Data Protection in the Age of Always-on Workloads

Deliver the data availability and resiliency your environments require.

It’s Time to Part with Old-school Data Protection Approaches

Legacy data protection was state-of-the-art when data was isolated and siloed, and storage capacity was expensive. Built to capture and reduce a copy of data, these systems deal with disruption reactively. They provide nothing more than expensive insurance policies. This is out of step with the requirements of today’s distributed data models, which typically consist of multi-instance, multi-premises, multi-cloud footprints.

What’s more, legacy systems weren’t built to meet today’s prevailing high-availability demands. Software, digital products, and services underpin nearly every modern customer experience. Downtime equals lost sales, lost insights, and damaged reputations.

Many more opportunities are squandered when “cold storage” data is exiled to hard-to-reach places. This information has potentially significant value for analytics, machine learning, and more—yet, it is increasingly put out of reach.

You’re not alone if your organization still relies on outmoded data protection approaches. According to IDC, as many as 50% of companies are unable to protect their data during disruptive events.

Data has tremendous value. It’s becoming increasingly important to take a more modern approach to protect it. Pure Storage® offers solutions that proactively provide the data availability and resiliency today’s hyper-connected, 24x7 environments demand while also helping your systems “stay modern” over time.
Four Tenets of Modern Data Protection

Pure Storage believes that modern data protection should be a continuation of always-on workflows that share data. When part of an always-on strategy, modern data protection can provide data resilience for day-to-day operations as well as extend to recovery scenarios in the event of a data or business-level outage. By adhering to the following tenets, Pure solutions prioritize data recovery and business continuity to help you better meet the operational needs of your enterprise.

Check the Recovery Box

Maintaining the ability to recover data from a catastrophic event is an obligation your business owes to its customers and stakeholders—and IT owes to leadership. Pure has multiple ways to help IT and security teams fulfill these responsibilities.

Pure provides a foundation for business resilience with a well-defined recovery strategy. This includes Pure Rapid Restore with FlashBlade™, a solution that instantly accelerates your data-recovery velocity from backups. This enables IT to close the availability gap between workgroup expectations and IT’s ability to deliver aggressive SLAs for both priority and normal data. And it allows you to retain your current software and processes for backup management. This solution speeds recovery enough that users may never even miss the affected data. What’s more, Pure Rapid Restore with FlashBlade helps you modernize IT operations by providing infrastructure that you can share across protection and other use cases, removing financial walls between IT budgets.

Continue using your preferred software—from vendors such as Veritas, Commvault, and Veeam—to back up essential data for mission-critical recovery and compliance (e.g., GDPR, regulatory, and data sovereignty laws). Extend your data protection deployment into a data hub that creates and places cost-efficient instances of data in tiered locations based on whether the data is required daily, monthly, or on demand.

Provide High Availability By Design

You can’t leverage data that you can’t access. A key component of modern data protection is near-constant availability, which begins with the design of your core IT infrastructure.

Pure FlashArray™—with its 99.9999% uptime—and Purity ActiveCluster™ offer data resiliency through highly available infrastructure and multi-premises synchronized instances. Active-active synchronous replication provides transparent, non-disruptive failover between arrays and sites. Automatic resync and recovery ensure business continuity—with zero RTOs and RPOs—across your data center or metro region. The resilient business-continuity model minimizes downtime for small issues and ramps up to become the disaster-recovery solution if a large-scale outage occurs.
As public-cloud services and resources become an integral part of IT design, it’s smart to extend the footprint of primary storage solutions with cloud resources. This “one storage” approach minimizes separate data mobility tasks that your infrastructure team needs to manage.

