White Paper

LiveVault

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"Data loss is never convenient. You don't need that data until you do."
- Dan Dugal, CEO Remote Data Backups, Inc.

Data loss has changed from an "if" to a "when". When did it finally happen to you or your business? Reliable recovery is the point of backup. Reliable recovery continues to be the focus of Remote Data Backups today and for the last two decades. LiveVault offers mirrored military grade data vaults, blazing fast recovery speeds, automated continuous backups and alerts, ransomware protection, sophisticated administrator controls and includes 24/7 USA live phone & remote support.

Critical Factors to Choosing a Cloud Backup

Security
256-bit AES encryption with option to escrow password at data center or keep private.

Versatility
- Incremental backups create less pressure on bandwidth.
- Open file backup & support is available across numerous platforms & applications including Windows, Mac, UNIX, Linux, Microsoft Exchange, SQL, Hyper-V, Oracle & VMWare.
- Continuous, near real-time protection of existing files and files that are being created or edited.
- Sophisticated Network Administrator controls for rule-based settings and user restrictions. For example, a user can be made "read only" status.
- Send full access or read only email alerts to multiple email addresses.

Pricing
Pricing is based on selected space but not total storage on the back end. Delta block incremental changes are free. LiveVault uses incremental "delta blocking" backup technology which sharply reduces costs. Pay more only for the changes made to each file since the last backup.

Data Centers
It doesn't get better than SOC 2, Type II complaint & best rated in the industry Iron Mountain   Data Centers. Data is stored in mirrored, geographically separated vaults for rock solid protection.

Test Restore Audits & 24/7 USA Support
- Today's rapidly changing IT environment demands scheduled auditing procedures to make sure your data is protected.
- Remote Data Backups recommends 6 months test restore audits and will work with your IT team to provide the support you need.
- Remote Data Backups can remote-in when needed with permission from the authorized user to help resolve tech issues and assist in recoveries.
- LiveVault stores data in a way where the data cannot be touched or manipulated in the case of a financial or legal audit.

Industry Compliance
Businesses that use credit cards are now under pressure to adhere to new government Payment Card Industry Standards, (PCI). LiveVault's data centers meets these standards because of the Iron Mountain Data Centers SOC 2, Type II ranking. FERPA, HIPAA, GLBA, Sarbanes-Oxley complaint.

Contracts of Service
LiveVault is free from binding service terms and is billed monthly.

Why use a Managed Backup Service Provider

Remote Data Backups Managed Backup Service does the hard work for you. We like to hold hands and we help our clients every step of the way. 20 Years of trusted backup & disaster recovery has made Remote Data Backups a trusted provider in the backup & recovery industry. Data loss is never convenient. It can strike at any hour creating havoc & lost profits for any business. POS based services are especially vulnerable. Remote Data Backups is available 24/7 to hold our clients hand through the data recovery process. Our techs are the most experienced LiveVault techs in the business. Clients receive automated emails of incomplete backups and enjoy a relationship with Remote Data Backups technicians. A Managed Backup Service for your business will often provide better support, better products, better service & prices equal to or lower than that of corporate IT solution vendors.

Not all backups are created equally as most of us have learned by now. Remote Data Backups is not a venture capital corporation pushing any old technology for profit gain. Remote Data Backups has chosen a select few backup & recovery platforms that work very well. Stable backup software that actually is proven to work when it is needed has saved our clients & our own techs both time and money resolving technical & recovery issues. Remote Data Backups Managed Backup Service actually can remote-in securely with client permission to help our clients hands-on during a crisis. We love test restores and will take the time to schedule an appointment to help your IT team check the health of your companies' backup when you request it.

Cyber-Crime & Data Loss

Cloud backup is still the most affordable way to securely backup your data. And most business owners understand their data is critical to the health of their business. In today's age most people have experienced a data loss of some sort whether it be a document that was not saved properly, a computer glitch, or worse. Most business owners today understand not all backups work the same and some backups are just better than others. There are many ways a data loss can occur within an organization. Cyber-crime is at an all-time high and soaring. Offsite backup is still the safest route to data protection. The statistics don't lie.

