

OVERVIEW

FastFrame™ network interface card (NIC) drivers provides users with a level of performance required by today's increased throughput needs in IT environments, driven by the proliferation of big-data across almost every vertical imaginable along with other applications such as virtualization.

ATTO Technology, Inc. FastFrame NICs provide users with all the benefits associated with 10GbE speed while allowing organizations the cost-benefits reaped by leveraging existing Ethernet knowledge and infrastructure already existing within the organization, all while providing performance ATTO has become known for in the industry. ATTO's drivers for IT applications provide users with performance optimized for the small-block size transfers typically required by IT applications.

THE ATTO ADVANTAGE

ATTO's experience with IT applications, coupled with a holistic development model between hardware and software, has resulted in performance characteristics with ATTO's driver that are optimized for the unique needs of those working with numerous IT applications.

Benchmark testing conducted with dual-channel ATTO FastFrame NICs indicates a pronounced advantage across smaller block-size transfers. Testing was conducted with the same hardware setup between the ATTO and Intel® drivers to provide equivalent comparisons.

As a whole, across block sizes ranging from 4K to 64K and encompassing reads and writes, the ATTO drivers provided significant performance improvements, both from an MB/s and IOPS perspective. Read performance shows up to a 39% improvement in both MB/s and IOPS, while write performance shows up to an impressive 76% improvement in both MB/s and IOPS. This can translate to significant user benefits. For instance, imagine a backup process that may normally take 12 hours suddenly taking 25% as much time and being completed within three hours.

SUMMARY AND CONCLUSIONS

ATTO's experience developing drivers specifically optimized for its hardware has continued with our entry into 10GbE products. The pronounced benefits of utilizing a 10GbE manufacturer that knows how to optimize every last piece of performance for the industry are quantifiably demonstrated above, leaving little doubt: If your workflow involves 10GbE, FastFrame NICs utilizing ATTO's hardware-optimized drivers are the industry's best-performing choice.

CONFIGURATION

IOMeter test

Host 1	Host 2
SMB 3.0 Share	client mapped share
Intel® computer	Dell® computer
Xeon 2.6G 8-core CPU	Xeon 2.4G 4-core processor
16GB memory	4GB memory
FastFrame NS12 NIC	FastFrame NS12 NIC
Windows 2012	Windows 2012

