


INFINIDAT



Reduce Ransomware Exposure with Comprehensive Storage Cyber Resilience

Dave Nicholson
Americas Field CTO
Infinidat

 dnicholson@infinidat.com

 [@MasSubestimado](https://twitter.com/MasSubestimado)

Exploding Cyber Risks

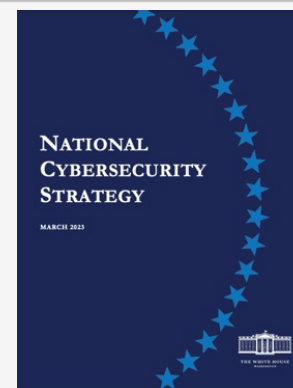


Flash Memory Summit

Headline News

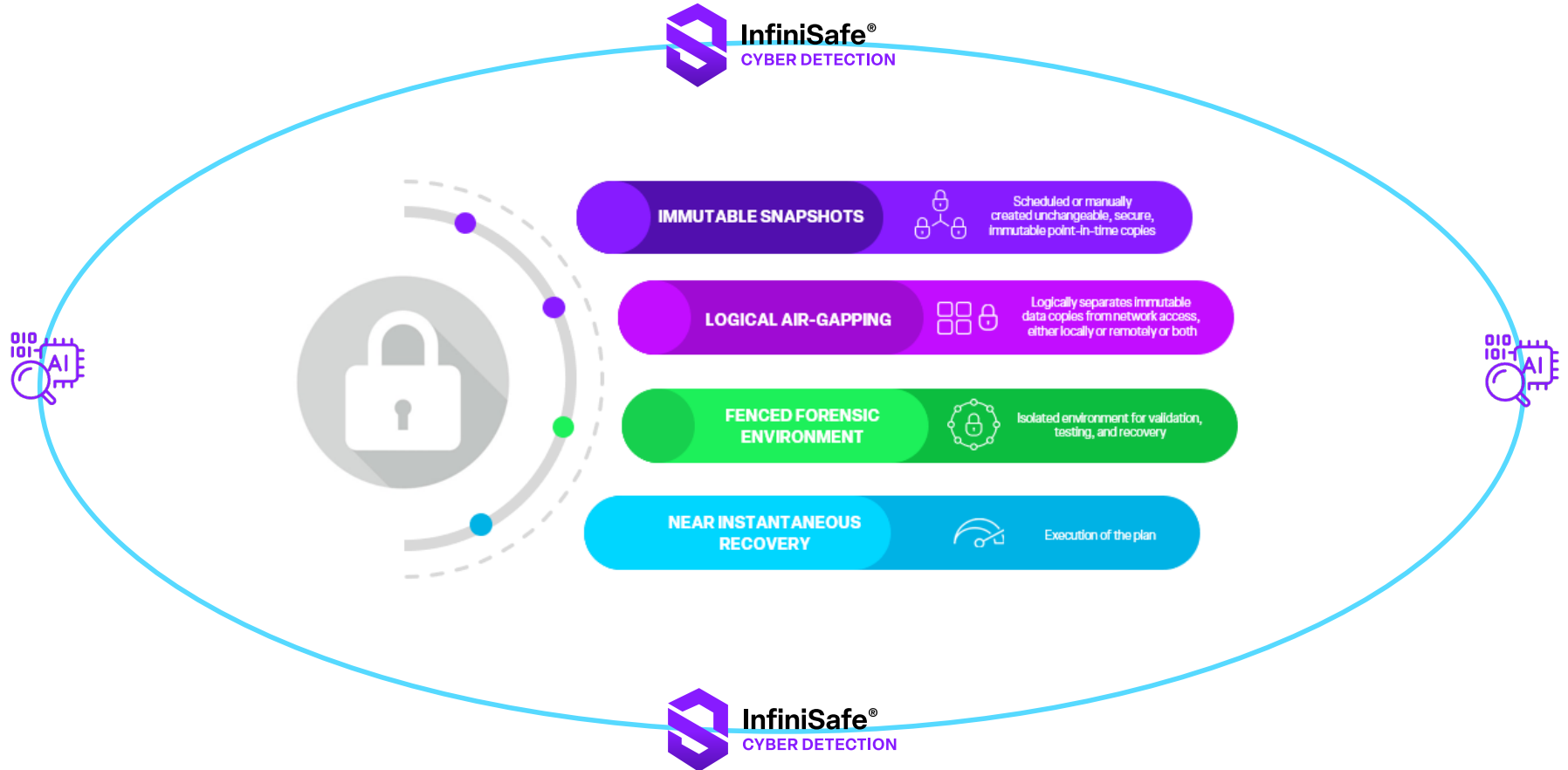
World @ Business @ Finance @ Travel @ Sport @ Weather