- 60% of cyber-attacked SMB's are out of business within 6 months of an attack.
  https://smallbiztrends.com/2017/04/not-prepared-for-data-loss.html
  (US National Cyber Security Alliance 2017 & Washington, DC-based research firm Clutch 2017.)
- 58% of small businesses are unprepared for data loss.
  https://smallbiztrends.com/2017/04/not-prepared-for-data-loss.html,
  US National Cyber Security Alliance 2017 & Washington, DC-based research firm Clutch 2017
- 43% of cyber attacks are upon small business.

https://smallbiztrends.com/2016/04/cyber-attacks-target-small-business.html

- Only 14% of small business rated their companies' IT cyber-security profile highly secure. https://signup.keepersecurity.com/state-of-smb-cybersecurity-report/
- "48% of data security breaches are caused by acts of malicious intent. Human error or system failure accounts for the rest." https://securityintelligence.com/20-eye-opening-cybercrime-statistics/

Additional Data Loss Outlets

- *Configuration drift* is the term for a lack of standardization across the network that can result in a weak link that creates a barrier to the data backup and/or recovery process. This not only refers to multiple vendor technology that can create failure across a network, but from internal hardware & software choices that are not updated or identified because of a lack of scheduled auditing.
- **Data was never placed on a backup platform**. Personal laptops, mobile devices, and emails used in the work environment are at times forgotten and fall through the cracks, never receiving an initial backup to begin with.
- **Outdated tape & disk** are easily physically damaged and many times don't perform recoveries well. A surprising number of SMB's still rely on outdated hardware as part of their disaster recovery backup strategy.
- **Natural Disasters** can knock out a network or worse a data center. Dual data centers are crucial to a company's backup strategy. Surprisingly, many data centers reside in earthquake prone areas of California.
- **Data theft** external or internal to an organization can lead to data loss. Unprotected passwords, onsite hardware, or uncontrolled user access to data can result in data theft. Data and hardware can also be misplaced & lost without any malintent involved.
- **Lack of scheduled auditing** to test that all systems are functioning properly across the network & communicating to the data centers is a very common and a highly preventable scenario that results in data losses.

LiveVault Hybrid Backup Options

Hybrid backup means backup that exists both onsite & offsite. There are some valid uses for onsite hardware as it pertains to backup. Hardware used alone as a backup strategy has the highest failure rate resulting in nearly 40% of data loss scenarios. Onsite backups no longer work because ransomware will encrypt that data too. Malicious encrypted backups on your hardware do you no good. Combining offsite and onsite backup strategies can however be used as a method to offset slow bandwidth functioning.

- Instead of relying on slow bandwidth speeds during a recovery, an onsite appliance can offer a quick and easy recovery tool.
- When bandwidth is an issue, a local device can store the data during the day and transmit to the data center at night when speeds are faster.
- If the entire site location is lost affecting your onsite device, the data is still safe at the data center.

<u>Turbo Restore Software</u>

LiveVaults' Turbo Restore Appliance (Software) is perfect for quick restores over the network. For example, when bandwidth is an issue the Turbo Restore Appliance can act as a buffer. Data can be backed-up to the Turbo Restore Appliance during the day to reduce impact on needed bandwidth, and the TRA can transmit to the data center during the evening when bandwidth speeds are greater. LiveVault's Turbo Restore (Software) is included at no additional cost, allowing customers the option to use existing hardware without having to purchase LiveVault's Appliance.

<u>NAS Device</u>

LiveVault can backup a local *Network Attached Storage* devices using Common Internet File System, CIFS collector.

Virtual Data Protection

LiveVault now supports VMware as well as Hyper-V. The following VM platforms are now supported by LiveVault:

- Microsoft Hyper-V Server 2008 R2, 2012 R2, & 2016 host level support
- VMware vSphere & VMware VADP

LiveVault in the SMB & Enterprise Environment

For most businesses, backing-up data is no longer optional. And with the explosion of new data being created we become more and more reliant on our backup platforms. However, most SMB's still do not have adequate backup coverage. Many don't even have a disaster readiness plan in place. Minimizing recovery downtime is critical to most businesses, especially: businesses in the Customer Service sectors, business that use POS systems, and businesses that use credit cards. Here's how LiveVault saves businesses time and money.

- LiveVault performs recoveries with speeds as fast as the companies own bandwidth offers.
- Because Remote Data Backups offers LiveVault as a Managed Backup Service, SMB's may call for USA-based assistance 24/7 to help with a recovery or any other technical need. This frees administrators to spend their time where they are most needed rather than learning every new software program used in their business.
- Recover or manage files from anywhere in the world with a secure internet location.
- Recover individual files, folders, entire drives, servers, PC's or databases.
- LiveVault user interface makes accessing backed-up files easy.
- LiveVaults continuous "hands free" backup performs backups automatically reducing the element of human error. Backups can also be scheduled if preferred.
- LiveVault is policy based. Network Administrators can define exactly what data they need backed-up and can design policies for different types of data.
- Remote Data Backups LiveVault 24/7 Managed Backup Service can help with all of the above freeing clients from worry and frustration. We are a phone call away.
- LiveVault eliminates transportation & storage costs of tape-based media.
- LiveVault offers predictable billing.

