

## At last. Fast, affordable, reliable storage.

Enterprise-class storage has always been the single biggest headache for cloud hosts and other service providers. Open source solutions are complex to manage and lack reliable support. Low-cost SANs lack scale, reliability and performance. High-end SANs require significant up-front capital investment, and get even more expensive as you scale.

### The smart SAN that grows with your business

OnApp Storage solves these problems at a stroke. It's a distributed block storage system that turns commodity hypervisor servers, and their disks, into an extremely scalable and efficient SAN. Using OnApp's patent pending smart disk technology, OnApp Storage lets you create multiple tiers of storage, quickly and easily, with high resilience, high performance and simple pay-as-you-grow pricing.

### Built on commodity hardware

OnApp Storage is an extremely cost-effective cloud storage platform. There is no vendor lock-in with supported disk types, or custom network backplanes: you can use your existing infrastructure and hypervisors, any disk storage available in that infrastructure, and commodity Ethernet components for communication.

### Rapid SAN deployment

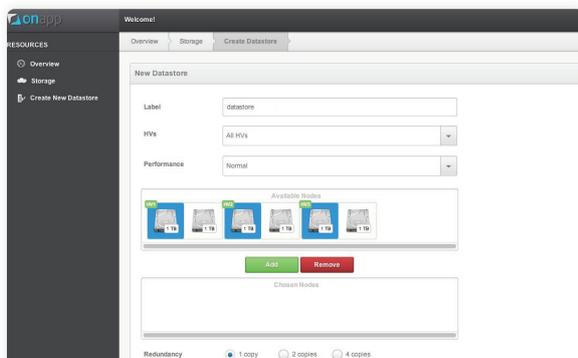
Building your SAN is easy. Using a simple web-based UI you can select physical disks from any servers connected to the platform, and combine them into virtual data stores to create your SAN. Disks can be

any size: they are simply grouped by performance, which enables you to create tiers of storage based on low performance/high capacity SATA drives, high-performance SSDs, or anything in between. A powerful CLI provides low-level access for sysadmins, too.

### Smart disk technology

OnApp's patent pending smart disk technology means that each physical disk in your SAN is a smart, self-managing, self-discovering and self-contained unit. That's important for a number of reasons:

- Disks in your SAN are hot-pluggable: they can be removed from a server, and added to any other server, and run anywhere in your infrastructure without impacting operation of your SAN.
- With no centralized disk management system there is no single point of failure.
- Each node is capable of making decisions about data synchronization and load balancing, and communicates directly with other nodes to move content around dynamically without depending on any centralized controller.



### Modular and highly scalable

OnApp Storage has a modular design that means you can add additional storage capacity without having to rebuild the whole SAN. You can add as many disks as you need to, from any servers connected to the platform.

### Highly efficient data de-duplication

Each storage node manages and compresses its own content in the most efficient manner possible, without loss of performance, using a highly efficient data de-duplication engine. This ensures that data is stored optimally across the whole environment, while maintaining data replication and drive resiliency properties.

### High performance

OnApp Storage optimizes I/O throughput for your SAN. Each disk's I/O queue is independent, ensuring there is no single point where bandwidth bottlenecks can occur. OnApp Storage also provides an option to prioritize local reads over logical striping if required.

By hosting virtual machines on hypervisors that contain copies of their virtual disks, you can reduce the I/O load for read operations, by only reading off the local copy. This option can be disabled for environments with plenty of network bandwidth, where you want to avoid the potential for local disk queue bottlenecks.

### Configurable redundancy & striping

Each virtual data store created with OnApp Storage has its own striping and redundancy options. You can set up as many stripes and redundant copies as you have disks.

### Full OnApp Cloud integration

OnApp Storage integrates completely with OnApp Cloud: once you have set up your distributed SAN you can allocate storage to virtual machines in the same way you would assign traditional SAN storage. The OnApp Storage UI integrates with the standard OnApp Control Panel UI.

### Other key features

- > Runs alongside or instead of any centralized SANs you already use
- > Online virtual disk content migration across physical drives, to support maintenance operations on disks or hypervisors
- > Disk over-commit/thin provisioning support
- > Disk snapshot and revert
- > Configurable striping and redundancy
- > Fully open, RESTful API

**OnApp Storage is currently in beta.**  
**For a demo, more information,**  
**or to register for the beta:**

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