



DATA PROTECTION AND RECOVERY WHEN YOU NEED IT MOST.



INDUSTRY SNAPSHOT



COMMON VULNERABILITIES



THE SOLUTION



ADDITIONAL RESOURCES

CLICK A BOX TO NAVIGATE





INDUSTRY SNAPSHOT

39%

of detected malware is ransomware*

nt was a could be sent much as a sent of a sent of a selection.

92%

of organizations can't detect cyberattacks quickly[†] 67%

of organizations had incidents with a negative impact in past 12 months[‡]

Sources

- *2018 Verizon Data Breach
- [†]Gartner Research, Shift in Cybersecurity Investment to Detection, January 2016
- ‡RSA Cybersecurity Poverty Index







INDUSTRY SNAPSHOT

TRUE COST OF RANSOMWARE

Ransom: \$30,000

Lost Revenue: \$2,500,000 Incident Response: \$75,000

Legal Advice: \$70,000

Lost Productivity: \$250,000

Forensics: \$75,000

Recovery & Re-Imaging: \$60,000

Data Validation: \$25,000 Brand Damage: \$500,000

Litigation: \$200,000

Total Cost of Attack:

\$3,785,000















INDUSTRY SNAPSHOT

RELIABLE DATA PROTECTION, DELIVERED WHERE YOU NEED IT MOST.

Protecting your organization from the inevitability of cyberattacks – especially ransomware – requires a multi-layered approach. You've got to prevent attacks (of course), but you've also got to be prepared for the worst.

Dell EMC Cyber Recovery protects your organization's most critical data within an isolated secure vault. Through an innovative REST API-based automation approach, your data is removed from the attack surface. Additionally, Cyber Recovery brings flexibility in automating robust analytics by integrating custom or well-known industry tools into your workflow. This facilitates a robust and proactive workflow to help increase cyber resilience throughout your organization.













TECHNICAL ROLL OVER ICONS FOR DETAILS Backup Media Servers Backup Reporting/ Ops Mgmt Server **INTERNAL NETWORK**







