



# Fourteen seconds.

In the time you're reading this, a company likely became a cyberattack victim. This perpetual data threat is industry-proof and is only growing worse.<sup>1</sup>

It begs the question: [Can your business survive a cyberattack?](#)

On average, U.S. companies experienced an increase in the number of days to identify a data breach — 191 in 2017 to **197 days last year**. And the cost of a breach is also skyrocketing: The average cost of a data breach last year was **\$3.8 million**. And that number is rising every month.<sup>2</sup>

Also, in the first half of 2018, the Breach Level Index, a public data breach database, discovered that 944 data breaches led to **3.3 billion lost, stolen, or compromised data records**. What makes this so alarming is the **72% increase** over 2017.<sup>3</sup>



**\$3.8 million**  
average total cost  
of a data breach



**3.3 billion**  
data records being  
compromised worldwide



**72%**  
increase in 2018

Do you have any plans in place to protect your business?

Don't wait until the last minute to take action. The time for building a cyber resiliency strategy is now!

## How can IBM help you implement a security strategy?

The cost of a data breach and the time it takes to identify and contain one go hand-in-hand. By implementing an effective cyber resiliency strategy, your business can mitigate financial losses.

In general, the quicker a data breach can be identified and contained, the smaller the financial and operational impact it may have:

Identify



**44** days  
saved<sup>2</sup>

Contain



**38** days  
saved<sup>2</sup>

Recover



**31** days  
saved<sup>2</sup>

Results based on a study sponsored by IBM.

1 <https://cybersecurityventures.com/ransomware-damage-report-2017-part-2/>

2 [https://public.dhe.ibm.com/common/ssi/ecm/88/en/88017288usen/88017288usen-01\\_88017288USEN.pdf](https://public.dhe.ibm.com/common/ssi/ecm/88/en/88017288usen/88017288usen-01_88017288USEN.pdf)

3 <https://www.gemalto.com/press/Pages/Data-Breaches-Compromised-3-3-Billion-Records-in-First-Half-of-2018.aspx>





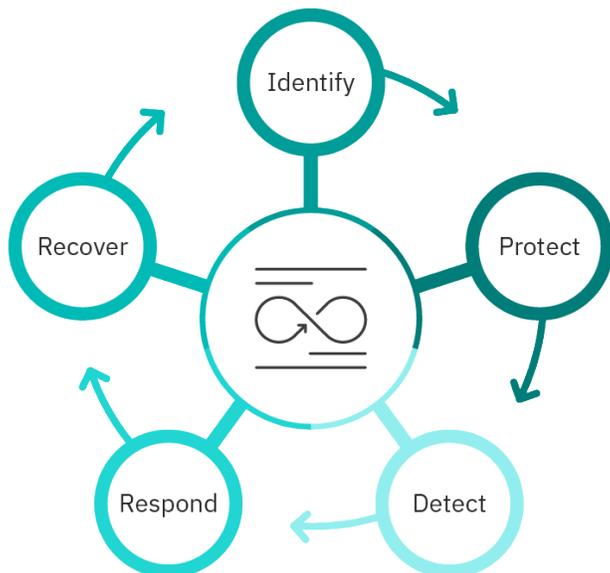
“IBM has a comprehensive portfolio of cyber resiliency solutions designed to help organizations reduce the risk of business disruption and financial losses due to user errors, malicious destruction or ransomware attacks.”

—Phil Goodwin, Research Director, IDC

## IBM Storage is your defense

The IBM cyber resiliency lifecycle helps enable organizations to strengthen their cyber-combat strategy with a five-phase approach.

IBM Storage can help with a breadth of solutions that achieve the objectives of the NIST Cybersecurity Framework. The framework—which is the foundation for the IBM cyber resiliency lifecycle—consists of standards, guidelines and best practices for preventing, detecting and responding to cyberattacks.



### Identify

Defining a roadmap and action plan to build or help improve organization’s cyber resilience plan

Products:

- IBM Storage Insights Pro
- IBM Spectrum Control
- IBM Spectrum Protect
- IBM Spectrum Protect Plus

### Protect

Protecting the organization against attacks by discovering vulnerabilities before they are exploited

Products:

- IBM Storage Portfolio
- IBM DS8000 Safeguarded Copy
- IBM Cloud Object Storage
- IBM Spectrum Protect
- IBM Tape Air Gap protection

### Detect

Determining possible unknown threats with advanced analytics

Product:

- IBM Spectrum Protect
- IBM Spectrum Insights

### Respond

Reacting effectively to cyber outbreaks

Product:

- Storage Infrastructure Management

### Recover

Recovering access to critical data and applications

Product:

- IBM Spectrum Protect Suite



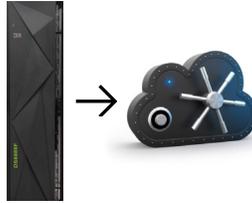
## IBM DS8000 Safeguard Copy

Provides a maximum of 500 immutable copies of production data that allow customers to recover from cyber breaches, user errors, and malicious data.<sup>4</sup>



## IBM Transparent Cloud Tiering (TCT)

Helps reduce CAPEX and OPEX by enabling hybrid cloud as an additional storage tier for data archiving, long term retention and data protection with access to extended storage capacity.



