Get optimized data protection

HPE StoreOnce Systems and Veritas NetBackup

Hewlett Packard Enterprise

One of the most common challenges for enterprises is dealing with exponential data growth. With growth come several data management challenges—meeting stringent backup and recovery service-level agreements (SLAs), keeping up the desired recovery point objectives (RPOs) and recovery time objectives (RTOs), and simplifying and enhancing remote office protection. IT organizations are challenged to do more with limited budgets and fewer IT resources. Meeting these pain points requires a paradigm shift towards optimized data protection. As a leader in storage, Hewlett Packard Enterprise is working with Veritas to deliver innovative solutions that modernize data protection for Veritas NetBackup environments to enable complete protection and delivery of the agreed SLAs.

Breaking down data protection barriers

The IT industry is undergoing a transformation. Data is growing at unprecedented rates and must be retained for longer and accessed instantaneously. Traditional backup and recovery methodologies are too slow and often fail to meet the required business SLAs for today's data center. Adding more data protection devices to manage increasing volumes of data leads to system sprawl and increased management complexities.

Most data protection technologies in use today have limitations, including incompatible technology silos, restricted scale and performance, untenable SLAs and backup failures, and complex management. To address the limitations of current data protection technologies and provide you with greater protection, Hewlett Packard Enterprise offers StoreOnce Systems built on breakthrough scale-out architecture and federated deduplication technology developed by Hewlett Packard Labs. HPE StoreOnce Systems are specifically designed for automated, hands-free backup that consolidates protection of multiple servers to a single HPE StoreOnce System. HPE StoreOnce deduplication provides more backup data storage in the same footprint; a 10X, 20X, increase depending on the data being protected and the backup schedule. StoreOnce replication enables cost-effective replication of data to or from remote locations for an additional level of protection.

HPE StoreOnce System has a tight integration with Veritas NetBackup, enabled by the HPE StoreOnce OST plug-in for Veritas NetBackup. This plug-in allows NetBackup managed movement of deduplicated data across the enterprise, from one StoreOnce System to another. This high efficiency is enabled by the StoreOnce Catalyst interface which offers multiple advantages for backup to disk compared to traditional NAS and virtual tape interfaces.
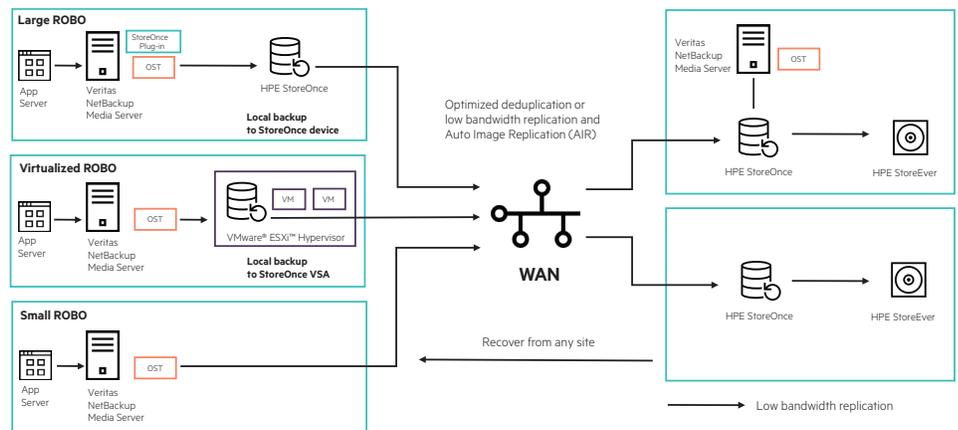
Figure 1. Delivering complete protection from remote office to enterprise data centers

HPE StoreOnce OST plug-in for Veritas NetBackup OST offers you:

- **Better performance**—Achieve significantly enhanced performance by writing to StoreOnce Catalyst compared to traditional disk backup targets. This is achieved by distributing deduplication processing between NetBackup media servers and the StoreOnce System.
- **Simplified management**—Centrally control data movement by the Veritas NetBackup backup which allows single console management.
- **Greater flexibility**—Move data from one site to multiple sites and enable replication across low bandwidth networks with the bandwidth reducing StoreOnce deduplication.

