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Linear Tape File System, abbreviated as LTFS, refers to both the format of data recorded on magnetic tape media as well as the implementation of specific software that uses this data format to provide a file system interface to data stored on magnetic tape. The Linear Tape File System format is a self-describing tape format, which was first developed by IBM to address tape archive requirements. The LTFS Format specification, which was adopted by the LTO Technology Provider Companies, defines the organization of data and metadata on tape or files stored in hierarchical directory structure. It allows you to use the tape almost as if it were a hard disk.

Linear tape file system was largely built on the LTO Ultrium 5 format standard. LTFS provides direct, intuitive and graphical access to data stored in IBM tape drives and libraries using LTO generation five tape cartridges. This eliminates the need for additional tape management software to access data and adds to the advantage of using LTO Ultrium 5. Linear Tape File System is the first file system that works in collaboration with LTO generation five tape technologies to set a new standard of portability for open systems tape storage. With the Linear Tape File System, accessing data stored on an IBM tape cartridge became as easy and intuitive as using a USB flash drive. In addition, reading data on a tape cartridge is quite easy. You can drag and drop files from your server to the tape, see the list of saved files using a standard operating system directory and no backup software is needed. Downloading LTFS is also quite simple.

The benefits of linear tape file system are also innumerable. Apart from being user friendly, it also makes access incredibly fast. Once you load a tape, the directories and files are displayed on your screen directory while in other cases a back up files needs to be run first. There is no such need in this case. Another benefit of LTFS is its feature of file portability. Tapes can be exchanged easily between different operating systems and the method to do so is easy as well. This is possible because the information written to tape is self-contained. Thus, data recovery is independent of hardware or software platforms. An LTFS archive solution is considerably less expensive than a comparable disk-only archive solution. However, these facilities of linear tape file system are not exclusive but have certain requirements. These include Linux or Mac OS X, which are operating systems that support linear tape file system.

However, when we compare LTFS with LTO on grounds of archival data, the latter will continue to be the first choice, as it remains a lower cost and more secure alternative than keeping the same data online. Yet it is true that the linear tape file system feature makes it possible for users or applications to easily store data to tape from their desktop. It is a simpler version of LTO in short. The two in conjunction casts an entirely new light on the future of tape.

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Crossroads StrongBox is designed to address the need for a low cost and highly reliable a [Linear Tape File System](#), presenting itself as traditional network-attached storage-NAS while leveraging the new a [LTFS LTO](#).

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Linear Tape File System, LTO, LTFS, LTFS LTO

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