

RAIT and Tape Virtualization

RAIT (Redundant Array of Independent Tapes)

- Organization similar to RAID

Tape Virtualization

- Example Neartek's VSEngine
- Product functionality:
 - Independent of any particular backup peripheral
 - Supports simultaneous, sharable backups for heterogeneous hosts
 - Centralized management of resources and of their sharing
 - Fast data backup and restore thanks to a RAID cache
 - The ability to provide multiple volumes on a single cartridge (Dynamic Volume Stacking)
 - Automatic volume duplication
 - Compatible with the most widely-used backup software, such as Netbackup, ArcserveIT, TSM, Networker...

	SAIT-1	SDLT320	Ultrium LTO (Generation 2)
Capacity (native)	500 GB	160 GB	200 GB
Capacity (compressed)	1.3 TB	320 GB	400 GB
Transfer Rate (native)	30 MB/s	16 MB/s	30-35 MB/s
Transfer Rate (compressed)	72 MB/s	32 MB/s	60-70 MB/s
MTBF at 100% duty cycle	>300000 hours	250000 hours	250000 hours
Media Formulation	AME	MP	MP
Media Form Factor	Single reel, half-inch cartridge	Single reel, half-inch cartridge	Single reel, half-inch cartridge
Media length	600 m	600 m	600 m
File Access Time	70 s	70 s	52 s
Media Load Time	23 s	40 s	15 s
Memory in Cassette	Yes	No	Yes
WORM Capable	Yes	No	No
Published Roadmap # of Generations	4	4	4
Roadmap Maximum Capacity (Native)	10 TB	1.2 TB	1.6 TB
Roadmap Maximum Performance (Native)	240 MB/s	100 MB/s	No
Multiple Manufacturing Sources for Drives and Media	Yes	No	160 MB/s