



5 data resilience capabilities to look for in storage solutions

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Data Resilience

Protect against and quickly recover from a data destructive event

Top

global risk



Targeting major corporations, governments and critical infrastructure



INTERPOL

Failures



Disasters



Cyber attack



Data theft



Important questions about data resilience



Is your primary storage **resilient?**



Is your data copy **isolated?**



Is your data copy **immutable?**



Is your data copy **discoverable?**

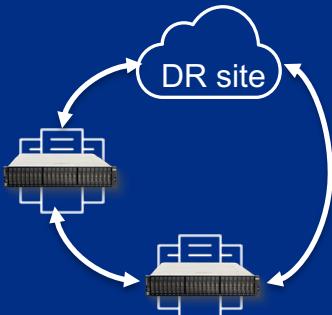


Can you restore your data **fast?**



Characteristics of resilient primary storage

2-site and 3-site replication Short RTO



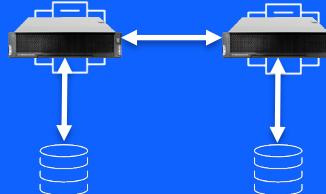
On-prem, on cloud
or hybrid

High-availability Zero RTO



100% data
availability guarantee

Enhanced high-availability Zero RTO



Multi-Platform Support

Pure HPE IBM
Dell/EMC NetApp 500+ others...

Immutable copy



Air-gap

Encryption



FIPS 140-2

IBM primary storage solutions for multi-site replication

Select RPO from zero to sub-second or minutes

Disaster Recovery

When you want to balance the value of data with the cost of protecting it

Built with
IBM Spectrum Virtualize



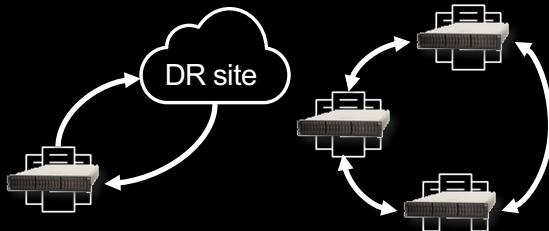
Cross-vendor support

Enterprise storage from entry to high-end

IBM FlashSystem

Heterogeneous storage with
SAN Volume Controller

Pure HPE IBM
Dell/EMC NetApp 500+ others...



Replication

Metro distance synchronously capturing every write for zero data loss

Global distance asynchronously streaming every write with RPOs as short as sub-second

Periodic replication of volume changes cycling every 60 seconds to 24 hours for limited bandwidth environments

IBM primary storage solutions for immediate failover

Zero RPO/RTO

High Availability

When you won't tolerate any data loss and can't afford downtime

Built with
IBM Spectrum Virtualize



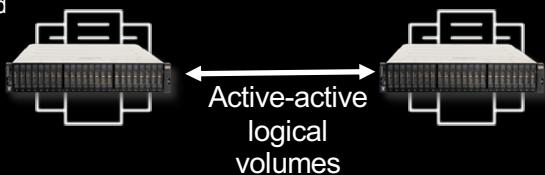
Cross-vendor support

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HyperSwap

Active-active read/write across two sites

Automated response to site failure and rebuild

100% data availability guarantee available when configured by IBM Lab Services

IBM primary storage solutions for immediate failover

Zero RPO/RTO

High Availability

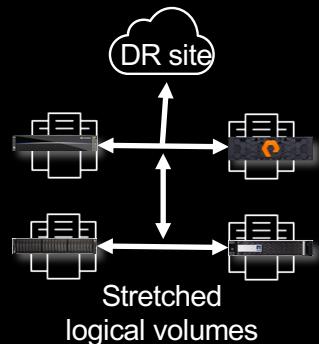
When your unique environment requires flexible HA options

Built with
IBM Spectrum Virtualize



Cross-vendor support

Heterogeneous storage with
SAN Volume Controller
Pure HPE IBM
Dell/EMC NetApp 500+ others...



