

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](http://www.msc-lims.com).



Join our mailing list for more information. Sign up at [www.msc-lims.com/lims/maillist.html](http://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](mailto:newsletter@msc-lims.com). 

## Resource: MSC-LIMS Insights Archive

We begin this, the tenth issue of *MSC-LIMS Insights*, by welcoming new users to MSC-LIMS. We hope you find the product as useful and flexible as others have before you.

To insure that you get the most benefit from your MSC-LIMS software, we encourage users – new and experienced – to explore the vast knowledge resource available in past issues of *MSC-LIMS Insights*.

Past issues are archived in chronological order in the Customers Only section of MSC-LIMS.com. Use your login name and password to log on to the Customers Only section of our website, and follow the links to *MSC-LIMS Insights*.

To streamline the process, this issue includes an abbreviated summary of articles featured in past issues.

Find the answers to your questions by perusing the summary of *Insights* articles in this issue's Customers Only section, MSC-LIMS Insights Archive, page 6.

## In this Issue

<i>Welcome</i>	1
<i>Resource: MSC-LIMS Insights Archive</i>	1
<i>From the Developer</i>	2
<i>Preparing for MSC-LIMS Messaging Version 3.2</i>	2
<i>Use a Dynamic Batch to Speed Login</i>	3
<i>Notes from Technical Support</i>	5
Solve Startup Problems with a New Copy of LimsCode	5
Graphing Analyses Performed	5
<i>For Customers Only</i>	6
MSC-LIMS Insights Archive	6
<i>Contact Us</i>	7

## From the Developer

MSC-LIMS version 3.2 is now only weeks away. We are busy testing and documenting the new features and we expect to release the new version by the end of September. Once again, I'd like to thank everyone for their suggestions for improvement. Many of the new features you will find in version 3.2 originated from your ideas.

If you have not yet experienced a version update, you will find the process simple. When the new release is available you will receive an email with installation instructions. You will need your web site login account to download your version 3.2 update. If you have not yet enabled your login account, please contact us to enable access.

With this 10<sup>th</sup> issue of *MSC-LIMS Insights* I'd like to remind you that all past issues are archived in the Customers Only section of our web site. Whether you are a new or experienced MSC-LIMS user, you will find plenty of useful information in past issues.



*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](mailto:rcollard@msc-lims.com).*

---

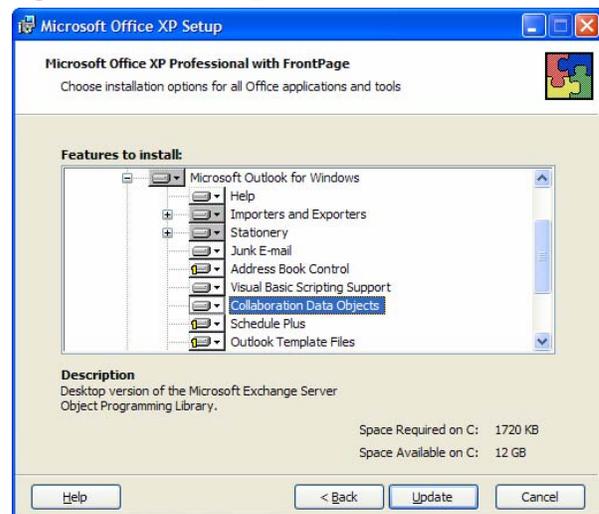
## Preparing for MSC-LIMS Messaging Version 3.2

In upcoming version 3.2 MSC-LIMS Messaging has several significant additions including batch message styles and message styles with attached PDF files. Many sites have been waiting for these features before adding MSC-LIMS Messaging to their implementation. If you plan to implement MSC-LIMS Messaging version 3.2, you can prepare now by installing the additional components required.

First, choose the workstation where you will install Messaging. While you can install Messaging on an existing MSC-LIMS workstation, we only recommend this for testing purposes. Your production Messaging workstation should be dedicated to just MSC-LIMS Messaging. An alternative is to run Messaging in a separate virtual machine on a LIMS workstation.

