of the genesis file**

- Number of life points 200
- Contains decoy files
- Firewall/Antivirus Module Storage
- May harbor a virus

- Skin of the folder according to its life points
- Basic fileQuantumCash.wallet not modifiable by the player, possible distribution of money on several files to minimize the loss
- Automatic repair module (based on a goal?)
- **Reinforced the backrest skin:** The file could strengthen as it progresses, gaining "armor" that reduces damage received from viruses.
- **Synergy effect with other files:** If the Genesis folder is placed near another folder, a special synergy might appear, such as increased health regeneration or better defense

### Advanced Protection Module

- **Module extension:** A special module can be added to the Genesis folder, such as a "**Quantum Shield**" which absorbs a certain amount of damage before deactivating.



### Feature of an additional file

The additional files each have different bonuses/penalties and bring a different vulnerability.

**Increased virulence of viruses in this file:** Additional folders could host more powerful versions of viruses. For example, a virus in an additional folder could behave more aggressively, making the attack harder to counter.

- Number of life points 200
- Contains decoy files
- Firewall/Antivirus Module Storage
- May harbor a virus
- Skin of the folder according to its life points
- Save.wallet distribution file
- Contains a Reward.docx file
- Appearance of a file every 3 minutes (max 4 on the ground)
  - **Unlock exclusive rewards:** The "Reward.docx" file could be a dynamic file, with rewards that evolve depending on the player's actions (for example, killing a particular type of virus, or completing a mission without losing any files).
  - **Rewards for side missions:** Secondary missions or objectives could be created for each additional file, allowing you to earn rewards in the form of new modules or defense bonuses.



## Protection in files

- **Antivirus** : Depending on the installed modules, placed in a folder, only it can eliminate the virus after a certain time.
- **Player cannot delete virus in folder** other than with an antivirus.



## Pare-feu

### 1. Placed outside (Global Zone)

- **3 to 5 slots for modules**(to be adjusted for game balance)
- **Base PV:50 PV**
  - The firewall in this configuration represents general protection, so it is not as robust as a specific firewall placed in a folder, but it has the advantage of covering a wide area.
- **Features :**
  - **Defense against multiple attacks:**This firewall can withstand continuous attacks (e.g. viruses or intrusion attempts on multiple files at the same time) and has medium resistance.
  - **Regeneration:**It could have a slow regeneration (e.g., recover 1 HP every 5 seconds) once it has been damaged or exhausted. This slow regeneration is a mechanism to avoid making the player too dependent on this type of protection.
- **Limitations :**
  - **If the firewall reaches 0 PV,**It is disabled for a certain amount of time (e.g. 10-15 seconds) before it can regenerate. This leaves the player vulnerable, forcing strategic management of protection.

## Placed in a Folder (Enhanced Protection)

- **Base HP: 100 HP**

- This firewall offers enhanced protection, suitable for important or critical files. It represents a more secure area, but this comes with specific benefits and risks.

- **Features :**

- **Protection forte :** This firewall is capable of blocking multiple attacks and absorbing more damage than a general firewall, making it an ideal solution for important files.
- **Active regeneration:** Once placed in a folder, the firewall can actively regenerate itself, and this regeneration is faster than for the external firewall.
  - For example, the firewall in the folder might recover 2 HP per second, but it cannot regenerate beyond its initial 100 HP.
  - **Regeneration Bonus:** If the firewall is intact for a while (e.g., after 10 seconds without being attacked), its regeneration could become faster (e.g., 3 HP per second for 5 seconds) to encourage proactive management.

- **Limitations :**

- **If this firewall is eliminated,** you will need to move or replace the firewall in the folder, and you will have to wait for a new firewall to be installed or for the previous one to regenerate more slowly during this period.

## Antivirus

- **2 to 4 slots for modules**(to be adjusted for game balance)



#### Place in a Folder:

- Antivirus modules must be placed in a specific folder to activate their effects. Once placed, these modules can scan the folder's contents for viruses. Each module has a different activation time or reactivation time, and some require a certain amount of time to eliminate threats.
- **Antivirus** : Placed outside a folder, zone attack

#### Virus Removal

When a virus is present in a folder, it takes time for the antivirus (and its modules) to **detect** and then **delete**. Depending on the module used, the time and methods of elimination may vary:

- **Antivirus Basic**: The virus is cleaned after **5 sec**.
- When a **polymorphic virus**, the antivirus must **exit the folder** to enable advanced detection capabilities.



