

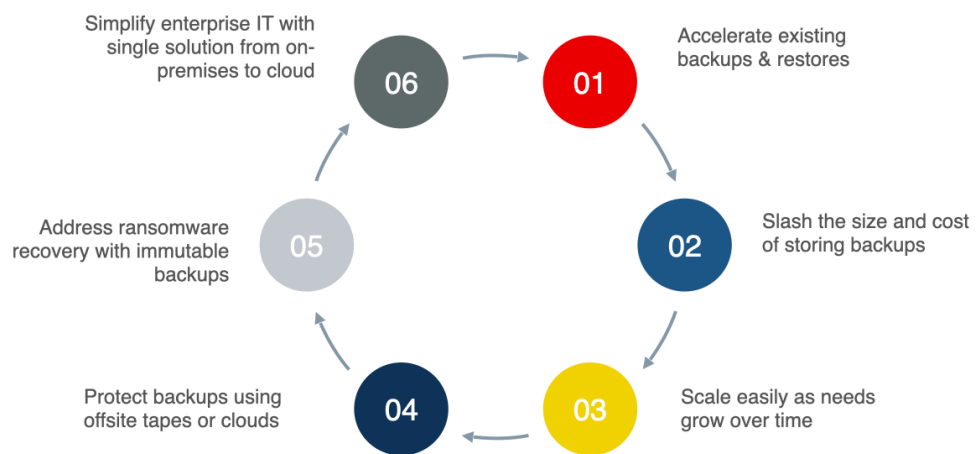
FALCONSTOR®

**The Backup as a Service Opportunity  
for Managed Service Providers  
with FalconStor Software**

## INTRODUCTION

The rise of the cloud, the imperative to increase data protection, and the need to rationalize enterprise IT in the aftermath of the COVID pandemic have all combined to generate a substantial business opportunity for Managed Service Providers (MSPs) to capitalize on the “Backup as a Service” (BaaS) opportunity. With this service offering, by taking over backup and archival operations, it’s a first step toward migrating a customer’s entire operations into the MSP’s datacenter.

FalconStor® works with leading MSPs around the globe, including those focused on IBM i, to power a compelling end-to-end BaaS service for today’s on-premises and multi-cloud world. Using FalconStor StorSafe® VTL, MSPs can highlight these top six uses cases:



Now is the time to partner with FalconStor to bring a BaaS offering online and grow a profitable business powered by FalconStor software, joint marketing and sales, technical support, and our ecosystem of partners which can securely ingest customers’ old backup tapes, hundreds to thousands of them, into digital form and securely shred them.

## THE STATE OF ENTERPRISE IT TODAY

IT investment reflects the impact of a weakening economy. Across the globe, IT spending is down. As reported by analyst IDC, rising interest rates have contributed to a reduction in capital investment. Spending on PCs and servers declines, but this doesn’t mean the work completed on

them by enterprises does down. In fact, data growth continues to surge as the Internet of Things and other digital transformations happen.



At the same time, IT organizations are under tremendous pressure to increase resiliency and reduce their overall IT budgets as a percentage of revenue. That combination is forcing IT organizations to examine their operations and increasingly to look to outsource non-core functions to focus on the heart of the business, bringing backup and archival onto center stage.

Plus, demand for information technology talent still significantly exceeds supply. According to industry analyst, Gartner, in their survey of around 18,000 employees conducted in November and December 2022, 86 percent of CIOs reported more competition for qualified candidates and 73 percent worried about IT talent attrition.

## THE BACKUP AS A SERVICE OPPORTUNITY

IT organizations are looking to MSPs to help address:

- Continued data growth requiring more storage and larger backup windows
- Reduced IT spending due to higher cost of capital
- Inability to fill vacant IT positions

MSPs that offer onsite and cloud backups are the preferred solution for organizations, from small businesses to large enterprises. Smaller companies likely use an MSP for cloud backups while larger companies use them as a component of a more comprehensive hybrid backup and disaster recovery strategy.

## LEADING MSPS ARE STANDARDIZING ON FALCONSTOR

MSPs that offer BaaS find that standardizing on FalconStor StorSafe VTL results in higher margins while meeting tight SLAs. As a market-leading virtual tape library solution, MSPs continue to use the backup software they or their client prefers, which combined with StorSafe VTL directs the backup to a disk-based storage. Note that servers and storage purchased from any vendor can also be used.

