### Scale-up Storage Can you scale your current storage?

A high performance scaleable storage that turns commodity hardware into an enterprise storage system.

[View more](http://www.prophetstor.com/federator-software-defined-storage-overview)

**Beyond Storage Virtualization**

Federator® Scale-Up is an innovative storage hypervisor that is adaptive and elastic. Unlike other storage hypervisors on the market today that only virtualizes storage, Federator Scale-Up includes a flash optimized analytics engine. With the intelligence to perform predictive analysis of the workloads in the environment, it allocates the right amount of costly Solid State Disks (SSD) as necessary to boost performance for hybrid configurations.

This gives Federator® Scale-Up storage the ability to determine a best-fit scenario, dynamically adjusting the balance of storage accordingly, so businesses can now scale digital services while ensuring consistent performance in its delivery without the cost.

Scale-up is an advanced solution that brings the power of patented storage analytic technology together with open source software and commodity hardware to create a cost-effective next-generation storage server system.

**Key Features**

**Flash Optimized Architecture**

Designed for the flash revolution to take full advantage of SSDs to deliver all-flash performance and to dynamically change the storage performance dynamics for hybrid configurations by using SSDs as a performance layer with traditional hard disks to balance the storage capacity and performance needs in delivering digital business services.

**Elastic Resource Control**

Maximizing and optimizing the use of resources, Federator Scale-Up automatically predicts short and long-term requirements for dynamic adjustment of cache resources on demand. Elastic resource control of SSDs and other performance layer devices can be automatically adjusted for Virtual Desktop Infrastructures (VDI) applications during business hour and readjusted automatically for the end of day reporting for Enterprise Resource Planning (ERP) applications.

* [**Text Hover**](http://www.prophetstor.com/federator-scale-up/)

**Traffic Modelling**

Businesses tend to take a pessimistic view of service requirements by using the most expensive resources and over allocating them even though it may not be necessary. Federator Scale-Up eliminates this problem by analyzing traffic patterns to provide Quality-of-Service (QoS) control to businesses to ensure only mission critical business services get the IOPs needed.

**Storage Optimization**

With native deduplication and compression capabilities, Federator Scale-Up reduces storage consumption by storing only unique blocks in an optimal manner. Together with thin provisioning, Federator Scale-Up reduces storage footprints and cost of ownership substantially.

**Federator® Scale-up Provides Enterprise-Grade Features Such As**

Pooled storage (eliminating the need to predetermine storage size)

Redirect-On-Write (optimized flash endurance and minimal time to take snapshots and clones)

Volume creation from snapshot

Snapshot rollback

Thin and thick provisioning with volumes up to 16EB

On-the-fly data compression and block-level deduplication

Multi-level cache

Elastic resource control

Checksums (enabling data integrity verification and self-healing)

Remote replication with compression and encryption

Rapid snapshot

Volume consistency group