

Disk Array Performance

INTRODUCTION

FlashDisk RAID disk arrays have been speeding up disk intensive applications for over 20 years. FlashDisk works equally well in random access environments including VMware, database and transaction-oriented applications as well as sequential access environments including backup, copying, video streaming, web serving.

Now in its 10th generation, FlashDisk RAID disk arrays deliver up to 160,000 I/O operations per second - perfect for all disk intensive applications. Often, after laboriously tuning an Oracle database or VMware application for days, week or months, just installing the application on FlashDisk RAID disk array will cause the applications to immediately run 2 to 10 *times* faster.

Winchester Systems has specialized in providing the highest performance disk arrays since 1988. Performance has improved exponentially at an incredible 45% per year annual compounded growth rate for 22 straight years - a 3,200 *times* increase in performance.

FlashDisk is perfect for VMware and high performance databases. FlashDisk performance easily supports dozens of virtual servers with a reliable storage pool.

WHY HIGH RANDOM I/O PERFORMANCE

- VMware virtual servers
- Database and transaction oriented applications
- Sequential applications: copying, backup, video
- Faster response time
- Faster reports, sorts and queries

REQUIREMENTS

- High-speed disk array
- Random access applications

TYPICAL ENVIRONMENTS

- VMware
- Database
- Financial
- Manufacturing
- Large number of users
- Long reports, sorts, and queries
- Web servers
- Video Streaming

BENEFITS

- High productivity
- Avoid expensive tuning
- Low cost
- High return on investment

HOW IT WORKS

FlashDisk high performance RAID disk arrays are architected start to finish for high performance. All FlashDisk RAID disk arrays are full 64-bit architecture end-to-end. No compromises. Up to 4 GB high-speed data cache per controller speeds data access for both reads and writes. For added speed, the disk arrays are designed with up to 8 channels that can be used for disk or host access. The result is massively parallel data access via full 64-bit data paths - yielding unsurpassed performance. All internal chips including RAID parity ASICs are designed for speed. Unlike very popular competitors, FlashDisk has not tossed out the hardware parity chips to save a few dollars at the customer's expense. Finally, FlashDisk RAID arrays are scalable to extremely high I/O demands since they are inexpensive enough to use as many as needed for the specific demands of the environment.

20 Years of Industry Leading Performance

The chart indicates how FlashDisk has advanced the state of the art in performance for the past 20 years. FlashDisk has always provided industry leading I/O performance and the latest 10th generation, with up to 160,000 I/O operations per second, is no exception.