

System Concepts

Lims1 is a comprehensive, Windows based, Laboratory Information Management System for entry, storage, tracking, analysis and reporting of laboratory sample data. The system combines ease and speed of operation with a high degree of flexibility for all aspects of laboratory work.

A major Lims1 feature is the provision of a comprehensive range of system Setup Tables and build-in LIMS Report Format Generator which offers un-paralleled scope in system development without the requirement of vendor or other IT support. Ref: [Lims1-Classic LIMS Comparison](#) on following page.

Ease of Use and Speed of Operation

LIMS programs are in general workhorse systems which are often in constant use on a laboratory network by a number of users performing different functions such as registration of samples, entry of results, tracking of laboratory work, response to client inquiries, creation of worksheets, creation of laboratory reports and analysis of results data. Most of these functions are done on a routine basis by laboratory, administrative or data entry staff who are continually using the program. The system has been developed within these types of laboratories based on ten years of experience and consultation with laboratory management and staff.

Lims1 provides a comprehensive range of fully integrated screen access techniques including single keystroke *Hot Key Buttons*, *Drop-down Menus* and *Tabbed Notebooks* to suit preferences of individual users. A major design consideration has been to provide very rapid and consistent data entry and reporting methods for routine operations such as sample registration login, entry of results and creations of laboratory reports. These and other functions, such and Filter/Search operations, may be done quickly directly from the keyboard. For confirmed 'mouse' users, point and click moves you quickly to all Lims1 functions. Registration, Setup Table and other data listings are displayed in large windows to provide a maximum amount of information on the screen. The overall effect is an extremely fast, easy to use system with a very high level of flexibility. This effect is particularly evident in network operations.

Flexibility

Laboratory information management requirements range over a very wide spectrum of applications. It is critical in the evaluation of LIMS programs that laboratory management insure that the system has the capability to meet their requirements. One approach to LIMS implementation is to provide a core program which is then modified by programmers to meet specific laboratory applications. This can be a very costly and time consuming process for the end user. This approach also often means that a specialist must be employed when system parameters need to be changed to meet new requirements.

Lims1 uses a unique approach by providing a system which includes a comprehensive range of Setup Tables and Utility Functions available to the user. Laboratory staff have full access to all system setup conditions. Within a few hours a user can start using the system for routine work. All database aspects are automatic and transparent. At the same time, Lims1 also employs standard desktop and client/server SQL databases which may be accessed as required by corporate IT personnel.

Product Line and Options

The **Lims1** product line includes systems to suit laboratory requirements, workload and budget. Systems may be upgraded at any time including direct transfer of all data and setup tables. System Add-in modules include Label Generator, Bar code reading, Invoicing/Accounts, Management Reporting, Instrument Interfacing, Data Calculations, Quality Control Reporting, 3rd Party import/export, Graphing of Results Data and direct Email of Laboratory Certificates and data.

LTech offers custom Website development services for publication of information to laboratory clients including work statuses, results, certificates of analysis and other information.

Lims1 - Classic LIMS Comparison

Traditionally LIMS software has been very complex/expensive to implement and maintain as most major systems require extensive database and user interface development to provide what LIMS vendors often describe as an 'off the shelf system'.

A major design criteria of Lims1 is that the system should be capable of being fully established and maintained by laboratory staff. The diagram below represents typical procedures used to establish a Classic LIMS in relation to procedures used by Lims1. Lims1 is a true 'off the shelf' system without compromise.

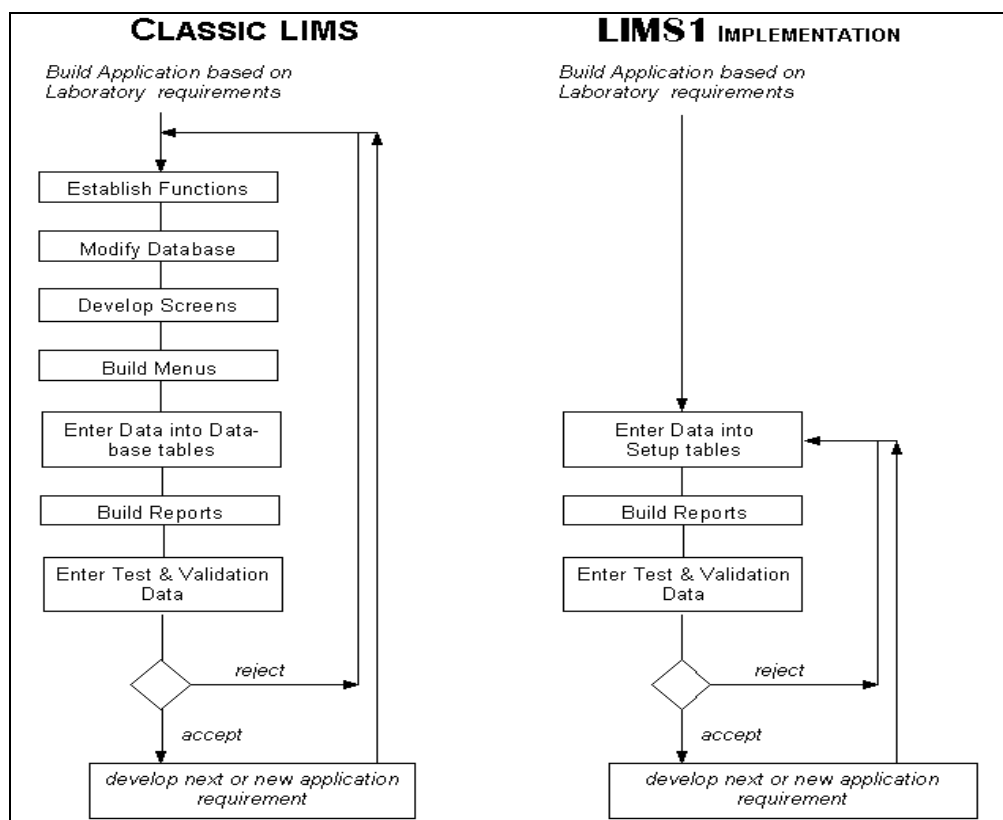
There is also an overall 'easy of use' element to Lims1 where all functions have been developed in consultation with system users to insure all setup and routine operations functions are intuitive and logical.

For new system implementations a **Lims1 Pilot System** based on laboratory work is provided at the time of initial system installation. Pilot Systems are developed based on examples of work performed and reports produced by the laboratory.

In effect this means from the day the system is installed the laboratory has a functional LIMS.

Pilot Systems are used for staff training, system review and development of on-going Setup Tables to fully meet laboratory requirements in consultation with Lims1 consultants.

The overall effect of the Lims1 approach is very rapid system implementation time with very significant saving in implementation costs and on-going maintenance costs.



System Setup Tables effectively reproduce the steps other LIMS vendors take to develop databases and application screens but allow laboratory staff to perform these operations. For example Tests, Test Groups, Methods, User Defined Fields and other LIMS related data can all be created within Lims1 Setup Tables and linked to form an integral part of a Sample Type along with Report Formats used to create Certificates, Sample Receipts, Worklists, Invoices and other types of reports.

A major part of on-going Lims1 development is the provision of new Setup Table functions to meet new Lims1 user requirements or new technologies.

The system will never be 100% compatible with all user requirements. Where these requirements are outside the scope of the core system LTech provide custom development services to meet specific applications and needs however, across our range of users no more than 20 percent of Lims1 functions are custom developed.