# MSC-LIMS™ *Insights*

The source for news and tips of interest to users of MSC-LIMS,
an affordable laboratory information management system for small labs.

Issue No. 9 February, 2008

## Welcome

Welcome to **MSC-LIMS *Insights***.

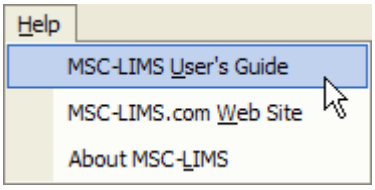
This newsletter will help current MSC-LIMS users get the most out of their software, and will complement the product literature and downloadable demo that prospective users can find on our web site at www.msc-lims.com.

Join our mailing list for more information. Sign up at www.msc-lims.com/lims/maillist.html.

This newsletter is for and about MSC-LIMS users. We welcome your comments, and your suggestions for topics you would like to see addressed in upcoming issues. Please send your thoughts to newsletter@msc-lims.com.

## Do You Have the Current Users' Guide?

Technical support responses often refer users to a specific page in the *MSC-LIMS User's Guide*, specifically when the guide has additional information to clarify the topic. Occasionally, a user's perplexed response reveals that they do not have the current version of the guide. If you have installed at least one MSC-LIMS update it is possible you may have an outdated user's guide.




Verify that all your LIMS workstations have the current version of the *MSC-LIMS User's Guide*: First, note the MSC-LIMS version you are running – it appears on the MSC-LIMS main menu. Next, click the Help menu in any LIMS screen and select "MSC-LIMS User's Guide", which will open the user's guide with your workstation's PDF viewing software. The version number appears on the *Guide's* title page.

The current version of MSC-LIMS is 3.1. If you do not have the version 3.1 user's guide, go to www.msc-lims.com. Use your web site login name and password to gain access to the File Library and download file MSC-LIMS Users Guide.pdf. Save the PDF file to the folder where MSC-LIMS is installed on your workstation (normally C:\MSC-LIMS) overwriting the older version. If you are unsure where MSC-LIMS is installed, start the LIMS, open the System Configuration screen on the Admin menu, click the System Info tab then note the LimsCode folder. Copy the user's guide to the same folder.

## In this Issue

## From the Developer

2007 was another successful year for MSC-LIMS. I'd like to extend our thanks to all of our users, and a particular welcome all the new MSC-LIMS users.

And while I never portray MSC-LIMS as a one-size-fits-all system, the breadth of applications currently supported is remarkable. MSC-LIMS is implemented in environmental, food testing, microbiology, petrochemical, process control, R&D, material testing, and medical research labs.

Next, we expect to release MSC-LIMS 3.2 in September of this year. See "What's Coming in Version 3.2?".

And last but not least, this issue of MSC-LIMS *Insights* explores "thin client computing." If you have an MSC-LIMS multi-user license and you have not considered thin client computing, take a look at the article, below, to learn the benefits of running MSC-LIMS with this architecture. Contact MSC if you want to discuss this option for your lab.

*Rick Collard is the founder of Mountain States Consulting and the principal developer of the MSC-LIMS software. You can reach Rick by email at rcollard@msc-lims.com.*

## MSC-LIMS Users May Benefit from Thin Client Computing

Many MSC-LIMS users with multi-user licenses run the system using traditional client/server architecture. That is, the MSC-LIMS front end software is installed locally on each LIMS workstation, while sharing the back end database from a shared folder on a file server. Application processing is distributed to each LIMS workstation and the data sharing and concurrency issues are handled by the file server. This architecture is simple, proven, and economical.

"Thin client computing" is an alternative architecture well suited for applications such as MSC-LIMS. The phrase describes a computing architecture where both the application software processing and data access are performed by a central server system.

The clients are "thin" since they do not perform any application processing - their only task is to exchange user input and output such as screen images, keystrokes, and mouse clicks. All application processing and data access is performed by the server.

Since only user input and output communication occurs between client and server in thin client architecture, the communication can occur over relatively slow interfaces including the Internet, wide-area networks (WAN) and even dial-up networks.

Examples of commercial thin client solutions include Citrix Presentation Server and Microsoft's Terminal Services. Terminal Services is available with all recent Microsoft Windows server operating systems.

