

## Case Study

Supporting dramatic usage growth in a mission critical LIMS System

### **Abstract**

This global multi-lab pharmaceutical manufacturing company sought Amaro and Associates, Inc (AAI) to project the operational characteristics of its highly configured Commercial off-the-shelf (or COTS) LIMS system.

### **The Challenge**

With a extensive product line, a robust product pipeline and strategic acquisitions, the company's rapid expansion required its mission critical LIMS system to be able to successfully accommodate the user and data volume anticipated in its 5 year plan.

### **How We Helped**

The AAI team analyzed the system and created planning documents to generate 100s of thousands of Lot, Job, Sample, Batch, Test and Incident records using the COTS system in a controlled environment to be used for performance testing against a load of 100s of users. Using snapshots of the database at various data volumes versus various user load levels, performance testing metrics of select functional areas of the system were collected and analyzed. The AAI team was able to provide recommended changes to the system to allow for data volume and a detailed report that included projections of the operational characteristics of the system for 1, 2, 3, 4 and 5 year planning cycles. After several years of operation, the AAI team's recommendations and projections have proven accurate and resulted in a well planned infrastructure migration in addition to application design practices that supports the planned user and data load.

### **Lessons Learned**

Data volume can have a dramatic, often debilitating, impact on system performance. A system that starts out with optimal operational characteristics can devolve into a nightmare of re-engineering. Preemptive capacity analysis, assessment, testing and growth management strategies can avoid costly operational difficulties and consequent redesign and redeployment.

*Contact us at 1-800-835-0495 for more information.*

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