

**Tech Note by IO Integration's  
VP Kevin Martorana****“These are the RAID’s we’ve been looking for:”  
FlashDisk FX-2000 & FX-3000 from Winchester Systems**

Today the issues with larger storage sets needing to be backed up is very common. The days of backing up a few Gigabytes or Terabytes is over. These days we see storage systems in excess of 300-400 TB. With the current trends in digital media getting larger its fairly safe to assume that bigger storage sets will be needed in the very near future.

The problem comes in when you build a large volume but need to back that volume up to tape within a certain window of time. As in a nightly or weekly backup. The larger the volume the longer it will take to backup. Adding more tape drives or higher capacity tape drives to the system may or may not help. In some cases it might make things worse. Let me explain for a moment. If a RAID has a single controller in it the speed would be limited to the speed of the RAID and the speed of the tape drive. With newer tape drives like LTO6 the demand and load those tape drives require to run at full speed can cause the RAID system to become over burdened. In many cases people are not aware of this and just think their server is slow. (It may be in some cases)

It could be multiple things contributing to poor backup performance. Some examples are not enough drives in the RAID set, more spindles add more speed. Slower RPM drives will also cause things to run slow. Not enough RAID controllers in the RAID to deliver the speed you want to your server. Not enough fileserver Fibre-channel HBA ports to deliver the speed from the server to the RAID or to the tape drives. So when deciding to

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**Kevin Martorana,  
Partner/Vice President  
Technical Support**

buy more capacity it is also important to discuss a backup window that makes sense and works within the required time.

You may need to add faster tape drives or more of them to deal with the backup window. You might also have to change the speed of your RAIDs by building not just larger but faster RAIDs as well. The good news is that RAID performance is getting faster every day. Over the past few years we have gone from 2Gbps Fibre - 4Gbps Fibre. Then from 4Gbps Fibre -

8Gbps Fibre. IO Integration is happy to announce we are shipping not only 16Gbps RAIDs for our servers but an Active/Active RAID which will let you use both RAID controllers at the same time to deliver 32Gbps to drive the server and since it has multiple I/O ports it can achieve speeds of 5,500MB/s Reads and 3,960 MB/s Writes. This is the RAID we have been waiting for in this race to deliver faster speeds to the users and faster speeds to high performance tape drives. If you are not getting the speed you need for your server or tape backups give us a call, we would be happy to discuss what is possible to reduce the backup window or just deliver higher speed to your network users. Ask about the new FX-2000 and FX-3000 Winchester RAID systems for your next data storage purchase.

For more information regarding these RAIDs please contact [sales@iointegration.com](mailto:sales@iointegration.com).



FlashDisk FX-2300 2U RAID Disk Array



FlashDisk FX-3400 3U RAID Disk Array

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