AGILENT OPENLAB CDS

Chemical Manufacturer Moves Lab into the Future with OpenLAB Chromatography Data System

Customer Profile:
DuPont Louisville Works

Established in 1955, the Louisville Works facility of E.I. DuPont de Nemours & Company is one of the world's leading manufacturer of chemical refrigerant. In addition to manufacturing refrigerants under the Freon® and other brands, the plant also produces vinyl fluoride and hydrochloric acid for worldwide distribution.

To satisfy growing demand for their products, busy chemical manufacturers everywhere face the need to maintain high quality standards while increasing production levels. Required to manage costs, lab managers must strike the right balance between increasing lab productivity and reducing cost.

Quality standards apply to every aspect of lab operations from sample analysis and data processing, to data and asset management. A differentiator – and critical element to laboratory efficiency – is the chromatography data system (CDS) used, which controls instruments and acquires, processes and reports data as part of the essential tasks performed in the laboratory.

The situation

In its state-of-the-art quality control (QC) laboratory, DuPont Louisville Works uses twelve Agilent gas chromatographs and several third party autosamplers. Prior to their upgrade to OpenLAB CDS, these GCs and autosamplers were controlled by different revisions of Agilent ChemStation. To manage its scientists' work lists, samples, instruments and results across the lab, the company is using a laboratory information management system (LIMS). Microsoft Excel macros are used to produce customized reports and to automatically execute post-run programs to send critical data to strategic personnel. The trigger for the move to OpenLAB CDS was DuPont's desire to maintain control of its software environment and upgrade the lab's workstation computers, which were still running on Windows XP. The customer's move from Windows XP to Windows 7 represented a great opportunity to also upgrade the lab's chromatography data system and benefit from new software innovations. And because OpenLAB CDS' modern 64 bit operating systems and IT-friendly architecture is also seen as an advantage, DuPont's lab was able to retain the familiar look and feel of the ChemStation software it had successfully used for many years, while realizing important productivity gains in the process.

Agilent Technologies

The OpenLAB solution

Having been a long-term and satisfied user of older revisions of ChemStation software and Agilent equipment in its 24/7 operated lab in the past, the choice to stay with Agilent was easy. In addition, to ensure software and PC hardware compatibility – and receive fast shipment from a single vendor in the process – the company decided to purchase its new computers from Agilent.

One of the many benefits of maintaining an active software maintenance agreement is the ability to always have access to the latest software. This entitlement allowed DuPont Louisville Works to transition the existing Agilent ChemStations to OpenLAB CDS software at no charge. To speed up the deployment of OpenLAB CDS and minimize downtime, the company took advantage of Agilent's services offerings and purchased installation and familiarization services, which were delivered by Agilent's services personnel as part of the larger DuPont multi-site transition.

"We have been very well supported throughout the migration; especially during a local electrical brownout, which completely disrupted operations, Agilent personnel went above and beyond to ensure that we were up and running again in record time."

DANIELLE VEREEN
ANALYTICAL CHEMIST, DUPONT

Moving Workflows Forward With Minimal Disruption and Downtime

DuPont's Louisville Works site was one of the first DuPont sites in the U.S. to make the transition to OpenLAB CDS. An Agilent field service engineer installed the PC's, loaded the software and generated the customer's permanent licenses. In close collaboration, DuPont's LIMS experts and Agilent's service engineer modified an existing macro to allow continued free flow of data from CDS into LIMS, and ensured successful integration of the existing LIMS implementation with OpenLAB CDS ChemStation software in a matter of days.

Sequence and method migration presented a lesser challenge, although it was necessary to confirm method parameters were set up as before the transition on each of the lab's GCs. In the end, the customer's concerns about potential downtime and instrument incompatibility were not realized; in fact, the lab was up and running just days after the initial work began.

Productivity Benefits Realized Using OpenLAB CDS

DuPont Louisville Works reports tangible benefits such as significant time savings related to automated data reporting and greater efficiency overall. With OpenLAB CDS ChemStation Edition it is possible to save methods faster than ever before, and it now requires fewer manual steps to review, reprocess and report data. Using the Control Panel in OpenLAB CDS, user management is simplified, including definitions of roles and permissions.

Fast Knowledge Ramp-up Aided by eFamiliarization

Since its move to OpenLAB CDS, DuPont reports a high level of satisfaction with their new software. "Learning and using OpenLAB CDS software has been really simple. I was particularly impressed with eFamiliarization. This is a fantastic learning tool that I will definitely use to teach others about our new software and its capabilities," says Vereen.

OpenLAB CDS provides:

- Smooth transition with full method, data compatibility, and a familiar user interface.
- Reduced operating costs through centralized administration.
- Create reports faster using drag-and-drop
- Real-time insight into and control of analyses and instrument status.
- Improved performance with comprehensive instrument control.
- Ability to scale the system from workstations to multi-site enterprises.
- Valuable self-paced learning tools to help users get up to speed quickly.

View the curriculum options and install flash

Launch topic modules for OpenLAB CDS ChemStation or EZChrom Edition

Service checklists to prepare and install your system

Learn more with suggested courses offered by Agilent Professionals

Figure 1: The eFamiliarization launch pad enables guided learning, anytime, anywhere.

Important Takeaways: Planning and Preparation Are Key

Prior to the move to OpenLAB CDS, analytical chemist Danielle Vereen had taken proactive steps to prepare her laboratory – ranging from taking inventory of the lab's instruments, software and documented firmware, software versions, as well as listing the IP addresses of the various instruments and PC's. Additionally, Vereen took the action to familiarize herself with the features of OpenLAB CDS ChemStation Edition by reviewing the available material on Agilent.com. Vereen's hands-on approach to this project was instrumental in setting the proper expectations and getting the lab up and running in record time. "Having prepared for the migration was a good investment of my time. Equally important is taking the time to train those who are running the samples and identify anything that has changed. To help with that, I selected the appropriate modules that eFamiliarization provides as my training tools," says Vereen.

To learn more about the OpenLAB Software Suite, visit:
www.agilent.com/chem/openlab

To learn more about the OpenLAB CDS, visit:
www.agilent.com/chem/openlabcds

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