LTO GENERATION 7 CARTRIDGE INITIALIZED AS TYPE M MEDIA FAQ

The LTO Program is introducing a new capability with LTO-8 drives: The ability of the LTO-8 drive to write 9 TB on a brand new LTO-7 cartridge instead of 6 TB as specified by the LTO-7 format. Such a cartridge is called an LTO-7 cartridge initialized as Type M media. The TPCs have agreed upon designating these LTO-7 Type M media by using an automation barcode label ending with the last 2 characters "M8". A normal LTO-7 cartridge is referred to as LTO-7 Type A, has a capacity of 6 TB, and is indicated with an automation barcode label ending in "L7". An LTO-8 cartridge is indicated with an automation barcode label ending in "L8".

Only new, unused LTO-7 cartridges may be initialized as LTO-7 Type M media. Once a cartridge is initialized as Type M, it may not be changed back to a 6TB LTO-7 cartridge. Also, an LTO-7 cartridge initialized as LTO-7 Type M media can only be written and read in an LTO-8 drive; LTO-7 drives are not capable of reading LTO-7 Type M media.

Q: What is LTO generation 7 cartridge initialized as LTO-7 Type M media?
A: LTO-7 Type M media is manufactured and logoed as LTO Ultrium 7 media but labeled with a barcode label ending with the last 2 characters "M8" and initialized at a higher Type M density. This LTO-7 Type M media will have 9TB native capacity or up to 22.5TB compressed 2.5:1

Q: When is LTO-7 Type M media initialized?
A: Media can be purchased as pre-initialized LTO-7 Type M media or as un-initialized LT0-7 media. Un-initialized LTO-7 media can be initialized as LTO-7 Type M media by applying an "M8" barcode label and writing data to the media in a tape library that supports un-initialized LTO-7 Type M media.

Q: Can previously used LTO-7 media be converted to LTO-7 Type M media?
A: No, the LTO-7 Type M media can only be created with new, un-initialized media. Previously used LTO-7 media will remain as such for the life of the media. Similarly, previously used LTO-7 Type M media will remain as such for the life of the media.

Q: Who is responsible for ensuring that LTO-7 "L7" labeled media and Type M, "M8" labeled media have been initialized correctly?
A: Compatible LTO-8 tape libraries will only initialize LTO-7 brand new cartridges as LTO-7 Type M media if the barcode label "M8" has been applied to the cartridge. Ultimately, it is the end-user responsibility to ensure tape library compatibility and to label cartridges correctly. The TPC's do not provide compliance testing to verify, and do not otherwise verify, the proper use of the Type M "M8" labeling by others.

Q: Do all LTO-8 tape library products support LTO-7 Type M media?
A: This depends on the LTO-8 tape library vendor. Please consult your product documentation.

Q: Do all LTO-8 standalone tape drive products, i.e. not installed in a library, support previously initialized LTO-7 Type M media?
A: Yes. However, LTO-8 standalone tape drive products will typically initialize new, un-initialized LTO-7 media as LTO-7 Type A media (6 TB native) regardless of the barcode label that is applied. Please consult your product documentation.

Q: What happens if an LTO-7 Type M media is loaded into an LTO-7 tape drive?
A: The drive will post an error message indicating that the cartridge format is incompatible and will not thread the media. In other words, an LTO-7 tape drive will not be able to load an LTO-7 Type M media.

Q: Will LTO-9 tape drives be backward compatible with LTO-7 Type M media?
A: Only LT0-8 Drives will be capable of reading LTO-7 media initialized as LTO-7 Type M media. If backward read in LTO-9 drives is required LTO-8 media should be used instead.

Q: Will LTO-7 Type M media support LTO format existing features?
A: LTO-7 Type M media will support existing LTO format features including data compression, encryption and partitioning enabling LTFS. LTO-7 Type M media will not be supported on WORM cartridges.