Cyber-Attack Recovery & Operational Continuity for ICS & OT Systems

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Salvador Technologies provides the first Instant and Safe Cyber-Attacks Recovery Platform for Critical Assets and Operational Technologies (OT).

Our mission is to ensure operational continuity by providing a unique solution that is fast and easy to use and enables recovery from any scenario.

NVIDIA INCEPTION PROGRAM

ICT OTD PREFER EXPERIENCE ONLINE Since 2011

PACE POLAND

CYVERSE

solutions pt Industrial IT Solutions

CYSOL networks

MCA TECHNOLOGY

eXcelsior Safety

esg Compliant

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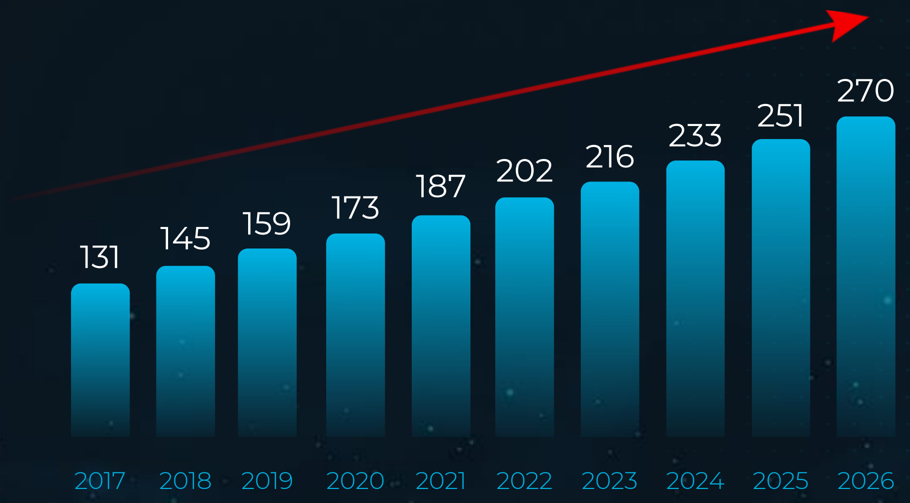
The offense is always one step ahead of the defense

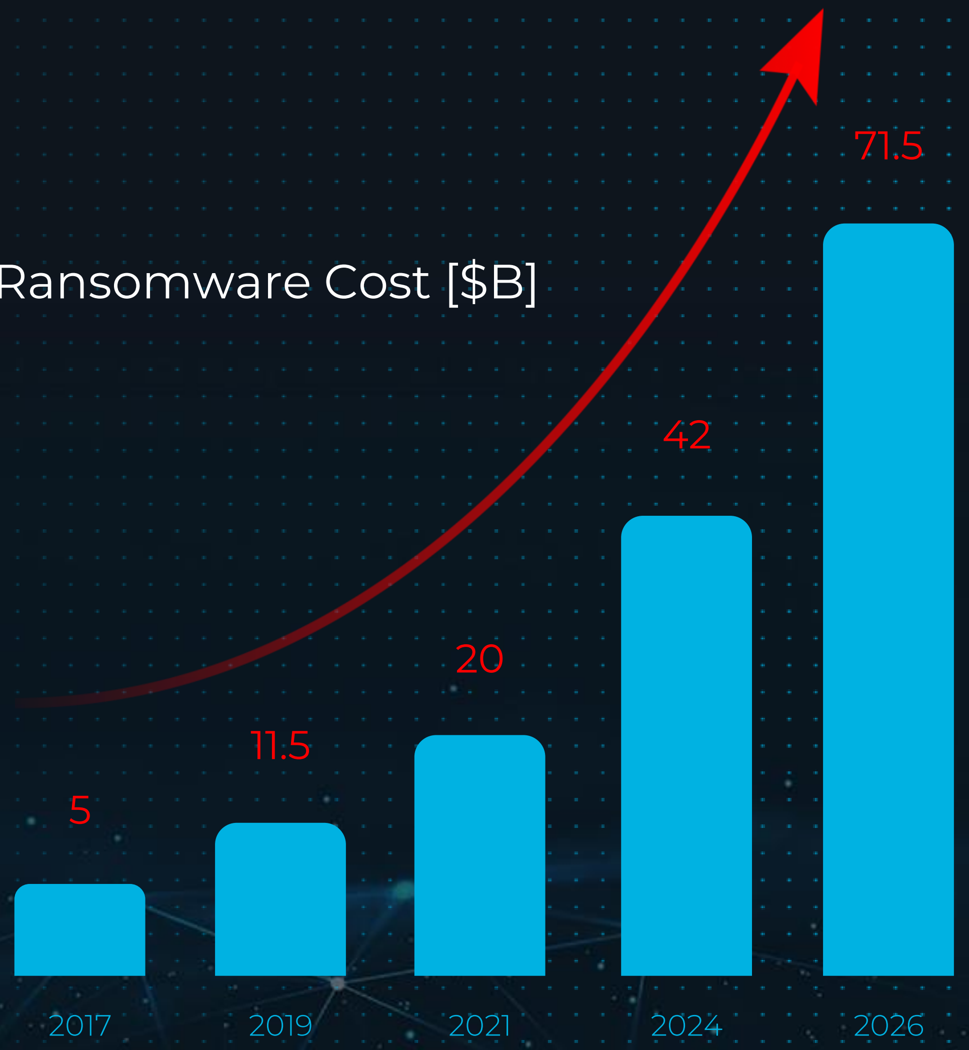
Incident response is critical

Security Investment: [M$]



www.databridgemarketresearch.com/reports/global-operational-technology-market

Ransomware Cost [$B]



