

# EFEKTÍVNA OCHRANA KRITICKÝCH DÁT A ZÁLOH PRED KYBERNETICKÝMI HROZBAMI A ICH GARANTOVANÁ OBNOVA

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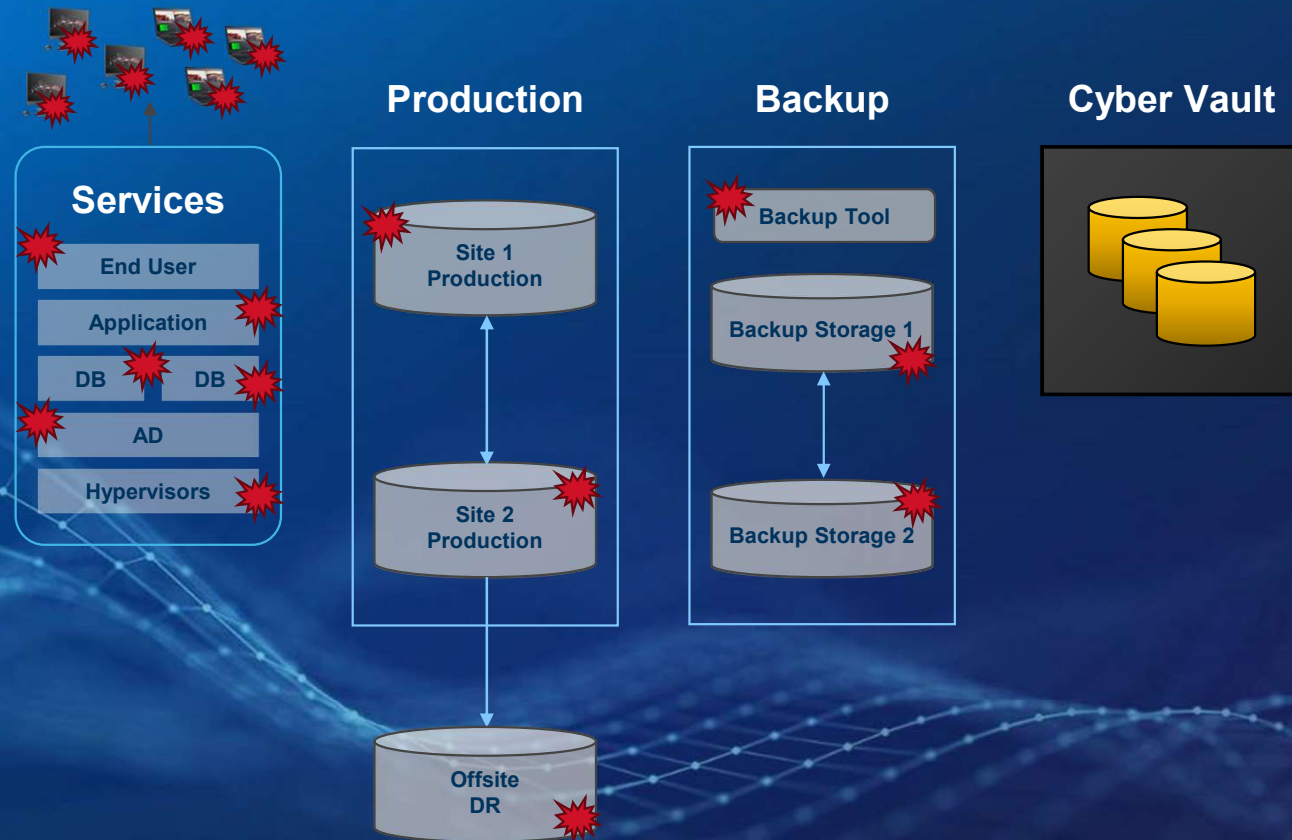
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 Dell Technologies

# The New Data Center Reality

Vaulting your data in an isolated environment



# Requirements from the Industry

1. Supply Chain Inspection
2. Separation of Duty
3. Data Isolation (offline)
4. Ability to Test Recoveries
5. Run Book Creation
6. Observability
7. Timely Recovery in the event of a Cyber Attack