Thin client computing is an alternative architecture well suited for applications such as MSC-LIMS. You should consider thin client architecture under any of the following conditions:

- ✓ You have more than five MSC-LIMS workstations.
- ✓ The size of your production LimsData database exceeds 100 MB.
- ✓ You have noticed degradation in performance as the number of concurrent users increases or the size of your LimsData database increases.
- ✓ You need to provide MSC-LIMS access from multiple sites while sharing the same LimsData database.
- ✓ You need to provide remote access to MSC-LIMS, for example while users travel or work from home.
- ✓ You are frequently troubleshooting workstation software problems.

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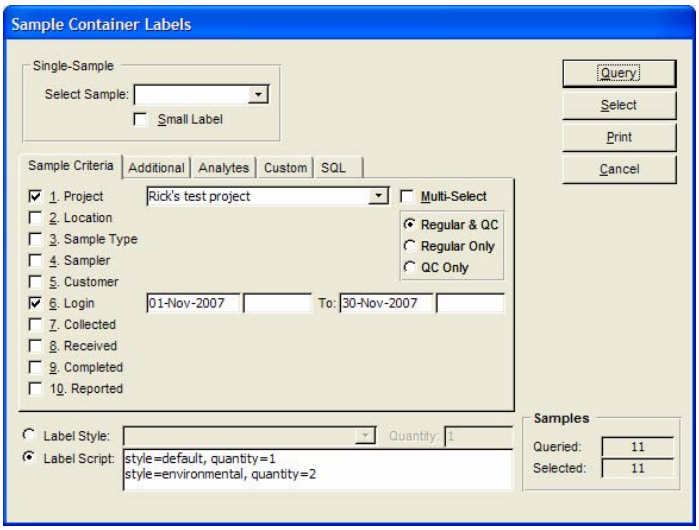
# What's Coming in Version 3.2?

We expect to release MSC-LIMS version 3.2 by the end of September this year. As always, all annual subscription licensees, and all full system licensees with current annual maintenance will automatically receive the update. Following is a summary of some of the new features expected in version 3.2.

✓ The screen below shows the updated Container Labels option on the Samples menu. Multiple labels can be quickly reprinted for multiple samples using the selected label style and quantity or a label script.




✓ New script building controls will be added to the Select Label Script popup dialog. These controls can be used to build a script with proper syntax with little or no manual editing.

✓ A new hyperlink field will be added to samples to link external documents.

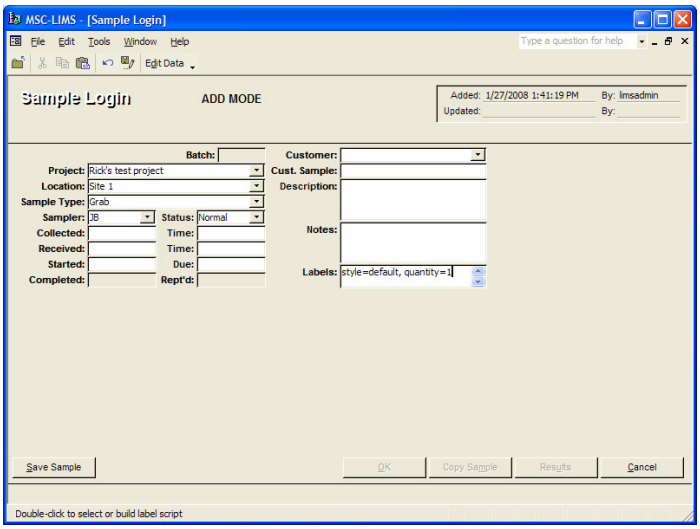
✓ MSC-LIMS Messaging will receive several significant additions. Both batch message styles and message styles with attached PDF files will be added.

✓ Label scripts will be added to project setup to configure a default label script for project samples. Label scripts will also be supported in single-sample login to print multiple label styles for a single sample.

✓ Optional audit trailing of changes to sample characteristics will be supported.

✓ New sampler and employee list reports are expected.

✓ A new option on the Data Entry tab of the System Configuration screen can be used to enable the Notes field in the results entry screens.




✓ New mobile phone number fields will be added to the customer and outside lab setup screens.

✓ For Full System licensees with customizations, new configuration options in MSC-LIMS Archiving make it simple to archive data in custom tables.