- Incremental "Delta Block" deduplication technology:
  -Drastically reduces costs
  -Uses less network bandwidth, only new data & file changes are backed-up every 15 minutes, verses entire data sets being backed up. This has a major reduction in network bandwidth requirements.
- Encryption is end to end providing security while at rest & during transport. This also supports industry standards for HIPAA, PHI, legal, PCI, & Financial.
- LiveVault offers backup across the entire network, perfect for branch offices (ROBO), as well as web & file servers.

Why LiveVault Works for SMB & Enterprise

- LiveVault is scalable. It can grow with your business from 1 server to hundreds of servers.
- LiveVault streamlines the complexity of the IT environment.
- LiveVault reduces reliance on costly hardware & its maintenance.
- LiveVaults' Managed Backup Service through Remote Data Backups guides administrators through resolving technical issues, saving your business time & money.
- LiveVault offers businesses a real DR plan though audit testing and increased continuity across the network.
- LiveVault's pricing is affordable
- Ability to backup large scale SQL data bases without any additional plug-ins or expensive middleware.
- LiveVault is easy installation, agentless backup.
- LiveVault integrates seamlessly within most Windows server environments.
- LiveVault's Turbo Restore Software works well with existing hardware.
- Recovery speeds are as fast as your own bandwidth, reducing data recovery downtime.

Need more product and no-cost trial information?

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Case study

Morgan County achieves dramatic 7-year retention with LiveVault

LiveVault and trusted Partner, RDBU, provide "better together" disaster recovery solution

Industry
County government

Objective
Provide onsite and offsite storage and disaster recovery for legally required 7-year timeframe on SQL server
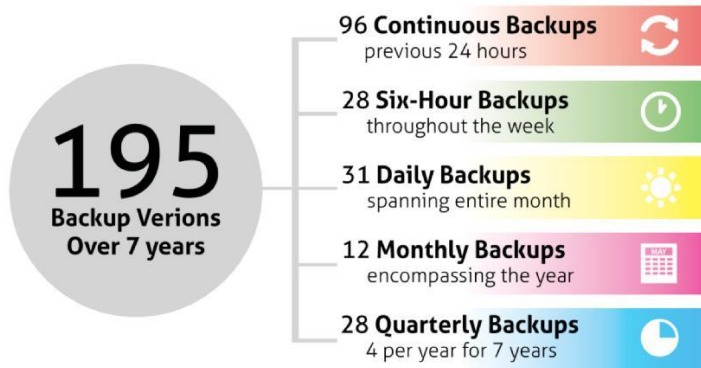
Approach
Engage LiveVault Partner RDBU to provide cloud-based managed services as well as onsite storage

IT matters
- LiveVault's cloud storage provides 7 years of retention
- LiveVault provides up to 195 versions
- Greatly reduced restore time leverages IT and user productivity
- No need to maintain decommissioned servers to restore old data

Business matters
- Total Cost of Ownership dramatically lower than other vendors
- Satisfies onsite/offsite and 7-year legal storage requirements
- Partner managed service provides offsite mirrored disaster recovery

195
Backup Verions Over 7 years

96 Continuous Backups previous 24 hours

28 Six-Hour Backups throughout the week

31 Daily Backups spanning entire month

12 Monthly Backups encompassing the year

28 Quarterly Backups 4 per year for 7 years

"Remote Data Backups, a LiveVault specialist partner, presented the only disaster recovery solution that supported 7-year retention. The closest any other vendor could come was 30-day retention. RDBU proved to us that is the only solution which can provide incremental daily restores on SQL, a claim the competition made, but couldn't support. Considering the benefits of SQL incremental versioning support and 7-year retention, it was a no contest choice."

– Karol Kopetzky, Information Systems manager, Morgan County Government

Morgan County Government, based in Fort Morgan, Colorado, needed an automated onsite and offsite disaster recovery and backup storage solution to comply with 7-year archiving regulations for its SQL database. The County chose LiveVault's solution from Remote Data Backups (RDBU), a trusted Partner and Managed Service Provider, due to its 7-year retention archiving ability and low cost per gigabyte of storage pricing (per month of cloud backup).

