

Cyber 2.0

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THE NATIONAL  
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# Cyber20T

# The Team



**Hertzel Ozer**



**Founder & Chairman of the board**

Chairman of the Board of few large companies such as **HOT** Telecommunication System

**Sneer Rosenfeld**



**CEO**

Well-experienced Manager

**Erez Kaplan Haelion**



**Founder & CTO**

Senior Advisor of **Microsoft**

**Tanya Sarel**



**COO**

HR Recruiter at Check Point Software Technologies

**Guy Tessler**



**USA Business Development VP**

Experience Managing Partner, GOT Group – Atlanta, GA

**Sai Krishna**



**Manager - India**

Founder of Global Cyber Security Forum

# Advisory Board



**Professor Lewi Stone, Ph.D. - Advisory Board**



**Advisory Board**

Expert of mathematical modelling of chaotic systems

**Major Gen. (Res.) Yitzhak (Jerry) Gershon**



**Advisory Board**

**Chairman** of the Israel Airports Authority

**Col. (Ret.) Adi Bershadsky**



**Advisory Board**

Former military attaché in Europe

**Major Gen. (Res.) Professor Isaac Ben Israel**



**Advisory Board**

The initiator of the National **Cyber Authority** at the **Prime Minister's Office** in Israel

**Professor Bryson R. Payne**



**Advisory Board**

Tenured Professor of Computer Science

Cyber 2.0

## What We Do

**Cyber 2.0 for OT Environments prevents cyber-attacks from reaching the controllers**  
**Effectively removing the hacker ability to attack the protected device and spreading through the network**

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# OT Attacks



- **Cyber attack on water system (opening dams and flooding)**
- **Disruption of traffic lights**
- **Damage to energy infrastructure**
- **Attack on atomic reactors (Iran)**
- **Locking rooms in a hotel (See-Hotel, Austria)**



# EDR is Not Enough

## Detection

First **try** to detect and recognize **every** malicious software

### Why they don't solve the problem

**100% Detection is not possible**

A new malicious software **every second**



## Prevention

Then **try** to prevent its **spreading** within the organizational network

**100% Prevention is not possible**

Hackers can **remove** the defense systems

## Cyber 2.0 – Beyond EDR

**Detection**



**Prevention**

**Doesn't miss any new  
cyber-attack**

**The system Continues protecting  
even if being removed**

**The technology: Zero Trust**

**The technology: Chaos Algorithm**



# Challenging all Hackers



- 4 years
- 5,500 hackers
- \$ 100,000 Reward



**They all failed**

**\$100,000 Hacker Challenge Goes Unclaimed at Tech**  
Cyber 2.0, an Israeli cybersecurity company with offices in Atlanta, offered a cash prize to anyone who could access a single file from its protected server.

**All hackers in the Cyber 2.0 International Hackers Challenge fail**  
With no winner, the NIS 10,000 prize was instead donated to the charity group the "Good Guys Association." However, it will not be the last such challenge.





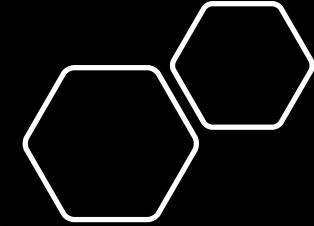


# WE COMBINES SEVERAL CAPABILITIES





# Marking Approved Programs



## The OT manager:

Marks **approved programs (1-5)**

that are allowed to access to network resources

In OT - Software that operates the controller)

