

PerfAccel Caching

Intelligent Active Data Cache

ACCELERATING APPLICATION I/O PERFORMANCE

PerfAccel Caching is the only I/O solution that provides deep operational intelligence between application and storage, with the added capability to control storage behavior for each application, providing performance optimization and acceleration. Delivering real-time reporting and deep analytics of active data, system administrators now have the power to both understand data movements and fine tune the caching rules for their entire environment. These performance analytics operate uniquely at the file level, rather than the block level, enabling detailed file level visibility, and thus, definitive control over the movement of data.

PerfAccel software provides an active data movement technology that moves IOPS to the server, delivering the capability to separate performance from capacity. Moving dynamic data closer to the CPU, optimizes application performance by providing the highest throughput and the lowest latency. By controlling the I/O path, server utilization is also increased, as servers are no longer waiting on storage. The ability to optimize the data delivery system to suit requirements and workloads is the key to empowered administration of data.

HIGHLIGHTS:

- Move up to 80% of the storage workload to the server
- Storage visibility through deep file level analytics within complex grid environments
- Higher performance with fewer SSDs used optimally
- Accelerates and uses any available storage: SSD, DAS, iSCSI, SAN
- Real-time monitoring over time to ID trends and patterns for future capacity planning

ANALYTICS FEATURES



File Level I/O Analyzer

Measures IOPS, latency, throughput and bandwidth at individual file/folder/node or entire grid level



Active Data Identification

Identifies hot data, monitors open/close, cache utilization, read hits/misses, writes/misses



Caching Mode

A simulation functionality that actively models caching behavior to size future cache/SSD requirements - aiding in purchase decisions



Performance Analytics

Identifies issues related to file level latency, throughput, IOPS and bandwidth



Predictive Analytics

Collects data over time, deterministically predicting future capacity and performance related outcomes



Real-time Graphical Display

View system health through latency, throughput, cache utilization, read hit/miss, write/miss



Contextual Analytics

Gathers meaningful insights from logical groupings of process, process ID's or process groups, providing the necessary intelligence to create optimal performance



Configurable Dashboards & Reports

A comprehensive view of infrastructure, operations and reports for storage metrics, trends, predictions, and notifications

CACHING FEATURES

- Intelligent read, write-through, write-back caching
- Create swim lanes for specific types of I/Os
- Accelerates and uses any available storage: SSD, DAS, iSCSI, SAN
- Pipeline control, which matches the appropriate type of storage resource to various types of data
- Drive application level SLA and SLOs for further performance optimization
- Exclusions based on file extensions and file size
- Caching based on access frequency in an interval
- Intelligence to connect to thousands data sources, from a single machine, to an entire rack, data center or cloud.

EMPOWERING SYSTEM ADMINISTRATORS WITH CONTROL

- Software deploys in minutes on the server without disruptions
- Data intelligence and data management capability provided through a single pane of glass
- Produce a consolidated view of the entire data environment and continuously monitor active data or information in motion
- Identify storage performance patterns and enhance data delivery by keeping hot data close to the CPU
- Understand and manage dynamics of hot data to maximize CPU utilization
- Identify bottlenecks in the I/O stack and take corrective action.
- Dedicated partition or a shared mounted directory
- Support for all major file systems: ext3, ext4, xfs, NFS v3, SCSI, iSCSI, on most Linux based distributions: XEN, KVM, VMware, RHEL, SLES, Ubuntu
- Plan and scale storage network and storage IOPS capacity: Performance and capacity planning - cache sizing\SSD sizing, determine high-performance storage placement for optimum results, endurance characteristic

A WIDE RANGE OF CAPABILITIES

SEE & TRACK

- Latency
- Throughput
- Cache utilization
- Read hit/miss, write hit/miss
- Hot files.

- Hot data.
- Nodes & locations

SEARCH & IDENTIFY

- Downtime patterns

- Storage outage patterns
- Challenges within the NAS appliance and trouble areas in IOPS
- SSD requirements
- I/O bottlenecks creating latency
- Data placements within NoSQL database deployments
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Try

Register for a free trial of PerfAccel software to see how data intelligence can dramatically improve the visibility, control and acceleration of your data network.

FREE TRIAL

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