DAX Archiving Client

Automated archiving saves valuable hours/day

Saving valuable working hours each day and keeping the equipment in optimum shape by means of automatic archiving of the DAX On-Line Archive Solution

DAX Archiving Solutions provides digital archiving solutions to clients around the world.

One such client is the **National Institute of Allergy and Infectious Diseases** (NIAID), part of the U.S. National Institutes of Health, which conducts and supports basic and applied biomedical research to better understand, treat, and ultimately prevent infectious, immunologic, and allergic diseases.

The challenge

NIAID deploys **about fifteen microscopy systems from various brands**. Each microscope is controlled by a PC that stores the data gathered from experiments.

For research purposes, cells and tissues are scanned and analysed. A single four hour scan session generates between 100 MB up to 20 GB of data. All microscopes generate together in average about **half a TeraByte of data each month.**

These vast amounts of data generate **operational problems** when hard disks of the computers fill up, blocking the start of new experiments.

Hence in the past the staff of the department had to constantly 'clean' the computers by inspecting data sets and removing/archiving data **manually** on DVD.

All experiment data **needs to be archived for at least a period of three to five years,** as researchers may come back, asking for copies of their data for re-inspection or reporting purposes.

The solution

In order to overcome the inefficiencies of manually managing and archiving data on DVD, NIAID deploys the **DAX On-Line Archive** with a 1 TB hard disk cache in conjunction with **File & Folder Archive Software (FFA)**.

A special script runs on each microscope which scans the hard disk for new experiment data.

This data is **copied automatically** to a central archive server and archived using the XML-interface of FFA.

The XML mechanism is also used to add appropriate metadata to the archived experiment data.

FFA provides **automatic off-loading of the microscope PC's hard disks**, which therefore do not require anymore dedicated inspection or so-called manual cleaning.

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Secure the Future of your History
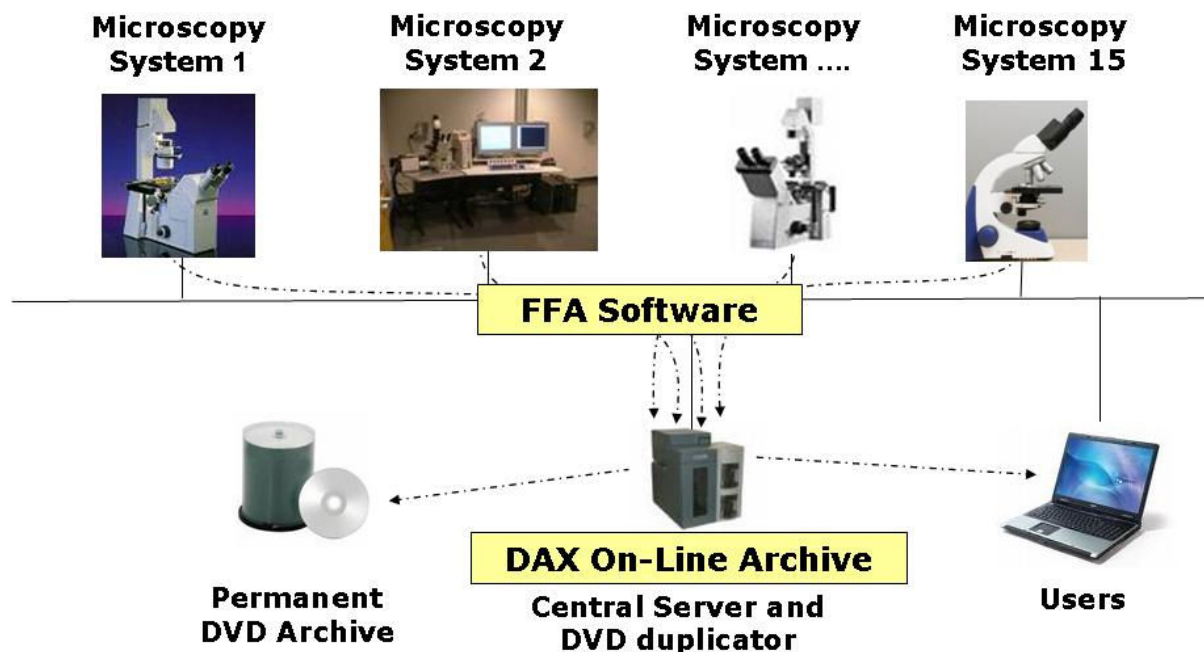
The data on the **central server** is archived fully automatically to DVD. This involves a **robotic mechanism that burns and labels all archive disks automatically**.

The robot can be fed with stacks of DVD disks, facilitating a fully automatic operation.

After archiving, the **data is kept in the on-line archive cache as long as possible**.

In practise this means that users/researchers can access their experiment data for a period of about 2 months directly on the network.

Older data can be accessed by restoring it from DVD's which are straightforwardly identified through the system by means of the (printed) label information.

In summary, the complete solution provides:

1. **Automatic archiving** of all experiment data as it comes in from the microscopes, resulting in increase in efficiency of the laboratory staff.

2. The PCs controlling the microscopes are **kept clean automatically** by means of the script that migrates the data safely to the file server.

3. All data is now **archived reliably and uniformly** as a result of the automated process that is implemented.

4. The system can **easily be scaled** to accommodate higher capacities as more microscopes or new technologies emerge.

See for more information: **www.daxarchiving.com:**
- DAX On-Line Archive
- DAX File and Folder Archive Software