BaaS helps MSPs modernize backup and archival operations for their customers, allowing them to:

- Protect all their mission-critical data within the backup window



- Ensure backups are securely and efficiently stored
- Retain a copy of backups offsite for increased resiliency

MSPs have a choice in how they construct their business model using FalconStor, sometimes referred to as “Asset Heavy” or “Asset Light” models. And customers can be outfitted with the perfect hardware for any SLA or situation.

#### **ASSET HEAVY**

In the Asset Heavy model, the MSP stands up its own cloud including FalconStor StorSafe VTL and StorSight®, the central management software, running in its datacenters on industry-standard compute servers from any vendors and block and object storage from its vendors of choice. We have seen many services-oriented, value-added resellers make the transition to this model, including many with a rich history servicing IBM i hardware and software.

#### **ASSET LIGHT**

In the Asset Light model, the MSP instead uses the major public clouds as the target destination for the offsite copy of backup data. While the MSP retains full control and visibility of the data and processes through the FalconStor portfolio, they can also utilize a twin copy of StorSafe VTL residing in Microsoft Azure, AWS, Google, or IBM Cloud.

Regardless of the model selected, MSPs working with FalconStor have the ingredients and the commitment of a worldwide go-to-market partner to build a BaaS offering that serves their customers’ needs and drives a highly profitable new line of business.

### **BAAS BASED ON FALCONSTOR MEETS CUSTOMERS’ CRITICAL NEEDS**

FalconStor’s experience serving the largest enterprise customers and helping MSP partners build their BaaS business highlight a critical list of requirements today and tomorrow. Customers can finally move from slow, manual backup operations that use tapes to fast, modern, and automated backup-to-disk data protection both on their premises as well as in the MSP choice of cloud for safekeeping, all the while driving down storage costs with market-leading deduplication technology. Specifically, FalconStor addresses the need to:

- Modernize data protection
- Meet backup windows with high performance
- Scale storage as needed

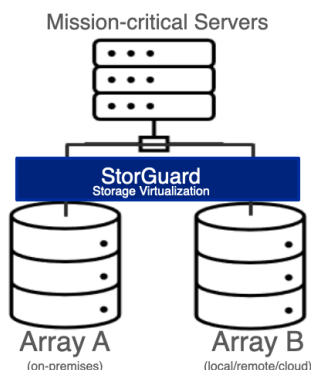
- Embrace the cloud
- Make changes to data protection processes without disruption
- Simplify IT operations
- Avoid vendor lock-in
- Enable data deduplication
- Maintain offsite storage requirements
- Ensure data is protected in-flight and at-rest
- Maintain visibility into backup and recovery operations

Let's explore each of these requirements and how FalconStor enables MSPs to provide a broad suite of BaaS features. Also described is FalconStor StorGuard™, a high availability and disaster recovery solution that works with any storage array, no matter where they are in their lifecycle.

### CUSTOMERS ARE LOOKING TO MODERNIZE

Customers need to go faster to keep pace with the ever-expanding amount of mission-critical data that needs to be protected. They are looking for a solution that can be right-sized for the needs of their different departments and be easily expanded as needs grow over time. They want to leverage the cloud for all it has to offer and ultimately many enterprises are planning to move mission-critical applications to the cloud.

StorSafe VTL not only modernizes data protection on-premises and in the cloud, it also enables migration to the cloud. In fact, IBM customers look to StorSafe VTL as the only IBM-certified third-party data protection solution with migration to Power Systems Virtual Server (PowerVS) in the IBM Cloud.

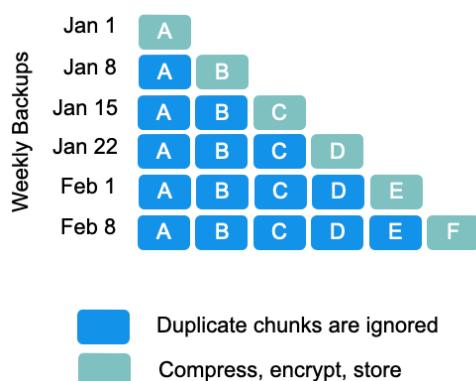


An MSP can add FalconStor StorGuard to a BaaS offering, turning it into a full “data protection as a service” with disaster recovery and high availability, all managed by StorSight. StorGuard is based on storage virtualization that enables six advanced data services for underlying disk arrays. Supporting existing third-party disk arrays and eliminating data boundaries and vendor lock-in, StorGuard is ideal for MSPs who want to expand their data protection as a service offerings.

