from CHAOS to CONTROL

GET SMART ABOUT BACKUP & RECOVERY
Some of today’s biggest IT challenges are being driven by a single issue: data. Lots of data. In fact, protecting and storing these burgeoning data volumes with shrinking resources challenges even the most fearless IT leaders. And as data volumes continue to balloon, shoring up and optimizing storage and backup and recovery infrastructures will be key to meeting IT challenges going forward.

WHERE DOES ALL THE DATA COME FROM?

While storage costs have come down and performance has increased, today’s fast-paced organizations are generating terabytes, petabytes—and, in some sectors, exabytes—of data that needs to be managed, stored, and protected.

BREAKING IT DOWN IN REAL LIFE...

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**GENERAL CORPORATE**
- Customer, supplier, and employee data
- Email, database and Web servers
- VoIP and Web conferencing systems
- Security/monitoring systems

**ENERGY & UTILITIES**
- Customer, supplier and employee data
- Field exploration/generation/transmission data
- Outage and usage data
- Real-time analytics

**FINANCIAL SERVICES**
- Customer, supplier and employee data
- Transactional and financial data
- Real-time market and investment data
- Real-time analytics

**HEALTHCARE & LIFE SCIENCES**
- Clinician, supplier, and employee data
- Health information exchanges (HIEs)
- Electronic health records (EHRs)
- PACS and other medical imaging systems

**HIGHER EDUCATION**
- Student, faculty, staff, and donor data
- Academic systems
- Financial and financial aid systems
- E-learning/distance learning initiatives

**PUBLIC SECTOR**
- Citizen, employee, contractor, and supplier data
- Tax collection data
- Healthcare data
- Health, scientific, and engineering research

**RETAIL**
- Customer, supplier, and employee data
- Location and sensor-enabled POS devices
- Social networking sites
- Product reviews


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BEHIND THE NEED FOR STORAGE EFFICIENCY

- **Growing data volumes** – The amount of data continues to grow and, along with it, a growing demand for more and more bandwidth to quickly and reliably back up and restore that data.

- **Duplicate data** – As data continues to grow so, too, does the amount of duplicate data that’s taking up storage space and burdening backup processes.

- **Multiple solutions** – Many organizations rely on multiple solutions for specific systems or business units, making it difficult to manage backup and recovery processes.

- **Shrinking resources** – With the economic recession, storage budgets shrank considerably; while there are signs that spending is on the rise, the trajectory is slow at best.

- **Emerging technologies** – New backup and recovery strategies, particularly around cloud computing, are gaining wider acceptance as a lower-cost alternative to dedicated recovery sites.

- **Increasing regulations** – Newer regulations and initiatives require organizations to formally draw up comprehensive business continuity, disaster recovery, and retention plans.
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- **Regulators** demand tighter security and greater accountability, driving costs up.
- **Employees** demand fast, 24/7 access to mission-critical applications and data, no matter where they are or what device they’re using, increasing security concerns.
- **Customers** demand the latest, greatest, best, and cheapest — raising questions about traditional business models.

To meet all of these demands, IT organizations must perform daring feats of balance and control. They must clamp down on security while controlling costs. They must exert greater control over information and resources, while yielding to constant pressures to expand access across physical and virtual boundaries. And they must do much more with so much less.
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LOOMING THREATS TO DATA

Today’s organizations have also experienced significant and growing threats to their data.

- Security breaches have exposed the confidential data of millions of people, putting them at risk for fraudulent activity, including identity theft and other financial crimes.
- Natural disasters, such as Hurricane Katrina and Superstorm Sandy, have also impacted the availability and potential loss of data.
- State-sponsored and terrorist-initiated attacks are also an issue, particularly in the Financial Services sector and for the public sector.

All of these threats — and more — can affect the availability of data and applications.

So what’s the answer?

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To effectively respond to and protect their growing data volumes, many companies are considering these top data management solutions.

1. Distributed Backup Architecture
2. Federated Deduplication
3. Cloud Storage and Backup-as-a-Service (BaaS)
THE TOP THREE DATA PROTECTION TRENDS for 2014

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3. Cloud Storage and Backup-as-a-Service (BaaS)
Instead of a traditional network architecture based on centralized servers and storage arrays, distributed backup moves the backup process to a decentralized system that allocates backup data across the entire network. In essence, the network itself becomes the backup device.

A distributed backup architecture preserves the scheduling, restoration and synchronization of traditional server-based network backup, and can scale by leveraging the free disk space on every computer on the network. It vastly improves enterprise reliability so that if a node or even a data center goes down, the backup and recovery processes remain available.

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Federated deduplication

With federated deduplication, data is deduplicated once using a common deduplication engine, and then moved anywhere across the storage infrastructure—without rehydrating the data or adding the duplicate data back in.

This common deduplication engine increases the efficiency of the deduplication process and allows data to be moved from location to location over low-bandwidth, affordable links—lowering both the storage overhead and WAN bandwidth burdens. Federated deduplication also increases flexibility, enabling organizations to optimize backup processes, reduce network bandwidth cost, and improve backup throughput.
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For highly efficient enterprise backup needs, cloud storage or remote backup services ensure 100% availability so that you can instantly access valuable data. While traditional backup requires you to physically move backup media offsite, cloud backup requires no such intervention. Backup data is automatically stored in a remote location, and the service works continuously to back up files as they are changed.

Cloud storage models shorten backup windows by dynamically adjusting compression rates. To ease security concerns, cloud providers use strong security and encryption — often 128- to 448-bit encryption — for data at rest and in-flight. And a single interface greatly reduces management complexity by allowing you to quickly and easily configure backup schedules, select retention periods, view job progress and alerts, and perform restores.

Pricing is based on use — as well as age and type of data, volume, number of backup copies and recovery time objectives — and allows you to easily scale by allocating storage on demand.

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THE TIME TO PROTECT YOUR DATA IS NOW

Explosive data growth, combined with IT cost-cutting during the downturn and a wave of consolidations in the recovery, has left many enterprise backup and recovery platforms inefficient, unmanageable and unable to scale to meet future demand.

Addressing these needs requires new solutions, but selecting the right one for the specific needs of your enterprise can be difficult. Integration can get sticky, too. That’s where Insight can help.

Insight brings third-party objectivity, as well as a dozen best-in-class backup and storage vendors, to ensure your solution is tailored to meet your organization’s needs. Insight’s hands-on workshops surface the goals and challenges of your data architecture, allowing Insight to assemble a customized solution that blends top hardware and software to meet your individual backup and storage needs.

ABOUT INSIGHT

Insight is a trusted technology provider of hardware, software and service solutions to business and government clients in more than 190 countries. Founded in 1988, Insight is a Fortune 500 company headquartered in Tempe, Arizona with approximately 5,400 teammates worldwide.

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