# Notes from Technical Support

## Compact LimsData without MSC-LIMS

In the rare situation when an MSC-LIMS back end database has been corrupted by a server or workstation crash, for example, MSC-LIMS will issue the startup error message "Unable to open file ... or it may not be a valid backend database." If you suspect a corrupt database, the solution is to compact your LimsData database since the compacting process will also repair many common problems and restore the integrity of the database. But to compact, you must start MSC-LIMS and use the "Compact LimsData" option on the Admin menu. However, the corrupt database is preventing you from starting MSC-LIMS.

If you find yourself in this scenario, there is a simple solution. When you use the Compact LimsData option, MSC-LIMS creates a small batch file called CompactLimsData.bat in the folder where the MSC-LIMS software is installed (typically C:\MSC-LIMS). The batch file contains commands that can be issued at a command prompt to compact the database using the installed Access runtime. To compact LimsData without MSC-LIMS, navigate to the C:\MSC-LIMS folder (or folder where MSC-LIMS is installed) using Windows Explorer and double-click on file CompactLimsData.bat. Follow the normal prompts to compact LimsData. Note that CompactLimsData.bat will only exist if the Compact LimsData option has been used at least once from within MSC-LIMS.

## Date and Time Analyses

What do you do when you need to report specific dates and times along with analytical results and the existing sample date and time fields don't suffice?

One MSC-LIMS user called and noted that she needed to report start and end dates and times for certain testing. The solution was to create date, time, or date and time "analyses" just for this purpose. In a new feature added at version 3.1, dates, times, and combinations of dates and times can be entered as analytical results.

To use this feature create your own analysis and use the Report Format field to define a suitable date, time, or date and time format (e.g. m/d/yyyy, hh:mm, m/d/yy hh:mm, etc.). During results entry, either right-click the result value field and select "Date/Time Value..." or enter a forward slash (/), colon (:), or semi-colon (;) to open the popup form for date and time entry. For more information search for identifier L-000809 in the MSC-LIMS 3.1 Release Notes.

# For Customers Only

This section of *MSC-LIMS Insights* is devoted to current users of MSC-LIMS. Here we briefly introduce only the most recent additions to MSC-LIMS.com Customers Only pages. Use your login name and password to log on to the Customers Only section of our website.

## Knowledge Base

Installing MSC-LIMS Under Citrix or Terminal Services

Summary: Thin client computing is an alternative to the traditional client/server architecture commonly used with MSC-LIMS multi-user installations. See our article "MSC-LIMS Users May Benefit from Thin Client Computing" in this issue for a detailed description.

This knowledge base article provides detailed instructions to install MSC-LIMS under Citrix Presentation Server or Microsoft's Terminal Services, two popular thin client solutions.

## Thin Client Computing

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There are numerous benefits to running MSC-LIMS with thin clients.

First, consider that the MSC-LIMS software is installed only once on the server. With only one installation there is only one machine to troubleshoot should an incompatibility surface. Although each MSC-LIMS user runs a separate instance of the software, each is an instance of the same single installation. Installation, updates, and maintenance occur on a single server and you do not have to wrestle with multiple workstation installations and their associated problems.

Second, with thin clients, database access is immediately faster since both the MSC-LIMS software and database reside on the same machine yielding performance comparable to a standalone installation. With the traditional client/server architecture, an MSC-LIMS workstation querying data, for example, must itself retrieve portions of the database across the network. With even the fastest network, noticeable delays will occur with larger databases. With thin clients, no LIMS data travels across the network since all database access is local. Thin clients also eliminate the problem of LIMS database corruption that can occur with a rogue workstation.

Finally, an added benefit of thin client computing with MSC-LIMS is concurrent licensing instead of the traditional workstation licensing. The MSC-LIMS software license agreement limits the number of workstations on which the software can be installed. If you have a 10-user license, you may install MSC-LIMS on up to 10 workstations – no more.

There is no license metering available within the MSC-LIMS software. With Citrix or Terminal Services installations, you can control the number of concurrent instances of the MSC-LIMS software. This allows the software to be accessible to more users while restricting the number of concurrent users to the license limit. MSC-LIMS can be accessible from any thin client within your organization but the number of concurrent users is limited by Citrix or Terminal Services to maintain license compliance.

If you are looking to streamline MSC-LIMS installation and administration or you want a significant performance boost in a sluggish network environment, consider deploying MSC-LIMS under Citrix or Terminal Services. For more information about thin client computing see Windows Server Terminal Services.

## Contact Us

### Questions, comments, suggestions? Reach us at:

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