#### Attack (Weapons)

##### Possible attack modules to put in a folder:

- **Ballistic Mouse**: Software places crosses on the ground that removes bugs
- **Thermal paste** : slows the enemy in the area and damages them
- **Outlook Canon** : Shoots email mines
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- **Arc plasma** : follow the enemy then return to the file (similar to bloon's boomerang td6)
- **Lag Spike** : Works like bay leaf but teleports the virus
- **Electro arc**: Installation of turrets which are connected to each other in the chain
- **DirectX Beam** : deals continuous damage, shoots in a straight line
- **Blue screen Grenade**

- **Module scanner** :detects invisible viruses
- **BitLocker Shield** : Encrypted Shield, absorbs damage for a limited time.

### Synergies

Synergy	Combined Modules	Effect / Behavior
Perfect against polymorphic viruses	Deep Packet Scanner (pare-feu) + Signature Updater (antivirus)	Improves the detection and elimination of polymorphic viruses, making the two modules complementary in the fight against viruses that are difficult to identify.
Optimized shield against network worms and viruses	Network Choke (pare-feu) + Overclocked Nodes (pare-feu)	Reduces the speed of worm propagation and optimizes firewall recharge time, creating a faster and more effective defense against network virus attacks.

Maximum detection, even of invisible viruses in folders	Cloak Detector (antivirus) + Heuristic Hunter (antivirus)	Detects hidden or dormant viruses, providing advanced detection and comprehensive coverage against invisible threats.
Ultimate defensive combo against ransomware and critical attacks	Anti-Ransom Protocol (antivirus) + Core Guardian (antivirus)	Block ransomware before it compromises files and enhances protection for critical files, providing a powerful defense against ransomware attacks.

## **Economy and loot**

**QuantumCash virtual currency** earned by killing viruses

**Cash** used for :

- **Loot box** (level 1 to 3, increasingly expensive and powerful)
- **Shop** (5 items change every 3 minutes, more expensive than loot box)


**The currency** is placed on the ground, can be stolen by spyware that picks it up.

## **Mechanics that require moving files**



### 1. **Viral overload zones (temporary red zones)**

- **Areas on the desktop become unstable (flashing red), generating a corruption field every X seconds.**
- **If a file remains in this area too long:**

- He loses HP passively.
- Viruses become invisible / more powerful there.
- **Goal: To force the player to regularly move their files to avoid inevitable infection.**

2.  **Collect the change:** The folder that contains the file **QuantumCash.wallet** must be moved to collect the change.

3.  **Bonus/penalty pressure plates (already mentioned) — in-depth**

- These plates appear randomly, and the player **must move a folder on it within 10 seconds** :
  -  Bonus: +QuantumCash, +free module, temporary defense buff. ?? to be seen
  -  If ignored: Virus spawns around the richest folder.

4.  **Data attractors (digital hooks)**

- Fake files appear: "FreeBoost.exe", "RewardsPack.zip", etc.
- And one **folder goes on it**, the player can obtain:
  - and **module d'extension rare**
  - a **lost currency recovery**
  - or... a **disguised virus (trojan)**
- Encourages the player to **take risks and move your files**, at the cost of potential infection.

## **BackdoorBazaar.exe** (loot genshin)

Allows you to obtain:

- Pare-feu
- Antivirus
- Custom configurations
- Decoy files
- Defense or economic improvements
- Interface
- Improvement for the interface
  - View folder contents
  - Move defenses between folders
  - Be able to move folders