If it is not already installed, install Microsoft Outlook on the Messaging workstation. MSC-LIMS Messaging uses Microsoft's Collaboration Data Objects (CDO) to send emails. CDO is not automatically installed with Outlook. To install CDO, use Start | Settings | Control Panel then double-click the Add or Remove Programs applet. Select Microsoft Office in the list of installed software and click the Change button. As show below, change Outlook's Collaboration Data Objects to "Run from My Computer." Use the Update button and follow the remaining prompts to install CDO.

Next, address Microsoft's email security warnings, which prevent Messaging from running unattended.



These warnings, which appear when an application other than Outlook attempts to send email, require user intervention to acknowledge the attempted email is valid. If your email server is Microsoft Exchange see [Administrator information about e-mail security features](#) for more information. If you do not use Microsoft Exchange you can download and install the free [Express ClickYes](#) utility which will automatically dismiss the security warning dialogues.

Finally, if you plan to use the new message styles with attached PDF files, you will need to download and install the free open source [PDFCreator](#) software. 

## Use a Dynamic Batch to Speed Login

By now you know that MSC-LIMS provides two methods for logging samples: single sample and batch login. Batch login first appeared in version 1.7 back in 1998. When introduced, batch login was designed to speed login of repetitive samples using predefined named lists of samples. For example, if a water treatment plant routinely collects the same 25 samples throughout the plant every weekday morning, the LIMS administrator can define a single "Weekday Morning Plant Samples" login batch with the static sample characteristics for all 25 samples. Using batch login, the user selects the batch then enters any sample characteristics such as the collected date to apply to all batch samples.

Any sample-specific data can be entered in the batch login screen before completing the login. Using batch login for such repetitive samples is obviously faster than single sample login.

When you frequently log a group of samples that are not routine to warrant a predefined login batch but still have similar characteristics, batch login may still offer advantages. In this case, you can use batch login to dynamically build the batch of samples and log the samples faster than using single sample login.

To use dynamic batch login you must first create an empty login batch used for this purpose. Open the Login Batches screen on the Setup menu and enter only a name and optional notes. Do not define any samples in this batch. The screen below shows our example empty "Dynamic Batch."

With an empty login batch we are ready to use batch login to dynamically build a list of samples to log. Select the Batch Login option on the Samples menu then choose your empty dynamic batch. Note that when selecting an empty batch, the sample characteristics listed under "Apply to all Samples" will be disabled since there are no pre-defined samples to which the characteristics can be applied. Click the OK button to proceed.

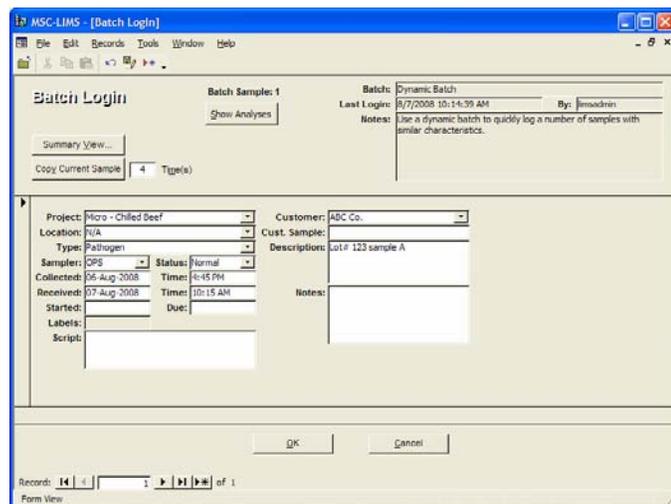
Enter the sample characteristics for the first sample in the Batch Login screen. After you have completed the first sample, click the save record toolbar button to enable the Copy Current Sample button. Now enter the number of times to copy the sample then click the Copy Current Sample button. In the example below (see next page) we are copying the sample four times to create a batch of five samples.

