Recycling of LTO Cartridges

Destroying cartridges is expensive

Most decommissioned cartridges are destroyed. Destroying cartridges is expensive and hostile to the environment. Our technology offers an alternative that is environmentally friendly and also saves you money.

Decommissioned cartridges could often be redeployed within the same enterprise. Instead of purchasing new cartridges, a data center within an organization could use decommissioned cartridges from another data center.

In other instances the decommissioned cartridges can be sold to the large and vibrant used LTO cartridge market.

Instead of paying to create toxic waste, create as good as new cartridges
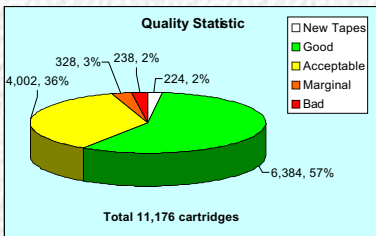
Erasing the data

Before media is moved even within an enterprise, the data have to be completely erased. Our equipment is capable of erasing the data at a level that is unrepresented. The erase procedure is secure and fast.
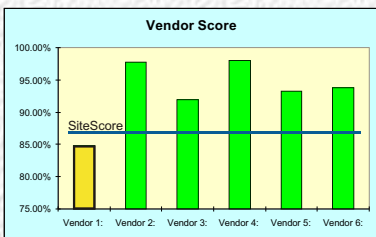
Knowing the cartridge quality

Even when the cartridge comes from a data center of the same enterprise, its condition may not be known. It could have been used past its life time, or it could have been used in a mis-adjusted tape drive. Our equipment analyzes the complete history of the cartridge and gives the recipient a comprehensive report.

Quality Statistic
- New Tapes
- Good
- Acceptable
- Marginal
- Bad

328, 3%   238, 2%
4,002, 36%   224, 2%
6,384, 57%

Total 11,176 cartridges

The **Quality Statistic** graph on the left shows an example of 11,176 cartridges that were erased with our equipment. 57% of the tapes are good , 36% are acceptable, 3% are marginal, 2% are bad, and 2% are new tapes.

Vendor Score

The **Vendor Score graph** shows the per Vendor results. Vendor 1 in this example has the lowest overall score of about 85% (Acceptable). The 5 other vendors all have scores above 90% (Good). The **SiteScore** is the total quality score for all erased cartridges (the blue line in the graph at about 87%). Vendor 1 (with a disproportional high number of cartridges) is just a bit below the SiteScore line, all other Vendors are above.

In addition, we also generate a **Detailed Report** for each cartridge. The detailed report includes:

- the score value of each cartridge
- the date & time of erasure
- the model and serial numbers of equipment
- the tape edge quality
- the number of mounts of the cartridge
- plus many other details.

Methods of Erasing the data

We offer two erasing methods to choose from:
Secure Erase™ a highly secure method to remove all data.
Quick Erase™ a very fast and economical erasing method.

Secure Erase™ for extremely security sensitive sites

Owners of tape cartridges must have complete confidence that the data have been erased before the cartridges are discarded. Whether the cartridge is redeployed within the same organization or sold outside the organization, protecting the data confidentiality is paramount. Secure Erase is the best available technology to remove the data.

Secure Erase™ is more secure than overwrite

When data are overwritten by the same type of equipment that originally wrote the data, some of the original data remain on tape. With sophisticated methods, these data can be recovered.
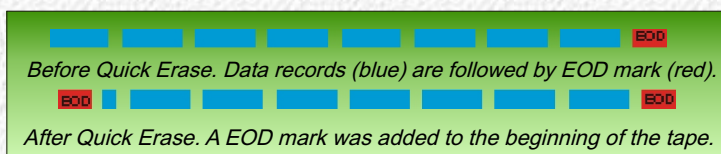The erase component in the Secure Erase equipment generates magnetic fields that are many times more powerful than the write components in a tape drive. This strong magnetic field penetrates the entire magnetic layer of the tape and removes the data entirely.

Secure Erase™ is much faster than overwrite

Secure Erase takes less than 4 minutes per cartridge. It can take several hours to overwrite a cartridge, making this process very expensive.

Quick Erase™, the economical alternative

Quick Erase is the fastest and most economical way to erase a cartridge. It takes less than 1 minute per cartridge. LTO drives use an "End of Data Mark" (EOD) mark to indicate the end of the recording. After the last data record (blue in the picture below), an EOD (red) mark is written. Data beyond this mark, such as data from a previous write operation, are inaccessable to all LTO drives.

Before Quick Erase. Data records (blue) are followed by EOD mark (red).

After Quick Erase. A EOD mark was added to the beginning of the tape.

All LTO drives discontinue reading as soon as the EOD mark is found. An EOD mark at the beginning of tape indicates empty tape.

Quick Erase™ prevents access to remaining data records

Accessing the remaining data beyond the EOD mark requires sophisticated knowledge and equipment. Quick Erase prevents not only accidental access to the remaining data, but also prevents all but the most sophisticated deliberate attempts to read the remaining data.

Both the Quick Eraser and the Secure Eraser are stand alone units. No host computer, interface cables, device drivers, or other problematic modules are required. Just power on and you are ready to erase.