

The Unparalleled Advantages of Lystem™ Laboratory Data Sharing System in Application

Abstract: Lystem™ Laboratory Data Sharing System is the professional software for centralized data management of the testing data obtained from respective testers. Compared with other database software, Lystem™ Laboratory Data Sharing System has unique advantages in data transmission, storage and application, etc. This article makes a detailed introduction to those advantages.

Key Words: database, management function, automatic, working progress, original report

With the increasing attentions to laboratory database and its functions, the construction of laboratory database has become one of the important tasks for laboratories. At present, laboratory database construction has evolved from the self-construction stage to the new stage of adopting database software supplied by professional companies. Such professional software is superior in stability of performance, sufficiency of content and convenience in operation. Instrument manufacturer, Labthink, has also developed professional software to resolve the issues of laboratory data sharing and laboratory database construction: Labthink Lystem™ Laboratory Data Sharing System.

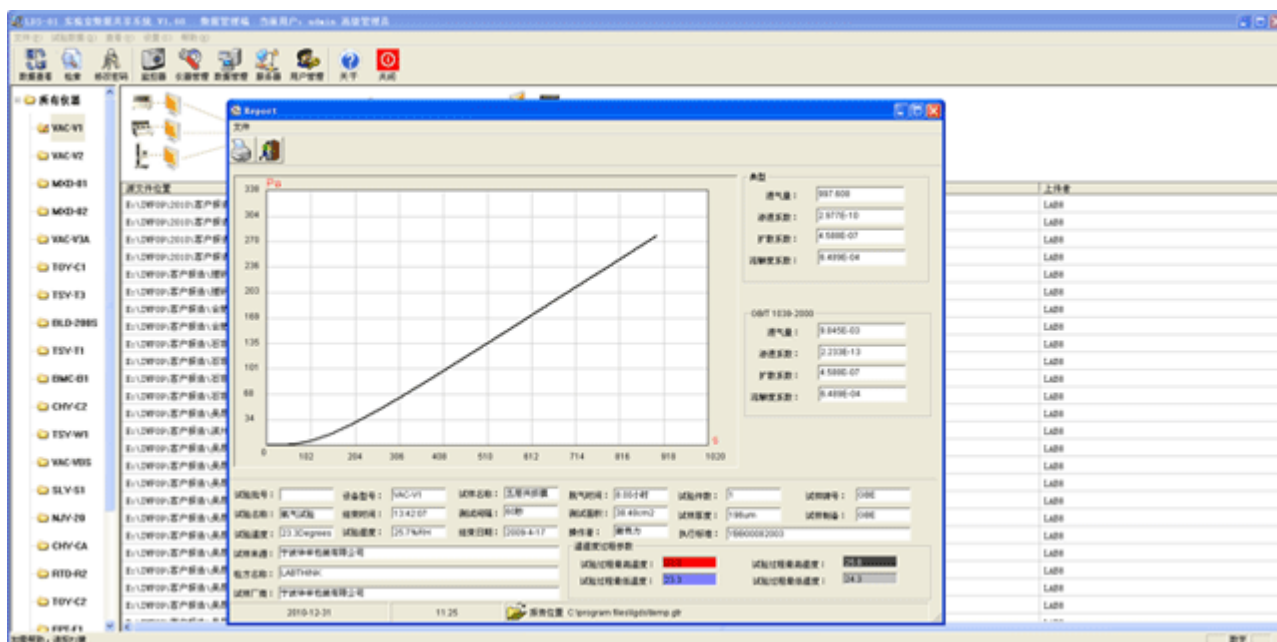
Lystem™ Laboratory Data Sharing System is the software for centralized data management of the testing data obtained from respective testers. Compared with other database software, Lystem™ Laboratory Data Sharing System has unparalleled advantages in data transmission, storage and application, etc. This article makes a detailed introduction to them.

1. Convenient Operation on Original Testing Report

As to previous software, most data are input into database by laboratory operators. Such data are varied in quantity. Though sometimes they are further categorized, it's very difficult for the database to realize functions such as inquiry for original testing report and analysis on testing data, etc. However, most or even all testing data should be accumulated in laboratory database; the searching, viewing and operation on those data are the fundamental applications of the database.

Laboratories would inspect or analyze testing data, which would require immediate demands on the original testing reports. This would be a troublesome for laboratories with great amount of testing tasks. Yet, the manually recorded data is lack of accuracy, and the simplest solution is to transmit all the original testing reports into the database for future inquiry and searching. Now, Lystem™ Laboratory Data Sharing System can solve the problem in a handy manner.

Lystem™ Laboratory Data Sharing System can realize perfect storage of testing data, including original testing report, processing data and relevant testing information, namely, the date, instrument type, operator and sample number, etc. Meanwhile, the software has the function for viewing testing reports, that is, the operators can view detailed data information of every test and original report only by logging in the database; and they don't have to turn on the instruments to run the corresponding instrumental software. Furthermore, Lystem™ Laboratory Data Sharing System can help view the report in a simple way: the operator only needs to double click the report name to view corresponding report. Data analysis, printing and other operations are the same as those of the testing software.