# Key Characteristics of our Cyber Recovery Solution



## Isolation

Physical & logical separation of data



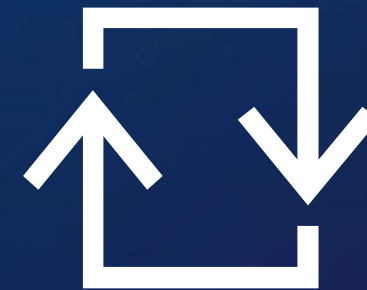
## Immutability

Preserve original integrity of data



## Intelligence

Machine learning based threat detection, alerting and reporting

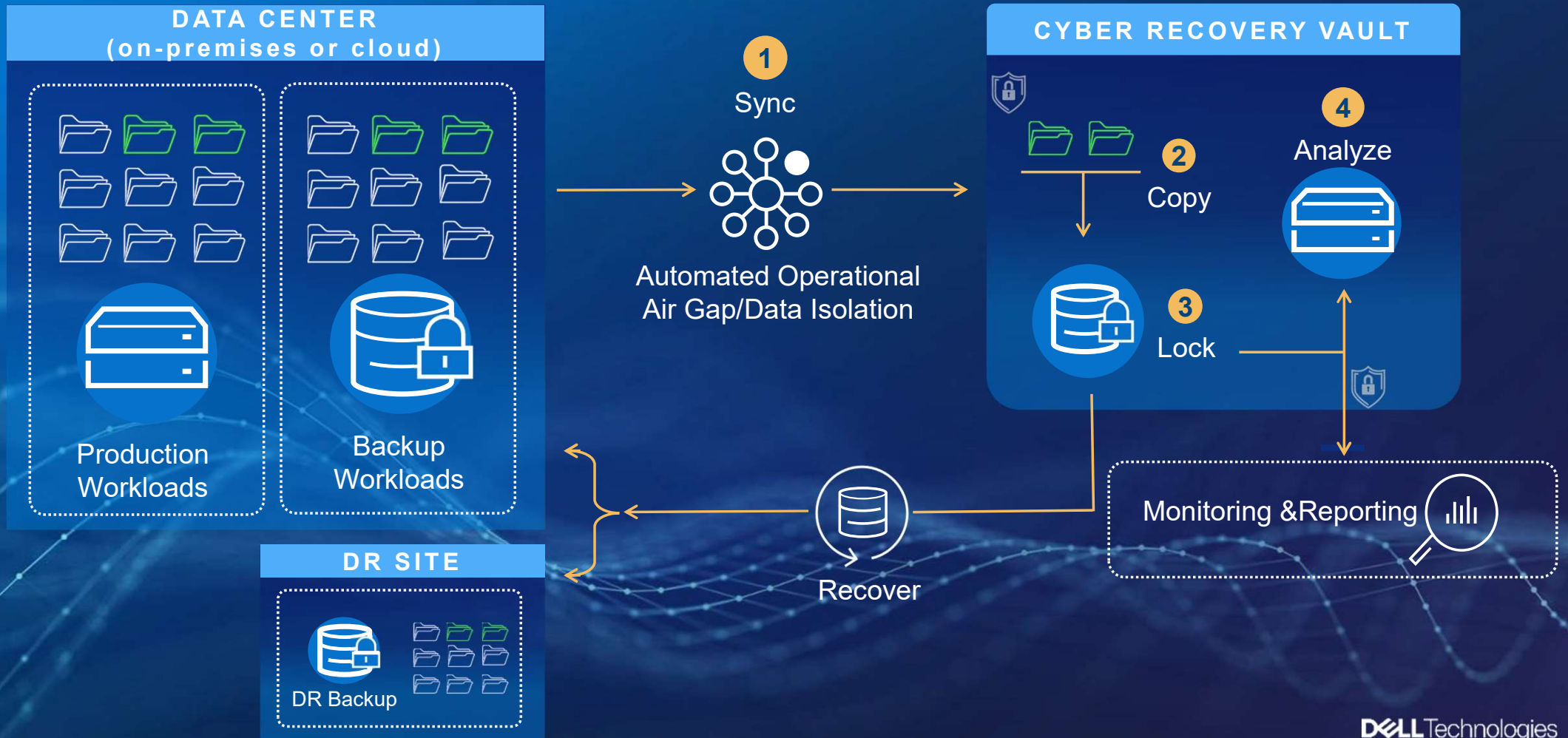


## Recovery

Fast recovery for minimal operational impact

# Dell PowerProtect Cyber Recovery

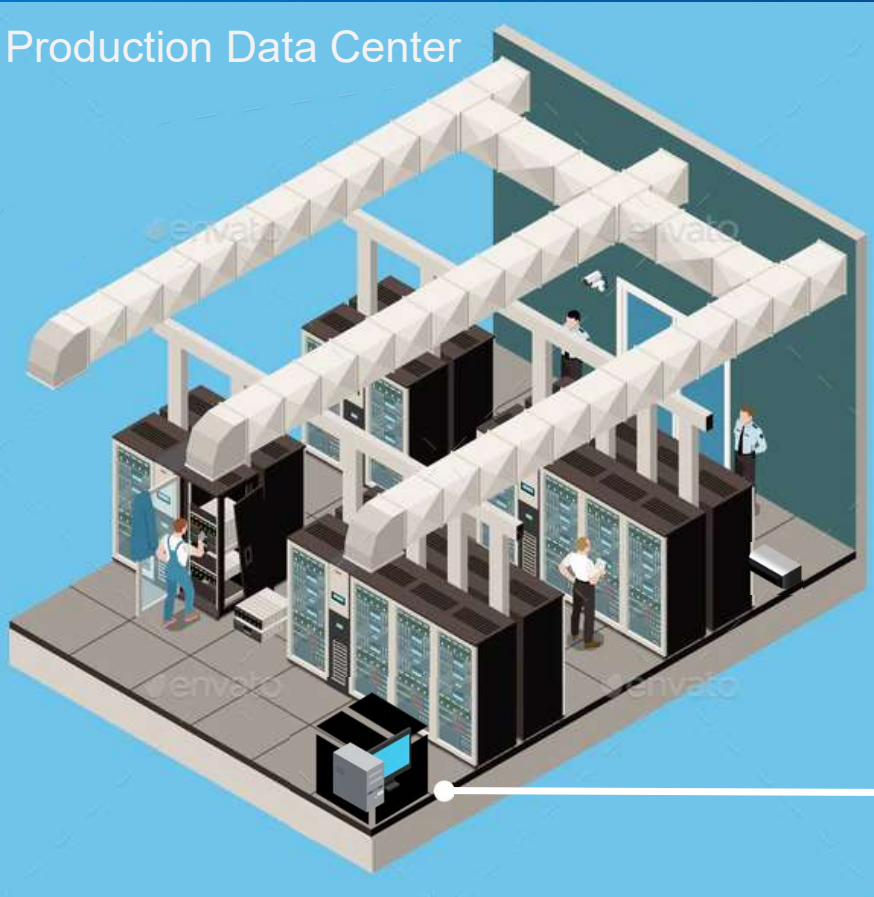
Ensuring the Recovery of Critical Rebuild Data in case of Cyber Threats



# Cyber Recovery Solution

The Gold Standard for Cyber Resiliency

Production Data Center



Cyber Vault



Replication



Air Gap

● Cyber Recovery Application

● Cyber Recovery Server

● Data Domain

● Data Diode

● Switch

● Cyber Sense (opt.)

● Management Server (opt.)

# How CyberSense Works

Analytics, Machine Learning and Forensic Tools to Detect & Recover from Cyber Attacks

## SECURITY ANALYTICS

200+ statistics indicative of cyber attack

## CORRUPTION DETECTED

Alert when suspicious activity is detected

## CyberSense Provides

- Attack type notification
- Ransomware detection
- Corrupted file details
- Data changes / deletions
- Breached user accounts
- Breached executables
- Last good backup copy



