

Infinio Accelerator

Lightning fast I/O for any storage

Infinio Accelerator is a server-side cache that delivers 1 million IOPS per VMware host, and 80 microsecond latency.

Infinio Accelerator is built on the fundamental principle that when frequently accessed data is co-located with applications in the server, performance is several orders of magnitudes better than relying on lengthy round-trips to and from even the highest performing network-based storage. Historically, the only option for achieving such speeds was using server-side resources such as SSDs or PCIe flash as silos of high performance storage capacity. This approach, however, comes at substantial expense: these silos require separate configuration and maintenance, and redundant data protection and reporting policies.

In contrast, Infinio's smart, content-based cache inserts server RAM, SSDs, and PCIe and NVMe flash transparently into the existing I/O stream to accelerate storage, while retaining familiar arrays and architecture. Infinio's cache dynamically populates servers-side media with the hottest data, reducing the storage requirement to a small fraction of the workload size. Through VMware's Storage Policy Based Management, Infinio's acceleration can be applied to VMs or groups of VMs transparently, while centralized storage continues to provide data protection and management.

The introduction of Infinio begins to provide value immediately after a non-disruptive, 15-minute installation that doesn't even require hosts to be put into maintenance mode. To get started, all that is required is a small amount of RAM in each ESX host; complementary server-side SSDs or flash is entirely optional.

Infinio's performance benefits provide flexibility in how new storage is purchased. With Infinio delivering performance, organizations can dramatically reduce their cost/GB by choosing high-density platforms optimized for capacity. For unprecedented IOPS and latency, Infinio can be paired with an all-flash array.

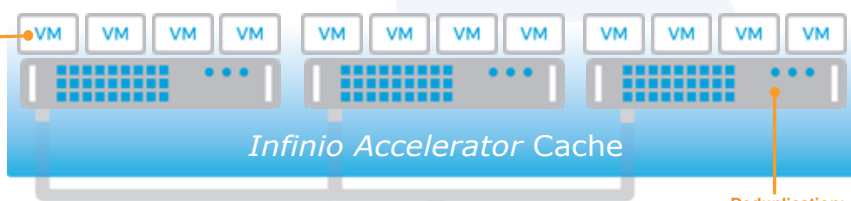
WHY INFINIO

- **15-minute installation**
Non-disruptive installation with no reboots or maintenance mode required, and no changes to storage or applications.
- **Industry-leading performance**
See 1,000,000 IOPS per ESX host, and latencies as low as 80 microseconds.
- **Deep VMware integration**
Complete integration with VMware's Storage-Based Policy Management, VAAI, and several other VMware APIs.

BENEFITS

- 20x improvement in latency.
- 10X improvement in throughput.
- Scale-out I/O with application growth.
- Lowest performance cost (\$/IOPS).
- Ability to optimize storage for lowest capacity cost (\$/GB).

Infinio's I/O filter: VMware's Storage Policy Based Management can be used to accelerate VMs individually or in groups.



Storage Compatibility: Infinio can accelerate SAN, NAS, and DAS hardware supporting VMFS, NFS, Virtual Volumes (VVOLs), and Virtual SAN (vSAN).

Deduplication: Increases the effective cache size for any host-side medium, such as RAM or SSDs

How does Infinio work?

Infinio is deployed as a VMware Installation Bundle (VIB), which installs an I/O filter. This installation process can be completed in under 15 minutes without any disruption or reboots. The I/O filter is applied to selected VMs or groups of VMs using VMware's Storage-Based Policy Management engine, and the UI makes it simple to filter by cluster and search by name to identify the VMs you'd like to accelerate. Infinio's cache is created from RAM, SSD, and flash resources located on the ESXi hosts. The software's unique content-based architecture provides deduplication of the cache, creating an effective cache size that can be many times larger than the allocated physical resources.

All of the Accelerators in an Infinio cluster are managed together, and seamlessly support typical cluster-wide VMware operations, such as vMotion, HA, and DRS. Advanced reporting lets you see aggregate performance improvements, as well as drill down on individual VMs for performance analytics at one-minute intervals. Best of all, using Infinio doesn't require you to make any changes to your environment. Your datastore configuration, snapshot and replication setup, backup scripts, and integration with VMware features like VAAI and vMotion all stay the same.

Increase performance for any application

- Reduce reporting times for databases, big-data, and analytics applications
- Improve boot times and responsiveness for virtual desktops
- Increase virtual machine density per host without compromising performance

System requirements

Installation

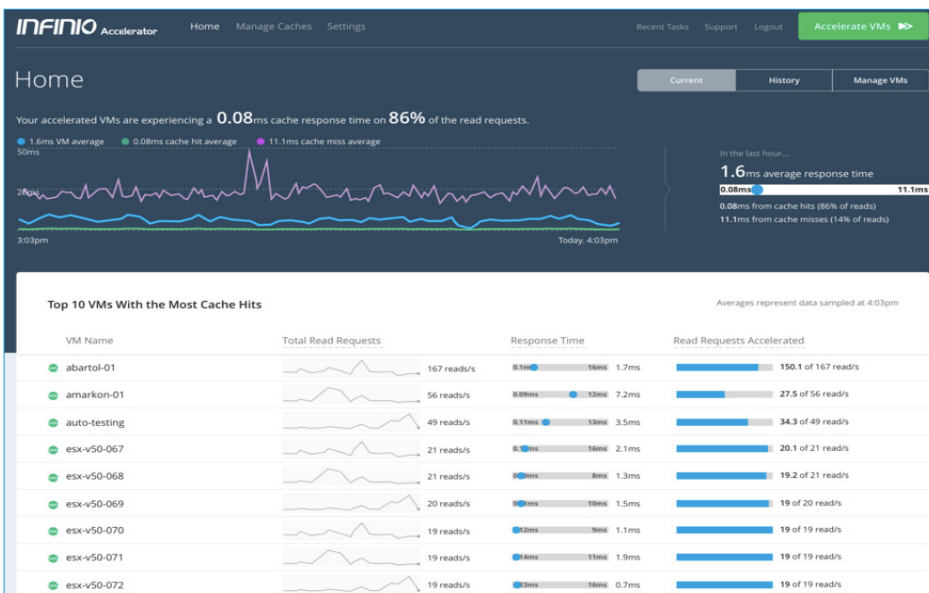
- The Infinio Accelerator installer works with Microsoft Windows.

Hypervisor

- Infinio Accelerator with VAIO integration requires VMware vSphere ESXi 6 U2 (Standard, Enterprise, or Enterprise Plus) and VMware vCenter 6 U2.

Storage

- Infinio Accelerator works with any VMware supported datastore, including a variety of SAN, NAS, and DAS hardware supporting VMFS, NFS, Virtual Volumes (VVOLs), and Virtual SAN (vSAN)



The Infinio Accelerator console provides a clear view of performance benefits, including aggregate latency and VM-level statistics.



NetApp