- Cybercrime to cost the world \$8T in 2023
 - \$15.2M per minute
 - Average WW Cost per event \$4.5M
 - Average USA Cost per event \$9.1M
- By 2025, cybercrime will cost the world \$10.5T
- US announces National Cybersecurity Strategy (Mar 2023)/ EU Announces Cyber Solidarity Act
- Cyber security is the #2 concern of CEOs globally (IDC, Feb 2023)
- Average enterprise suffers 1,168 cyberattacks weekly
- 48% of CEOs are increasing investment in cyber security 2023
- Globally, 30,000 websites are hacked daily



INFINIDAT

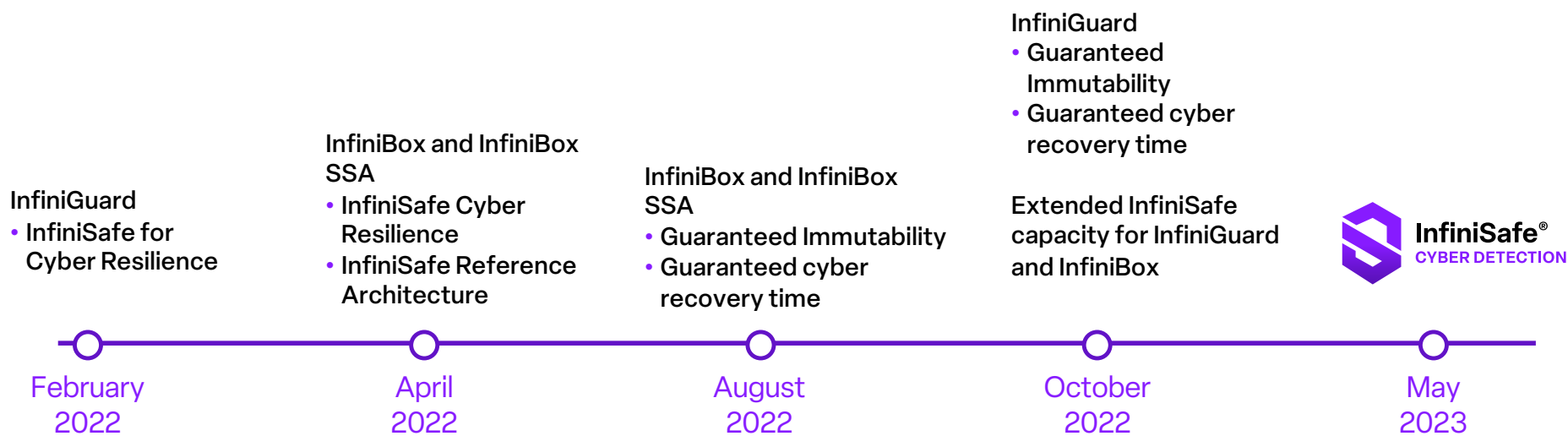
InfiniSafe Cyber Storage Resilience



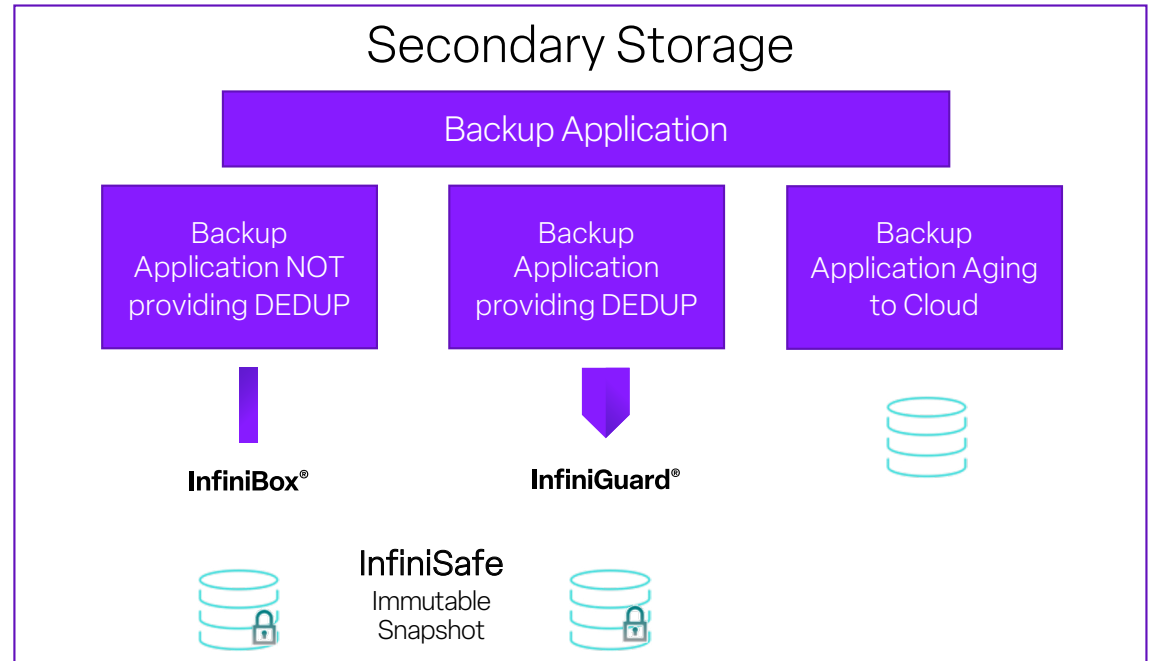
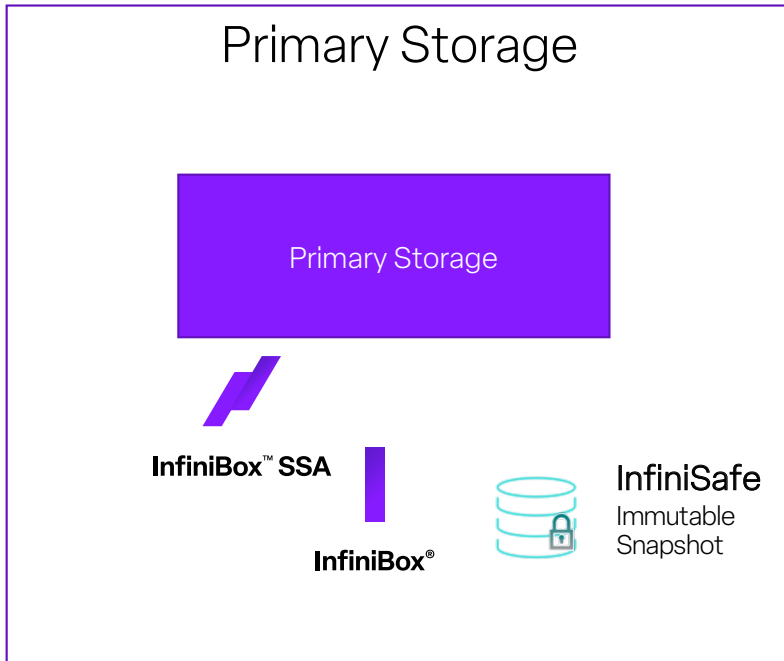
InfiniSafe Cyber Resilience Innovation

Commitment to delivery of cyber resilience innovation

- First cyber resilience solution for primary storage
- First guaranteed cyber resilience recovery
- First guaranteed cyber resilience recovery time



Cyber Resilient Storage Enabled by **InfiniSafe**



InfiniSafe Cyber Storage Resilience Guarantees

- Guaranteed immutability of InfiniSafe immutable snapshots
- Recovery time guarantee of those immutable snapshots
 - Less than 20 minutes for InfiniGuard
 - Less than 1 minute for InfiniBox SSA II and InfiniBox
 - Regardless of immutable snapshot size

InfiniSafe Cyber Storage Resilience

- Immutable Snapshots
- Logical air-gapped protection
- Fenced forensic environment
- Near-instantaneous recovery of any size backup repository

Guaranteed Cyber Storage Resilience !!!!!