NEXT

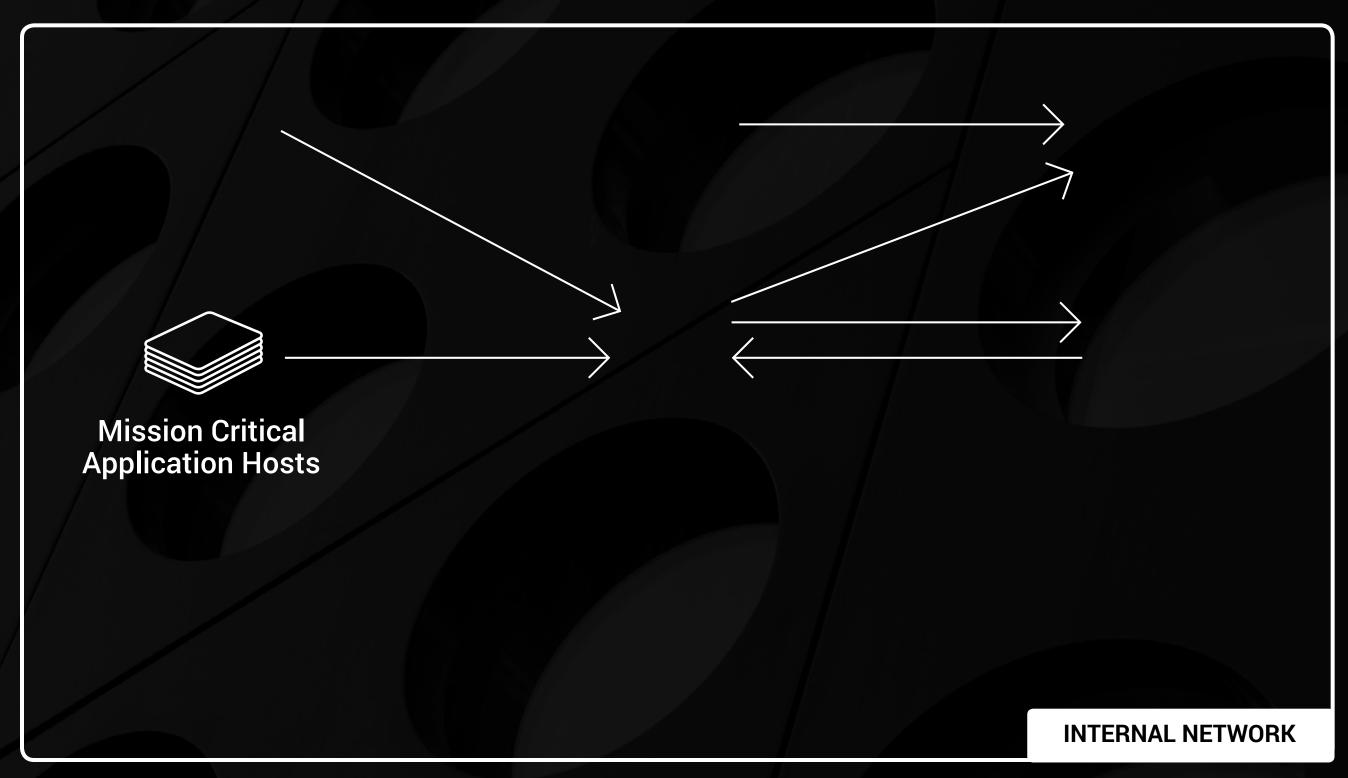




COMMON VULNERABILITIES

ROLL OVER ICONS FOR DETAILS

PEOPLE & PROCESS



PRE\







NEXT





RISK PROFILE SUMMARY

TECHNICAL

- All data is currently susceptible to a cyberattack
- Primary storage replication can replicate corruption
- Backup catalog not replicated
- Recovery of backup catalog from tape is slow and failure-prone
- Backup copies not isolated from network

PEOPLE & PROCESS

- IT Engineering and Ops have access to most if not all Backup Assets
- Security teams not assigned to assets. Bad actors inside the firewall can create havoc.
- Franchise critical and non-critical data are not segregated
- Backup images can be expired without authorization

These risks are consistent with traditional disaster recovery models. This is a <u>different challenge</u> and requires a different architecture.

PREV













DISASTER RECOVERY VS. CYBER RECOVERY

Traditional disaster recovery solutions are ill-equipped to recover from a cyberattack.

	DR	CR
Recovery Time	Close to Instant	Reliable & Fast
Recovery Point	Ideally Continuous	1 Day Average
Nature of Disaster	Flood, Power Outage, Weather	Cyberattack, Targeted
Impact of Disaster	Regional; typically contained	Global; spreads quickly
Topology	Connected, multiple targets	Isolated, in addition to DR
Data Volume	Comprehensive, All Data	Selective, Includes Foundation SVCs
Recovery	Standard DR (e.g., failback)	Iterative, selective recovery; part of IR