## **Antivirus Modules**

Module name	Base Rarity	Effect / Behavior	File placement
Antivirus Basic	1	Automatically cleans a virus present in the folder after 5 sec.	Interior
Behavioral Scanner	1	Reduces scan time to 3 sec for known viruses (spyware, adware, files).	Interior
Signature Updater	2	Increases the speed of detection of new types of viruses (e.g. polymorphic).	Outside
Heuristic Hunter	3	Can detect viruses even if not activated (macro, Trojan in sleep mode).	Outside
Anti-Ransom Protocol	3	Allows you to block ransomware before it	Outside

		takes a file hostage (once per game).	
<b>Pulse Antivirus</b>	2	AOE damage (area of effect), 1 time every 10 seconds. Useful outside of files.	Outside
<b>Code Purifier</b>	4	Instantly removes all rarity 1 or 2 viruses in the folder within 2 seconds.	Interior
<b>Cloak Detector</b>	2	Reveals camouflaged (invisible) viruses, useful against Rootkits and network viruses.	Interior
<b>Core Guardian</b>	4	If placed in the main folder, protects all files for 15 seconds after attack. Slow reload.	Interior

## Firewall Modules

Module name	Base Rarity	Effect / Behavior	Placement
Firewall Basic	1	Standard Firewall: Blocks worms and slows down network viruses.	Outside
Deep Packet Scanner	1	Identifies polymorphic and shapeshifting viruses that penetrate the firewall.	Outside
Adaptive Barrier	2	The firewall adapts its blocking according to recent virus types (last type detected).	Outside
Overclocked Nodes	2	Reduces firewall cooldown (faster to block successive waves).	Outside
Electro Trap	3	The firewall inflicts minor damage to viruses that attempt to pass through it.	Outside
ICE Spike	3	Massively slows down affected viruses + chance to "freeze" them (0.5 sec).	Outside
Quantum Firewall	4	Has a chance (20%) to "teleport" a virus to a random ledge (reboot its trajectory).	Outside
Botnet Breaker	3	Reduces the effectiveness of coordinated botnet attacks (weakens their area attack).	Outside

<b>Network Choke</b>	2	Reduces the spread speed of worms within a 3 unit radius.	Outside
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Category of virus	Description	Virus Behavior	How to Counter It	Reward 💰	Damage to the file
<b>Adware</b>	Displays unwanted ads in the form of pop-ups.	Disturbs user experience, displays ads, some bosses are difficult to close.	Close on the X, the bosses must be found. Use a <b>module antivirus</b> adware detection and a <b>fire-wall</b> to block unwanted connections.  To use <b>Behavioral Scanner</b> (Antivirus) and <b>Firewall Basic</b> (Pare-feu).	1-3 QuantumCash Bosses 5-8	
<b>Spyware</b>	Collection of personal information without user consent (passwords, browsing habits, etc.).	Currency theft	To use <b>Cloak Detector</b> (Antivirus) and <b>Heuristic Hunter</b> (Antivirus).	10 QuantumCash de base.  If he stole money from the floor or from a file, then if firewall installed with anti-spyware module (total recovery of the money he took)	
<b>File Virus</b>	Infects executable files (.exe, .com, .bat, etc.).	Blocking the use of weapons, shields, etc., possible blocking of the market	To use <b>Pulse Antivirus</b> (Antivirus).	💡 Basic Attack Module or 20-30 credits.	
<b>A virus from a macro</b>	Infects documents containing macros (e.g. Word or Excel files).	Activates when the infected document is opened and executes the malicious macro.	To use <b>Behavioral Scanner</b> (Antivirus) and <b>Heuristic Hunter</b>	📦 Random Utility Module (Support/Defense) .	

		Reward.docx			
<b>Rogueware (Faux antivirus)</b>	Masquerades as a legitimate antivirus, but is designed to trick the user into purchasing a useless paid version.	Tricks the user into purchasing a paid version without real protection.	To use <b>Code Purifier</b> (Antivirus) and <b>Deep Packet Scanner</b> (Pare-feu).	40-50 + chance of rare drop (rare module).	
<b>Network virus</b>	Spreads through computer networks, exploiting security vulnerabilities.	Spreads across a network, infecting multiple connected systems, often difficult to detect due to its invisibility.	To use <b>Botnet Breaker</b> (Firewall) and <b>Network Choke</b> (Pare-feu).		
<b>Vers (Worms)</b>	Replicates and propagates without user interaction.	Spreads automatically without user interaction, exploits security holes to infect other systems.	To use <b>Firewall Basic</b> (Pare-feu).		
<b>Trojans (Trojan horses)</b>	Hides under an innocent appearance and allows access to a system for other forms of malware.	Does not replicate but opens unauthorized access to other malware.	To use <b>Heuristic Hunter</b> (Antivirus) and <b>Cloak Detector</b> (Antivirus).		
<b>Botnets</b>	A network of infected computers controlled remotely by a cybercriminal.	Uses infected computers to launch DDoS attacks, send spam, or perform other malicious actions.	To use <b>Botnet Breaker</b> (Pare-feu).		

