3 requirements for data protection: Simple, cost-optimized, and flexible

Your business runs on data. When data is protected and managed intelligently, it becomes a competitive differentiator and creates greater efficiencies, customer retention, profitability, and growth. Losing your data or access to it can wipe all of that out. A data loss event can range from an innocent mistake by an employee to a natural disaster and can result in the loss of a single file or the entire site. Reducing the possibility of data loss by implementing protection and recoverability solutions preserves organizational reputations, provides enhanced customer experience, and ensures business continuity. Managing and protecting data is vital to your organization and career. Ultimately, it all boils down to can you recover confidently?

The challenge with traditional backup and recovery

Traditional backup and recovery environments typically consist of multiple stand-alone products. These products may offer snapshots, backup, deduplication, archive, reporting, and other features. But they are just separate products that were not designed to work together and lack integration.

Administrators struggle with managing these multiple products. Each product is a separate data silo with its expensive vendor-specific storage and infrastructure. They struggle with inconsistent management tools, limited backup options, cumbersome recovery, and an inability to access or use data across products. This disjointed approach results in increased infrastructure, management, and operational costs.

A new approach to data protection

A modern data protection solution gives you the confidence that your essential information is always available, no matter the scenario. From ransomware attacks to disaster recovery needs, your entire environment must be protected and managed with a straightforward solution.

You require a new approach to data protection. A solution that delivers on your requirements:

- **Simplicity**: easy for your IT staff to manage, protect, and use your data where it exists today, and wherever it is moved and stored tomorrow.
- **Cost-optimized**: streamlines operations and offers predictable growth and costs, so you know what to expect and budget.
- **Flexibility**: supports your diverse environment today and gives you the confidence knowing your future technology decisions will be supported as well.

So what are you waiting for? Choose a data protection solution that delivers all that you need; simplicity, cost-optimized, and flexible.

Simple data protection

To start, you need a data protection solution built on a unified data platform — a single view to intelligently manage, protect, and easily migrate data across locations, storage types (cloud, disk, or tape), and workloads. It doesn’t matter where your data lives in your environment — from an on-premises data center to the edge, to the cloud, and even to SaaS environments — you can manage it all. The architecture should cover the range of data copy use cases — backup, replication, disaster recovery, dev/test, snapshot management, archive, compliance, eDiscovery, and migration.
Next, you need to eliminate complexity by simplifying the purchase, installation, deployment, and management of your data protection environment. That means a data protection platform that provides:

- Choice of scale-out and scale-up architectures to meet your availability, performance, and budget requirements.
- Easy implementation and deployment options, whether it is your preferred hardware vendor with a validated reference design, an integrated appliance, or Software as-a-Service. The choice is yours!
- Industry-leading customer support. When you have questions or need assistance, you want the right answer the first time.

“Commvault has given me a worry–free environment.”

Jens Kirkeby Service Delivery Manager | Cochlear Americas

When it comes to simplicity, your data protection solution should save IT resources, not add to them. The ability to automatically schedule jobs based on service levels, defined thresholds or points in time, will be of immense value. With policy-based automation, you set the parameters to protect data and applications with the right schedules and retention policies. Adding to data protection simplicity should be the native support to manage and migrate data to, from, and within the cloud, as well as between clouds. This will eliminate the complexity, and potential lock–in, of cloud gateways and third–party migration products, and truly free your business to make the infrastructure choices it needs without limitations.

You want simplicity, but also the comfort and confidence that it will work seamlessly without impacting your team. It must deliver the data protection you need today, and it will support you as your environment grows with new applications and technologies.

Cost–optimized data protection

It would be best if you had a data protection solution that supports your preference of infrastructure types, storage, and cloud platforms to reduce both hardware and operating expenses. For example, do you require a scale–out infrastructure to eliminate purchasing three to five years of compute and storage upfront? Scale–out allows you to buy what you need today. Also, scale–out puts an end to costly and complicated forklift upgrades whenever you refresh the hardware.

Another consideration is a solution that offers both source–side and target–based deduplication to eliminate backing up and retaining redundant data. Deduplication will lower storage costs while minimizing data management time. It’s also essential to seek a data protection solution that supports the seamless movement of data to less expensive compute and storage resources when necessary and only pay for those resources when consumed. Using pre–defined policies, you can align the value of the data with the cost of storage, whether it is tape, disk, or cloud storage.

Additional features of cost–optimized data protection are it streamlines your operations and eliminates repetitive, time–consuming tasks. It should:

- Streamline operations by automating processes with intelligent policies and self–service capabilities for users and application owners.
- Seamlessly move data by easily migrating your backup copies to the cloud or physical locations. Restore to any location, including the cloud, and only pay for compute when it is used.
- Powerfully scale by elastically expanding and contracting resources for planned or ad hoc data growth, only paying for the services as needed.

