Guaranteed storage performance for your cloud

With OnApp Cloud and SolidFire you can offer high-performance, all-SSD storage to your customers, and the ability to guarantee IOPS per workload through your OnApp control panel.

SolidFire’s all-SSD storage systems are designed for the unique challenges of large-scale, multi-tenant cloud environments.

- **True scale-out architecture**: expand from five to 100 nodes, with up to 3.4PB in one array
- **Incredible throughput**: up to 7.5 million IOPS
- **All-SSD**: predictable and consistent low latency for each I/O
- **Quality of Service** for storage: guaranteed IOPS for individual workloads
- **Performance virtualization**: provision storage capacity and performance independently

**Fully integrated with OnApp**

SolidFire’s unique storage capabilities are fully integrated with the OnApp cloud platform.

You can provision storage from SolidFire arrays in just the same way as other types of storage - but with the added ability to choose guaranteed IOPS for each virtual disk.

With all-SSD storage and guaranteed IOPS, you can offer the performance to enable customers to bring disk-intensive apps and databases into your cloud, and ensure that demanding workloads won’t impact performance for other users.

“**For the first time, cloud computing is a viable option for I/O intensive applications or databases**”

- Aaron Weller, Managing Director, Crucial Cloud Hosting

**The world’s fastest, largest all-SSD storage platform**

The new SolidFire SF9010 offers up to 3.4PB and 7.5 million IOPS for less than $3/GB. The SF3010 and SF6010 offer guaranteed storage performance at smaller scales.

**OnApp and SolidFire power Blaze**

Crucial Cloud Hosting launched the first public cloud with guaranteed storage performance: Blaze, built with OnApp and SolidFire.
How it works

SolidFire storage clusters are fully integrated with OnApp Cloud via the SolidFire API.

SolidFire storage has a clustered scale-out architecture in which storage nodes are aggregated into a single management domain, and capacity and performance scale linearly with the addition of each new node.

The diagram shows the recommended network configuration for OnApp Cloud with SolidFire storage systems. SolidFire clusters require a 10Gb Ethernet environment.

Using SolidFire storage with OnApp

Automated provisioning: isCSI activation and deactivation is automated for connections between virtual machines and specific volumes, removing the need for manual provisioning.

When new virtual machine disks are created for customers in OnApp Cloud, a new storage volume is automatically created in the SolidFire cluster. Removing disks and LUNs is also fully automated.

Guaranteed IOPS for intensive applications: OnApp presents a block device to the virtual machine rather than an LVM. This enables IOPS to be guaranteed per VM/virtual disk.

Billing for IOPS: you can track and charge for minimum, maximum and burst IOPS per virtual machine disk. Data store capacity, and IOPS and capacity statistics per volume, are also shown in the OnApp control panel.

Secure storage access: LUN mapping is used to set storage access limitations. Only LUNs authorized to access a particular VM can access the specific port.

Enhanced Backups: use SolidFire’s clone feature to take instant VM snapshots. These can also be offloaded to the OnApp backup server for additional protection.