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The importance of a plan for an unplanned downtime

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Our offerings

Revolutionized patented air-gapped technology

- **Fast Recovery**
- **No need for IT personnel**
- Instant restoration tests
- Operational Continuity

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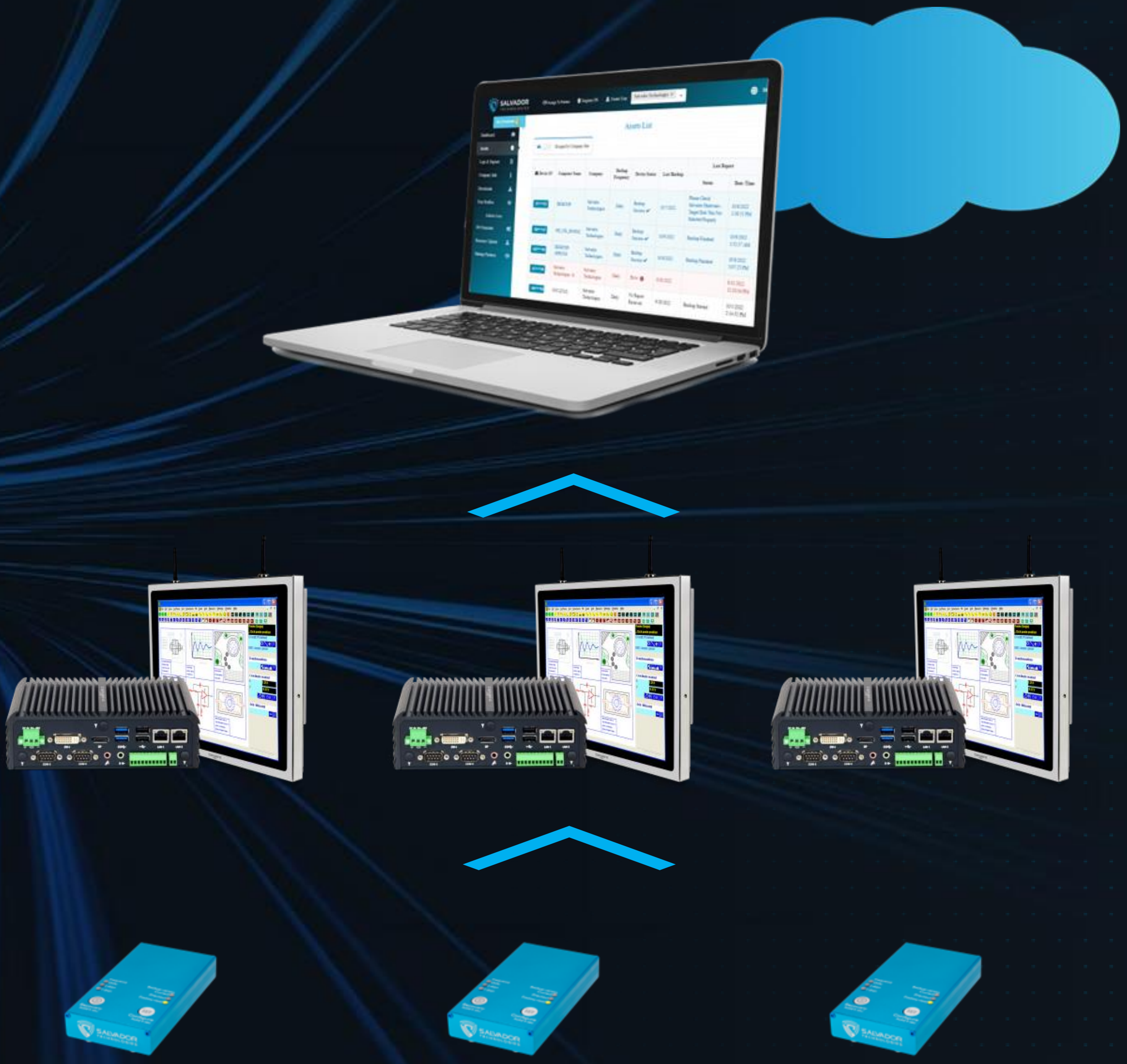
3 Layers of Defense



Air Gap Protection

Innovative Recovery Software

Continuous Monitoring

30 sec

and you’re back on track!

