

## LIMS Migration

Pfizer Consumer Healthcare's successful migration from LabManager to SampleManager

**Pfizer Consumer Healthcare (PCH), a division of Warner-Lambert Company LLC, a wholly owned subsidiary of Pfizer, Inc., selected SampleManager LIMS™ from Thermo Electron Corporation to replace the LabManager LIMS operating in multiple analytical laboratories at its Consumer Healthcare headquarters in Morris Plains, N.J. Key products from Pfizer's \$3.5 billion Consumer Healthcare division include Benadryl®, Neosporin®, Sudafed® and Visine®. How PCH successfully migrated to SampleManager – including stability data and active studies – is the subject of this paper.**

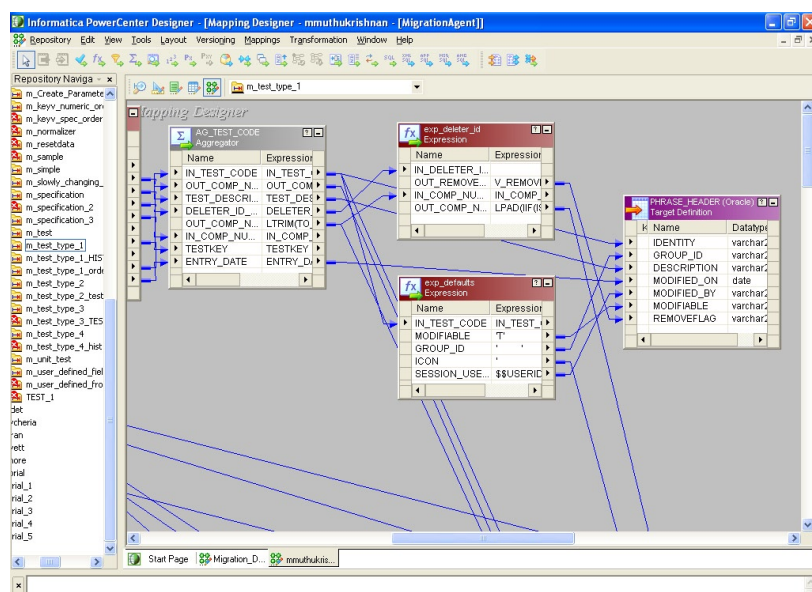
### The situation

In 2002, PCH R&D was using LabManager 8.4a running OpenVMS 7.1 in multiple labs for approximately 70 users at its Morris Plains, NJ, campus. The system had last been upgraded in 1998, from a previous version of LabManager that was deployed in the early 1990s.

PCH's decision to update its laboratory information management system for PCH R&D was based on several compelling factors:

- OpenVMS was difficult to support and becoming obsolete
- LabManager did not meet PCH R&D's evolving business needs for security, network interfacing, electronic communications
- PCH R&D's desire to trend stability data within a single system
- InnaPhase Corporation, which acquired LabManager from Beckman Coulter in 2003, had announced it would enhance and support LabManager through 2013 (InnaPhase was subsequently acquired by Thermo Electron in September 2004 and the horizon for LabManager remains the same.)

Given these factors, PCH R&D decided to develop criteria for selecting a new LIMS by assembling a team of major stakeholders to generate system requirements that would support their work well into the future. The core team included representatives from the analytical laboratory, stability and calibration, the pilot plant, formulation and product development, raw materials, quality assurance, and information technology. Previously, the LIMS had been run entirely by analytical laboratory personnel without any involvement from PCH



Global Business Technology. With the new LIMS, this would change with PCH Global Business Technology assuming responsibility for overall project management and ongoing maintenance. The new system would be supported by Global Business Technology and meet all of PCH Global Business Technology's systems development standards.

### Criteria for a new solution

PCH R&D was looking for a highly configurable LIMS with as much capability "out of the box" as possible to avoid the expense, resources and time involved in supporting a custom LIMS. A solution that met PCH R&D's business requirements while appealing to end users was also critical.

Detailed requirements were developed by users, covering business, technical, security and compliance requirements.

"We didn't make any assumptions about what a system would bring to the table," said Erik Kopp, Manager, Laboratory Information Systems, for PCH R&D Technical Affairs. "We took the extra step to spell out exactly what we wanted."

