

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

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. 

“Microsoft to Retire Access!” Fact or Fiction?

Contrary to rumor, Microsoft Access, the platform on which MSC-LIMS is built, is neither dead nor ailing. Microsoft’s Access development team is larger than it has ever been, and the firm continues to improve Access and the Jet database engine. In fact, Access 2007 is already available to beta testers and is slated for release next year.

To learn more about the future of Access, you and your IT department may start with [Microsoft Office Access Vision White Paper](#), a Microsoft white paper which we have made available on our website. Published August 1, 2006, the white paper is

“... addressed to information workers, business decision makers, and IT managers. It describes how they can use Access to meet their organization’s data-management needs and how customers find Access valuable, and it summarizes the key capabilities and benefits of the product. The paper also describes several investments Microsoft is making in the future of Access...”

While it is too soon to tell whether Access 2007 will provide developers the capabilities needed to deliver a robust commercial application like MSC-LIMS, we at MSC will be watching the progress from Redmond closely. And whether or not Access 2007 is embraced by the developer community, we will continue to update and improve MSC-LIMS.

(Continued on page 5)

In this Issue

<i>Welcome</i>	1
<i>“Microsoft to Retire Access!” Fact or Fiction?</i>	1
<i>From the Developer</i>	2
<i>Version 3.1 Released in July</i>	2
<i>Your Keyboard is Your Friend</i>	2
<i>Feature Article</i>	3
<i>Understanding the LimsUser3.mdw File</i>	3
<i>Notes from Technical Support</i>	4
<i>Quick Data Analysis with Excel</i>	4
<i>For Customers Only</i>	6
Discussion Forum	6
File Library	6
<i>Contact Us</i>	6

From the Developer

We released MSC-LIMS version 3.1 last month and initial user response is encouraging. We appreciate your comments, suggestions, and requests for new features and we hope you find the improvements valuable. Your participation has been a significant contribution to MSC-LIMS' development and has helped ensure its success.

And speaking of participation, if you have been longing to see a **chemical and supply inventory feature** in MSC-LIMS, I encourage you to visit the Discussion Forum in the Customers Only section of our web site. A new topic describes the collaborative approach we are taking to design this new capability for an upcoming version (for more information, see Discussion Forum, page 6). You can help us create a useful feature by contributing to the process.

Finally, I would like to thank all MSC-LIMS users including the many who have recently joined our ranks. I have been in the software business for over 20 years now, and I continually appreciate your confidence in our software and I hope you will find our product and services valuable. How does the old adage go? *'If you are thrilled with MSC-LIMS, tell your friends. If not, tell me.'*



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.

Version 3.1 Released in July

Mountain States Consulting's release of MSC-LIMS version 3.1, an upgrade to its highly successful version 3.0, came at the end of July, 2006. The new version builds on its predecessor's streamlined user interface, to provide expanded sample login and editing capabilities.

Lab personnel may use the new one-click method to add or delete sample analyses and sample requirements to single-sample, batch or multiple queried samples in one smooth operation. Users may also configure sample statuses to define turnaround types and optional analysis cost multiplier, and may now enter date, time and date/time values as analytical results. Login is further simplified with new Sample Login Default values for many required fields.

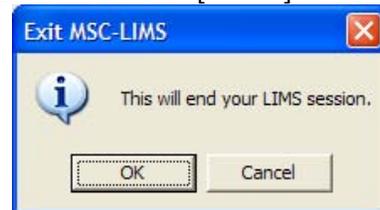
In response to requests by commercial labs, version 3.1 now provides a Customer contact history feature. Lab managers may include hyperlinks to external documents such as correspondence or invoices, and print all information for any customer.

Other upgrades include fully configurable container label styles, additional hyperlinks to outside documents, auto-complete analyses results, and expanded audit trail capabilities.

(Continued on page 5)

Your Keyboard is Your Friend More Keyboard Shortcuts

- To select the next or previous tab in a tabbed dialog including the MSC-LIMS main menu, use Ctrl+Tab or Ctrl+Shift+Tab.
- To open the Zoom window to edit or view the contents of any field in a larger window use Shift+F2.
- To select the bold or default button in any popup dialog use Enter. To select [Cancel] use Esc.



- To open a drop down picklist when the cursor is in the field use Alt+DownArrow. To close the drop down picklist use Esc.
- To move one word to the left or right in a text field use Ctrl+LeftArrow or Ctrl+RightArrow.