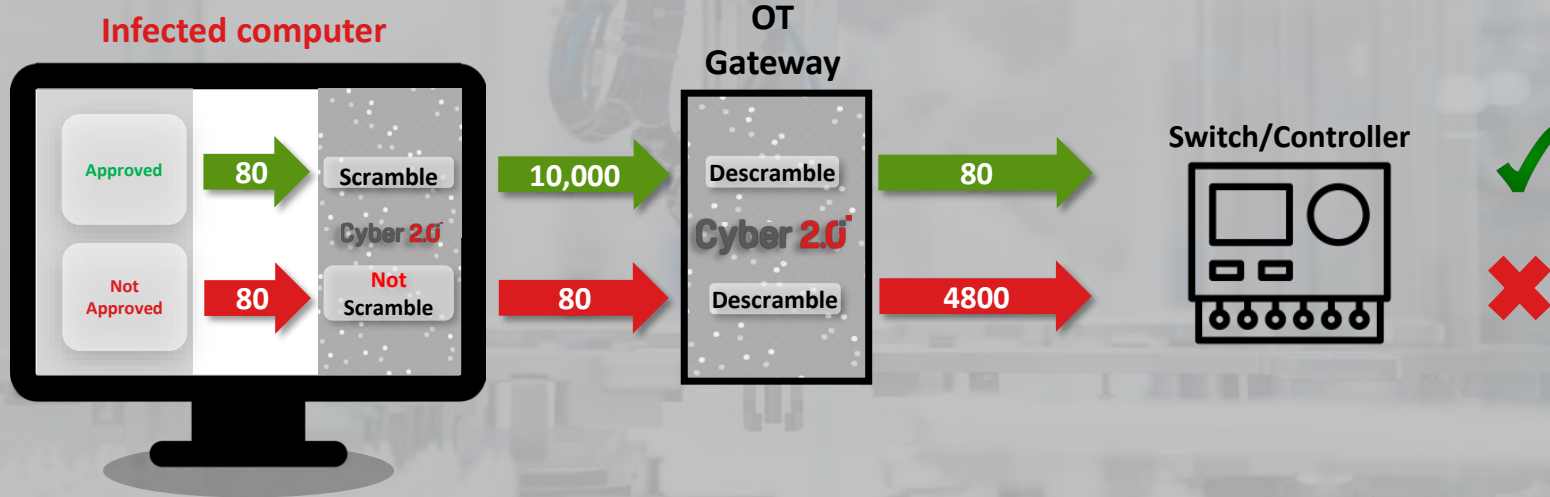
## Not approved programs (all the rest):

Every software that was not marked as  
an approved program

(including every new and unknown software)