Like StorSafe VTL, StorGuard is 100% software-based and licensed by data volume. Now MSPs can offer a variety of SLAs, with RPO and RTO requirements fully met.

## CUSTOMERS FEEL THE NEED FOR SPEED

The volume of data directly impacts the speed of backup. MSPs are using StorSafe VTL to make their customers' existing backup and restore software run faster by upgrading to a backup-to-disk target implemented on-premises. Compared to tape backups, StorSafe VTL greatly improves performance while doing inline deduplication, without burning other compute resources.



StorSafe VTL includes multi-patented industry-leading data deduplication that dramatically reduces the size of the backup image, significantly slashing the capacity required to hold backup data and ensuring tight backup windows are always met. Backups are reduced in size by up to 95% over time, dramatically reducing storage costs at the customer site and in the MSP's data-

center where a twin copy of StorSafe VTL is typically run. This enables the MSP to either lower the price to its customers to grow the top line or improve the bottom line.


## CUSTOMERS NEED TO EASILY GROW OVER TIME

Scalability has been a requirement for decades and new technologies keep improving the options. With many companies large and small offering ways for organizations to "pay for what they use," MSPs can offer seamless scalability.

Because FalconStor products are 100% software, they can be run on as little as a single VM or can use as many as nine industry-standard servers for backup processing. Plus, MSPs using StorSafe VTL can ensure unlimited storage capacity to accommodate growth. Plus, if storage is running low, StorSight provides a proactive alert.

## CUSTOMERS ARE LOOKING TO ADOPT THE CLOUD

While it is reported that 94% of enterprise organizations have adopted the cloud (source: RightScale), cloud adoption has been piecemeal across workloads. For example, IBM i workloads are still primarily on-premises, though PowerVS adoption will change that. As organizations look to a cloud solution to shut down datacenters, MSPs who can offer assistance are in an enviable position.



To help customers leverage all that the cloud has to offer, MSPs using StorSafe VTL can export backup data captured locally to remote private or public clouds. StorSafe VTL runs at the customer's site to provide a backup-to-disk target that replicates to a twin StorSafe VTL in the MSP's datacenter, or exports backup data to Cloud Object Storage (COS) at the MSP or in public clouds.

A key point here is that StorSafe VTL is not just supporting COS, but is fully embracing the cloud with the same product run on-premises and in the cloud. This flexibility makes StorSafe VTL and StorGuard ideal as a cloud migration tool. MSPs supporting IBM i workloads today look to StorSafe VTL as the single product to use for migration to PowerVS and subsequent data protection. Read more about how [StorSafe VTL modernizes data protection for IBM i workloads](#).

### **CUSTOMERS NEED COMPATIBILITY WITH EXISTING SYSTEMS AND PROCESSES**

Customers are rarely interested in changing everything, and this goes in particular for their backup and recovery software. With FalconStor, MSPs can now offer customers an on-premises backup-to-disk target that is 100% compatible with their existing backup and restore software and procedures. StorSafe VTL becomes the target for the backup software - it's that simple!

With 20 years of experience and compatibility with many generations of backup software, FalconStor has proved to be able to fit into existing operations. MSPs are using StorSafe VTL today with backup and recovery software that spans generations, from Veeam to IBM (including IBM BRMS), Veritas, Commvault, and more.

### **CUSTOMERS ARE LOOKING TO SIMPLIFY THEIR OPERATIONS**

"Project Simplify" are words that resonate with many organizations. Often, legacy applications and outdated procedures are limiting factors in achieving IT modernization. When it comes to data protection, StorSafe VTL creates an opportunity to simplify.

StorSafe VTL is easy to install and operate across the a hybrid estate and frees MSP customers from having to deal with physical tapes ever again. Adopting StorSafe VTL on-premises is as easy as redirecting backups currently aimed at tape libraries or older backup-to-disk target toward StorSafe VTL, which appears as an industry-standard iSCSI or Fibre Channel tape library to the backup software.

## CUSTOMERS WANT TO AVOID VENDOR LOCK-IN

IT departments are constantly challenged to work with hardware and software that appeared as a result of a merger or acquisition. In other situations, new IT staff are forced to work with hardware that they had no say in acquiring. But at the end of the day, it really doesn't matter where the equipment came from. What matters is how its full value is realized.