2. Automatic Construction of Database

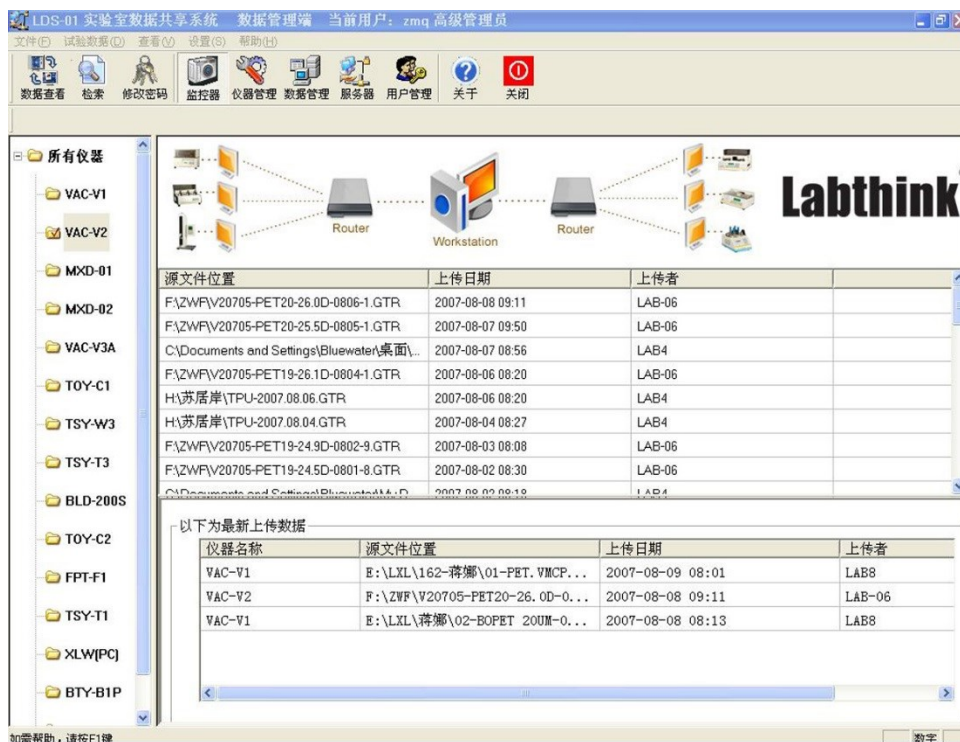
The second unique advantage of Lystem™ Laboratory Data Sharing System is its automatic and centralized management of varied instrument data within the network as well as its automatic completion of the database. The system is the professional management software for centralized management of data and reports generated from respective testing instruments. This advantageous characteristic is superior to other database software, since the construction and data input of other database are partially or completely done by the operators. On the contrary, Lystem™ Laboratory Data Sharing System can achieve fully automatic and centralized data storage. Operators need to do few works in database construction and data collection. Thus, Lystem™ Laboratory Data Sharing System can reduce the workload, which is good news, especially for large scale laboratories or busy ones. While data centralization and management are performed automatically, the safety and stability of the system is perfect. Lystem™ Laboratory Data Sharing System employs Transmission Control Protocol (TCP) to confirm accurate and rapid data transmission into the database. All the uploaded data are categorized according to the name of testing instrument, clear and definite. The users only need to log in the system and click the file name of the corresponding instrument at left side of the main interface to view the data. All the data are identical to the original information in the computers at the instrument ends.

3. Clear Working Progress

Lystem™ Laboratory Data Sharing System has a unique data monitoring function. With the help of this function, newly uploaded testing data can be viewed thoroughly and clearly. This function is especially useful for the management to learn the progress of tests.

Data monitoring function would be installed at the server end, which would only be available for senior administrators, that is, the management of laboratories. With the help of this function, the management of laboratories can learn the latest data status just by clicking 'monitor' button on the main interface after logging into the server end. Then, the latest testing information would be displayed at lower part of the main interface. Moreover, this function can better help the management learn the progress of key tasks without interfering with routine works. If problems are found by the management, they can immediately inform operators to remedy. Thus,

testing efficiency can be improved and errors avoided.



4. Accurate and Convenient Data Inquiry

Generally, massive testing data are stored in the database, with dozens of testing operators or data recorders. Such data recording process may take a span of one year, or even decades. Therefore, if the test is not a recent or an impressive one, it would be very difficult to find a certain piece of testing record. Finding the useful and definite data information should be the basic function of the database. Thus, how to provide users with more efficient and convenient data inquiry and searching method is critical to the database.

Lystem™ Laboratory Data Sharing System, based on long-term application, optimizes its inquiry method. First, the inquiry method is strengthened to be more complete and scientific. More convenient means of inquiry can provide users with better inquiry experiences with the help of flexible searching items. Second, combination function of searching items is also added. All this contribute to the location of the most valuable data within the shortest duration; thus, working efficiency is greatly improved.

At the same time, the inquiry function of Lystem™ Laboratory Data Sharing System can provide the management of laboratories with special assistance in monitoring instrument utilization ratio and working efficiency of the operators. The system can further simplify the statistical process on instrument utilization ratio, since the data uploaded to the server would be categorized according to the instrument name. Utilization ratio of each instrument can be obtained easily with high accuracy and without extra workload. The working progress and workload of every staff can also be monitored by the management, so as to better assess their achievements and allot their workload. In this way, thorough testing capability of the laboratory can be improved.

5. Conclusions

The above-mentioned distinguished characteristics help Lystem™ Laboratory Data Sharing System gain favorable responses among various laboratory databases. This system can realize excellent data arrangement, and effectively reduce workload in database construction. The application convenience of the system database would further strengthen enthusiasm for database construction, and laboratories would benefit from it.