# Vortex Gateway for the OT/IOT World



# Every Attack Against Cyber 2.0 Will fail



1. Direct attack on Protected Device



2. Attacking protected device from authorized computers

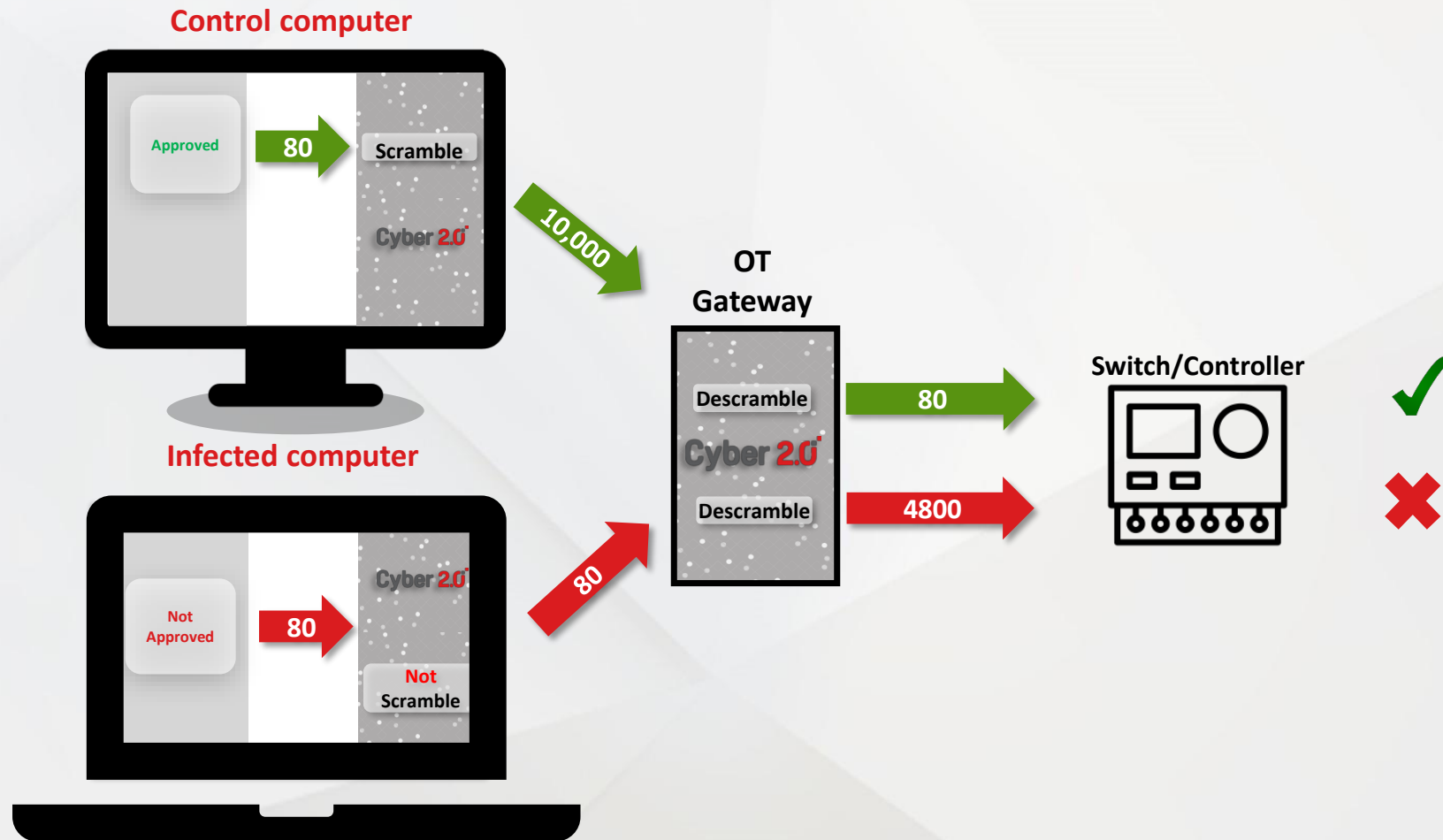


3. Adding malicious software to the trust list

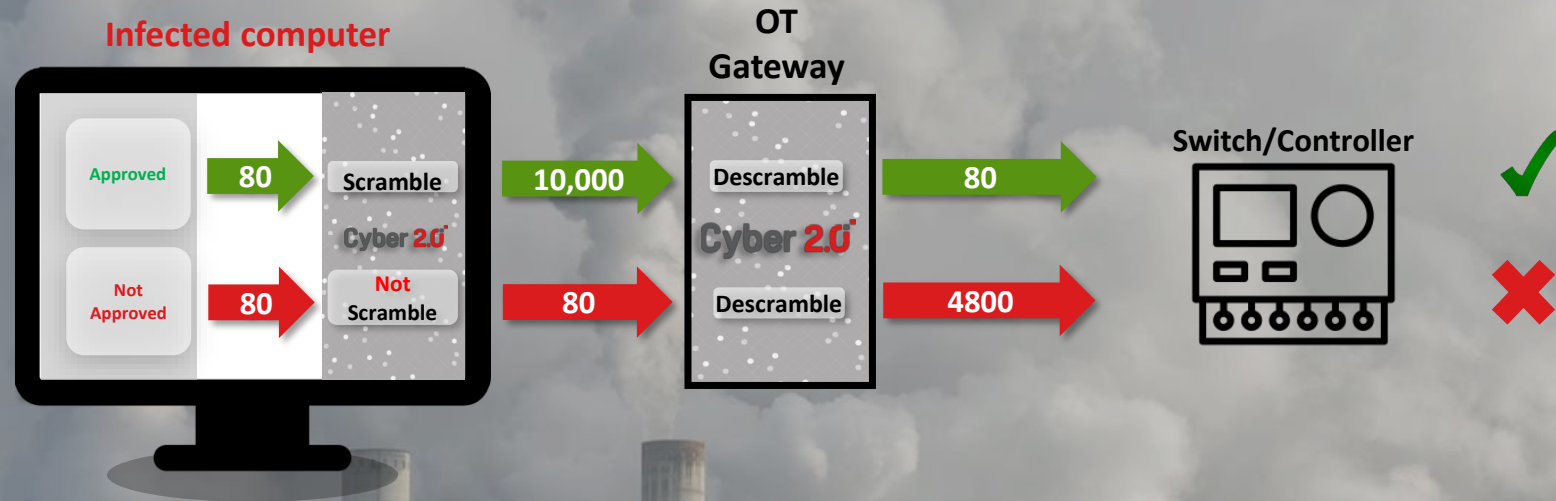


4. Malicious software using other software to attack protected device

# 1. Direct attack on Protected Device

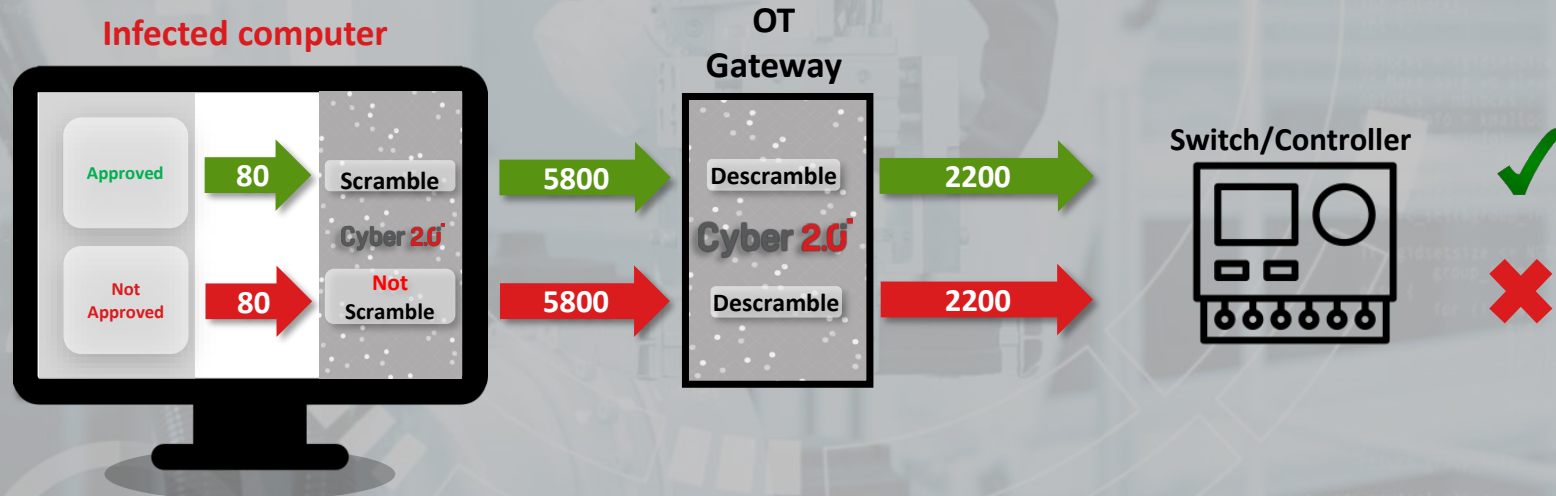


## 2. Attacking protected device from authorized computers



### 3. Adding Software to The List Will Fail

Changing the list breaks the chaos balance between computers, and the system will allocate incorrect port number