Tip: Reference Microsoft's online Help system for "keyboard" for all keyboard shortcuts. 

Feature Article

Understanding the LimsUser3.mdw File

By now, you are probably familiar with the size, location, and purpose of the LimsData3.mdb file (LimsData for short), which is the repository for all data entered into MSC-LIMS. Well, almost all of the data entered. You have seen the full path name of the LimsData file on the main menu below your logo and company name and you may have used File | Open LIMS Database to open an alternate LimsData file such as an archive database or a test database.

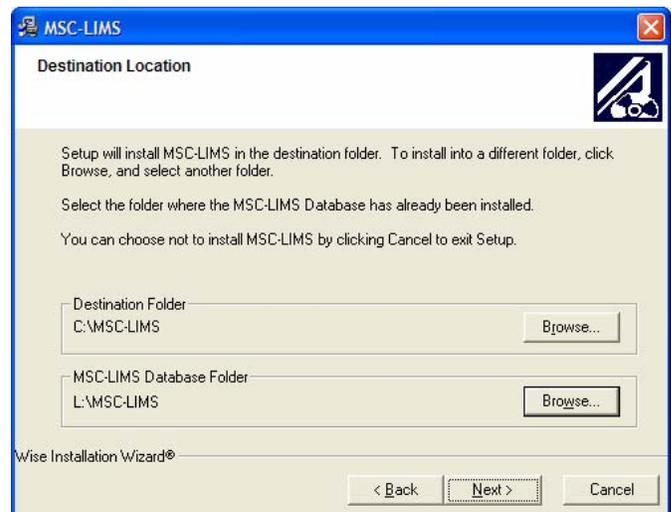
In a multi-user configuration, your production LimsData is located in a folder on a file server and all MSC-LIMS workstations share the file. Many believe that LimsData is the only file shared among LIMS workstations, but file LimsUser3.mdw is also shared. Understanding the purpose of this file may help you troubleshoot missing login accounts and other login problems.

LimsUser3.mdw (LimsUser for short) is a Microsoft Access workgroup information file (the "w" in MDW denotes a workgroup file). A workgroup file maintains information on a workgroup including login names, passwords, and security roles or groups. All MSC-Users must be a member of the LimsUser workgroup in order to use the LIMS. Since MSC-LIMS is a secured application, Microsoft Access reads the workgroup file prior to LIMS startup to determine who has access. Providing a valid login name and password in the login dialog allows Microsoft Access to proceed and open LimsCode3.mdb, which starts the MSC-LIMS software. In MSC-LIMS, you add LimsUser login accounts through the Users screen on the Admin menu.

Microsoft Access does not need to know the location of LimsData when starting the LIMS. If LimsData has been moved from its previous location or it is the first time you start the software after installation, MSC-LIMS will ask you to select your LimsData database. However, the location of LimsUser must be known to Microsoft Access at startup. That is, before you can even open LimsCode and therefore start the MSC-LIMS software, Microsoft Access must read LimsUser then present the login dialog.

How does Microsoft Access know the location of LimsUser? A command line *switch* in the Target property of the shortcut used to start MSC-LIMS identifies the location of LimsUser. Shortcuts are the desktop icons or Program menu items you use to start an application.

The MSC-LIMS Setup program automatically adds the shortcut's workgroup switch during installation using the specified location of the previously installed MSC-LIMS Database component. In the installation screen below, folder L:\MSC-LIMS has been selected to identify the location of the MSC-LIMS database.



When the MSC-LIMS Database component is installed both LimsData and LimsUser are copied to the designated folder. Later, if you move LimsData to a new server or folder, MSC-LIMS will detect the situation at startup and ask you to select the location of your LimsData. However, the shortcut's workgroup switch is instructing Microsoft Access to read LimsUser from its original location (L:\MSC-LIMS in our example). If you must move your production LimsData to a different location, remember to also move LimsUser and then manually edit the Target property of the shortcuts on all MSC-LIMS workstations to identify the new location. To edit the Target property, right-click the shortcut then select Properties from the popup menu. You will find the Target property on the Shortcut tab of the properties dialog. Here is the Target property from the shortcut in our example. Note the full path name of LimsUser appears following the "/wrkgrp" switch.

```
"C:\Program Files\Microsoft Access  
Runtime\Office10\runaccess.EXE" /excl  
/runtime /profile "MSC-LIMS" /wrkgrp  
"L:\MSC-LIMS\LimsUser3.mdw" "C:\MSC-  
LIMS\LimsCode3.mde"
```