## COMPREHENSIVE INDEX

Changes in content over time



## SECURITY ANALYTICS

200+ statistics indicative of cyber attack



## MACHINE LEARNING

Trained on thousands of trojans and attack vectors



## CORRUPTION DETECTED

Alert when suspicious activity is detected



## POST ATTACK FORENSICS

Detailed reports, including last good backups for rapid recovery

# CyberSense Support for Intelligent Recovery

1

## Detect

*Detect corruption within a backup cycle*

2

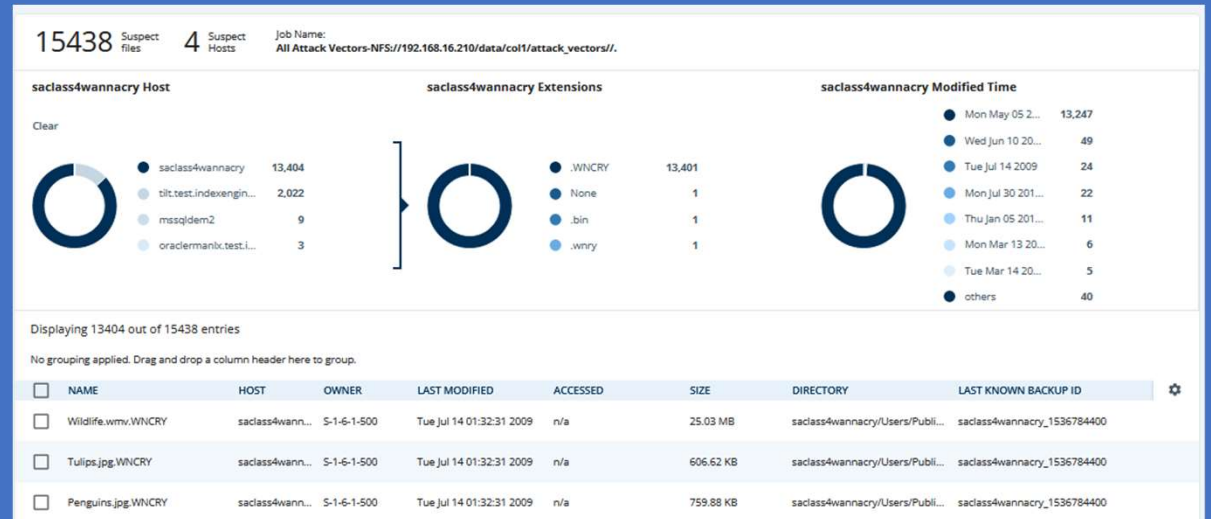
## Investigate

*The who, what, where & when of the attack*

3

## Recover

*Report on last good backups quickly recover*



Point in time of the attack

Listing of corrupted files

What backups need to be recovered

Search backups to detect ransomware



- 🏠 Dashboard
- 🔗 Infrastructure ▼
  - Assets
  - Storage
- 🔔 Alerts and Events
- 🛡️ Policies
- 🔄 Recovery
- 📊 Reports >
- 🕒 Jobs >