When speed matters

HPE StoreOnce System delivers backup performance of up to 184 TB/hr. And while it's important to back up data quickly, it's even more critical to retrieve that data quickly in the event that it is lost or damaged. HPE StoreOnce System doesn't just deliver superior backup performance, but also gives you:

- **Industry-leading restore performance and Granular Recovery Technology (GRT)**—
  HPE StoreOnce allows rapid data restores—up to 128 TB/ hr. As a result, you can get back online quickly and greatly minimize the risk of lengthy downtime. With support for NetBackup Granular Recovery Technology (GRT), you can recovery individual items and objects from the backups which greatly accelerates recovery operations for restoring single items to improve end user productivity. HPE StoreOnce also supports NetBackup Accelerator which provides the ability to perform full backups at the speed of incremental backups without the limitations of incremental backup chains. This is another way to meet aggressive backup windows and recovery SLAs.
- **High-availability**—Failed backups mean inadequate data protection of application and data sets, leaving you vulnerable to data loss in case of a catastrophic failure. The effects of failed backups are magnified further when you use centralized backups of remote data.
  HPE StoreOnce System, with redundant components, allow NetBackup backup jobs to continue uninterrupted even if the appliance loses a hard drive or power supply.
  The HPE StoreOnce multi-node System provide further protection with the ability to survive the loss of a node and complete the backup or restore job. This means you can safely rely on your backups for restore when needed.
- **Increased storage and restore efficiency**—One of the major benefits of StoreOnce is the ability to deliver huge space savings from high efficiency deduplication and compression. Depending on the data being protected and the backup schedule space savings of 10X, 20X, can be achieved.

Simplified and flexible disaster recovery options

In today's highly competitive world, fast recovery is absolutely critical to keep your business running should a data loss or corruption occur. For many years, enterprises have relied on tape-based vaulting to offsite locations as a primary mechanism for disaster recovery. Tape is a very good for long-term backup data retention and archiving, and should be part of your overall data protection strategy. Having multiple copies of consistent backup images is not only desirable, it's essential, and disk-based systems are a superior solution for many organizations. Where multisite disaster recovery was not possible due to cost and bandwidth constraints, it is now affordable with HPE StoreOnce Backup and Veritas NetBackup.

Save time, reduce bandwidth with NetBackup controlled replication and Optimized Duplication (Opt Dupe)
As figure 1 shows, the HPE StoreOnce plug-in for Veritas NetBackup, the StoreOnce OST plug-in enables Optimized Duplication between StoreOnce appliances. This allows NetBackup to control the replication capabilities of the HPE StoreOnce Systems, and execute backup copies to multiple locations. The HPE StoreOnce System only transmits new backup data to the HPE StoreOnce System at the remote data center. This saves time, reduces bandwidth requirement, and helps to lower the cost of data protection.

Improved disaster tolerant solution with Veritas Auto Image Replication (AIR)
With StoreOnce, you can choose single-hop or use multi-hop backup copies backup images to multiple data centers. The HPE StoreOnce OST plug-in enables NetBackup to track, monitor, and control the replication of backup. The catalog is updated and backup images can be restored from any of the available recovery sites. The entire process from backup to offsite replication is automated for reliable, error-free, and simplified disaster recovery protection. The integration of StoreOnce with OST AIR automates and accelerates disaster recovery through WAN-optimized replication of deduplicated backup images and their associated catalog data from one NetBackup domain and recovery from another NetBackup domain.

Enable asymmetric retention via NetBackup storage lifecycle policies (SLP)
With HPE StoreOnce integration with NetBackup, the backup image replica is treated as a copy, allowing NetBackup administrators to set asynchronous retention policies. Storage lifecycle policies ensure that all necessary backup is created in the correct locations and with the right retention periods, without needing to create separate duplication jobs. For long-term retention, data can be migrated to a tape device at any location.

This single management pane provides Veritas NetBackup administrators with greater control over data protection, while significantly reducing the cost of management.

Reliable, centralized, and cost-effective remote office protection

With the growing volume of data at remote sites, reliable data protection at remote site is essential to enterprise wide data protection strategy. HPE StoreOnce eliminates data protection risks through an automated backup and recovery process at remote sites. Backup administrators can schedule replication jobs, and recover data from any site, all from a centralized console eliminating the need for skilled IT staff at remote or branch offices, saving valuable time and reducing operational expenses. Depending on the business requirements, you can either choose to back up data to a StoreOnce device deployed locally for faster restores and/or replicate it to central site for disaster recovery purposes. Centralized management ensures complete data protection and delivers IT cost efficiencies. Depending on model, a StoreOnce System can act as replication target for up to 384 remote locations. And lights-out data management automates backup and recovery, reducing the administration burden while providing enterprise-class data protection to remote sites simultaneously.

Keep your data safe with encryption and Secure Erase

Protecting sensitive data from stolen or discarded disks or tape pose serious challenge to organizations. HPE StoreOnce implements industry standard AES-256 bit encryption for data at rest. The backup data stored on HPE StoreOnce is FIPS 140-2 capable and help you keep the data safe while meeting regulatory compliance requirements.

HPE StoreOnce also implements Secure Erase functionality that provides protection against recovery or reconstruction of deleted information. This secure data shredding meets the stringent NIST SP 880–88 standard so you can securely erase your confidential data. With HPE Data Protection solutions, you can be rest assured that your data remains safe and secure.

Learn more at
hpe.com/storage/storeonce/veritas

hpe.com/storage/buracompatibility

Hewlett Packard Enterprise