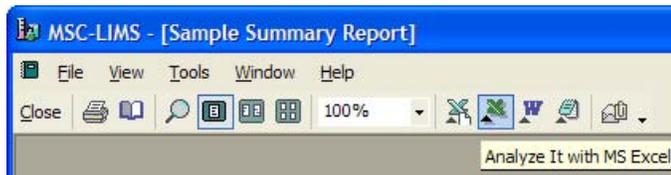
(Continued on page 5)

Notes from Technical Support

Quick Data Analysis with Excel

Exporting MSC-LIMS data to Excel for further analysis is a technique many MSC-LIMS users employ. MSC-LIMS' integrated Excel interface can make the job easy. Understanding how data can be exported to Excel will help simplify your data analysis tasks. A recent technical support email included a scenario that offers a good example.

One MSC-LIMS user had not yet explored the capabilities of the Excel interface. She knew it existed and now she had a good reason to learn how it worked. Her boss had given her the task of analyzing specific analytical results for the past year. Jumping right in, she used the Sample Summary report and queried a year's worth of samples. In the report's print preview window she clicked the "Analyze It with MS Excel" toolbar button (see below) to export the data to Excel but she was discouraged by what she found in Excel.



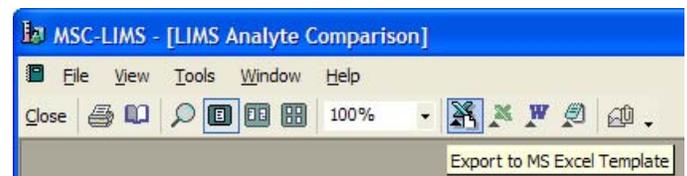
"Analyze It with MS Excel" is a standard feature in Microsoft Office applications. We have preserved this feature within MSC-LIMS' print preview window because it does provide some utility in certain situations. When you use this feature, all of the report's data and field or control names are exported in a format that attempts to mimic the appearance of the LIMS report. Try an example yourself and you will see that, in this format, the data is not particularly useful for further analysis. Extracting all of the results for the required analyses and assembling them in columns for statistical analysis would require significant cutting and pasting. With only a few samples, this format may suffice. But with a year's worth of data it was not practical.

We suggested she export the data to an Excel template from the print preview window using File | Export to MS Excel Template or the equivalent "Export to MS Excel Template" toolbar button (see the example, below). But what template should she use?

The MSC-LIMS Export Template is the perfect solution. This template can be found in folder C:\MSC-LIMS\Examples\Excel Export Templates on all LIMS workstations.

Most export templates are designed to receive a specific report's data and include macros to manipulate the data after receipt. However, the MSC-LIMS Export Template has a single LIMSData sheet with empty macros so it can be used with any MSC-LIMS report.

Unlike the "Analyze It with MS Excel" feature, the "Export to MS Excel Template" software does not attempt to recreate the appearance of the report. Rather, the main report's underlying recordset is exported to the template's LIMSData sheet. The recordset may contain more data than the report lists. However, when a report is constructed with subreports, each with its own recordset, only the main report's recordset is exported to Excel. Such is the case with the Sample Summary report. When you export a Sample Summary report, the LIMSData worksheet will contain all of the characteristics for each sample but the analysis results are not exported. A template can in turn query the LIMS for the additional data but that was not the quickest solution.



Since the results for only a few analyses were required over the one year span, the simple solution was to use the Analyte Comparison report. Selecting the analyses of interest, querying a year's worth of data, previewing then exporting to the MSC-LIMS Export Template produced all of the required analytical results in an easy to manipulate tabular layout.

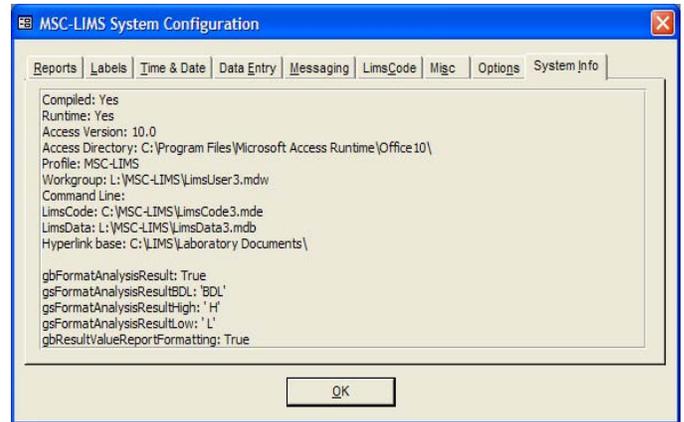
Whenever you need to quickly export MSC-LIMS data for any purpose, remember the "Export to MS Excel Template" toolbar button and the generic MSC-LIMS Export Template. Use this combination with any MSC-LIMS report and you will have a wealth of information at your fingertips. 