“With Commvault, we have brought down storage costs immensely and been able to migrate, replicate and protect data all within a single pane of glass.”

Teodoro Macias Principal Backup Engineer | Herbalife Nutrition
Providing self-service access to extended teams also helps you to lower your total cost of ownership as well as the burden on IT resources. Look for capabilities that allow you to set-and-forget your service levels using automated policies, scripts, and machine learning so you can realize the data management efficiency your environment needs.

When it comes to disaster recovery, be sure to choose options that will reduce downtime costs and increase your availability. Having instant access to your applications and data by leveraging snapshots and replication technologies will improve business productivity and minimize the cost of an outage, especially if you take advantage of automated workflows.

Flexible data protection

Today’s IT environment demands advanced data protection capabilities. These capabilities are developed to enable effortless protection as your organization grows, simplifies recovery procedures, and minimizes downtime in hybrid IT environments. Nothing says modern more than today’s cloud architectures, which require a new, flexible approach. Flexibility means that whatever the data type, workload, or platform, or whether it is in the cloud or on–premises, you can confidently restore and resume business operations. It is a data protection solution that meets your demanding Service Level Agreements (SLAs) for recovery time objectives (RTOs) and recovery point objectives (RPOs). These are achieved by using automated and orchestrated snapshots to protect your critical and high priority workloads with rapid recovery to meet your SLAs. Flexible data protection provides:

• Cloud-to-cloud backup and recovery – seamlessly backup, recover, and migrate data between Microsoft Azure, AWS, Google, and other major cloud providers, all from a single platform.
• Multiple data types and platform support – enterprise protection for the widest variety of applications, databases, file systems, hypervisors, servers, storage, and cloud platforms.
• Intelligent automation – identify and automate data management operations to maximize backup and recovery efficiency and performance. Automatically ensure you meet your recovery point and recovery time objectives.

“With Commvault, we can reduce our reliance on physical servers and desktops, which means we can focus internal IT resources on supporting our researchers and customers.”

Michael Catrini Assistant Vice President | UConn Health

Flexible also includes using your data for decision making and organizational benefits. Having a data index that spans your data protection environment enables you to quickly find and identify your data for a more efficient recovery, discovery, and compliance purposes. Knowing what your data is and where your data resides, whether it is on an endpoint, in a remote office, in your data center(s), or the cloud, will also help to future–proof your environment for quick access and recovery.

Commvault Complete™ Data Protection; no silos!

Unlike point products, Commvault Complete™ Data Protection is an integrated solution. Protected data is stored in a single, virtual data repository, which eliminates the separate data silos that come with traditional snapshot, backup, dedupe, archive, and reporting products.

As a result, only Commvault delivers a comprehensive data protection solution that provides a complete view of your enterprise data, no matter where it lives. Commvault also has industry unique breadth and depth of coverage across storage systems, snapshot engines, operating systems, databases, enterprise applications, hypervisors, and cloud platforms, so users are never locked–in to a specific vendor’s expensive or proprietary technology.

Commvault Complete™ Data Protection quickly protects data across the enterprise – including virtual and physical servers, cloud, hybrid, and storage platforms; data centers, remote offices, and mobile devices. Flexible data protection options include Commvault snapshot management, deduplicated backup, replication, and archive. In all cases, quickly recover data in a single step. Also, Commvault software enables organizations to:

• Actively manage and archive data across storage tiers to reduce costs and improve performance.
• Immediately access data without waiting for a full recovery.
• Easily use data in support of eDiscovery, regulatory compliance, and other objectives.
Commvault software also provides advanced reporting and analytics across all data types and environments so companies can make better business decisions.

“Commvault integrates with the highest number of primary storage array, cloud and application vendors evaluated in this report. It also supports several tape libraries and on-premise and public cloud object storage platforms.”

With support for 40+ cloud storage options, Commvault makes it easy to backup workloads, applications, and data to the cloud. Whether it’s a few applications or a petabyte of data on an ongoing basis, Commvault helps organizations get their data to the cloud — and protect it — quickly and efficiently.

**Bottom line: You can have it all**

Today’s hybrid IT environment requires a new data protection solution that will enable you to backup your data everywhere it lives and recover it anywhere it’s needed. Traditional backup tools and processes built on point products with different policies and multiple copies must be replaced with a simple, powerful approach.

Commvault software is an approach to solving complex data problems in a comprehensive but straightforward way. A platform that enables you to implement a data protection strategy that simplifies IT operations, keeps the budget under control, and satisfies business demands, now and into the future — allowing you to have it all.

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4 Gartner, Critical Capabilities for Data Center Backup and Recovery Solutions, July 2020

To Learn more about Commvault data protection, visit commvault.com/backup-and-recovery