FalconStor's backup-to-disk software can be used with any brand of compute server, disk array, object, or COS provided to it, so customers and MSPs alike avoid hardware vendor lock-in which has often resulted in higher costs. The bottom line is, what you have, you can use - and to its fullest potential!

## CUSTOMERS REQUIRE OFFSITE PROTECTION OF BACKUPS

There's no getting around meeting long-term archive and governance requirements. Storing tapes in a mountain is one option, but MSPs can now offer their customers, including IBM i shops, a solution whereby backups are directed to the customer's on-premises backup-to-disk target and then are continuously replicated offsite to the MSP's datacenter, still fully deduplicated and encrypted, for safety. The old "offsite" copy used to be a tape in a bunker, and now it is in the MSP's private cloud or in a public cloud.

## CUSTOMERS NEED HIGH SECURITY

Data is under threat from attack every day. But when data backups are managed by FalconStor's software, the data is fully AES-256 encrypted on-premises at the customer site, in the MSP's datacenter, as well as while in transit between them. Only the customer has the keys, managed by their on-premises StorSafe VTL, which provides a high level of security.

### StorSafe VTL Security Features



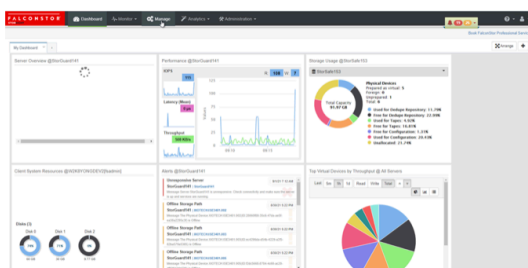
- Encryption in Motion
- AES-256 Encryption at Rest
- StorSafe Manages the Encryption Keys
- Secure Multi-Tenancy
- Virtual Tape Shredding of un-needed tapes

#### Immutable Backups

- Write-Once-Read-Many (WORM) virtual tapes cannot be overwritten by backup software
- Immutable Object Storage locks data to provide a safe backup and to maintain data integrity

## CUSTOMERS STILL WANT FULL VISIBILITY

Even though they may outsource operations, customers still want to retain the ability to monitor and see their backups across sites and clouds from a web browser. While customers want to see their own operations, MSPs



### StorSight delivers:

1. Visibility across sites and clouds
2. Simplified License Management
3. Centralized Patch Management
4. Full Multi-tenant Security
5. Predictive Analytics

need to have a view of their entire portfolio of customers' operations. FalconStor StorSight is the answer. Its multi-tenant user experience enables MSPs to manage all of their customers in a shared environment as well as provide their customers the window into their data that they need. Visibility is key for both the provider and the end customer.

## WHAT YOUR CUSTOMERS GET FROM BACKUP AS A SERVICE

MSPs have a great opportunity at hand in the form of a BaaS offering, and FalconStor has the experience and capabilities to be the partner of choice. Demand is high, the time is now, and FalconStor has the software to power the end-to-end BaaS solution for MSPs and their customers.

While features and functions are essential, enabling a scalable operating model is key. FalconStor provides the ability to scale individual customer's environments as the data volume grows and to scale the MSP's private cloud easily. From an operating perspective, FalconStor policy-based automation enables the client team to set up operations once and eliminate manual tasks.

In terms of capacity, as data volumes grow, FalconStor lets MSPs scale by adding a new processing node or storage capacity non-disruptively. In terms of operations, FalconStor software provides full visibility into the data and jobs for each specific end-customer in a secure, multi-tenant environment that is built for tailoring to individual customer SLAs and for routine business operations like charge back.

Over 20 years FalconStor has ironed out all the usual frustrations and, with MSPs and ecosystem partners, has migrated hundreds of customers from tape to cloud, and IBM i customers from ProtecTIER® and tapes to StorSafe VTL-based touch-free BaaS.

## OUR COMMITMENT TO YOUR MSP BUSINESS

FalconStor is 100% committed to collaborating with MSPs to make their Backup as a Service offering successful both technically and financially. This involves helping them build their offering as well as collaborating on sales, marketing, training, and support. FalconStor has been successful with MSPs worldwide who offer Backup as a Service to their customers using the Asset Heavy or Asset Light model.

By driving down costs of long-term storage, MSPs can choose to pass along savings to their customers or increase their profit margins, all while providing value-added services. MSPs should start their BaaS offering with a solid foundation with StorSafe VTL.

Contact FalconStor at <https://www.falconstor.com/contact/>