Flash Memory Summit



- **InfiniSafe Cyber Storage Guarantee**
 - First primary storage platform cyber storage guarantee
 - Guaranteeing immutability of our InfiniSafe immutable snapshots
 - Guaranteeing near instantaneous recovery of an InfiniSafe immutable snapshot:
 - 1 minute or less with InfiniBox/InfiniBox SSA II
 - 20 minutes or less with InfiniGuard
- **100% Availability Guarantee**
 - InfiniBox/InfiniBox SSA II
- **Performance Guarantee**
 - InfiniBox/InfiniBox SSA II - Based upon your actual real-world applications

INFINIDAT

InfiniSafe Ransomware and Malware Resistance

Cyber Detection Flexibility



Primary Storage

Volumes, App Workloads, Snapshots



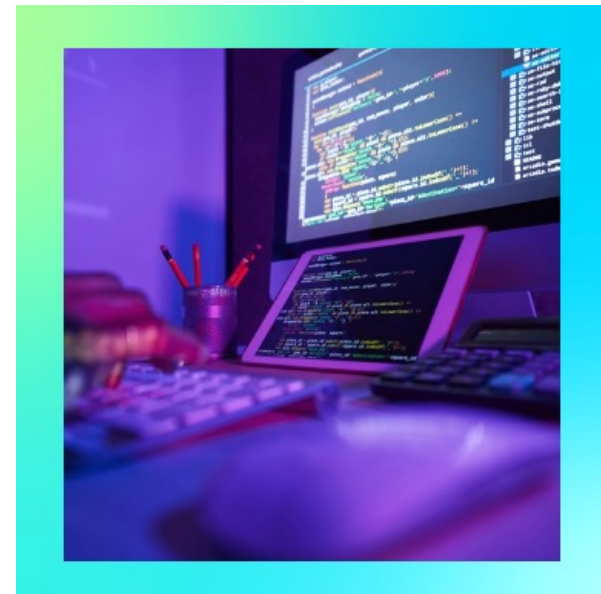
Databases

Oracle, DB2, SQL, SAP Hana, Cache, etc.



User Files

Contracts, Financial Docs
Intellectual Property, etc.



