Protecting Long-Term Data Archives Stored On Removable Media

A sometimes-overlooked threat to valuable data archives is the obsolescence of the hardware and software needed to read the data. Planning for system obsolescence is critical. It's necessary to calculate the useful life of your hardware and the software. Be sure to consider all the factors, including the computer platform, the operation and application software, as well as the peripheral hardware. Meet with manufacturers of the products and consider their plans for future products and backward compatibility.

It is important to migrate your data to a new storage format before your old format is past end-of-life and obsolete. Once you determine the useful life of your system, you can archive data during the first-half of this period and migrate your data to a new format during the second-half of this useful-life period. It is important to adjust your plan on an ongoing basis. Market conditions and technology changes can affect the support for competing technologies in unforeseeable ways.

Another important factor to consider is care and handling of your data archives and the expected life of the physical media. With proper care today's storage media will be useable much longer than the expected life of the systems needed to use the media.

However, it is prudent to monitor the readability of your removable media archives on an ongoing basis. For Data Storage Tape media, control tapes can be archived for the purpose of health-checking the archives.

Control tapes would be duplicate recordings of some small subset of archived data that are occasionally made and archived along with a larger group of primary archive tapes. These control tapes can be returned from the archive, read and then placed back into archival storage. Test read control tapes on a predefined schedule. This will act as a reminder to maintain a compatible system environment for your oldest archives.

By using control tapes to check the archive, you don't place the actual primary archive data tapes at risk. If at some point a problem is encountered reading the control tapes, help can be solicited before trying to read any primary archive tapes in the same group.

The information presented here is just a small snapshot of proper data management that can ensure your data will live forever. Please contact us to discuss your strategy, plans and technology options. Proper media care and planning for the timely migration of valuable data archives is a cost-effective strategy.


For questions or comments, go to “Ask the Expert” in the Technical Center.