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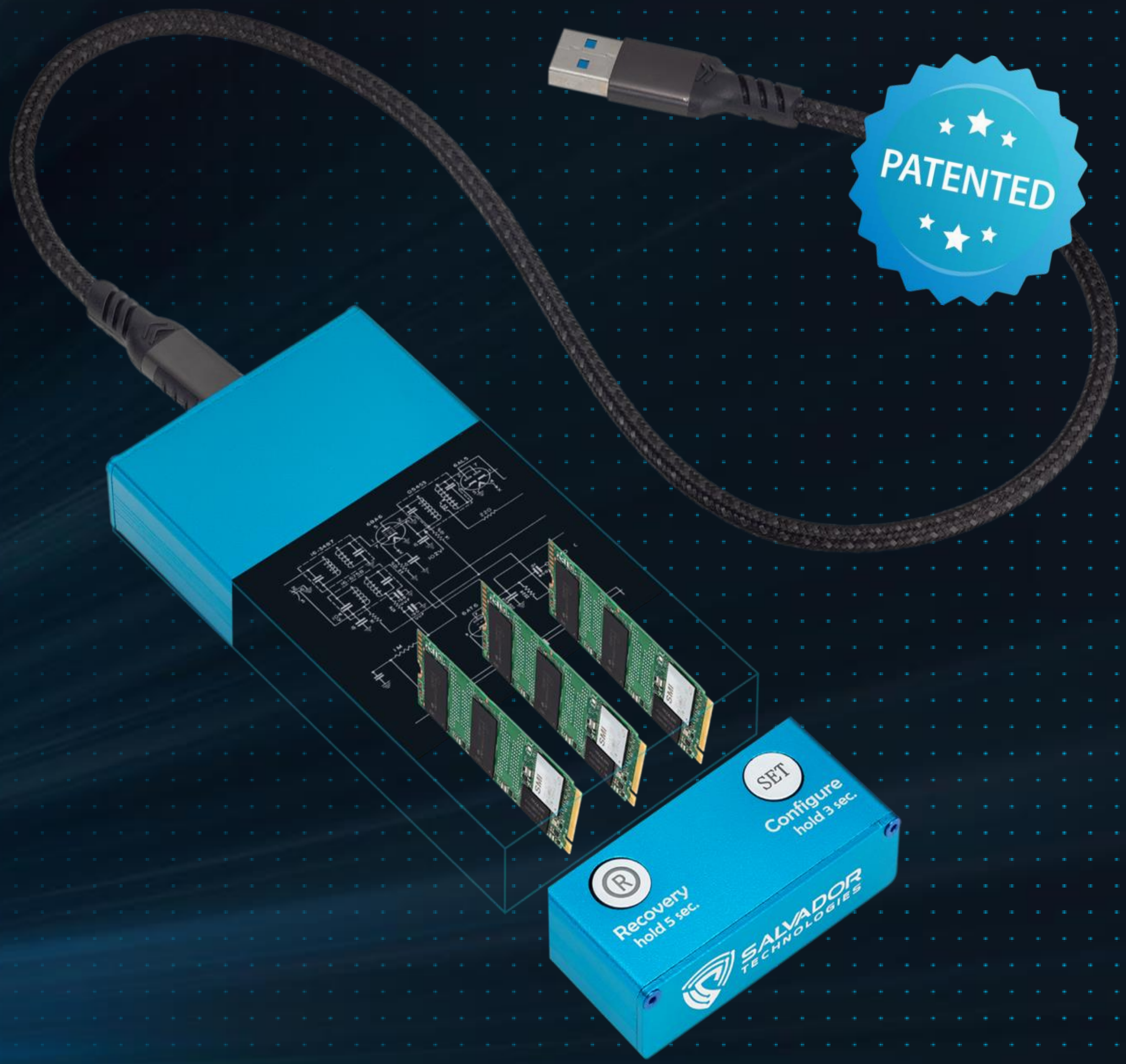
Air Gap

The algorithm will not allow any external or internal control of this functionality from the computer.

It means, that every X days, a different disk will be accessible to the user for backup of the data – other disks are electronically offline.

All copies include the entire disk; OS, configurations, licensing and data files.



