# Virtualization Solution Brief



## Virtual Storage Infrastructure Challenges

As IT systems have become increasingly larger and more complex, virtualization has become an integral part of building an optimal IT infrastructure that adapts to rapidly changing business requirements. As more mission and business critical applications get virtualized, the performance and availability requirements of the associated virtual machines are becoming more stringent.

Virtualization has magnified the challenges with implementing a shared storage infrastructure that cannot keep up. Server virtualization creates three primary challenges to the storage infrastructure - (a) the I/O blender effect of virtual machines, (b) rapid storage growth virtual machines and associated data and (c) high availability requirements as well as the ability to recover quickly from backup copies. Expensive, all-flash-storage has partially alleviated the requirements for performance hungry virtual machines. However, many of these virtual machines have large swathe of fast growing file stores which leads to expensive flash storage infrastructure along with complex manual administration of the underlying storage infrastructure that is ill-equipped to deal with such dynamic storage capacity growth. Current solutions are often based on legacy scale-up architecture with limited scalability. Once the scalability limits are reached, the only available options are to either add another storage island with separate management or undergo the challenging task of a forklift upgrade and replace the existing unit. The consequences are significant downtime and increase in the total cost of ownership, which is the antithesis of virtualization in the first place.
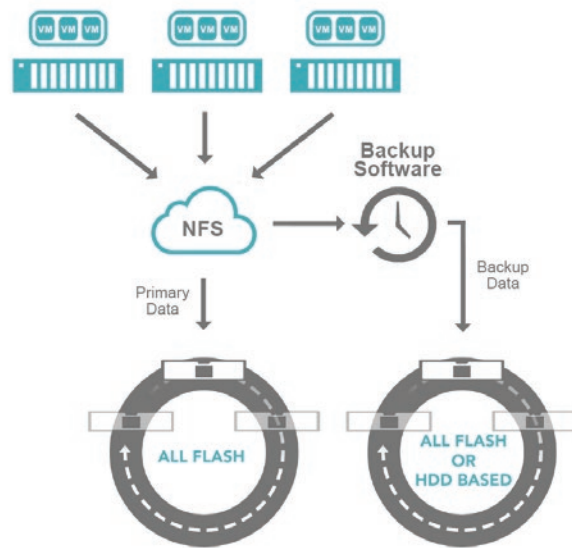
## OneBlox All-flash Array

OneBlox offers an all-flash scale-out NAS storage for your high performance virtual environments. OneBlox's core system combines a distributed file system tightly integrated with a fine-grained object store. The ability to scale granularly – one SSD at a time – and to keep the storage footprint in check with powerful storage reduction technologies, such as inline deduplication and compression, ensures that organizations can eliminate management complexity as well as significant storage over-provisioning costs.

## OneBlox & OneSystem

OneBlox is a powerful, yet simple, integrated scale-out NAS storage appliance, coupled with OneSystem, an easy to use storage management service with a choice of cloud-based or local implementation. The solution has been designed from ground-up to fully exploit today's advances in storage technologies to deliver a single infrastructure that integrates advanced storage features and brings storage management simplicity across multiple fronts. OneBlox 5210 is all-flash array with built-in enterprise-grade features such as continuous data protection, inline variable-length deduplication and compression, and multi-site disaster recovery for your entire virtualization infrastructure. With most storage management tasks automated,

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OneSystem eliminates the need for storage expertise to install and operate. The high performance, scale-out storage appliance is ideal for virtualized Microsoft application workloads, VDI, or virtual server consolidation with easy to manage NFS datastores within a single pool of storage.

Complementing the all-flash array OneBlox 5210, OneBlox 4312 optimizes storage capacity and is well suited as a high-throughput disk-based backup target for Veeam, StorageCraft, Veritas, and others backup/recovery applications protecting the virtual infrastructure. This ensures rapid recovery from backup copies without relying on tapes.

### Keep your storage footprint in check

- Drive down the storage capacity requirements with built-in, fast, in-line variable-length deduplication and compression

- Granularly scale-out storage capacity, with drives or additional OneBlox. Add another OneBlox to the cluster to immediately aggregate the storage capacity to accommodate growth of VMs

- OneBlox's scale-out architecture protects the IT organization's investment, eliminating the need for future forklift upgrades as requirements change

### Dramatically simplify the management of your virtual environment

- Eliminate storage management complexity without the need to configure RAID, LUNs, or volumes

- Remove and replace failed disks without disruption to file and application services and with zero configuration

- Globally manage on-premises OneBlox from any browser with OneSystem

- OneSystem is a powerful, yet intuitive, cloud-based management service

### Safeguard your virtual machines

- OneBlox's remote replication protects against local failures. Configure it in 3 mouse clicks and 2 minutes

- With built-in variable-length inline deduplication and compression, OneBlox can also consolidate the backup of all the production VMs simplifying the virtual environments

- Disaster recovery implementation with OneBlox is simple to setup and bandwidth-efficient, only replicating compressed and deduplicated information to other OneBlox Rings

- IT organizations can employ a flexible 1-to-1, 1-to-many, many-to-1 bi-directional remote replication architecture with multiple OneBlox Rings

## Certifications

### Server Virtualization Platform

**vmware** READY STORAGE

**Microsoft** Hyper-V

### Backup Software

**veeam**

**VERITAS**™

**commvault**

**UNITRENDS**

**StorageCraft**®