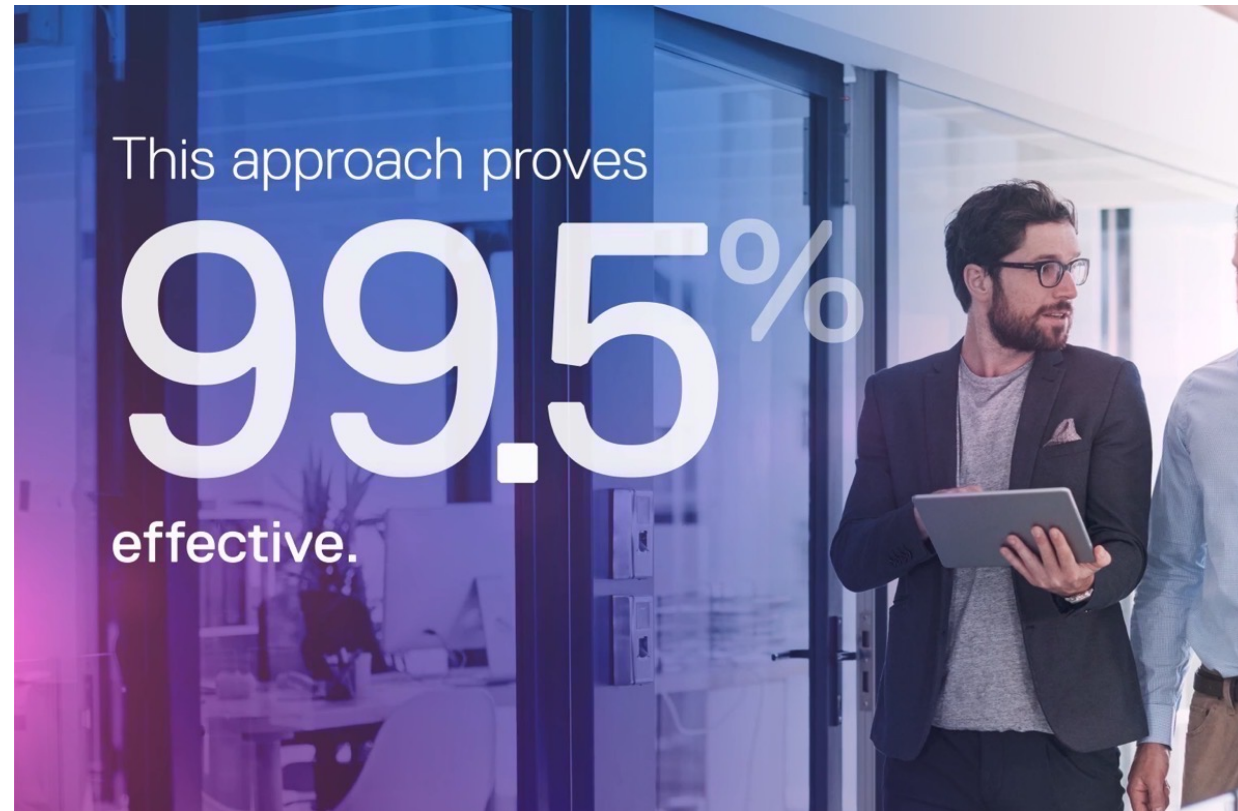
INFINIDAT

Cyber Detection Machine Learning Model Training



Flash Memory Summit

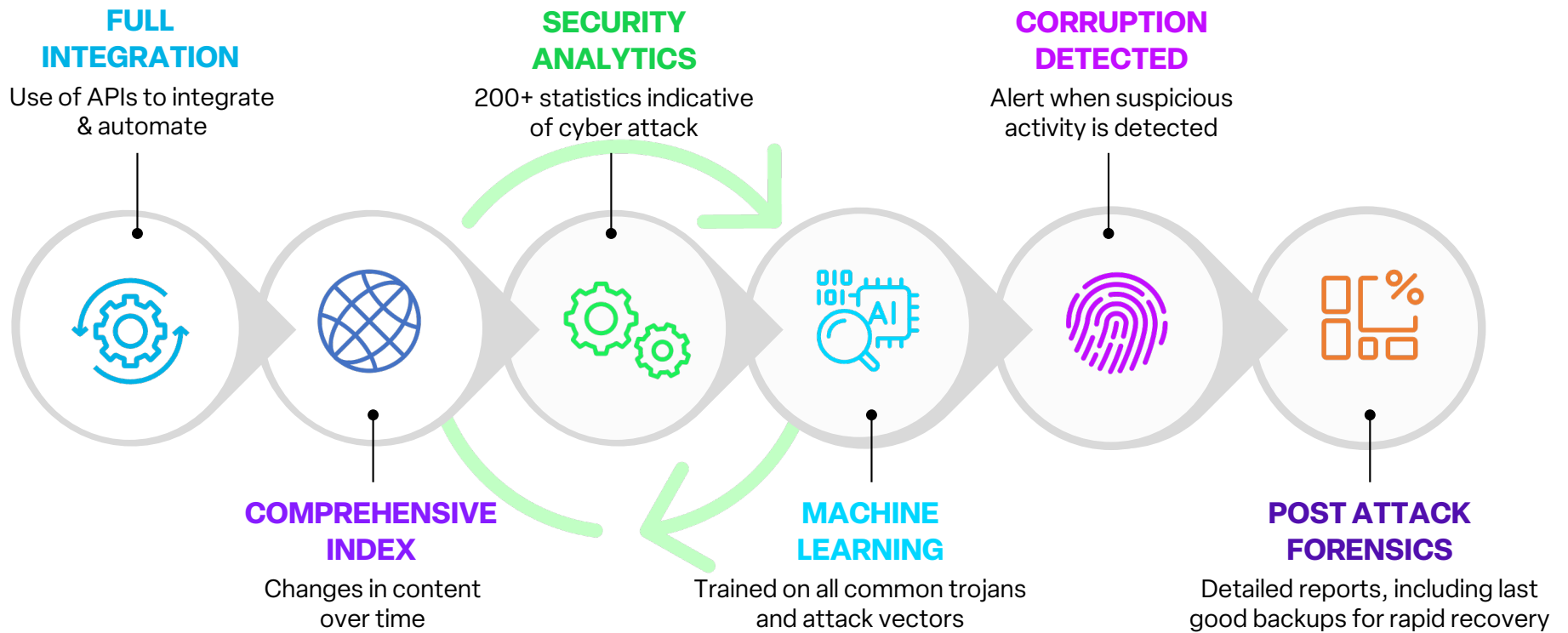
- Data sets representing many different pre and post attack environments, with all known ransomware variants, are used to train the machine learning model
- Machine-learning model quality is tuned and measured to meet a 99.5% recall rate