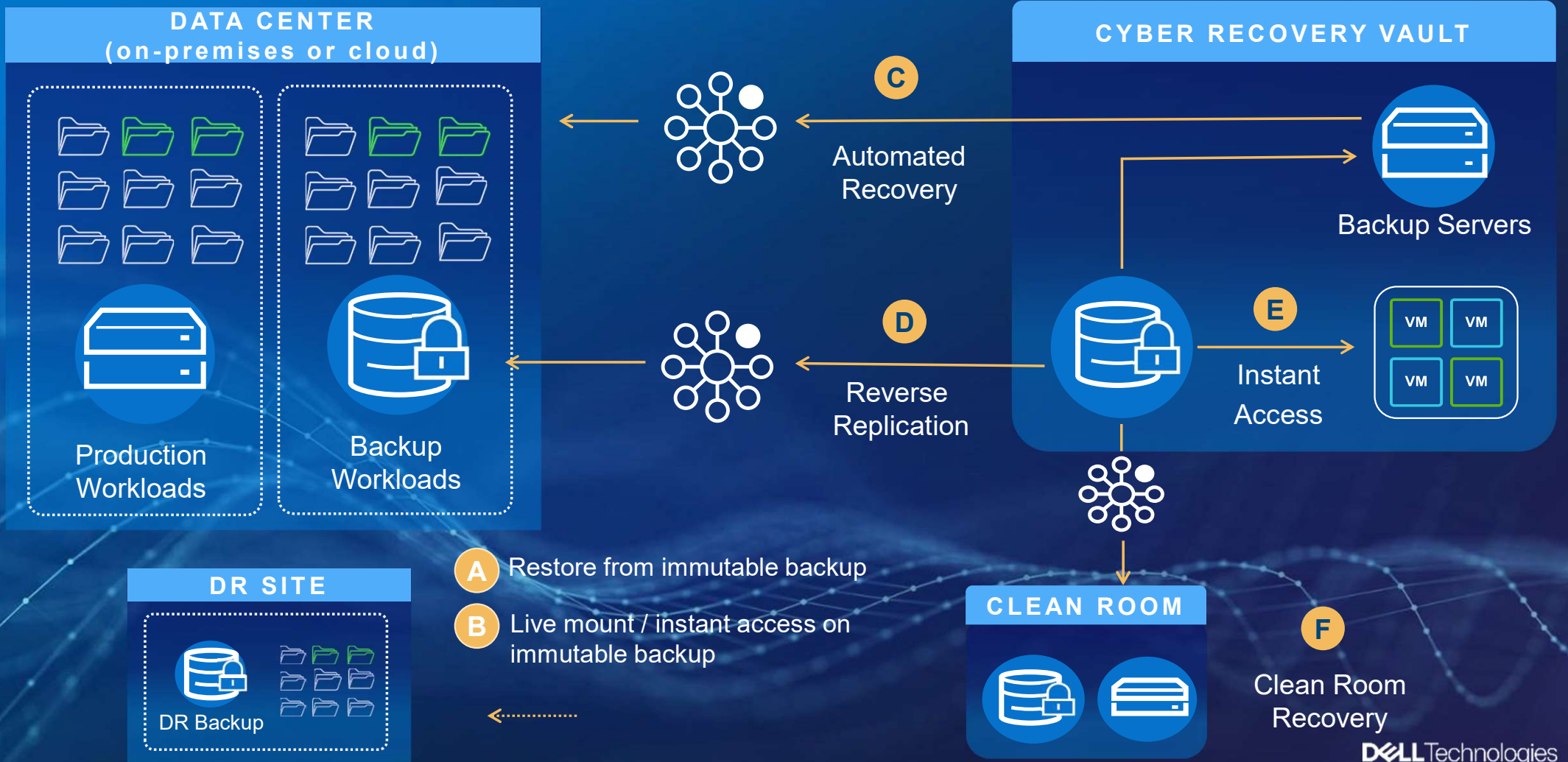
## Recovery

Copies    Sandboxes    Recovery Sandboxes

Sandbox   
 Application   
 Alternate Recovery   
 Recovery Check   

	Details	Copy Name	Policy Name	Creation Date	Expiration Date	Last Analysis	Recovery Status
<input type="radio"/>		cr-copy-NetWorker-FS-20230330121904	NetWorker-FS	Mar 30, 2023 12:19 PM UTC	Mar 31, 2023 1:19 AM UTC	Suspicious	
<input type="radio"/>		cr-copy-PPDM-FS-20221106095854	PPDM-FS	Nov 6, 2022 9:58 AM UTC	Jan 26, 2023 12:50 AM UTC	Good	
<input type="radio"/>		cr-copy-NetWorke-20220622115906	NetWorker-FS	Jun 22, 2022 11:59 AM UTC	Jan 26, 2023 12:50 AM UTC	Good	Recoverable

# Recovery Options To Meet Your Cyber Resilience SLAs



# Health Service Executive (HSE): Cyber Attack

Population 5 Million



## Conti cyber attack on the HSE

### Independent Post Incident Review

Commissioned by the HSE Board in conjunction with the CEO and Executive Management Team

03 December 2021



### IMPACT:

- No email
- No network
- No phones
- No mobiles
- All sites are down.
  
- No IT services
  
- No health care services

Attackers provided the decryption keys  
3 months to recover back primary systems  
6 months to fully recover



Ďakujem Vám za pozornosť ...

 **DELL**Technologies