



WHITE PAPER

A GUIDE TO LEVERAGING CLOUD SERVICES FOR BACKUP AND DISASTER RECOVERY

IT TEAMS ARE UNDER MORE PRESSURE THAN EVER TO DEPLOY BACKUP AND DISASTER RECOVERY SOLUTIONS THAT ARE COST-EFFECTIVE BUT FULLY CAPABLE OF MEETING INCREASINGLY STRINGENT REQUIREMENTS FOR AVAILABILITY, BUSINESS CONTINUITY, DATA PROTECTION AND REGULATORY COMPLIANCE.

It is a challenging situation: Organisations are producing more data and supporting bold new initiatives such as the Internet of Things (IoT) and digital transformation, yet IT departments still need to devote more resources—time, money and personnel—to backup and recovery.

In the face of these budgetary and personnel constraints, IT must balance business innovation with business requirements to improve recovery time objectives (RTOs) and recovery point objectives (RPOs) while backup windows become smaller.

The average cost of a data centre outage is now more than \$730,000, according to the Ponemon Institute, representing a 38% increase since the organisation began tracking downtime costs in 2010.¹ Of course, many of the effects of downtime can't be measured in dollars and cents: There is also the potential for lost revenue, damage to brand reputation and loss of customer goodwill.

To address these challenges, many organisations are turning to cloud models for backup and disaster recovery as part of a broader data management strategy built around the need to protect, preserve and manage data at every stage of its lifecycle.

In fact, disaster recovery as a service (DRaaS) is the No. 1 new storage initiative cited by IT decision-makers surveyed for the TechTarget Research Storage Momentum Index™. Cloud storage backup was ranked No. 3 in terms of deployment momentum.

It should come as no surprise that IT leaders are embracing the cloud as a crucial element of their data management strategies. Cloud services give IT teams the opportunity to be more efficient in managing RTOs and RPOs. They are easy to scale, highly flexible and simple to deploy.

Cloud backup and recovery solutions can also be extremely cost-effective and efficient for businesses with multiple locations. Organisations can leverage automated processes to ensure that backups are completed correctly, without burdening the person who is responsible on site but may not be an IT professional.

In addition, using a cloud service will simplify and automate many processes needed to meet security and compliance requirements. The cloud also enables IT teams to shift from a Capex to an Opex model. This makes it easier to plan and budget, which is an important consideration in this era of ever-expanding data creation and consumption.

¹ "Cost of Data Center Outages," Ponemon Institute, January 2016

THE NEED FOR DATA LIFECYCLE MANAGEMENT

Businesses of all sizes are becoming more reliant on digital technologies to support day-to-day operations and drive innovation through initiatives such as big data analytics, the IoT and social networking. Technologies that support digital transformation will account for 75% of all IT spending by 2019, growing at twice the rate of the overall IT market, according to IDC.²

Data management is critical to success in this era. Business and IT leaders have seen companies such as Netflix, Airbnb and Uber harness the value of their data to disrupt industries. For IT teams, this means taking a holistic approach that ensures all data is protected, preserved and managed efficiently during its entire lifecycle.

Backup and recovery are an essential part of this equation. As more data is being created and stored, organisations need to be efficient in how and where they store the data, otherwise costs can quickly get out of hand. At the same time, production data must be quickly and easily recoverable to keep the business going in the event of a disruption or widespread disaster.

A comprehensive data management strategy will take into account the value of data at each stage of its lifecycle and ensure it is stored on the appropriate media. Production data may be in the cloud for fast recovery, while archival data saved for compliance or e-discovery purposes may be moved to less expensive

storage such as tape. Even for older data, it is important to have backup so you can recover in the event of a disaster.

No matter what stage the data is at in its lifecycle—production, backup or archival—or whether it is on-site or off-site, IT teams must deploy a data management strategy that ensures it is protected, available and accessible whenever the organisation needs it.

WHY USE THE CLOUD FOR BACKUP AND DISASTER RECOVERY?