### Selecting SampleManager

Based on demonstrations by leading LIMS vendors and a point-system evaluation of how each vendor's LIMS met extensive user requirements, SampleManager emerged as the preferred solution.

"Any number of these systems could have eventually met our needs, but we wanted a LIMS that required the least amount of customization," Kopp said. "SampleManager seemed highly configurable with the most out-of-the-box functionality. From a user standpoint, they liked SampleManager because the interface was intuitive. It's not complex. It's easy to use and to find your data."

Vincent Cantarella, Project Manager for PCH Global Business Technology, stated that SampleManager's configurability "over the long-term reduces your total cost of ownership – the cost to maintain the system and of future upgrades."

SampleManager met PCH's technical requirements, in terms of compatibility with PCH's standards, operating systems and databases. Audit trails, electronic signatures and the ability to be 21 CFR Part 11 compliant were standard. In addition, key business requirements for stability, raw materials, research and the like could be met with minimal configuration.

Kopp said PCH was also comfortable selecting Thermo, a Fortune 500 company with good references.

Vincent Cantarella and Erik Kopp, representing PCH Global Business Technology and business project leadership respectively, then developed a project proposal which provided business justification, secured funding, identified resources, and outlined a timeframe for deployment.

Funding and approval to license SampleManager was secured in March 2003.

### Implementation and Validation

PCH then selected a third-party vendor to handle the system integration, validation, migration and training. The system integration and validation was completed in 13 months, with "go live" in April 2004. With SampleManager up and running, PCH was now faced with the task of migrating stability and select other data from LabManager to SampleManager.

### Data Migration

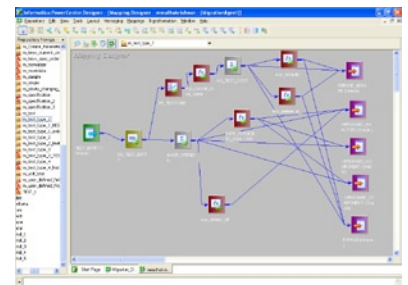
Earlier in the project, PCH R&D evaluated its options for data migration:

1. Do no migration and begin by loading new studies into SampleManager
2. Migrate only completed stability studies from LabManager to SampleManager, or
3. Move both completed and active stability studies into SampleManager.

Reference interviews indicated full data migration was no easy task. However, PCH explored what was possible and determined that PowerCenter by Informatica, a software tool that is currently part of Thermo's new Migration Agent process, was best suited to successfully migrate data from one LIMS to another. This method would allow PCH to successfully migrate all static and dynamic data for all active and complete stability studies in their entirety. It also allowed the migration of instrument inventory data to avoid manual data entry on numerous instruments.

PCH decided to move all its stability data because stability studies often last 3-5 years and there were numerous active studies in LabManager. There was concern for the longevity of the OpenVMS operating system that LabManager ran on, as it was growing difficult to maintain. In addition, PCH wanted to be able to trend its data from a single source. As a Consumer Healthcare R&D lab with requirements for lifetime access to stability data, PCH's objective was to maintain that data in a single repository for easy, consistent reporting and to avoid the costs associated with maintaining an old, stand-alone system for data archiving only.

Between December 2003 and September 2004, when the actual migration took place, PCH went through a deliberate process of proof-of-concept, development, testing, and validation. The core team agreed to write validation test scripts with the purpose of qualifying the



migration of the data from LabManager to SampleManager. The intent of the qualification would be to verify that the data when migrated was transferred to the correct location, that the correct number of records was moved over, and that results and reports were the same. They also verified that SampleManager's functionality worked with data migrated from LabManager assuring that there was no difference whether the data originated in SampleManager or LabManager.

For several months, LabManager and SampleManager ran concurrently in the lab, but the net effect was described by Mr. Kopp as "the best scenario... because we did a better quality job and got it right the first time."

The actual migration of data occurred in a single weekend without any disruption to the users.

"We had done so much planning and testing, we were sure it would work," said Mr. Kopp, noting that after the data migration, SampleManager was working as expected in the Consumer Healthcare R&D labs and has been "well accepted" by users.