Available capacity: 3 x NVMe drives

options: 512GB / 1TB / 2TB / 4TB

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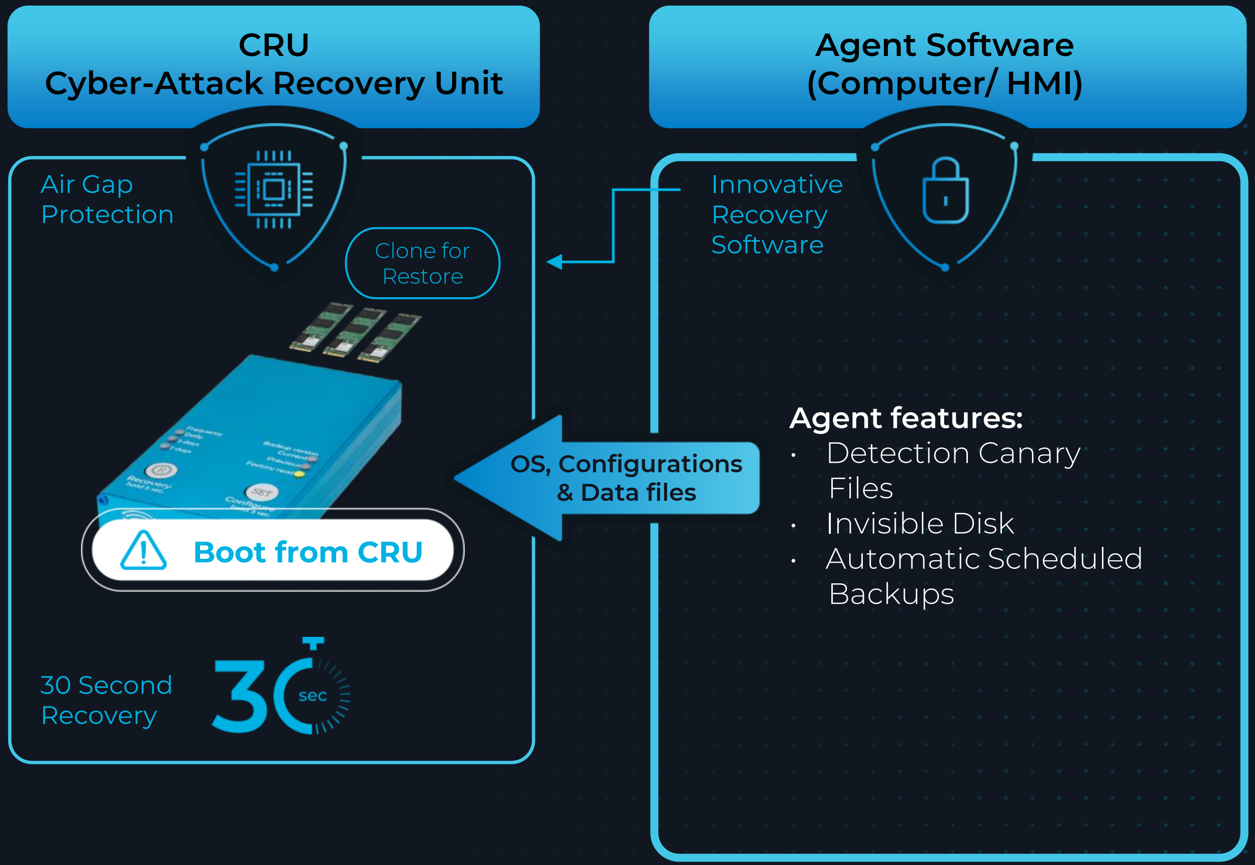
How does it work?

Step 1- Cloning the disk



CRU
Cyber-Attack Recovery Unit

Air Gap Protection

Clone for Restore

Boot from CRU

30 Second Recovery

OS, Configurations & Data files

Agent Software
(Computer/ HMI)

Innovative Recovery Software

Agent features:

- Detection Canary Files
- Invisible Disk
- Automatic Scheduled Backups

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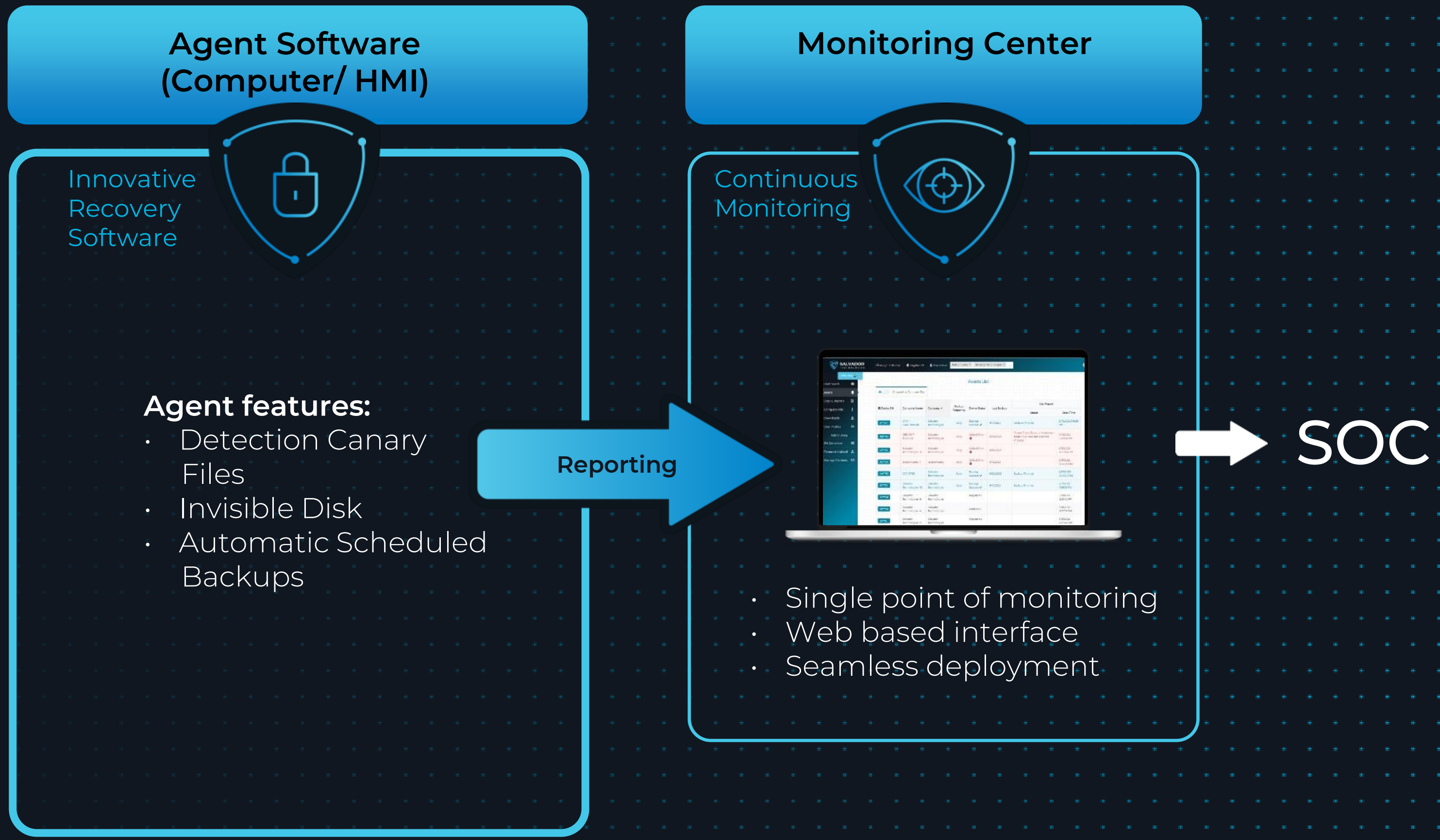
How does it work?