LiveVault and RDBU managed services secure governmental data

Morgan County, formed in 1989, measures 36 square miles, and is the kind of place you might wish you came from. Fort Morgan is the seat of the Morgan County Government with a population of 11,034. Glenn Miller grew up there. Kids love the antique locomotive on the main street. But even the most peaceful of towns has its share of IT problems. Not usually in tornado territory, a tornado came close enough to expose the need for a remote disaster recovery and archiving system.

Saddled with an old technology tape storage system and no offsite disaster recovery solution, Karol Kopetzky, Information Systems manager, Morgan County Government, and her IT staff decided to go out to bid to remedy the situation. At first response, it appeared there was a wealth of solutions to consider. But the responses were sidestepping some of the requirements, specifically 7-year retention.

One of the benefits of working with LiveVault, is its broad portfolio of hardware and software solutions, coupled with a plethora of LiveVault Expert Partners that ensure a best fit solution. LiveVault coordinated a full business analysis of the Morgan County RFP, and recommended a very powerful "better together" solution. LiveVault decided that bringing in Remote Data Backups (RDBU), its trusted partner and expert Managed Service Provider for LiveVault storage solutions, would provide Morgan County with the best solution to fulfill its SQL-based 7-year retention requirements. Once engaged, RDBU jumped right in and proposed a storage solution consisting of its LiveVault cloud-based backup managed service (for offsite recovery), and LiveVault's TurboRestore Appliance (for onsite storage and recovery).

"Remote Data Backups, a LiveVault specialist partner, presented the only disaster recovery solution that supported 7-year retention," recalls Kopetzky. "The closest any other vendor could come was 30-day retention. RDBU proved to us that LiveVault is the only solution that can provide incremental daily restores on SQL, a claim the competition made, but couldn't support. Considering the benefits of SQL incremental versioning support and 7-year retention, it was a no contest choice."

Although the solution looked solid, Kopetzky didn't take anything for granted. She carried out responsible due-diligence and checked up on existing RDBU customers to make sure the solution worked in the real world.

"When you have a limited budget in a small county like ours, you can't afford to make any mistakes," admits Kopetzky. "You get one shot. RDBU customers were universally satisfied with the company's integrity, quality of solution, and results achieved. That has also been my personal experience with RDBU since day one."

RDBU dedicated resources to helping Kopetzky with the implementation, which was fully deployed in May, 2014. During the first few weeks, after going live, she checked in frequently, to monitor efficacy, and found that the RDBU staff was very responsive and the solution operated exactly as advertised.

"RDBU impressed me with its LiveVault and storage expertise," she expands. "They took the time to understand our business functions and schedules and are very proactive. It was one of the more simple installations I've dealt with, and we've never had a single problem."
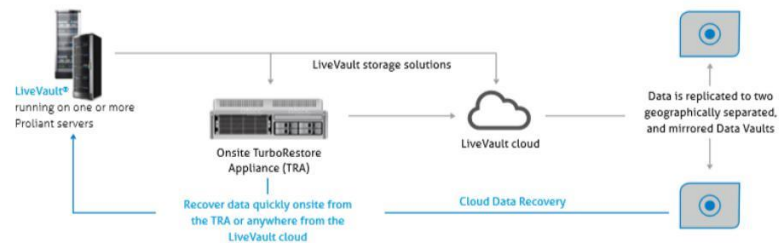
Backing up in the old days

Prior to deploying its new LiveVault storage and recovery solution, Kopetszky's staff relied on a tape library backup, which was time-consuming and required storing and maintaining decommissioned servers (for restore continuity). If a server with financial data was retired due to obsolescence, the IT staff had to keep it and its tape drives handy for seven years. If, for example, critical financial data was needed from six years back, the old server platform would have to be reinstalled, rebooted, and the data restored from tape. In addition, the only disaster recovery in place consisted of tapes stored in a safety deposit in the local bank. Having the stored tapes located so near, left the data vulnerable to a local disaster.

LiveVault

TurboRestore Appliance Deployment Model

Thanks to RDBU and its managed service offerings, all that is now ancient history. RDBU currently provides the Morgan County Government a complete, hands-free, managed service, using LiveVault, for the entire 7-year legal life of its data. The LiveVault solution encrypts and securely transmits County information to two highly secured, ISO 27001 certified, mirrored, geographically separated LiveVault-operated data center facilities, ensuring that mission critical data is readily available, anytime, with U.S. based 24/7 technical support from RDBU.

