

Customer Success

Orchid Cellmark, Inc.

Key Highlights

Business Profile

DNA testing services company operating in the U.S. as well as internationally

Industry

Biotech

Challenges

- > Improving backup window timing
- > Regulatory compliance considerations
- > Migrating away from tape systems

Solution

- > One DD560, four DD530, and two DD510 systems
- > Data Domain Replicator software

Benefits

- > Assurance of regulatory compliance
- > Accelerated ROI
- > Extended local retention
- > Faster, more reliable backups and restores
- > Eliminate tape as our primary recovery system

Backup Software and Tools

- > CommVault Galaxy and Backup Exec

Competitive Challengers

Recovery Networks
ExaGrid
Iron Mountain
Traditional tape library systems

Reliability: A Paramount Focus

Orchid Cellmark, Inc. is a leading provider of identity DNA testing services for the human identity and agriculture markets. In the human identity area, the company provides DNA testing services for forensic, family relationship, and security applications. In the agriculture field, Orchid Cellmark provides DNA testing services for food safety and selective trait breeding.



Orchid's business carries strict regulatory compliance requirements and distinct continuity objectives. The Data Domain solution has provided Orchid with the reliability it needed to meet those compliance requirements and feel secure that its operations and data were readily recoverable. In addition, Orchid achieved a fast return on its investment and was able to extend its on-site retention of data from one week to six months.

Customer Challenges

As an international enterprise handling highly sensitive data, Orchid Cellmark relies heavily on its IT infrastructure to support its day-to-day operations. It had become apparent to the IT team that the individual tape backup systems they relied on were becoming less and less effective at supporting their operations.

According to Carlos Ramos, Executive Director of Information Technology and Security for Orchid Cellmark, "We had tape libraries running non-stop in all our locations. Our backup windows were getting really large and we were barely completing our backups every night before operations began in the mornings. In addition, some of our operations were expanding to multiple shifts, which made it even more challenging to address the requirements of the business from a backup strategy perspective."

But increasing backup window difficulties were only a part of the problem. Orchid's tape systems were not only time-consuming and difficult to use, they were becoming unreliable. Mr. Ramos and his team recognized that, as their data continued to grow and their operations changed, their existing tape backup systems carried a distinct level of risk. A major hardware and/or software failure could have a significant impact on operations. Mr. Ramos explains, "More than anything, we needed a more reliable product. The inherent risks with tape served as a catalyst for change."

Also, given the sensitive nature of the data it handles, Orchid Cellmark faces significant regulatory compliance requirements.

Mr. Ramos says, "We deal with a lot of government agencies that have unique requirements, and must ensure the continued integrity of our systems and our data. We needed a system that was fast, reliable and simple to operate to meet all of our compliance and data protection requirements as well as being able to recover any of our laboratory operations in case of a disaster."

Data Domain Solution

As a result of some of their experiences with tape, Orchid Cellmark abandoned plans to expand their tape libraries and began looking into disk-based backup systems. After a comprehensive search and ROI study, the company conducted a successful pilot with Data Domain, then moved forward rapidly with deployment of systems into of their US- and UK-based data center locations and backup facilities. Initially, local backup was established at the datacenters, then Data Domain Replicator software was tested and configured to provide replication of data offsite for disaster recovery purposes.

Mr. Ramos explains, "We initially deployed a total of seven Data Domain systems, one in each of our U.S. locations with additional units in our backup facilities. We currently have one system in our U.K. office and we're going to add another system there to do replication to a local DR site. We're also growing our systems in the U.S. as our other sites grow and these units were designed with growth in mind. By year end, we will have all sites replicating to our New Jersey-based datacenter."

"Data Domain not only delivered but absolutely went above and beyond our expectations. By even the most conservative estimates, the Data Domain system is giving us all the ROI we needed and more."

Carlos Ramos
Executive Director of Information Technology
and Security
Orchid Cellmark

Orchid is currently protecting approximately 7 Terabytes of data with Data Domain. This includes financial systems data, flat file data, Exchange data, Oracle data, SQL data, laboratory data from various instruments and output from expert systems, all of which carry critical data integrity, security, and regulatory compliance requirements.

Business Benefits

With its Data Domain systems in full production, Orchid Cellmark is seeing a significant return on investment and numerous process benefits. Mr. Ramos reports, "We did a full ROI study on the project. Taking into account all the manpower involved in maintaining the tape systems and our offsite transportation and storage costs with Iron Mountain, by even the most conservative estimates, the Data Domain system is giving us all the ROI we needed and more."

Within weeks of implementation, the company achieved an average compression rate of 29x with the Data Domain solution. Ramos says, "We're ecstatic about the results that we're getting already, and the savings and efficiencies are only going to keep getting better."

The Data Domain system has also greatly simplified the compliance process. According to Mr. Ramos, "We get daily reports from the Data Domain systems that are automatically generated with all kinds of internal health analysis, and this has been very impressive. We've actually used these reports in our audits to show that the data being saved to disk has built-in resiliency and that it's being reliably maintained." He adds, "Our type of business carries with it some unique requirements. For example, we have to be able to prove that any data pertaining to a person exonerated of a crime is no longer in our databases. The Data Domain product helps us meet those requirements very effectively."

The Data Domain solution has also enabled longer local retention of data. Mr. Ramos explains, "We used to be able to keep a week's worth of data in-house and were constantly sending and recalling tapes. With the Data Domain system, we have a full six months of data in-house that we can go to at any time."

Ramos concludes, "Backup and restore performance has been outstanding: approximately 9 to 10 times faster than our previous tape systems. Data Domain not only delivered but absolutely went above and beyond expectations."

Data Domain

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