Step 2- Reporting, Analytics & Management

- OK
- Report missing
- Attack detected
- Hardware Alert



Agent Software (Computer/ HMI)

Innovative Recovery Software

Agent features:

- Detection Canary Files
- Invisible Disk
- Automatic Scheduled Backups

Reporting

Monitoring Center

Continuous Monitoring

- Single point of monitoring
- Web based interface
- Seamless deployment

SOC

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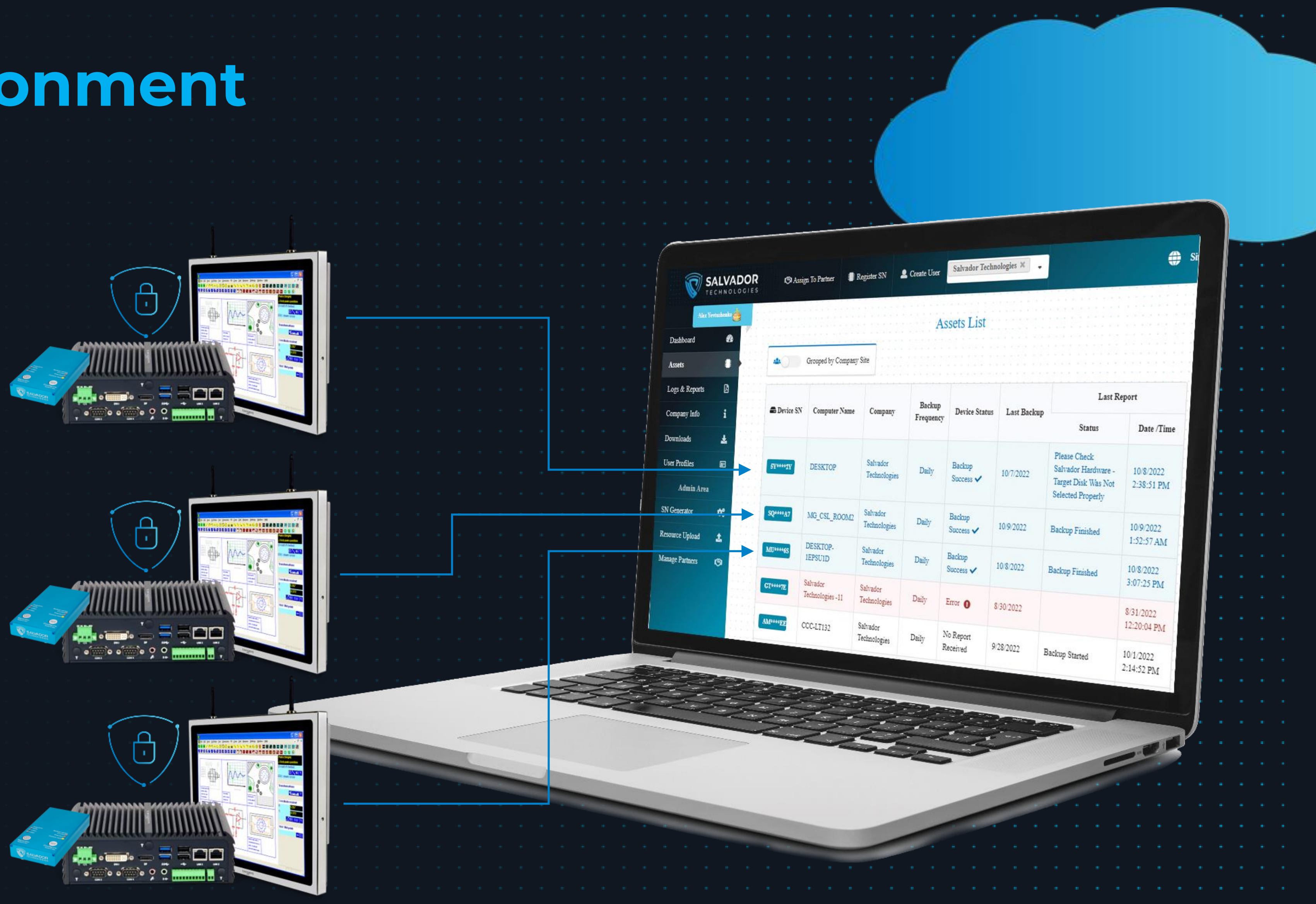
Network Environment