(Continued on next page)

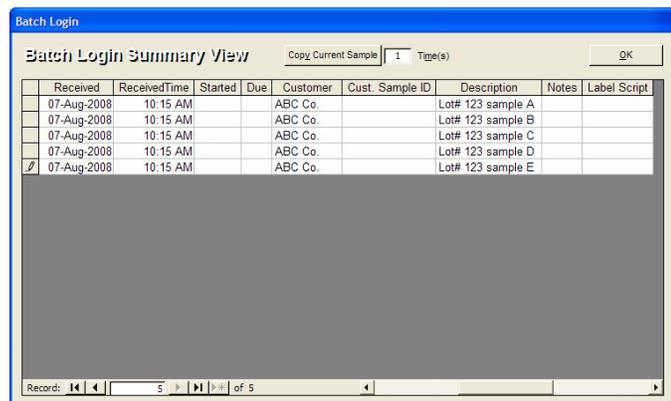
## Use a Dynamic Batch to Speed Login

(Continued from previous page)

To change any field across samples simply place the cursor in the field and make the change then use either the Page Up/Page Down keys or the buttons in the lower left to navigate between samples. Alternatively, you can click the Summary View button to open a datasheet view of the samples.



In our example five-sample batch, the only field that differs between samples is the sample's description. The Summary View screen below shows how easy it is to make these changes. Note that you can also copy and delete samples in the Summary View as well.



To complete the batch login, close the Summary View screen and click the [OK] button on the Batch Login screen. You will see that all of the samples in the batch are assigned a single sequential batch number, which you can use later to quickly query all of the samples in the batch for results entry or reporting. You may also find it efficient to use the batch number as a report number on your own custom Excel final reports.

You can also use the Copy Current Sample button to build your batch incrementally. For example, if we had a batch of 10 samples to log where the first five samples were similar and the last five samples were similar but differed from the first five, you can build the batch in steps. Complete the first sample and copy it four times as we did above. Now navigate to a new sample using Records | Go To | New Record or the navigation button. Complete the sixth sample and copy it four times.

If you haven't already done so, explore the advantages of dynamic batch login and you may speed your sample login process. 

## Notes from Technical Support

### Solve Startup Problems with a New Copy of LimsCode

Occasionally, we receive a call or an email from a user unable to start MSC-LIMS. The error reported can vary from a somewhat helpful "Error in SystemStartup" to a more cryptic "MSysDb not found" message. If the startup error message does not indicate a problem with the LimsData database, the problem likely lies within LimsCode.

File LimsCode3.mde, which is installed on each LIMS workstation, is an Access database that contains all of the MSC-LIMS screens, reports, and software. LimsCode3.mde is typically 10 to 15 MB in size and can become corrupt as a result of power failures, system lockups, or any situation where the LIMS is not exited normally. Since LimsCode3.mde does not store any LIMS data you can safely replace the file if you encounter a startup error.

If you suspect a LimsCode problem simply copy LimsCode3.mde from your Setup folder to the folder where MSC-LIMS is installed (normally C:\MSC-LIMS) overwriting the existing file. If you installed MSC-LIMS by downloading from our web site, your Setup folder is likely in folder C:\MSC-LIMS. If you have a multi-user license, your Setup folder is normally located in the folder where your LimsData database resides on your file server.

### Graphing Analyses Performed

Recently, a user emailed a request for assistance to graph counts of analyses performed by her lab. She wanted counts of specific analyses transferred to Excel so she could create graphs to graphically compare this year's data by month and quarter with last year's data. We proposed two possible solutions, either of which you may find helpful if you have a similar requirement.

First, use the Analysis Count report on the Notebook menu and query by login date range to get counts for all analyses. Since the report does not group the data by any time period, you will need to query and export for each month, quarter, etc. Preview the report then export its data to the generic MSC-LIMS Export Template (available in C:\MSC-LIMS\Examples\Excel Export Templates). You can now copy the data for the analyses of interest to another workbook for graphing.

The second solution is a bit easier and faster for longer time intervals. Add the following SQL statement to the MSC-LIMS Data Query workbook (available in the File Library on our web site):

```
TRANSFORM
Count (SampleAnalysis.SampleAnalysisID)
AS CountOfSampleAnalysisID
SELECT Analysis.SortOrder,
Analysis.Analyte
FROM Sample INNER JOIN (Analysis INNER
JOIN SampleAnalysis ON
Analysis.AnalysisID =
SampleAnalysis.AnalysisID) ON
Sample.SampleID =
SampleAnalysis.SampleID
WHERE Sample.AddedDate
BETWEEN #1/1/2008 00:00:00# And
#6/30/2008 23:59:59#
GROUP BY Analysis.SortOrder,
Analysis.Analyte
PIVOT Month(Sample.AddedDate) ;
```

The SQL statement above queries analysis counts by month for all samples logged within the specified date range. The result of the query shows analyses in rows in your LIMS sort order with one column for each month found in the data queried. You can then easily copy the data for the analyses you need to a new workbook to graph the results. To use the MSC-LIMS Data Query workbook, make sure MSC-LIMS is running on your workstation then open the workbook. Enter the SQL statement above on the Query worksheet and enter the appropriate login date range in the BETWEEN clause. Click the [Query] button and your results will be displayed on the LimsData sheet. 