## IBM Tape Air Gap protection

Tape cartridges are only accessible when mounted in a drive, this “offline by design” nature of Tape defines the “Tape Air Gap” and provides one of the most secure ways to protect and confront cybercrime while providing less than a penny per GB.<sup>5</sup>



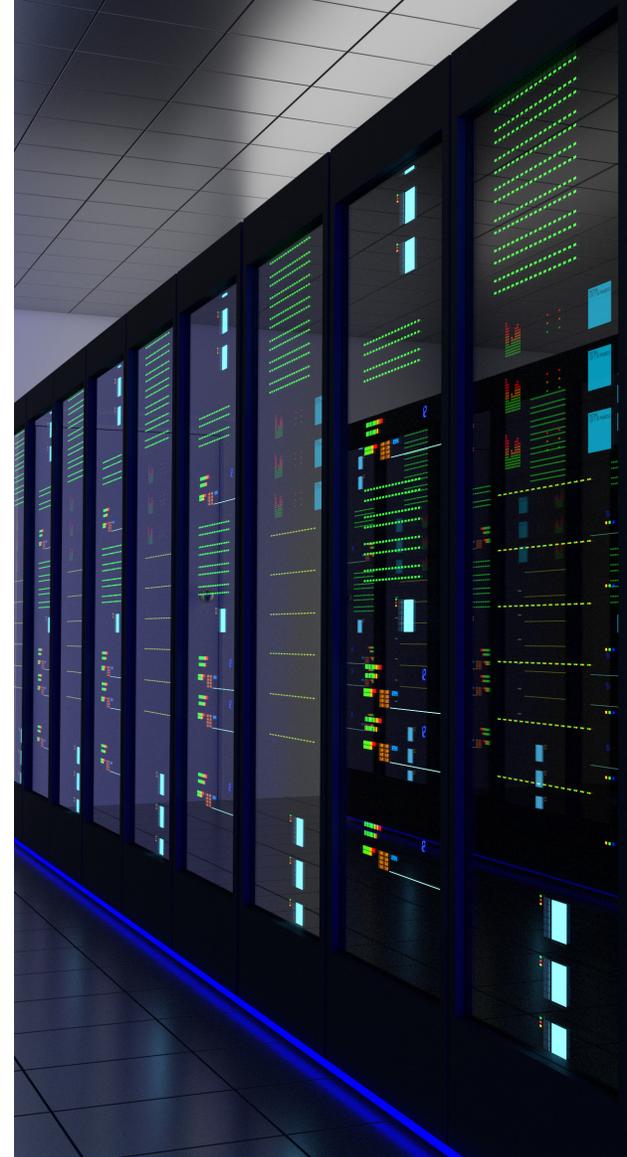
*Cost of Tape is less than a penny a GB and HDD storage is 3 cents per GB.\*<sup>6</sup>*

\*Using compression

<sup>4</sup> <http://www.redbooks.ibm.com/redpapers/pdfs/redp5506.pdf>

<sup>5</sup> [https://www.fujifilmusa.com/products/tape\\_data\\_storage/case\\_studies/pdf/Tape\\_Air\\_Gap\\_Oct2017.pdf](https://www.fujifilmusa.com/products/tape_data_storage/case_studies/pdf/Tape_Air_Gap_Oct2017.pdf)

<sup>6</sup> Forbes, Tom Coughlin, Digital Storage Projections for 2019 part 1



# Start today!

Use your current infrastructure and follow an incremental approach to strengthen your cyber resiliency strategy:

1. Use FlashCopy as an easy and cost-effective method to create point-in-time copies of production data
2. Use immutability to prevent point-in-time copies of the data from being accidentally or deliberately compromised
3. Create a virtual insulation with restricted access and different administrator roles
4. Create a physical separation with air gapped IBM Tape to provide secured lines of data protection

Find out how IBM can help you create a cyber resiliency strategy according to your needs.

**Read the important new rules for storage →**

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**IBM Storage**