Assets List

Device SN	Computer Name	Company	Backup Frequency	Device Status	Last Backup	Last Report	
						Status	Date /Time
5Y****2Y	DESKTOP	Salvador Technologies	Daily	Backup Success ✓	10/7/2022	Please Check Salvador Hardware - Target Disk Was Not Selected Properly	10/8/2022 2:38:51 PM
SQ****A7	MG_CSL_ROOM2	Salvador Technologies	Daily	Backup Success ✓	10/9/2022	Backup Finished	10/9/2022 1:52:57 AM
MU****6S	DESKTOP-1EPSU1D	Salvador Technologies	Daily	Backup Success ✓	10/8/2022	Backup Finished	10/8/2022 3:07:25 PM
GT****7E	Salvador Technologies -11	Salvador Technologies	Daily	Error ❗	8/30/2022		8/31/2022 12:20:04 PM
AM****EE	CCC-LT132	Salvador Technologies	Daily	No Report Received	9/28/2022	Backup Started	10/1/2022 2:14:52 PM

Automated notification Service via email & SMS!

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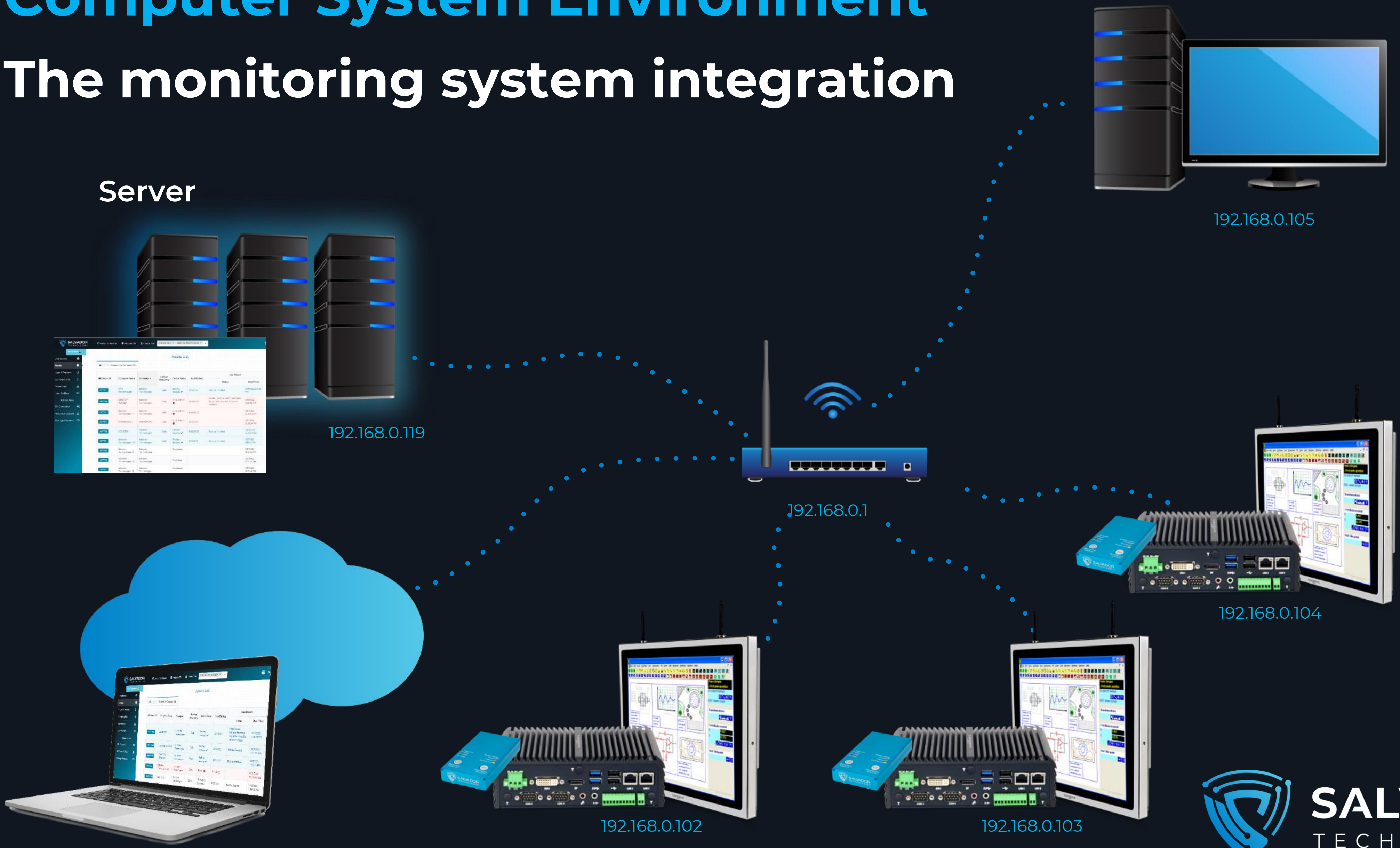
Computer System Environment

The monitoring system integration



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Main Use Cases
DR and Maintenance

- Cyber Recovery
- IT Failure Recovery
- Patching
- RAID Control

PATENTED

Our data loss prevention tools are easy to use – less than **1 minute of installation** in order to protect the data from malicious encryption.

