

XenData

Your Digital Assets
Preserved | Accessible



XenData Oil and Gas Industry Case Study: Ovation Data Services, USA



Ovation Data Services is a highly regarded world leader in digital data management and preservation. Many of Ovation's clients are in the oil and gas industry and the company has extensive experience in handling geophysical data.

Since its founding in 1976, Ovation Data Services, Inc. has helped companies preserve the integrity of their vital information assets. Ovation has provided services and solutions for over 1500 companies within the past three years. Ovation can help recover, retrieve, transfer or store virtually any piece of data while offering a rigorous verification process to ensure accuracy. Ovation Data Services has virtually unlimited ability to duplicate and translate digital data. This includes the transcription of information

between any type of media or format. If the customer has information on a media that has become obsolete due to age, interface, availability or system upgrades, Ovation can provide the bridge between the old and the new. Without this bridge, such data may become worthless and can even become a liability.

The company's Technology Center in Houston, Texas has over 40,000 square feet of production and storage space and it is capable of handling the largest of data management and preservation projects.

The Challenge

Ovation Data Services required an expandable long-term archive system that could manage large data sets which are required to be stored for many years and yet be easily and rapidly accessed when needed. The challenge for Ovation was to provide an archive and retrieval system and methodology that was stable through technology jumps, that was file type independent and easily accessible by the user when needed.

Some of their customer's information dates back to the 1960's and is still valid for seismic research for the oil and gas industry. The challenge was to select the best archival software that could span across media technology changes far into the future. Many of their customers have vast quantities of old data tapes, 9-track, even 7-track and 21-track as well as IBM 3480 and 3490e that contain data sets used for oil and gas exploration. These low-density tapes required consolidation to new physical media that allows the customer access to the stored data.

Ovation's Digital Data Stewardship program offers a 5 year subscription program whereby they will manage and store customer's data and make it available to them on the latest format media. This ongoing program requires that whatever system is used it can be upgraded easily to the next generation storage medium.

The Solution

Solution Provider: Ovation Data Services

Ovation Data Services has extensive in-house technical expertise and implement the system with their own engineering staff.

Solution Key Components

- Video Edition, XenData Archive Series software
- Sony PetaSite robotic tape library with two SAIT tape drives

Solution in Detail

Data is copied from customers either by reading their old format tapes or transferring data via FTP to the Ovation facility. It is then moved onto hard disk cache and transferred to the latest generation digital data tape for future storage. Tape input formats vary from 9 track reel tapes to DLT, IBM 3480 and 3590 as well as more current LTO formats. The data is verified after it has been copied onto the Ovation primary disk cache. It is then archived to SAIT tapes via the XenData archive software in order for it to be easily managed.

Ovation selected XenData's Archive series software as the key element for their archive system. The software manages a Sony Petasite robotic tape library and presents it as a share drive on any network. The XenData software runs on a Windows 2003 server with a disk cache that is seen as a mountable drive. It seamlessly transfers files placed in folders on the cache disk onto data tape according to rule sets that can easily be set up by the operator. For Ovation the rule set is simple:

- Copy the file from the XenData cache disk to tape cartridge.
- Write a second copy to an additional tape cartridge.
- When all copies have been written the file information is still retained on the XenData cache disk.

The second replica copy tape cartridge is used for disaster recovery purposes and is exported out of the Sony Petasite when the tape cartridge is full.



The XenData software uses the Windows file system to present the files as though they are on the hard disk cache, allowing for easy retrieval. When a request for the file is made, the software loads the required tape cartridge and restores the file to the cache disk where it may be accessed by the user. If the required file is no longer in the robotics tape library but stored on the shelf then a request for the bar code labelled cartridge can be issued to the operator who then proceeds to load the tape cartridge into the robot and the file is automatically restored to the XenData disk cache. This allows Ovation to store vast quantities of deeply archived customer data on the shelf.

Key to Ovations business is XenData's method of storing data on the tapes. XenData uses the standard TAR format instead of a proprietary format used by other vendors ensuring that the tapes can be read long into the future even without the XenData software, thereby guaranteeing ongoing archive accessibility and transportability.

Over a 2 year period Ovation has archived approximately 100 TB of data stored in the Sony Petasite with another 200 TB on the shelf that is also managed by the XenData software.

The Results

The archive system fulfilled every one of Ovation Data Services' requirements. They were able to implement a highly scalable digital archiving system which manages an unlimited volume of data, and automatically generates duplicate tapes for additional data protection.

A key factor was XenData's use of the POSIX standard TAR format. This ensures that the files can be read for many decades into the future, independent of the XenData software.

The Future

Ovation plans to update its library by adding LTO4 tape drives to their current archive system for in house use. They also plan to provide customers with secure remote access to their data stored at the Ovation facility.

For more information, visit www.xendata.com or call us:

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