<b>Polymorphic viruses</b>	Modifies its code with each infection to avoid detection by antivirus.	Constantly changes shape to avoid detection by traditional antivirus.	To use <b>Signature Updater</b> (Antivirus) and <b>Deep Packet Scanner</b> (Pare-feu).		
<b>Boot sector virus</b>	Infects the boot sector of a hard drive, USB flash drive, etc.	Activates at system startup, even before the OS loads, making it difficult to remove.	To use <b>Code Purifier</b> (Antivirus).		
<b>Shapeshifting Viruses</b>	Changes not only its code but also its structure to avoid detection.	Continuously modifies its code and structure to make itself undetectable by conventional antiviruses.	To use <b>Signature Updater</b> (Antivirus) and <b>Heuristic Hunter</b> (Antivirus).		
<b>Rootkits</b>	Hides other malware at a deep level of the operating system.	Allows the attacker to gain unauthorized access while remaining undetected.	To use <b>Cloak Detector</b> (Antivirus).		
<b>Ransomware</b>	Takes a user's files hostage by encrypting them, demanding a ransom to decrypt them.	Encrypts files and demands a ransom to decrypt them, making data inaccessible without payment.	To use <b>Anti-Ransom Protocol</b> (Antivirus) and <b>Core Guardian</b> (Antivirus).		

## Long Term Progression System: Cyber Survivors

### Duration of

a **part30 minutes**, with progressive difficulty, more and more intense, with:

- of the **threat level** every 5 minutes (new virus types, new mechanics)
  - of the **increasing rewards** for long survival
  - of the **rankings (weekly ranked mode)** optional
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## Gameplay v2s



### Factions

Factions represent **cybersecurity origins**. Each one gives a **passive bonus**, of the **unique appearances** And **exclusive modules** :

Faction	Style	Passive Bonus	Exclusive module example
Quantum Watch	Defensive high-tech	+10% HP on all firewalls	Quantum Firewall Overdrive
DeepTrace	Stealth detection	+20% hidden virus detection speed	Signature Auto-Indexer
NetSec Syndicate	Aggressive Offensive	+15% damage dealt by attack modules	Lag Spike Mk II
GreyCloud	Economy & Control	+25% QuantumCash recovered	CryptoSiphon (steals currency from viruses)



### Player Roles

Each player chooses a **role in each part**, which directs its modules, its strategy and its skills:

Role	Description	Main Bonuses
Defender	Strengthens the files	+HP +repair speed
Operator	Module specialist	+module slots
Hunter	Virus-fighting oriented	+weapon damage, +detection
Tech-Merchant	Economy and loot	Shop price reduction, drop bonus



### Jobs (permanent, progression between games)

The professions offer **passive abilities** And **crafts** via QuantumCash or looted resources:

Job	Main function	Example
<b>Cryptologue</b>	Improves antivirus	Creates a modified scanner that detects dormant viruses
<b>Firewall Engineer</b>	Reinforces firewalls	Reinforced ICE Spike Module
<b>Code Broker</b>	Manages loot	Turns QuantumCash into rare loot
<b>Archivist</b>	Optimize storage	Reduces module recharge times

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## Skill tree (character)

3-branch system, progressive between parts. Each **level** gives 1 point to distribute.

- **Active safety** : +PV, +regen pare-feu, +slots de modules
- **Countermeasures**: +weapon damage, -antivirus CD, AoE damage
- **Network & loot**: +QuantumCash, reduced shop, bonus on plates