

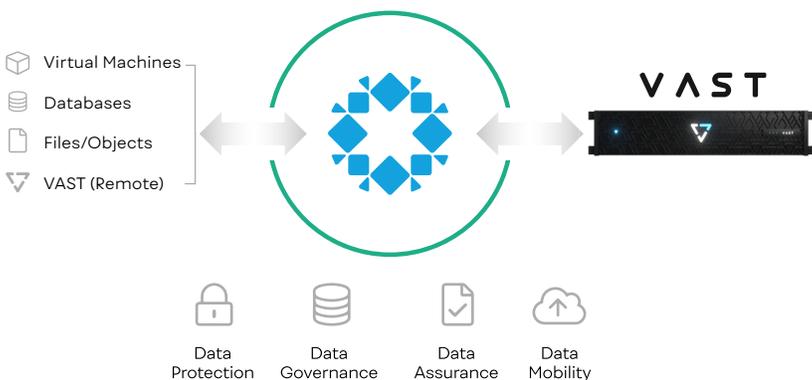
# RAPID BACKUPS, INSTANT RESTORES, AND DEEPER DATA INSIGHTS

## ALL-FLASH BACKUPS AND RESTORES AT ARCHIVE ECONOMICS

VAST Data and Rubrik, together, deliver a high-performance data protection and recovery solution that keeps your critical applications running for your end-users. Today's always-on computing environments place new demands on your expensive purpose-built backup appliances that are HDD-based and cannot provide the performance you need at restore time.

In an ideal world, every application would be powered by flash. But, until now, customers have never been able to afford a true, all-flash data center because the cost differences between hard drive and flash storage systems have been prohibitive. VAST combines QLC flash, revolutionary data reduction, and highly efficient erasure codes to bring flash to backup price points, eliminating the economic arguments for mechanical media. This means customers can use VAST data as a high performance archive repository for data managed by Rubrik Cloud Data Management (CDM). From enabling fast backups to ensuring blazing fast restore performance, VAST Data and Rubrik enable you to minimize user impact at a cost that is comparable to harddrive-based backup appliances.

## CONSOLIDATE BACKUPS ON VAST DATA



## PAIN-POINTS WITH LEGACY SOLUTIONS

### Slow Data Restores

HDD-based systems are not optimized for fast restores and recovery, often leading to missed SLAs.

### Poor, Unpredictable Performance at Scale

Backup and restore performances fail to keep up with ever-growing backup datasets.

### Performance Bottlenecks Inhibit Fast Insights

Traditional backup appliances fail to deliver the performance needed to run Rubrik's powerful analytics engines.

## BENEFITS OF VAST DATA + RUBRIK CDM

### Up To 10X Faster Restores

With all-flash, restore and recover in minutes, not hours.

### Accelerate Backups At Any Scale

Complete backups of petabyte scale datasets, while streamlining backup windows.

### Unlock Insights from Backup

VAST Data's Universal Storage delivers the high-performance needed to unlock fast and actionable insights with Rubrik Polaris without restoring to primary storage.

# ONE UNIVERSAL PLATFORM FOR ALL YOUR DATA

Organizations spend far too much energy and money moving data throughout a storage hierarchy that is rapidly growing in complexity. With VAST Data, you store everything in a single tier of flash storage that's fast enough for demanding applications, large enough for all of your data, and affordable enough that HDDs are no longer relevant. Our radical flash economics make VAST Data universally applicable for a wide range of applications, including Backups and Restores using Rubrik CDM.

## SIMILARITY-BASED DATA REDUCTION

VAST's Similarity-Based Data Reduction delivers advanced levels of data reduction where traditional deduplication techniques fail. VAST's data reduction algorithms reduce data in similar blocks down to minimum sized delta blocks by compressing similar blocks together. The result is a best of all worlds approach that brings the effective cost of flash in line with HDD-based systems for backup scenarios without compromising on performance or resiliency.

## VAST'S DATA REDUCTION IN ACTION

Backup Dataset	Rubrik Compression	+	Additional VAST Data Reduction	=	Total Combined Data Reduction Ratio
VMware Backup	4:1		1.3:1		5.2:1
Unstructured Data Backup	3.8:1		1.48:1		5.6:1
VMware SQL Server Backup	5:1		1.68:1		8:1

Combined Rubrik & VAST data reduction ratios observed in VAST Data's labs



**LIMITLESS  
PERFORMANCE  
SCALABILITY**

### VAST DATA UNIVERSAL STORAGE

**Breaking Decades of Infrastructure Trade-offs**

**Flash At The Cost Of HDDs**  
Radical flash storage economics make flash affordable for all your massive datasets.

**Industry Leading Data Reduction**  
Gain up to an additional 1.7x data reduction after Rubrik compression with VAST's Similarity-Based Data Reduction.

**Petabyte to Exabyte-Scale Storage**  
One storage system for all your data maximizing data reduction and minimizing complexity.

**Limitless Performance Scalability**  
Scale to Millions of IOPS and Beyond 1TB/s.