INFINIDAT

Cyber Detection Workflow

Analytics, Machine Learning and Forensic Tools to Detect and Recover from Cyberattacks **Flash Memory Summit**



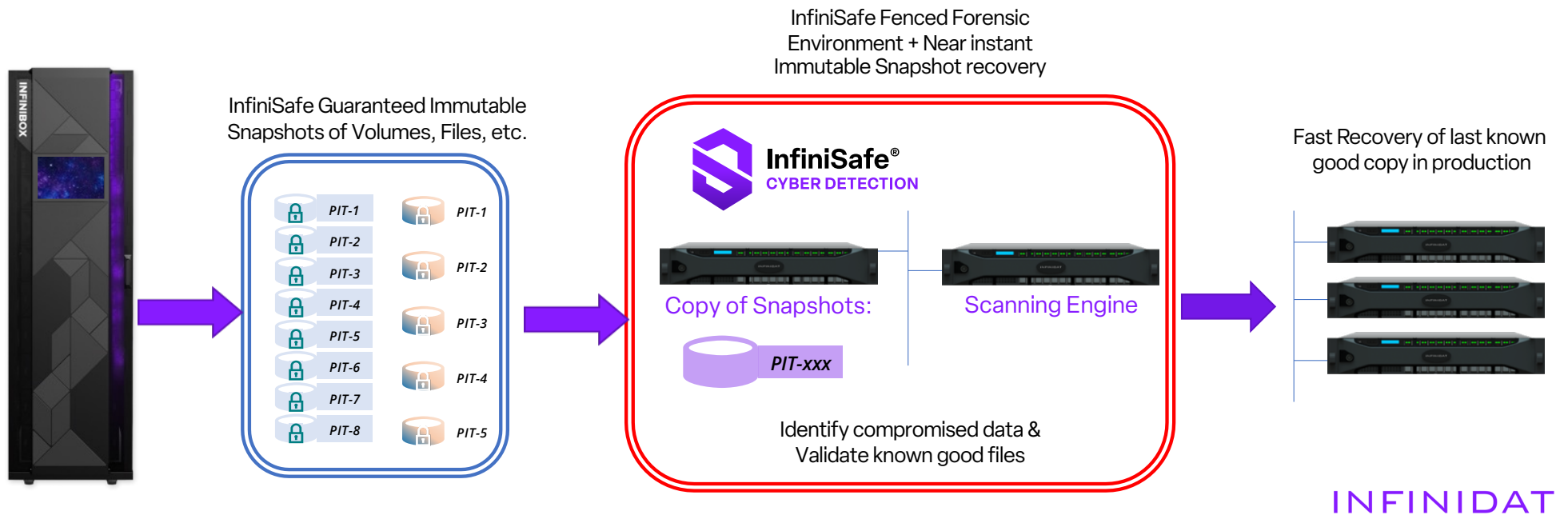
INFINIDAT

InfiniSafe Cyber Detection Solution



Flash Memory Summit

- Applications can validate immutable snapshots in Fenced Forensic environment
- Cyber Detection will tag any corrupted files, create forensic report
- Provides the intelligence needed to facilitate recovery





InfiniSafe Cyber Offload Solution

- Multiple InfiniBoxes or InfiniBox SSAs replicate to one
- Cyber Detection offload “array” will scan all data files and tag any corrupted files, create forensic report
- Provides the intelligence needed to detect an attack

Multiple InfiniBoxes replicate to offload



InfiniSafe Fenced Forensic Environment + Near instant Immutable Snapshot recovery



Cyber Detect Post Attack Dashboard

Improved user experience - More insight into data - Intuitive post attack workflow



Flash Memory Summit

Alerts organized by severity

New details on suspect corruption

Customizable, dynamic charts to drill down into details of the attack

List of corrupted files that can be downloaded

The screenshot shows the InfiniSafe Cyber Detection dashboard. At the top, there are tabs for Monitor, Analyze, and Configure. The main section displays 'New Alerts' with a summary: 2 Critical, 1 High, and 5 Medium. Below this is a table of alerts, including 'Watchlist Changed' and 'Suspected Ransomware'. A detailed view of a 'Suspected Ransomware' alert is shown, explaining that the Machine Learning Model recognized a type of ransomware attack based on file entropy. The dashboard also features three donut charts: 'Extension' (listing .exe, .csv, .xml, .txt, .zip, .rar, .7z), 'Location' (listing various paths), and 'File Type' (listing Type 1, 2, 3, 4). At the bottom, there is a table of corrupted files with columns for Name, Host, Owner, Last Modified, Accessed, Size, Directory, and Last Known Backup ID.

