

**Q: Does ATTO support LTO tape devices?**

A: Yes, ATTO fully supports attached LTO tape devices.

**Q: What is LTFS?**

A: LTFS is a format that allows data to be written to tape so that it can be read anywhere with open source LTFS software. It also indexes the tape and makes it searchable so that files can be retrieved much faster. Users can browse contents and drag and drop files from a desktop or folder directly to and from tape just as with a hard drive or thumb drive.

**Q: Does ATTO still support LTFS?**

A: Yes, ATTO still supports LTFS.

**Q: What are Transport Layer Retries?**

A: Transport Layer Retries (TLR) are designed (when reading from tape) to catch errors and automatically initiate a retry.

**Q: Does ATTO support LTO tape devices and TLR?**

A: Due to the latest LTO tape drives behaving differently in certain respects than previous generations, ATTO no longer supports TLR (when reading from tape) with the following products:

- ExpressSAS® 6Gb SAS/SATA RAID Adapters
- ThunderLink® SH 2068 – Thunderbolt™ 2 to 6Gb SAS/SATA

**Q: Without TLR, how are errors handled?**

A: Without TLR, products will rely upon the backup application to catch the error and initiate the retry. Most sophisticated backup applications have this capability. Some applications, (which may include LTFS) do not support error retry handling. This means if a read error occurs the user can simply try again.

**Q: Is there a way to reduce the number of errors?**

A: ATTO has found that by slowing the SAS link down from 6Gb/s to 3Gb/s, the frequency of read errors with LTO drives is reduced tremendously. To make it easier for our customers, the products listed above will automatically reduce the SAS PHY speed down to 3Gb/s when an LTO drive is attached.

**Q: Do the 12Gb and 6Gb HBAs support TLR?**

A: Yes, TLR continues to be supported with ExpressSAS H6XX, H12XX and ThunderLink SH 3128 adapters.