

# 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. 14

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## 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). 

## Understanding the Hyperlink Base

If you use any of the hyperlinked document fields available in MSC-LIMS, it is important to understand the purpose of the Hyperlink Base field on the Workstation Configuration screen. Hyperlinked document fields allow linking external documents to a LIMS record and are available on the Results by Analyte, Results by Sample, Customers (Contact History), Instruments, and Methods screens. While hyperlinks can be created for web pages and email addresses, they are most often used to provide access to external document files.

When you add a new hyperlink to a document, you can make the path to the document an *absolute*, or fixed, path. Alternatively, using the hyperlink base, you can add the hyperlink with a path that is *relative* to a base folder. Relative paths make the hyperlinks somewhat portable since you will only need to change the hyperlink base if the documents are moved to a new location.

An example will help to illustrate the benefits of relative paths using the hyperlink base. Assume we have a standalone installation of MSC-LIMS where both the LIMS software and database are installed in the default C:\MSC-LIMS folder. To keep all of our hyperlinked documents well organized we have created additional folders Customers, Instruments, Methods, and Samples within the C:\MSC-LIMS folder as shown below.

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# MSC-LIMS™ *Insights*

## From the Developer

Earlier this year we marked the 15<sup>th</sup> anniversary of MSC-LIMS. It is interesting to note that we have based MSC-LIMS on only three versions of Microsoft Access during those 15 years: Access 2.0, Access 97, and Access 2002. These Access versions have served us well. Before we look to a newer version of Access for MSC-LIMS 4.x, there will be one more Access 2002-based version, which we expect to release in the fourth quarter. See *What's Coming this Fall in Version 3.3* below.

MSC-LIMS users are important to us for many reasons, including your shared insights into using MSC-LIMS that we could never anticipate or address in the MSC-LIMS User's Guide. MSC-LIMS Insights is a more useful tool because of your participation. See *Notes from Technical Support* below for a few good examples.

Finally, please note our revised mailing address and update your records accordingly. All lines in our new address are required to ensure proper mail delivery:

Mountain States Consulting, LLC  
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Jackson, WY 83002



*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).*

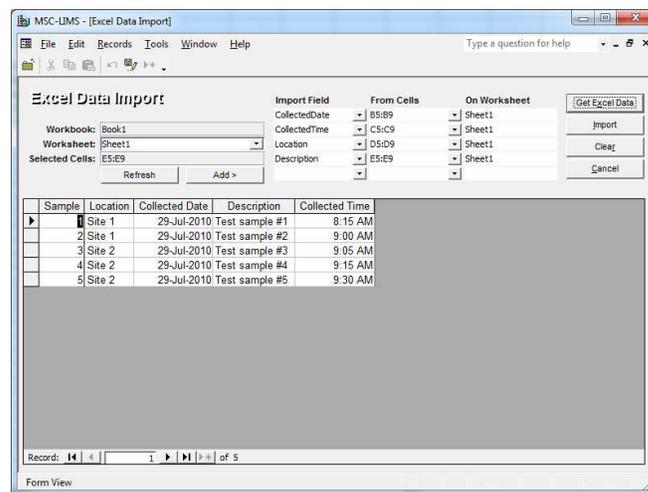
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## What's Coming this Fall in Version 3.3

We expect to release MSC-LIMS version 3.3 during the fourth quarter this year. As always, all annual subscription licensees, and all full system licensees with current annual maintenance, will automatically receive the update. Below are a few of the new features expected in version 3.3.

- ✓ The result type pick lists in the results entry screens will show only valid result types for the analysis.
- ✓ The Sample Login tab of the Customers setup screen will support login batch options so the customer can be selected in batch login setup and only their batches displayed for selection.
- ✓ The Analyses report will include new options to show how all analyses or selected analyses are used in projects and requirements. Listing analyses which are not part of any project or requirement will also be available.
- ✓ New options will be available to import data from Excel during batch sample login, one of which is illustrated below. The Batch Login screen will include a

new Spreadsheet menu with an option to import sample characteristics for existing batch samples and an option to import and add new batch samples. This feature will allow importing new samples or sample data from your own electronic chain of custody spreadsheets, for example.



Sample	Location	Collected Date	Description	Collected Time
1	Site 1	29-Jul-2010	Test sample #1	8:15 AM
2	Site 1	29-Jul-2010	Test sample #2	9:00 AM
3	Site 2	29-Jul-2010	Test sample #3	9:05 AM
4	Site 2	29-Jul-2010	Test sample #4	9:15 AM
5	Site 2	29-Jul-2010	Test sample #5	9:30 AM

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- ✓ The results entry screens will include new options to print a Sample Summary report for all samples currently queried.
- ✓ The message resend button in the Results by Sample screen will allow sending and resending batch message styles from any batch sample. Just like single-sample message styles, the resend button will support sending messages with preliminary results and resending messages with updated results.
- ✓ New System Configuration screen options will allow changing the open mode of Add/Edit screens so that a screen may be opened in Edit mode by default.
- ✓ New fields to document CAS number and measurement uncertainty will be added to the Analyses setup screen. ▲

## Current Example Excel Export Templates

One distinct advantage to an MSC-LIMS Full System license is the ability to customize any MSC-LIMS report. If you want to alter the layout of a report, you can simply make a copy of the system report, use the Access report design surfaces to make changes to the new report, and then add a record to a LimsCode table to install your version of the report.