It requires only **30 seconds** to return the system back to work in case of a cyber-attack or system malfunction.

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Join our fast-growing customer base in Europe and the US

Manufacturing

Critical Infrastructures

Energy

Maritime

Medical

BMS

Logistics

Manufacturing Chemicals

Global mineral and chemical factories, manufacturing Magnesium, fertilizers, Bromine for agriculture and food industry. Hundreds of HMI stations and servers to support the operations worldwide.

The Need

Securing operational continuity of resource planning, monitoring, configuration, and real-time hazard recognition.

Protection of Engineering workstation: Real-time Plant Control, product and operations traceability, Inventory Management.

Results

- **Reduction of downtime from 10 days to minutes**
- **99% reduction in data storage checkups process**
- **Recovery for virtual machines (VM), SCADA & DCS, running Win 10, Win 2012 Hyper-V platform**
- **100% visibility across multi-site assets**

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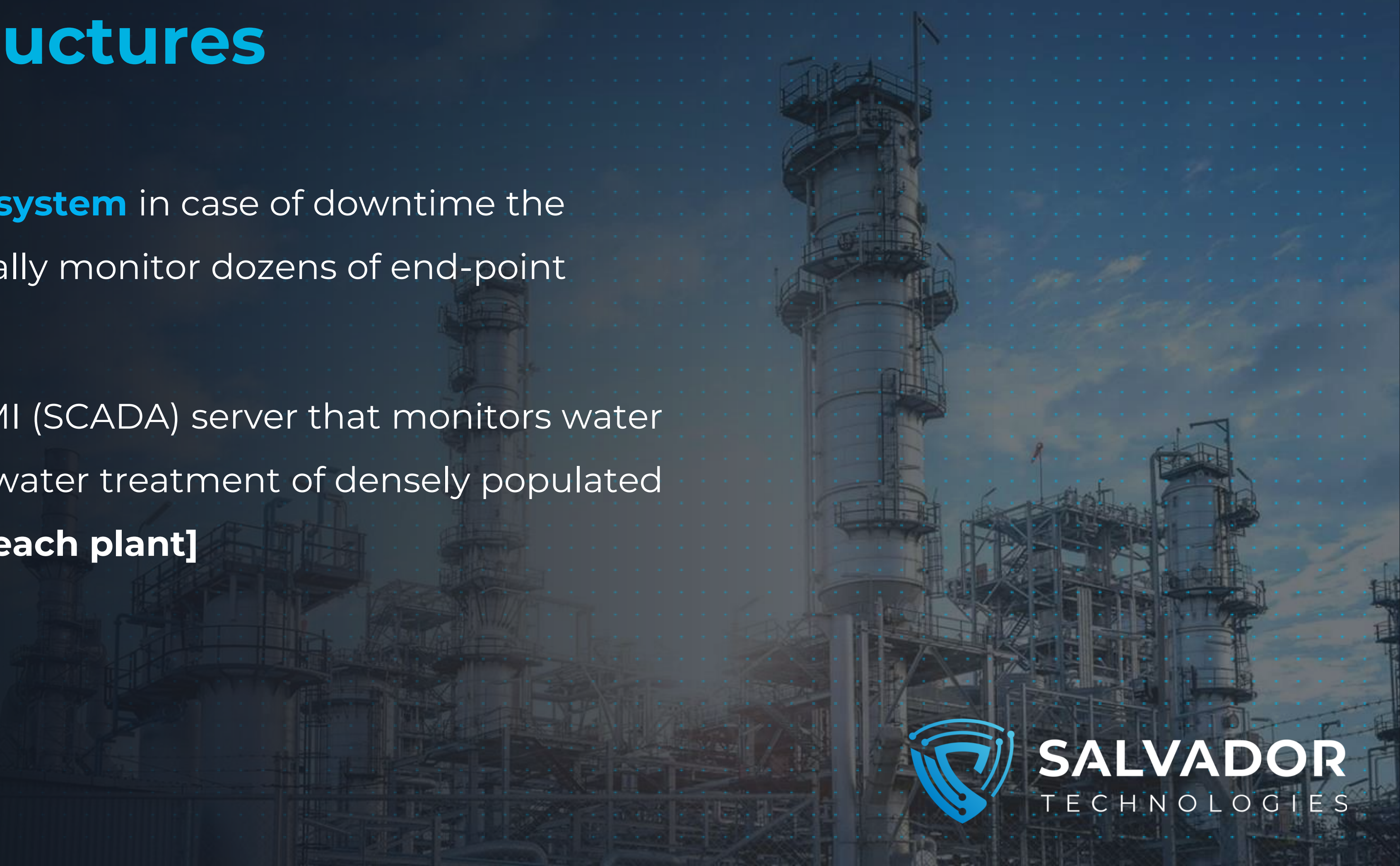

Critical Infrastructures

- **Ammonia refrigeration system** in case of downtime the operator needs to manually monitor dozens of end-point controllers. **[10-20 units]**
- **Water Supply Plants** HMI (SCADA) server that monitors water quality and controls the water treatment of densely populated areas in Israel **[3-5 units each plant]**

Maritime The Ashdod Port Company

Ashdod Port, Israel's largest sea port cargo volume and is a major gateway for goods and cargo to and from the State of Israel, has started operations in 1965..

