



Market

Biotechnology/
Pharmaceuticals

Application

Data Storage and
Retrieval

echive Highlight

Database application
for Rimage CD
duplication

Tools Help Meet Storage and Retrieval Needs for Medical Research Firms

Challenge

Some specialized industries, often science related, are required to store and retrieve large amounts of data. One such industry includes the biotechnology and pharmaceutical sectors where the US Food and Drug Administration has stringent data reporting and archiving requirements. The FDA's responsibility for authorizing treatments for the many illnesses we face mandates a vast amount of data from the biotechnology firms. These companies are required to supply historical records to the FDA in digital form with easy retrieval capability. Typically, 75 CD's per week may be necessary to meet these data requirements. Automating the production, storage and retrieval of laboratory data is mandatory to efficiently service FDA needs.

Solution

Rimage, the leading manufacturer of CD production systems, needed a front-end database system to offer a complete CD storage solution. The echive[®] Series is a powerful and unique database system for indexing and searching the content of scanned and existing documents. echive Organizer provides a customizable database management system that indexes and stores huge amounts of data. These databases are publishable to CD/DVD or to XML/ODBC for intranet applications. echive Explorer, available in multiple formats, offers extensive search and retrieval functionality.

For one biotechnology company, Open Archive Systems, Inc. developed a customized media publishing utility to use with the echive document management solution. This utility automatically captured weekly laboratory data and extracted file timing characteristics. This information could then be indexed into an echive database created by our standard echive Organizer software. echive Explorer, a desktop viewer, was used to provide file search and retrieval, identifying the desired CD or CD packet. Rimage hardware provided an automatic CD duplication solution using source tools created by echive.

Process

In our example, the data administrator invokes the custom echive Media Publisher utility weekly. This utility extracts date stamping data for each laboratory record and indexes it into the appropriate echive database, storing lab animal ID, lab start date, end date, etc. The files are segmented into CD volumes for each weekly run and production jobs are submitted to the Rimage system for writing to the CD's.

The Rimage production system accepts the job files and label information created by the echive Media Publisher utility. The CD's are automatically produced with no user intervention. Doctors, laboratory technicians and FDA personnel can then access echive Organizer or Explorer to locate laboratory data. echive Explorer provides search methods to locate information: full text searching on any word in any file and database property searching (animal ID, date, title, lab technician, etc.)

Results

As seen with most echive implementations, biotechnology customers cite cost savings, ease of use and reduced risk with echive solutions. Cost savings are realized with reduce labor maintaining the data and increased user productivity. The intuitive and accurate data access provided by echive guarantees user satisfaction. By providing data at researcher's fingertips and efficiently meeting FDA information requirements, biotechnology customers reduce their risk of errors and regulatory problems.