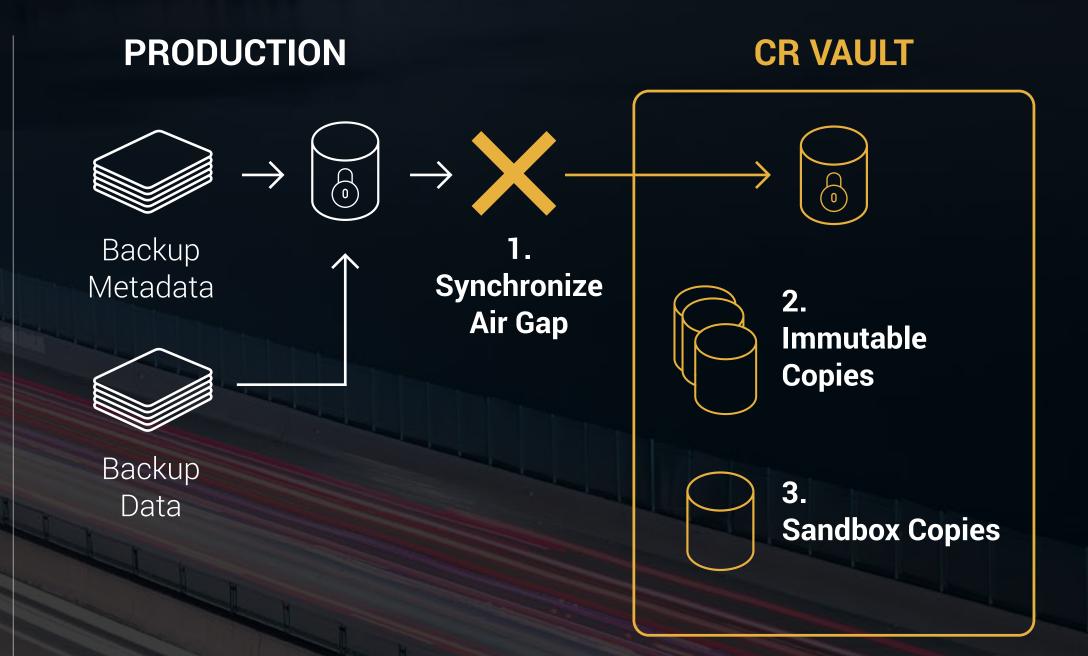


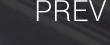


THE SOLUTION

CYBER RECOVERY SOFTWARE

- End-to-end workflow automation
- Runs only in CR Vault
- Creates isolated gold copies
- Robust REST API framework enables analytics with AI/ML for malware (incl. ransomware)
- Modern UI / UX experience
- Easy to deploy and maintain

















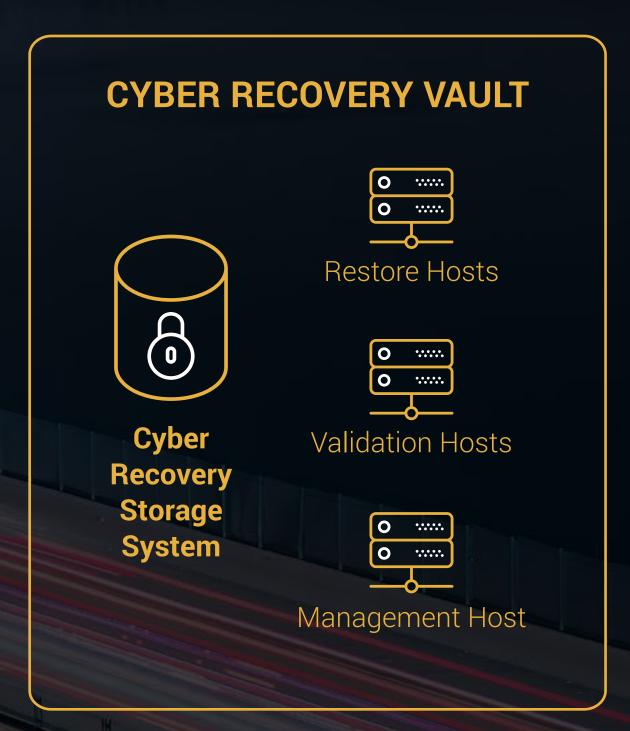
PROACTIVE ANALYTICS IN THE CR VAULT

Why Analytics in the Vault?

- Increase effectiveness of Prevent/Detect cybersecurity when performed in protected environment.
- Diagnosis of attack vectors can take place within an isolated workbench.
- App restart activities can detect attacks that only occur when application is initially brought up.

Categories of Data

- Transactional Data dynamic/large (log variances, sentinel records, etc.)
- Intellectual Property static/large (checksums, file entropy)
- Executables / Config. Files static/small (checksums, malware scans)

















ADDITIONAL CYBER RECOVERY SERVICES

THE SOLUTION





New deployment services from Dell EMC Services accelerate the value of Data Domain based Cyber Recovery Solution. These implementation services are available in two sizes to fit your needs based on number of MTrees and data subsets.



WORKSHOP

Dell EMC Consulting leads a facilitated Business Resiliency workshop with key stakeholders to share Dell EMC best practices for resiliency, including IT Continuity and data protection, with an emphasis on cyber recovery.



ADVISORY SERVICES

Dell EMC Consulting Advisory services include the workshop and provide you with a deeper understanding of the solution, specific data to contain in the vault, and advises on roadmap and custom solution design. These offers scale based on your specific needs.

PREV OOO



ADDITIONAL RESOURCES



Case Study: Founder's Federal Credit Union





Business Cyber Risk Bulletin





Learn more about our Cyber Recovery Solution





DOLLEMO

Cyber Recovery Solution Overview









ADDITIONAL RESOURCES



Analyst Report: Cyber Recovery





ESG Video: Cyber Recovery



▶ WATCH VIDEO