Pure envisions a future in which hybrid apps and workloads run seamlessly across clouds. This aligns with the shift in the way IT uses virtualization to leverage resources where they exist, with the agility to access and move data wherever it’s needed. Pure solutions include integration with VMware for VM-level protection and extend primary storage into the public cloud. Pure Cloud Block Store™ and Purity CloudSnap™ provide teams with the ability to manage data across hybrid environments by including cloud resources in the protection plan. This built-in capability supports modern data protection by providing additional, cost-effective instances that can serve as a recovery option for some classes of protection. It also allows you to create a cloud solution for long-term data retention.

One-to-one data strategies must evolve to handle many-to-many relationships. Shared data may exist in multiple physical locations, but virtualized aggregation allows users, devices, and machines to experience the data as a single set. Beyond that, the modern multi-path, multi-cloud data center opens up a new opportunity to share and recover data in various forms for multiple purposes, such as analytics and cybersecurity.

Pure Storage is dedicated to making data portable, easy to manage, and continuously available. Pure solutions provide IT teams with increased control and auditability over data, while also consolidating data management. We can help you develop a protection infrastructure that serves as a data hub—eliminating the inefficiencies and security threats from groups keeping multiple copies of data or standing up external instances in public clouds for development. A fast, efficient data hub removes the motivation to work around IT controls, because the high-availability FlashArray-based hub offers a more efficient way to access and store information.
The Advantages of Pure Storage Solutions

In addition to the four tenets, Pure Storage supports modern data protection with these practical benefits:

- **Non-disruptive upgrades:** Like all IT infrastructure, data centers providing modern data protection must juggle TCO, manageability, and sustainability requirements. What will it take to track, maintain, and administer the data center? And how do you keep it cutting-edge over time? Pure Storage Evergreen™ addresses all these issues directly. Easily swap, add, and upgrade storage and controllers on the fly. Data-in-place upgrades of Pure controllers and flash arrays provide the latest versions without disrupting data availability. That means no planned downtime, planned outages, performance impact, or data migration—ever again.

- **Visibility across the storage environment:** Visibility is the difference between assuming that your recovery and availability solution is in place and reliable—and knowing it for a fact. If you can’t see what and where the issues are, you can’t be sure you’re addressing them. Efficient infrastructure management requires knowledge of what is being served, when, and where. Pure1® Fleet management across FlashBlade™ and FlashArray™ provides your infrastructure team with visibility and metrics across the entire storage environment. Pure1 Meta™ offers increased efficiency and performance forecasting. Together, they enable operations teams to predict capacity and performance needs over time or even model workload consolidation and hardware upgrades. With this level of intelligent consolidation, you can eliminate risk and drive efficiency.

- **Everything-as-a-service:** Pure as-a-Service takes efficiency to the next level by offloading capacity and performance SLAs. As part of a Pure as-a-Service subscription, Pure monitors storage capacity and performance, then plans and implements upgrades. Your organization only pays for what it consumes. You can also choose backup-as-a-service and data recovery-as-a-service through managed service providers (MSPs). Pure Storage works closely with MSP partners, so their customers get these same recoverability, availability, and consolidation benefits in a managed OPEX consumption model.

- **Built-in data-at-rest encryption:** Pure believes that data should always be secure. That’s why we include data-at-rest encryption in all our arrays with Purity software. There are no additional fees to upgrade to this important protection. You get always-on, always-in-line encryption at no extra cost and with no impact on performance or administrative overhead.
Modern Data Protection...It’s Time

Relying on legacy data-protection systems and strategies won’t move your organization forward. In fact, the inefficiencies, rising costs, and lost opportunities of legacy systems may be holding you back. Outdated data protection also leaves you vulnerable to a major data loss that could damage your business.

It’s time to start evolving data protection for today’s realities. Data is spread across multiple locations, including clouds. Always-on workflows and software that runs everything make data availability as important as backup and recovery. Analytics, insights, and innovations require a fast, efficient way to virtually aggregate shared data from disparate locations.

Pure Storage offers solutions for modern data protection. It’s the kind of always-on protection that can give your business greater security and a consistent, competitive edge. Get more information about improving data recoverability, availability, and resilience today.

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