## For Customers Only

This section of *MSC-LIMS Insights* is devoted to current users of MSC-LIMS. In this *Insights'* column, articles featured in past issues of *MSC-LIMS Insights* are summarized. Use your login name and password to log on to the Customers Only section of our website, and follow the links to the [MSC-LIMS Insights](#) archives.

### MSC-LIMS Insights Archive

#### Issue No. 9, Feb-2008

- Do You Have the Current User's Guide?
- MSC-LIMS Users May Benefit from Thin Client Computing
- What's Coming in Version 3.2?
- Notes from Technical Support: Compact LIMS Data Without MSC-LIMS; Date and Time Analyses
- Knowledge Base: Installing MSC-LIMS Under Citrix or Terminal Services

#### Issue No. 8, Jul-2007

- Review Your Backup and Recovery Strategy TODAY
- Integrating MSC-LIMS and ERP Systems
- Notes from Technical Support: SQL to the Rescue
- Quick Data Export to Excel
- Create PDF Files with Free PDFCreator
- File Library: Sample Tracking Templates

#### Issue No. 7, Jan-2007

- Windows Logo Key Shortcuts
- Calculate Sample Turnaround with a UDR
- Notes from Technical Support: Microsoft Access cannot open this file; Wrong Subtotals in Excel Sample Tracking Templates
- File Library: Invoice Templates; Final Report Templates

#### Issue No. 6, Aug-2006

- "Microsoft to Retire Access!" Fact or Fiction?
- Understanding the LimsUser3.mdw File
- More Keyboard Shortcuts
- Notes from Technical Support: Quick Data Analysis with Excel
- File Library: Control Chart Templates

#### Issue No. 5, Feb-2006

- Keyboard Shortcuts
- Mountain States Consulting's Twenty-Year Anniversary
- Improve Excel Reports With Conditional Formatting
- What's Coming This Summer in Version 3.1?

#### Issue No. 4, Aug-2005

- MSC-LIMS In The News: Meeting the Need for Speed; Off-the-Shelf System Tackles Monitoring, Reporting Needs; LIMS Fits Labs
- Using Wildcard Pattern Matching in Queries
- Notes from Technical Support: SQL For Unique Queries
- Knowledge Base: Creating an MSC-LIMS 3.x Edit LimsCode Shortcut; Moving LimsData to a New Location

#### Issue No. 3, Jan-2005

- MSC-LIMS In The News: Macro Magic
- Compacting and Repairing in Version 3.0
- Notes from Technical Support: Round or use Excel's "Precision as Displayed"
- MSC-LIMS Ten Year Anniversary
- Demo 3.0 Reveals All

#### Issue No. 2, Aug-2004

- New User's Guide Includes *Quick Start* for Beginners
- Simplify Queries with SQL Expressions
- Notes from Technical Support: Copy Only Subtotals in Excel
- What are The L-nnn Identifiers in the Release Notes?
- Do It Yourself Automated Mass Readings
- MSC-LIMS Annual Subscription for \$500
- Knowledge Base: How to Update Template References for MSC-LIMS 3.0
- File Library: MSC-LIMS Analyses.xlt; MSC-LIMS SysCfg Options.doc

#### Issue No. 1, Jan-2004

- How Reliable Are Your Backups?
- Compact Routinely
- Notes from Technical Support: Interface Instrument with Excel
- What's Coming in Version 3.0?
- Knowledge Base: Query Data with the MSC-LIMS Data Query Workbook; Use a Text List to Enter Special Symbols; How To Remove a Template's LIMS Infrastructure



## 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](mailto:info@msc-lims.com)  
[www.msc-lims.com](http://www.msc-lims.com)

Copyright © 2008 Mountain States Consulting, LLC.  
All rights reserved.