Cloud service has emerged as an extremely efficient and cost-effective technology for backup and disaster recovery use cases. That is why IT leaders are increasingly turning to cloud models as a key part of their data lifecycle management strategies. The market for disaster recovery as a service is growing at a staggering pace: One report predicts compound annual growth of 45.9% between 2018 and 2021.³

The cloud delivers a range of attributes and benefits that are increasingly difficult for on-premises data centers to match, particularly as they relate to backup and recovery. These include:

- > **Elasticity:** With a cloud service, you have the ability to turn up and down services as needed, and do the same with compute and storage resources. This will help save money, increase agility and simplify manageability as data continues to grow within your organisation.

² "IDC Sees the Dawn of the DX Economy and the Rise of the Digital-Native Enterprise," IDC, Nov. 1, 2016

³ "Disaster Recovery as a Service Market Worth 11.11 Billion USD by 2021," MarketsandMarkets, July 27, 2016

- > **Performance:** Most organisations can achieve better RTOs and RPOs with a Hybrid Cloud model versus a pure on-premises model particularly those that have data in multiple geographic locations. Certain cloud vendors even offer service-level agreement guarantees for rapid recovery in the event of a disaster.
- > **Efficiency and simplicity:** Backup and recovery services can be purchased simply and efficiently. You don't have to separately invest in hardware or software, and you don't need to have a team of specialists on your staff. Managing backup and recovery with on-premises hardware, disk, tape, maintenance and the like can be an oppressive—and unnecessary—burden on IT teams.
- > **Costs:** With the cloud, you will be moving from a Capex to an Opex model. This will help in terms of budgeting. You will also benefit from not needing staff for deployments and maintenance. In evaluating total costs, it is important to understand that you are not just paying for cloud storage, but also for egress and support as well as data in and out rates.
- > **Security and compliance:** Security and compliance have become critical advantages in leveraging the cloud. Cloud service providers have made huge investments in security and compliance capabilities. Cloud providers must be aware of changing compliance requirements across all industries and regions and react quickly to changes for all of their customers.
- > **Flexibility:** The cloud offers organisations a flexible approach to backup and recovery. Many organisations follow 3-2-1 guidelines for data protection: three copies of data, on two different types of media, with one backup in an off-site location. The cloud as part of a data management strategy can help your organisation easily and cost-efficiently adhere to these guidelines.

TAKING THE NEXT STEP

Understanding the benefits of the cloud for backup and disaster recovery is one thing, but choosing the right partner is another. The fastest and most reliable path to cloud backup and recovery is to work with an experienced full-service provider that offers cloud disaster recovery as a managed service.

It is also critical to work with a cloud backup and disaster recovery provider that provides a broad portfolio that includes products and services that are not limited to the cloud. Remember, cloud backup and recovery should be part of a holistic approach to data management that incorporates a variety of solutions and data protection options.

You want to be able to choose the right services for your organisation and mix and match services based on your needs, including those related to cost management, security, compliance, ease of use and any other factors specific to your organisation.

When it comes to delivering leadership in cloud backup and disaster recovery as part of a broad data management portfolio, Iron Mountain is unique in the industry.

Iron Mountain has a long history and vast experience in protecting, preserving and managing its customers' most vital data assets, whether on premises, off site at a secure location or, now, in the cloud. Iron Mountain® Disaster Recovery Service offers:

- > Industry-leading technology for instance backup and recovery with on-premises and cloud virtualisation.
- > Guaranteed recovery times backed by Service Levels.
- > Specialists to manage planning, testing and, if necessary, execution of disaster recovery processes.

- > Secure, remote access to recovered systems via an SSL VPN, with end-to-end encryption to enhance data protection.
- > Zero downtime for planned maintenance upgrades and site outages.

In today's era, successful data management can be a huge competitive advantage. This includes efficient, cost-effective, secure and reliable backup and recovery in the event of a disaster.

For information on how Iron Mountain can help your organisation leverage cloud backup and recovery as part of a holistic data management strategy, please visit <http://www.ironmtn.com.au/Services/Data-Management/Disaster-Recovery-Services.aspx>

ABOUT IRON MOUNTAIN

Iron Mountain Incorporated (NYSE: IRM; ASX: INM) provides information management services that help organisations lower the costs, risks and inefficiencies of managing their physical and digital data.

Founded in 1951, Iron Mountain manages billions of information assets, including backup and archival data, electronic records, document imaging, business records, secure shredding, and more, for organisations around the world. Visit the company website at www.ironmtn.com.au for more information.