> ## "LiveVault, in concert with j2's broad portfolio of storage solutions, allows RDBU to offer increasing value to our customers while making the adoption of leading-edge technology simple and seamless."
>
> – Dan Dugal, CEO, Remote Data Backups

"Providing we didn't have to stand up a decommissioned server, it would have taken us about 30 minutes to restore a file with our old tape library, much longer if we had to reboot an ancient server,"

explains Kopetzky. "Now the whole restore process is so quick that sometimes I don't even think that it's done, but it is. Restoring a 500 MB database took only seconds. Our IT time-savings result in a significant productivity gain for my staff."

By law, government regulations demand up to 7 years of data storage imposing stiff penalties for those who cannot comply. LiveVault is designed to address these long-term storage regulations by offering predictable costs with 7-year retention and continuous offsite backup. Remote Data Backups, a LiveVault Partner and Managed Service Provider specializing in storage for small, medium, and enterprise-sized companies has supported the LiveVault platform since 2001.

"LiveVault, in concert with j2's broad portfolio of storage solutions, allows RDBU to offer increasing value to our customers while making the adoption of leading-edge technology simple and seamless," says Dan Dugal, CEO, Remote Data Backups. "LiveVault boasts best-in-class data protection and deduplication technology, which maximizes data protection onsite, offsite, and in virtualized environments. Our LiveVault Managed Service, combined with LiveVault ease-of-use, leverages the IT staff's ability to spend more time on critical issues, instead of chasing after data hidden somewhere on a tape in the bank."

Case study | Morgan County

Customer at a glance

Application

Utilize Managed Service Provider (RDBU) and LiveVault storage solution to provide required onsite and offsite disaster recovery

Hardware

- LiveVault
- LiveVault TurboRestore Appliance

Software

- SQL
- Windows Server® 2008 R2

LiveVault services

- 24/7 support from RDBU

LiveVault Partner and Managed Service Provider

Remote Data Backups (RDBU)
(970) 420-3744

support@rdbu.com
remotedatabackups.com

LiveVault storage solutions save IT time and restore peace of mind

Even though LiveVault provides the unique ability to provide 7-year data retention, regulations mandate that Morgan County have both onsite and offsite recovery capability, as well. For onsite compliance, RDBU implemented LiveVault TurboRestore Appliance, for storage, replication and recovery.

The automated reliability, the flexibility, and the ease-of-use of the new LiveVault storage solution enables Kopetzky to deliver restore services at a granularity and speed previously unavailable to grateful government employees. Whether onsite, or offsite, she can now easily restore up to 195 versions of data spanning 7 years for the County's Finance Department SQL database, on demand.

"With our LiveVault solution, we find ourselves restoring more than ever before, and have a lot of happy users because of it," she notes. "A user accidentally wrote over a file needed for an impending key meeting, and we just dialed up her previous version and restored it. It's a good example of how our new system helps increase both IT and end-user productivity. We now restore peace of mind, as well as data."

Anything that saves time for the IT department is worth its weight in gold, according to Kopetzky. She and only three other IT professionals are responsible for all the County departments and must service eight separate facilities located throughout Fort Morgan. Whereas restoring a server from a tape library took two days previously, with the new LiveVault storage solution it takes under two hours. Kopetzky cites a power outage that took the previous tape backup offline for its regular weekend backup. The first order of business on the next Monday was to run last week's backup and bring it up to date, in her "spare" time.

"With our LiveVault solution, we find ourselves restoring more than ever before, and have a lot of happy users because of it."

– Karol Kopetzky, Information Systems manager, Morgan County Government

"It took us two working days to get the system current again and we had to do this while also accomplishing all our regular daily tasks." she concludes. "Restoring data from our tape library was a slow and daunting process. I wish we had this system in a long time ago. I can't express how happy we've been with this system and RDBU's expertise. I've recommended its many benefits already to our school district."

LiveVault is now part of KeepItSafe, Inc., a j2 Global® company.

About j2 Global

j2 Global, Inc. (NASDAQ: JCOM), is a leading provider of cloud services, helping improve business performance and efficiency for LiveVault customers and over 12 million customers worldwide. In addition to data protection and recovery, our growing family of brands provides essential business tools such as endpoint backup, unified communications, hosted email services, email marketing, online faxing, and virtual phone systems. j2 Global's network spans 49 countries over 6 continents. For more information about j2 Global, please visit **www.j2global.com**.

Learn more at

www.onlinebackup.com