

White Paper

12 Best Practices for Data Backup and Recovery

DISK-O-TAPE, INC.

1. Onsite/Offsite Protection: Get Fast, Local Restores and Offsite Disaster Protection Hybrid solutions combine onsite software with offsite cloud services to give you data protection that's the best of both worlds: near-instantaneous access to your (local) backup data and, in case of a sitewide disaster, ensured access to a copy of your data that's safely stored in an offsite location. This approach is especially valuable if you operate in a distributed environment: remote/branch offices gain fast data access, and all locations back up to the cloud for ensured disaster recovery.

2. Reliability: Use Disk-to-Disk Technology

Tape-based restores have a high potential for failure. With disk-to-disk technology, your backup data resides on disk drives, a far more reliable medium than tape. With tape, you won't know if your data is usable until you attempt to restore it, at which point it's often too late. When a disk-to-disk backup completes, you already know the data is secure and accessible on the disk drive. The reliability of disk-to-disk technology can make an incalculable difference by helping you avoid just one breach or failure and the toll that could take on your finances and reputation.

3. Solution Breadth: Don't Settle for Less Than What You Need

Vendor offerings vary widely: some are designed primarily for consumers, others for enterprise data centers. Consider which features best meet your business needs now and in the future. Choose a solution that scales (see 7. Scalability) to handle growing data and infrastructure demands. Make sure the solution can back up servers, PCs, and laptops, as well your applications (not all solutions can). Look for block-level (not file-level) deduplication and delta-block technologies to improve performance, reduce your data footprint, and save money.

4. Expertise: Look for Full-Service Backup and Recovery

The right technology is critical, but your backup and recovery vendor must also have experts to help guide your deployment, service your everyday operations, and act as your first responder if things really go wrong. Be sure they have the expertise required to create—and later execute and maintain—a disaster recovery plan that matches your evolving environment (infrastructure, staffing), policies (security, compliance), budget, and unique needs. Finally, make sure this expertise translates to real support. Can you reach them by phone or email only? Are they available 24/7/365? Who exactly are you talking to when you call that 800 number? Look for customer service that is passionate—maybe even obsessive—and partner with a vendor who will treat your data as if it were their own.

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5. Security: Get End-to-End Encryption with No "Back Door"

For many organizations, tape-based encryption is too slow to fit within an acceptable backup window. As a result, many organizations still don't encrypt tape backups—users simply turn encryption off, creating a critical security risk. Encryption is essential, even with the physical safety of disk-to-disk backup. Look for 256-bit AES encryption, find a solution that encrypts your data during transmission and while in storage, and make certain there isn't a "back door" that would allow someone else to view your data.

- 6. Accessibility: Ensure That You Can Retrieve Your Data with Minimal Delay Restores should take minutes—not hours or days—and require zero time for physical transport and storage (no trucks or warehouses). You could waste a lot of precious time just waiting for physical delivery of tapes, whereas a disk-to-disk backup onsite gives you direct access to your data immediately. Make sure your solution provider can meet your Recovery Time Objectives (RTOs) and Recovery Point Objectives (RPOs). With the help of your provider, you should be able to determine how quickly you can recover your data and what it will take to maintain business continuity. Onsite and offsite replication can improve accessibility and recovery performance significantly and support a solid disaster recovery strategy.
- 7. Scalability: Invest in an Architecture That Can Grow with Your Business

 Most businesses are confronted with a rapidly increasing data footprint, but not all backup systems scale readily to meet larger demands. Choose a solution that enables you to protect your data regardless of size. Starting small? Look for an option that handles your backups automatically and then, as you grow, offers tools to manage complex environments. Data transfer efficiency and speed will become increasingly important as your data footprint grows. Look for "changes only" deduplication and compression technologies that speed backups and save space. Insist on bandwidth throttling to balance traffic and ensure network availability for your other business applications. And make sure your solution relies on common technology that scales easily as your business—and data—grow.
- **8. Compliance:** Choose a Data Protection Partner with Regulatory Expertise Companies in regulated industries must meet stringent privacy, security, and data retention requirements. How do you recognize a strong compliance partner? They should gladly show you a table of regulatory requirements and list how their products, services, and technology help you satisfy those requirements. Even better: Use a vendor who successfully completes an SSAE 16 audit each year, which helps you comply with your regulatory requirements.
- 9. Disaster Recovery: Identify a Vendor That Delivers a Complete DR Solution Without a tested and proven comprehensive disaster recovery plan, your data is not safe, no matter what you do for backup and recovery. Find a backup vendor with the product mix and professional services to help you prepare your company for a worst-case disaster recovery scenario. Make sure the vendor can help configure your backups so you rebound quickly. Best bet: a vendor that can train you to deal with disasters based on your company's actual configuration.
- 10. Ease of Use: Get Control and Reporting You Can Use Anywhere with Ease Some companies don't—or can't—manage backups from one place. Managing your backup environment should be simple, and the software you use should eliminate any guesswork that could lead to lost data. You should know at all times if your data is protected across your entire network—including remote offices—simply by looking at a dashboard. The software must be simple enough to configure using wizards, yet powerful enough to meet your specific needs with customizable views, job propagation, and role-based security.

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11. Mixed Platform Support: Get Unified Support for Your Complete Environment

Backup vendors often support a limited range of operating systems, servers, and applications. Your backup and recovery solution should accommodate your environment, not vice versa. Get a single solution to protect your laptops, desktops, and servers regardless of the platform and applications you use. Beyond the broad claims, check the fine print for the level of protection offered for specific applications and operating systems.

12. Staying Power: Choose a Financially Stable Vendor with a History of Success

Does your backup vendor have a superior reputation and the financial resources to stay in business for the long haul? Many vendors come and go, so take your time and find a service provider with strong financial backing, a solid business plan, and the ability to be in business as long as your data needs to be stored. Ask for customer references and case studies—past and present customers are usually the best validation you can get.

Take the Next Step

To learn more about EVault backup and recovery services, contact Disk-O-Tape, Inc. by phone at 800-923-8273 or 216-765-8273, or email at evault@disk-o-tape.com, or visit www.disk-o-tape.com



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