StorSafe® VTL for IBM Power and PowerVS Product Brief

FalconStor StorSafe® VTL for IBM Power and PowerVS

Optimized data protection and cloud migration for IBM i/AIX/Linux

FalconStor StorSafe VTL for Power and PowerVS are optimized solutions for IBM i/AIX/Linux backup/restore, cloud migration, and disaster recovery. FalconStor StorSafe VTL is a software solution and works with any leading backup software on single or mixed heterogeneous operating systems (eg. IBM i/AIX/Linux) emulating physical tape libraries with the ability to virtualize any storage to reduce costs, while shrinking backup images with advanced compression and patented block-level deduplication to reduce the network traffic and storage footprint for backup/recovery. The software can run in the cloud, on physical servers, or on virtual machines and utilizes leading security technology to keep data safe to protect and restore against cyber and ransomware attacks with immutable backups. StorSafe VTL is certified by IBM on PowerVS and is the only solution that can provide IBM i backup workloads over 2TB with ease in IBM PowerVS.
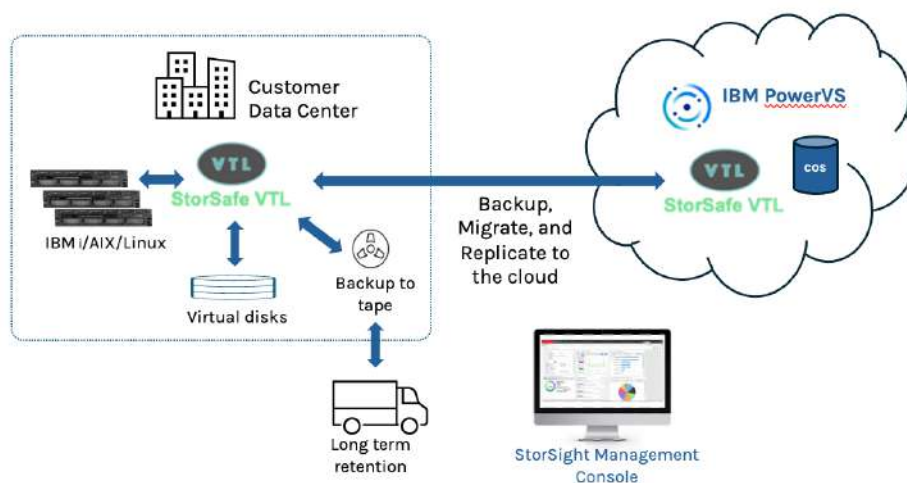

Figure: StorSafe VTL for Power and PowerVS Solution Overview

IBM Power and PowerVS Use Cases

The most common and widely adopted use cases for FalconStor StorSafe VTL for Power and PowerVS environments to optimize backup/recovery and migration include the following five use cases.

1. **On-Premises Backup**, of IBM i/AIX/Linux workloads leveraging StorSafe VTL to virtualize any server, internal disks, or exterior block or object storage

Benefit: Reduce storage costs with up to 95% reduction in backup image size leveraging multi-patented deduplication.

2. **Hybrid Cloud Backup,** where customers perform backups with StorSafe VTL on Power, deduplicate, and send a copy to PowerVS.

   Benefit: Reduce data transferred to the cloud with deduplication, saving time, bandwidth, and storage costs for secondary backups to PowerVS or long-term archive.

3. **Migrate from On-prem to Cloud,** where IBM i/AIX/Linux workloads and legacy tapes are migrated to IBM PowerVS

   Benefit: Simplify migration of on-premises workloads and legacy tapes to IBM PowerVS.

4. **Cloud-Resident Backup,** where workloads in the PowerVS are backed up via StorSafe VTL. StorSafe VTL is the only solution able to backup IBM i workloads over 2TB in size on PowerVS with ease.

   Benefit: Ensure cost-effective and reliable backups and restores for IBM i/AIX/Linux in IBM PowerVS, an IBM certified solution.

5. **Cloud Disaster Recovery,** where workloads in the cloud are replicated to another cloud location or cloud platform for recovery in the event of disaster.

   Benefit: Leverage the same StorSafe VTL software to replicate workloads in PowerVS to another cloud location or cloud platform for simplified DR.

Benefits/Features

Fast Migration to PowerVS

Easily migrate IBM i/AIX/Linux workloads to PowerVS to realize cloud value quickly, then protect with StorSafe VTL for PowerVS, an IBM-certified solution.

Up to 95% Data Reduction

Patented deduplication technology can reduce the size of backups by up to 95%, significantly reducing storage costs and bandwidth costs in the cloud. Supports global deduplication with a single instance repository.

No changes to existing backup and recovery processes

Uses your existing backup and recovery processes. Data can be ingested and protected from backup servers/tape/file shares/NAS (Network Attached Storage) and directly with Oracle RMAN/SAP Hana.