## 4. Malicious Software Using Other Software Will Fail



- Outlook sends legitimate emails according to legitimate commands

- If or when Outlook has been compromised by hackers, every cyber defense company will detect it

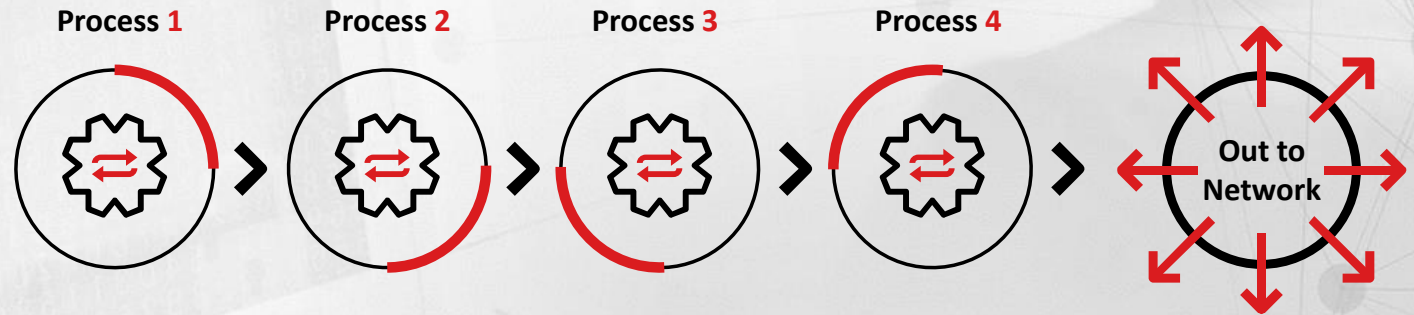
### Current cyber solutions

- But the hackers are sophisticated - they insert malware, using other legitimate software. Malicious software activates a chain of legitimate software, that eventually gives a seemingly legitimate command. Cyber systems will not block Outlook from going out to the network

### Cyber 2.0 - Reverse tracking

Our mechanism tracks the chain all the way back, using **Reverse Tracking Technology**, and blocks Outlook from going out to the network





