SolidFire Solution Brief

Predictable Storage Performance to all of your VMware Applications

The All-Flash Array Built for the Next Generation Data Center

**The SolidFire Advantage**

Only SolidFire integrates with VMware’s Storage I/O Control (SIOC) to provide tunable and predictable performance to each virtual machine. SIOC provides per-VM rate limiting at the hypervisor level. When coupled with SolidFire’s unique Quality of Service capabilities, you can ensure end-to-end performance. By integrating with SIOC, SolidFire dynamically allocates and manages minimum, maximum and burst performance on the storage system based on per VM SIOC requirements in an integrated workflow. With automated orchestration, you can adjust each virtual machine’s SIOC settings on the fly, and SolidFire’s QoS will automatically adjust the volume IOPS allocation to match, eliminating storage administrator intervention and reducing overall operating costs.

**Architected for Predictable Performance**

SolidFire is purpose built to provide predictable performance to multiple applications in parallel. The system’s REST-based API means every aspect of the storage system is automated, speeding deployment. SolidFire’s performance virtualization decouples performance from capacity, virtualizing each into separate resource pools that are provisioned as needed. These resources are expanded on-demand without interruption or downtime, and datastore performance can be adjusted without complex and time-consuming storage reconfiguration.
Powering the Software Defined Data Center

VMware’s vision, to drive increased VM awareness and management granularity at the storage system layer, pairs extremely well with SolidFire’s Quality of Service architecture. The ability to manage and provision storage policies within the virtual infrastructure, that are then enforced down to each virtual disk in the SolidFire storage system, is a far more holistic approach than you can get from legacy storage vendors.

- Virtualize storage into performance and capacity resource pools that can be allocated using policies
- A complete REST-based API means every aspect of the storage system can be automated
- Per-volume QoS controls ensure predictable VM performance
- Scale on-demand without interruption or downtime

End-to-End Quality of Service

- Only SolidFire is able to combine SIOC with storage-enforced QoS to ensure predictable performance to each VM.
- Integration allows for automated storage performance allocation based on VM SIOC requirements.
- Dynamic performance allocation to datastores eliminates the need to over-provision storage, allowing you to deploy more VMs.
- Adjust VM SIOC settings on-the-fly and SolidFire QoS is automatically adjusted to match, eliminating storage administrator intervention.
- With end-to-end QoS control, you can consolidate multiple performance-sensitive applications on the same infrastructure.

Benefits of Running VMware on SolidFire

Deep Integration

- vSphere Client Plug-in
- Single pane of glass management
- Single click QoS enablement
- No RAID configuration
- Automatic data distribution
- Automatic load balancing

Seamless Scaling

- Eliminates complex capacity planning
- Set up once and keep scaling
- Add capacity to VMware without storage admin impact
- Create datastores and storage volumes together on-the-fly

Simplified Management

Streamlined Configuration

Learn more about running VMware on SolidFire and request a demo at solidfire.com/vmware