Ransomware protection

Air-gapped and immutable backups protect against cyber and ransomware attacks with provisioning Write-Once-Read-Many (WORM) virtual tapes and integration with IBM Immutable Cloud Object Storage. Data is encrypted in motion and at rest using AES-256 with StorSafe VTL managed keys.

Multicloud support

Certified by IBM to backup PowerVS, StorSafe VTL can also run on Microsoft Azure and Google Cloud Platform. The object storage repository can support a multicloud environment comprised of multiple cloud platforms.

Backup window optimization

Flexible inline or post processing deduplication options are built in to help with optimize performance to meet backup window demands.

Disaster recovery

Replicate workloads from on-prem to cloud or from one region in the cloud to another region to recover rapidly in the event of a disaster. One-to-many replication provides extended protection.

Secure multi-tenancy support

Leverages Falconstor StorSight® to provide centralized management of all StorSafe licenses and servers with rules, analytics, reports and forecasts, and real-time visibility to enable specific departmental and/or organization specific chargebacks. Added security is included leveraging multi-factor authentication.

About FalconStor StorSafe VTL

FalconStor StorSafe VTL can be deployed on a physical machine or as a virtual machine on different hypervisors. With multi-OS support across Windows, Unix, and IBM i applications, FalconStor StorSafe VTL provides a single solution from on-premises to cloud, while easily scaling from supporting a single terabyte to supporting multiple petabytes for seamless cost-effective growth as required.

Scalability to handle explosive data growth is an important feature required by all organizations. FalconStor StorSafe VTL uses the storage assigned from the disk array so, as needs grow, customers can grow the LUN or assign more LUNs. And because it can offload older virtual tapes to object storage, StorSafe VTL has unlimited capacity to store backup/migration data. Similarly, offsite protection has no limitation on capacity. For offsite protection, FalconStor StorSafe VTL provides the choice of physical tape, cloud object storage, or a twin copy of StorSafe VTL running at a remote site where data is replicated continuously.

Data deduplication and immutable backups are two other core features that separate FalconStor from similar data movement products. With multiple patents, FalconStor algorithms are optimized for each backup vendor's file format. Identifying more duplicate blocks than other data movement solutions, and combined with advanced compression, FalconStor StorSafe VTL can reduce the size of a backup by up to 95% while delivering enterprise backup and restore performance. Flexibility with the option to choose between inline and post-processing deduplication enables control for optimal performance.

Since StorSafe VTL is 100% compatible with any open system and backup software, backup windows are easily met and restores are performed quickly - both used for migrating workloads to the cloud. Data can also be easily ingested and protected not only from backup servers, tape and file shares, but also directly from NAS, Oracle RMAN, and SAP Hana. Easy migration to the cloud occurs with a backup of on-premises workloads which are then restored in the cloud.

Understanding that every environment is unique (e.g., environments have a mix of storage and backup licenses, and cloud infrastructures from acquisitions, purchased by staff who are no longer present, etc.), it is important that FalconStor StorSafe VTL support any mix of configurations.

FalconStor StorSafe VTL even supports multicloud environments for organizations who support a mix of cloud platforms.

When FalconStor StorSafe VTL is deployed, it does so non-disruptively - even when high availability solutions are in place. This allows IT staff to continue to support the many pieces of their unique environment without requiring new infrastructure. Access the FalconStor StorSafe VTL certification matrix* to see storage and system resource requirements and the list of supported tape libraries and drives, supported platforms, and backup software.

IBM Strategic Partnership

IBM has teamed with FalconStor to bring enterprise-class data protection, disaster recovery, ransomware protection, and cloud migration to IBM Power workloads. StorSafe VTL for Power and PowerVS are the first solutions from this business partnership between IBM and FalconStor that accelerates cloud migration, cloud backup, and cloud disaster recovery of IBM Power systems. Part of the IBM ecosystem, FalconStor's collaboration with IBM combines the companies' strengths to help solve the most complex challenges in protecting today's hybrid cloud environments.

Availability

StorSafe VTL is available today directly from the IBM Cloud Catalog and its worldwide ecosystem of business partners in two forms.

StorSafe VTL for Power from the IBM Cloud Catalog is designed for deployment on-premises for more efficient backup with any enterprise backup solution or even directly from any NAS deployment, Oracle RMAN or SAP Hana. It also enables fast and secure migration to PowerVS.

StorSafe VTL for PowerVS from the IBM Cloud Catalog allows IT administrators to quickly deploy virtual servers, also known as logical partitions (LPARs), into their PowerVS environment. By adding StorSafe VTL for PowerVS as a critical LPAR for migrating IBM workloads to PowerVS, IT administrators can then securely back them up, restore them (including at any point in time for ransomware protection) and provide disaster recovery with one-click provisioning and integrated billing with PowerVS.

Contact FalconStor: https://www.falconstor.com/contact

Find a FalconStor reseller: https://www.falconstor.com/partners/all/

IBM Partnership: https://www.falconstor.com/partners/ibm_partnership/