NAME	HOST	OWNER	LAST MODIFIED	ACCESSED	SIZE	DIRECTORY	LAST KNOWN BACKUP ID	
<input type="checkbox"/>	Another File Name that is too...ng.exe	91bd86a2fe...	Jonathan Anderson	Dec 14, 2021 01:30	Dec 14, 2021 01:30	1TB	Directory Name	12345
<input type="checkbox"/>	Another File Name that is too...ng.exe	91bd86a2fe...	Jonathan Anderson	Dec 14, 2021 01:30	Dec 14, 2021 01:30	1TB	Directory Name	12345
<input type="checkbox"/>	Another File Name that is too...ng.exe	91bd86a2fe...	Jonathan Anderson	Dec 14, 2021 01:30	Dec 14, 2021 01:30	1TB	Directory Name	12345
<input type="checkbox"/>	Another File Name that is too...ng.exe	91bd86a2fe...	Jonathan Anderson	Dec 14, 2021 01:30	Dec 14, 2021 01:30	1TB	Directory Name	12345

INFINIDAT

Infinidat at FMS

Dates: Aug 8 – 10, 2023

Location: Santa Clara, CA

Booth: 649 - <https://www.infinidat.com/en/news/events>

Set up Meetings: Lynsy Calvario - lcalvario@infinidat.com

Tuesday, August 8

- 8:30am – 9:35am: Will All Storage Reside in the Public Cloud?
- 9:45am – 10:50am: All-Flash Technology Getting the Advantage of Software Defined Storage
- 3:20pm – 4:25pm: Perpetual Upgrades, Managed Services and Other Modern Storage Consumption Models
- 7:30pm – 9:00pm: Chat with the Experts - Beer & Pizza Night

Wednesday, August 9

- 8:30am – 9:35am: The current state and future direction of storage system investments for Generative AI and Analytics Workloads
- 3:30pm – 4:35pm: Reduce Ransomware Exposure with Comprehensive Storage Cyber Resilience - DSEC-203-1: Cyber Resiliency and Systems - What You Don't Know Will Hurt You
- 3:30pm – 4:35pm: CMO Panel – Flash Arrays Will Be Everywhere but What Are the Changing Customer Requirements and Winning Go-to-Market Strategies
- 6:30pm – 7pm: Best of Show Awards



Flash Memory Summit



VMware Explore Las Vegas 2023

Infinidat Party at VMware Explore – Monday Aug 21

Time: 7:00pm – 10:00pm

Location: The Venetian, Las Vegas, NV

Venue: Villa Azur – Grand Canal Shoppes

Demo: Kevin Fredericksen, Infinidat's Director of Professional Services, will be demoing our Cyber Resilience solutions

Speaking Slot - Tuesday Aug 22 at 2:00pm

- Veeam Booth #603
- "Building a cyber resilient VMware environment with Infinidat and Veeam"

Speaking Slot - Wednesday Aug 23 at 9:30am

- VMware Explore Technical Session – Attendees will need to check the VME calendar
- "Core Storage Best Practices: Optimizing NVMeoF and vSphere Virtual Volumes [CEIB2533LV]"

ABOUT – VMware Explore Infinidat Party

Before the event begins, come and unwind with Infinidat in a relaxed lounge atmosphere at the brand-new restaurant, Villa Azur, located within the Grand Canal Shoppes of The Venetian.

Catch up with the people behind Infinidat's legendary enterprise storage solutions while mingling with business partners and peers from all over the world. This restaurant is straight out of the South of France adorned with glamour and elegance from the French Riviera. You'll be greeted with delectable serving stations and canapes. Enjoy the open bar and roaming entertainment.

Registration Page: [click here](#)



INFINIDAT



Flash Memory Summit

THANK YOU!



InfiniSafe[®]

CYBER DETECTION