Diskeeper® 16

Overview

Everyone knows the frustration of a Windows® system becoming progressively slower the longer it is used and burdened with more software and data.

With over 100 million licenses sold, Diskeeper® has been the undisputed leader in keeping Windows systems running like new. Now, the introduction of Diskeeper 16 with DRAM caching builds on the powerful legacy of Diskeeper with this release that goes well beyond just keeping Windows systems running like new but actually guarantees to fix your worst performing physical servers or Windows PCs with faster than new performance or your money back for 90 days—no questions asked.

Diskeeper 16 Now With DRAM Caching

Instead of "defragging," Diskeeper 16's newest patented engine ensures large, clean contiguous writes from Windows so fragmentation is no longer an issue for HDDs or SSDs. This eliminates the "death by a thousand cuts" scenario of small, tiny writes that inflates I/Os per second, robs throughput, and shortens the lifespan of HDDs and SSDs alike. Diskeeper 16 delivers dramatic improvements to Windows system performance with the new addition of dynamic memory caching—using idle DRAM to serve hot reads without creating an issue of memory starvation or resource contention.

The latest PCMark benchmarks reveal that Diskeeper 16 Professional increases the performance of Windows 10 PCs by 73% in the Microsoft Office Productivity Suite test and boosts the PCMark Storage Bandwidth test by 31% with a mere 4GB of available DRAM leveraged for cache. Diskeeper 16 Server speeds system performance of the most I/O intensive applications like those running on MS-SQL Server. Iometer tests that simulate MS-SQL workloads according to Microsoft's specs on physical servers, show that Diskeeper 16 Server can boost performance by as much as 6X depending on the amount of available DRAM that can be leveraged for cache.

Diskeeper 16 with Write and Read Optimizations

Where typical defragmentation utilities consume resources to operate and deal with fragmentation only after the performance penalty has already been incurred, Diskeeper 16 is the only proactive solution that solves the problem in real-time while running transparently in the background, eliminating fragmentation issues from occurring on HDDs, SSDs, and SAN storage systems while also eliminating the IOPS inflation from many small writes and reads. Diskeeper 16 boosts performance faster than new with DRAM caching. The real genius in Diskeeper's newest engine is that nothing has to be allocated for cache. Diskeeper dynamically uses only what is idle and available at any given moment and throttles according to the need of the application. If memory is under-provisioned and the application asks for all the memory, the caching engine throttles back entirely. However, with as little as 3GB of available DRAM, latency is reduced by an average of 40% on production workloads.

The net effect of both fragmentation elimination and DRAM caching means Diskeeper 16 offloads a minimum of 30% of the I/O traffic on most workloads on commonly configured systems. Since Diskeeper is transparent, "set-and-forget" software, and operates with near zero overhead as a lightweight file system driver, organizations achieve significant performance gains without management or system resource overhead.

Enhanced Reporting

If you never knew how much Windows inefficiencies were robbing system performance, Diskeeper 16 tracks time saved due to fragments eliminated by Diskeeper 16 and time saved from every I/O that is served from DRAM instead of being served from underlying storage. Diskeeper 16 enables IT Administrators to see what percentage of all write requests are reduced by Diskeeper 16 due to sequentializing otherwise small, fractured writes and what percentage of all read requests are cached by Diskeeper 16 with DRAM caching.

DATASHEET

Features

IntelliWrite® write I/O optimization technology prevents files from being fractured and broken apart into pieces, with each piece requiring its own I/O operation before being written to disk or SSD in a non-sequential manner.

IntelliMemory® read I/O optimization technology intelligently caches active data from read requests using idle memory.

InvisiTasking® intelligent monitoring technology allows all "background" operations within the system to run with near-zero resource impact on current activities.

Instant Defrag™ technology has been enhanced to monitor volumes to resolve critically fragmented files in real-time that are known to cause performance problems, making it SAN-friendly. This feature is turned off in the event of solid-state drives.

Enhanced Reporting shows how many fragments are eliminated, what that means to percentage of write input/output operations that have been reduced and how much I/O time has been saved on the system as a result. Also, see what percentage of read requests and how much data is cached within idle memory and how much time that has saved your system by serving such requests from DRAM instead of HDD or SSD storage. See free spaces consolidated and many more I/O performance metrics to help you understand what is occurring on your system and how much benefit Diskeeper is providing.

Efficient Mode in addition to an extensive defrag mode, Efficient Mode offers the greatest net gain in system I/O resource savings ever available. It immediately targets and eliminates only fragmentation that directly affects system performance that is on the system before Diskeeper was installed since Diskeeper automatically prevents any new fragmentation after installation.

Free Space Consolidation Engine swiftly consolidates free space and tightly integrates with Instant Defrag to handle new fragmentation as soon as it is created.

Terabyte Volume Engine® Technology engineered to rapidly defragment volumes with hundreds of thousands of files.

Diskeeper Administrator Management Console makes centralized deployment and management of Diskeeper 16 easy even on the largest networks with hundreds or thousands of physical servers or PCs.

MediWrite™ technology engine resolves extreme file fragmentation issues that can cause the File Attribute List (FAL) to reach its maximum size limit and risk downtime in environments like MS Exchange or some EHR applications like MEDITECH.

About Condusiv

Condusiv® Technologies is the world leader in software-only storage performance solutions for virtual and physical server environments, enabling systems to process more data in less time for faster application performance. Condusiv guarantees to solve the toughest application performance challenges with faster than new performance via V-locity® for virtual servers or Diskeeper® for physical servers or PCs. With over 100 million licenses sold, Condusiv solutions are used by 90% of the Fortune 1000 and almost three-quarters of the Forbes Global 100 to increase business productivity and reduce datacenter costs while extending the life of existing hardware.

Diskeeper Benefits

- Keep Windows systems running faster than new
- Improves business productivity and extends the life of hardware
- Prevents fragmentation at the Windows OS level
- Caches hot reads with idle DRAM
- True "Set It and Forget It" management
- Deploys to hundreds or thousands of servers or PCs in a few clicks

System Requirements

250MB of available hard drive space. IntelliMemory caching requires a minimum of 3GB of memory on the system and at least 1.5GB of idle, available memory before caching will initiate.

Supported Platforms

Windows 7 and above for Client OS
Windows Server 2008r2 and above for Server OS

More Information

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