The need

An alternative to the previous manual backup method which required physical access to each crane station. Efficient and Frequent backup of all operational systems of configuration updates for all end-points

Operational Continuity of Critical equipment – various types of cranes, including legacy systems.

The Solution

One-time physical installation on the crane station, providing automatic frequent backups.

Deployment of Cyber Recovery Unit (CRU) on critical end-points: ABB HMI terminal crane computer systems

based on Window 10, and SIEMENS Window server 2012 with SIMOCRANE CMS (Crane Management System).

- Less than 5 minutes to integrate and discover critical attack paths.

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Medical A National Israeli Hospital

One of the largest regional multi-disciplinary medical centres, with over 28 different departments, 50 out-patient clinics, 1,000-bed capacity treating hundreds of thousands of patients per year and employs over 5,000 workers.

The need

Strengthen the resilience of multiple workstations such as operations rooms, medical imaging systems, EMR systems, and X-ray machines.

Attend the PACS continuity challenge swift recovery path in case the unexpected operation interruption from the infrastructure malfunction or a malicious cyber-attack.

The Solution

Automatic, frequent, backups with simple and straightforward recovery procedure, allow any of the medical centre personnel to perform recovery by one click.

22 CRUs installed in selected departments (phase A), including labour/delivery, PACS infrastructure.

Attending the unique medical operations' infrastructure (e.g. CT, X-Ray, etc.,) alongside IT infrastructure (Windows-based servers).

Phase B - increasing to 90 CRU devises for critical workstations and other systems.

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Meet Our Team

The Salvador Technologies team is composed of 14 highly experienced professionals, each in their own discipline, mission-oriented, and with great interpersonal skills!

The entire team is committed to Business Continuity Planning and shares the passion for contributing to the global cyber security agenda.

Alex Yevtushenko

CEO

Electrical engineer, specialization in VLSI and computer engineering

Oleg Vusiker

CTO

Electrical and electronics engineer with vast experience in the National Cyber Unit

Amos Halfon

VP Sales EMEA

29+ years of experience in Hi-Tech sales and building global markets.

Sharon Caro

Marketing Executive

15+ years of experience in business development, branding, and global strategies

Rami Kalish

Managing Partner & Co-Founder at Pitango VC

Ariel Maislos

Serial Entrepreneur & Investor (Anobit)

Prof. Hezy Yeshurun

Co-Founder @ ForeScout
Prof. Emeritus @ TAU

Gabriel Marcus

Cyber Architect
@ Bank Discount

pitango

SARONA
PARTNERS

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FAQ

Why is your recovery so fast?

Our advanced backup software creates a full duplicate of the system, which includes the OS (Operating System), data files, drivers, and the unique user configuration. The attacker cannot reach, encrypt, or delete the data, as it is secured by air-gap protection. This allows the user to immediately reboot and operate from Salvador's disk, with no need for IT expertise, by one click of a button.

Any solution for petabytes of data storage ?

Most of the critical assets can use our Cyber Recovery Unit (CRU) units for immediate recovery. For large capacity servers and private cloud, we have the Network Recovery Station (NRS) based on the DPU network adapter. This product is not limited by the capacity of your data.

How do you avoid a backup of the virus?

We do continuous monitoring of the data of both the computer and the backups data. This allows us to immediately identify attempts of attacks, and inform the user to take an action.

How do I perform recovery exercises for my company?

It is easy and will not require you to shut down your workstation. All you need to do is to plug off the unit from the workstation and then you can test the recovery process on a different computer (by booting from Salvador device, the whole process takes approximately 30 seconds).

How do you deal with an APT virus ?

One copy of the data is never accessible before recovery to avoid APT virus infection. The two other copies are secured by a patented offline protection algorithm. Access to the data in those copies is time-limited and allowed only to dedicated Salvador software. The disks are invisible by the OS.

How does it differ from a DR system?

Yes. DR (Disaster Recovery) is designed specifically for data loss in cases such as fire, water, and physical theft. These are usually online solutions that are vulnerable to cyber-attacks. Salvador's solution is based on air-gapped protection storage to allow recovery from ransomware, wiper malware, and other types of cyberattacks.

I have many end-computers in my organization, how can I deploy your product?

The deployment is very easy. The installation takes less than one minute per station. It means you can deploy hundreds of systems in a few hours.

How do I perform a backup validation?

With our simple-to-use web monitoring system, you can see the status of all workstations in one management panel on the cloud or on-premise (in case no internet connection exists).

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Thank You!

For more info
and a demo request
contact us:

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