# The Reverse Tracking



Every process and every library file that loads is recorded

The system takes their MD5 and SHA signature

Every access of a process to another process is recorded

Cyber 2.0

# The Advantages of this Process

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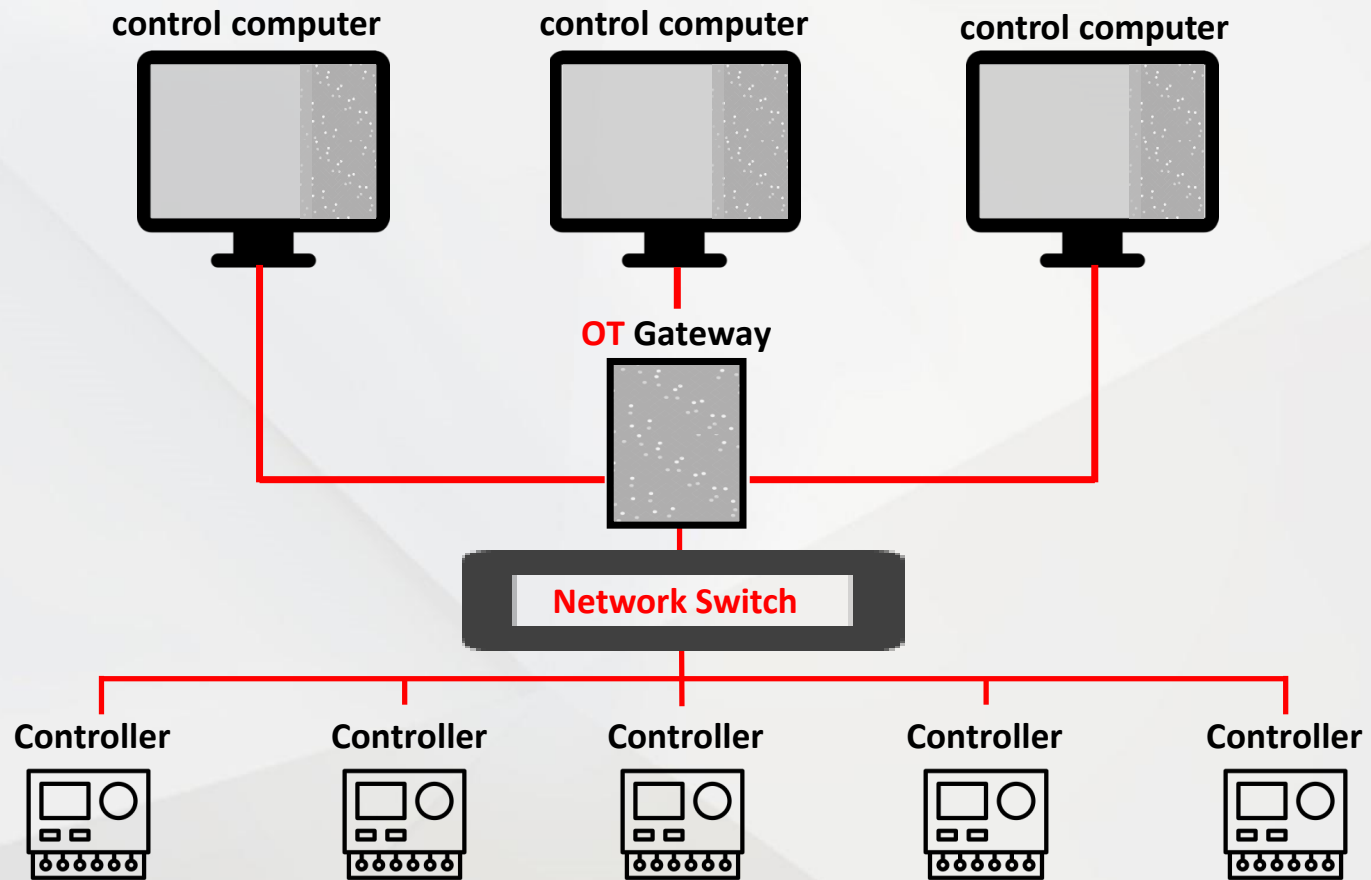


- We don't read data
- Our solution complies with the Regulation and the GDPR (Privacy Protection Regulations)
- We do not create a load on the systems, nor do we slow down the network
- No software updates are required – allow cyber 2.0 to work in complete close environments



# OT Full Protection in a Closed Environment

A single gateway



# OT Full Protection in a Widespread Environment