Enhanced HA

Two to five sites can participate
Metro and Global distances including cloud
Heterogeneous support so use the storage you have or add new capacity

IBM primary storage solutions for immutable copy

Immutable copies

When you need a copy that bad actors can't reach

Built with
IBM Spectrum Virtualize



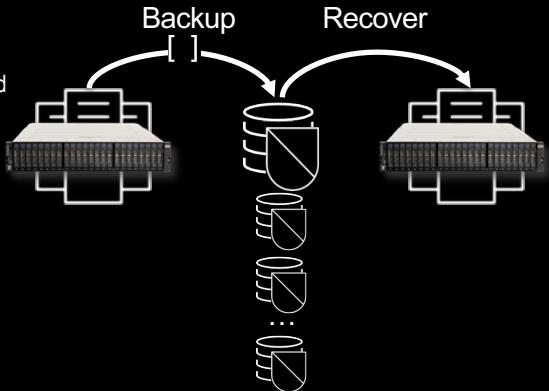
Integrated with
IBM Security QRadar

Cross-vendor support

Enterprise storage from entry to high-end
IBM FlashSystem

Heterogeneous storage with
SAN Volume Controller

Pure HPE IBM
Dell/EMC NetApp 500+ others...



Safeguarded Copy

Immutable point-in-time copies of production data

Isolated logical air-gap offline by design

Separate privileges for admins of production data and Safeguarded Copies

Consistent automation with other copy services

IBM solutions for data protection

Data protection

When you need a flexible copy of production data; physical, virtual or container; on prem or public cloud

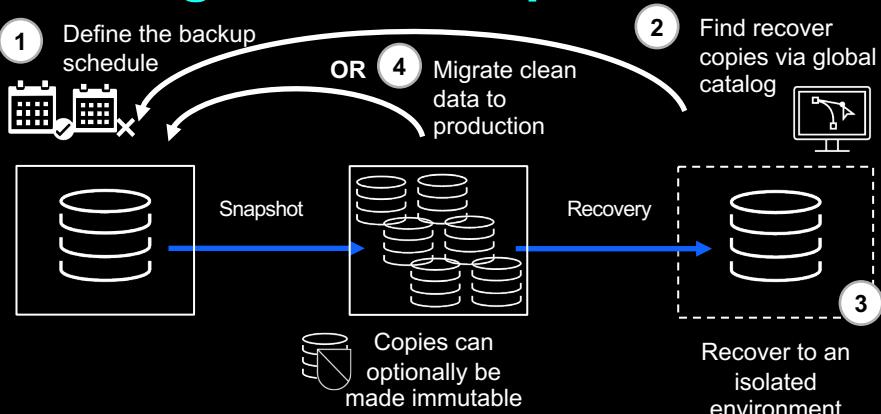
IBM Spectrum Protect Plus

Enterprise-proven

- Data Resilience
- Data Reuse



Heterogenous data protection



Spectrum Protect Plus

RPO policy governs snapshot frequency for longer-term retention and fast recovery

Remotely air-gapped and immutable copies

Quick identification with backup catalogue

Role-based authentication for secure self-service data reuse

IBM primary storage solutions for encryption

Data Theft

When you want to guard against prying eyes or prevent outright data theft

Built with
IBM Spectrum Virtualize



Cross-vendor support

FIPS 140-2 level 2

hardware encryption
with no performance impact



Enterprise storage from entry to high-end
IBM FlashCore

Consistent
system-wide software encryption



IBM FlashSystem or
Heterogeneous storage with
SAN Volume Controller

Pure HPE IBM
Dell/EMC NetApp 500+ others...

Encryption

Tamper-resistant hardware encryption

System-wide software encryption

Consistent encryption for heterogeneous storage

Enterprise key management

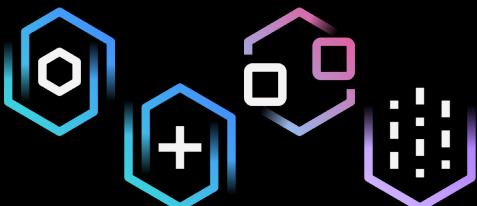


IBM Security

gemalto
security to be free

Learn more about IBM Data Resilience

Take the free Data Resilience Assessment
ibm.biz/ResilienceAssessment



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