Understanding the LimsUser3.mdw File

(Continued from page 3)

As we mentioned earlier, when you maintain user login names, passwords, and security roles using the Users screen on the Admin menu, the login accounts you add, edit, or delete are saved in LimsUser. Now consider this scenario. You have moved both LimsData and LimsUser to a new server and you have edited the /wrkgrp switch in the Target property of all workstation shortcuts to reflect the new location. But you inadvertently forget to update your own workstation's shortcut. Later you add a new login account and test it on your workstation. However, the new user can not log on to the LIMS at any workstation but your own. The problem should now be apparent. You added the login account to LimsUser in its old location and all workstations but yours are instructing Microsoft Access to load LimsUser from its new location, which does not include the new login account.

When you suspect a LimsUser problem, you can use the System Info tab of the System Configuration screen on the Admin menu to quickly troubleshoot. As the screen below shows, the LimsUser workgroup file used at startup is listed.



When you need to move your production LimsData to a new location, remember to also move LimsUser and edit all of your shortcuts. Knowing the location and purpose of LimsUser and how it is used at startup will help you find login problems quickly. 

Fact or Fiction?

(Continued from page 1)

Our investment in third-party installation software and the use of an isolated Access 2002 runtime on all MSC-LIMS client workstations, assures MSC-LIMS' longevity. Without regard to past, current or future installations of Microsoft Office or Microsoft Access, we can deliver MSC-LIMS updates indefinitely.

As we have done in the past, we will assess the capabilities of each new version of Microsoft Access. We will offer a major MSC-LIMS upgrade only when there are sufficient compelling features that justify the development effort required to incorporate the new Access version.

The bottom line here is that both Microsoft Access and MSC-LIMS are alive and well. 

Version 3.1 Released

(Continued from page 2)

MSC-LIMS is a complete laboratory information management system designed for small to mid-sized labs. For over a decade, MSC-LIMS has helped environmental, food testing, and petrochemical laboratories maintain well organized, secure, instantly accessible and easily reported lab data.

Prices start at \$500 per user per year for MSC-LIMS' Annual Subscription License. A detailed price list, all product literature, and downloadable MSC-LIMS Demo, MSC-LIMS Report Viewer, example reports, and Excel report examples, are available at www.msc-lims.com. 

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 additional to MSC-LIMS.com Customers Only pages. Use your login name and password to log on to the Customers Only section of our website. While you are there, visit these features:

Discussion Forum

[Help design a chemical and supply inventory feature](#)

We are trying something new with this topic. Your services are requested, to help us design a new chemical and supply inventory feature for an upcoming version. Since this feature will likely have different requirements for different labs, we would like to initiate a group dialogue so that we may design a flexible solution that will be applicable for many users. If you can benefit from the addition of such a feature, please join the discussion.

[Version 3.1.0 Bugs](#)

This topic includes a description of known problems with MSC-LIMS version 3.1.0. If you believe you have discovered a bug, check this topic to see if it has already been reported and whether there is a quick fix or workaround.

File Library

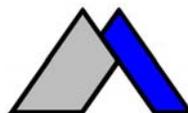
[Control Chart Templates](#)

MSC-LIMS' Control Chart report is a useful tool. However, the Control Chart report's layout, tabular data, statistics, and graph appearance are not easily altered.

Export the control chart report's data to these Excel templates when you want more control over the layout of your control charts. One template is designed for control charts displaying analysis results and the other for charts displaying analytical batch QC data. See each template's Read Me sheet for more information. 

Contact Us

Questions, comments, suggestions?
Reach us at:



Mountain States Consulting, LLC
970 West Broadway #471
Jackson, Wyoming 83001-9475 USA
Ph +1 307-733-1442
Fax +1 303-379-6850

info@msc-lims.com
www.msc-lims.com

Copyright © 2006 Mountain States Consulting, LLC.
All rights reserved.