Since MSC-LIMS Annual Subscription licensees do not have this capability, any custom reports beyond the capabilities of MSC-LIMS' user-defined reports must be created with an Excel template. And many Full System licensees find it easier to maintain custom reports using Excel templates. For this reason, we often add new Excel export templates to the list of example templates installed by MSC-LIMS. For example, we recently added Work Order and Work Sheet templates so you can export the data from these reports to create your own versions.

You will find the installed example templates in folder C:\MSC-LIMS\Examples\Excel Export Templates on your LIMS workstation. An archive file containing all templates is located in the [File Library](#). Below is a list of the Excel export templates currently available in the archive file.

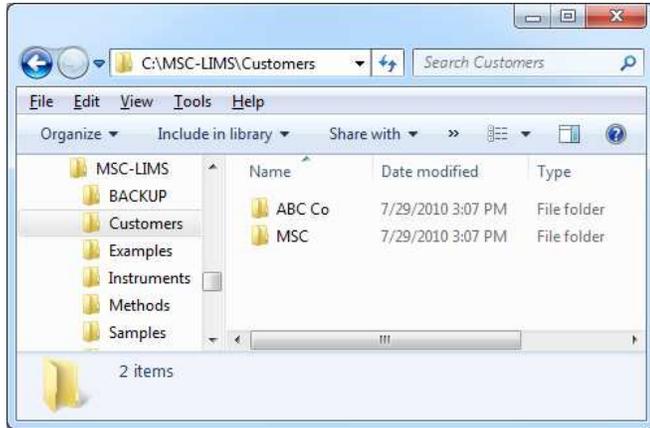
Analysis Count Chart  
Bench Sheet - Oil & Grease  
CofA Example  
Control Chart - Analysis Results  
Control Chart - QC Data  
EDD Example - All Analytes  
EDD Example - Specific Analytes  
Final Report - Samples in Columns  
Final Report - Samples in Rows  
Final Report Example  
Invoice by Batch  
Invoice by Sample  
Monthly Sample Count Chart  
MSC-LIMS Analyses  
MSC-LIMS Export Template  
MSC-LIMS UDR Export Template  
Sample Tracking by Batch  
Sample Tracking by Customer  
Sample Tracking by Project and Location  
Work Order  
Work Sheet

See the Read Me worksheet in each template for more information on the template's operation. Note that the MSC-LIMS Export Template is a minimal template. This generic template contains only the required LIMSDATA worksheet and its macros. However, the macros are empty so you can export any MSC-LIMS report to this template to view the report's raw data. See Exporting to the Generic Template in [MSC-LIMS Insights Issue No. 12](#) for more information. ▲

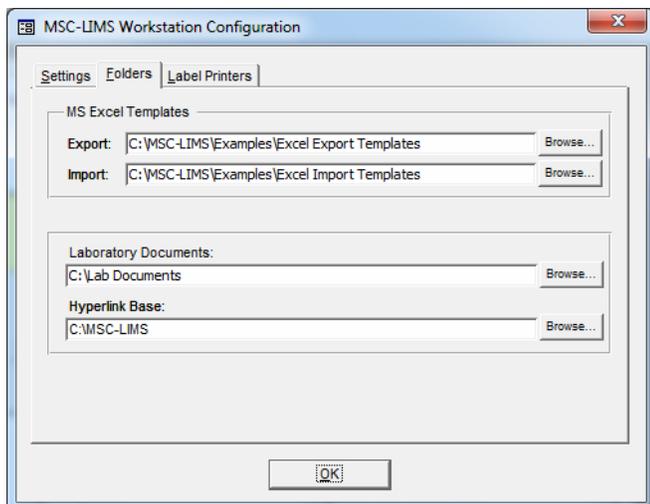
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## Understanding the Hyperlink Base

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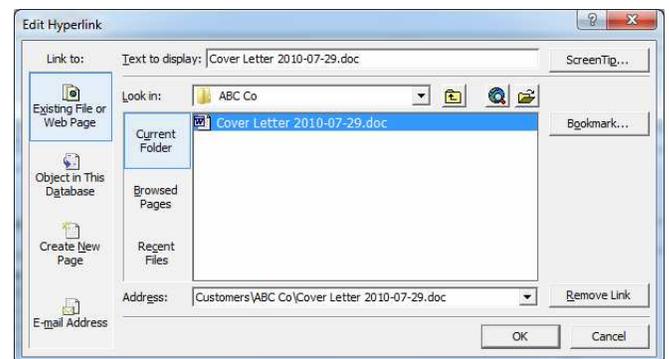


We have also created additional folders within the Customers folder to organize customer-specific documents. Assume that we just mailed a letter to ABC Company and we want to add a hyperlink to the letter in the Contact History section of the Customers setup screen. Without a defined hyperlink base, we can add a hyperlink to the letter, which will have an absolute path to folder C:\MSC-LIMS\Customers\ABC Co. As long as the letter remains in this folder, the hyperlink will continue to retrieve the letter. However, if we later upgrade to an MSC-LIMS multi-user license the hyperlink will only work on the original workstation since only that workstation has the relevant folders and files. A similar problem will occur with absolute hyperlink paths in a multi-user environment if the location of the shared document folders ever changes, such as when moving to a new file server.



We can solve these problems by defining a hyperlink base before we add any hyperlinked documents. In our example, all of the hyperlinked documents are in folders within the C:\MSC-LIMS folder, which is the base folder. Since all of the paths to hyperlinked documents begin at folder C:\MSC-LIMS, we can define this folder as our hyperlink base in the Workstation Configuration screen.

With our C:\MSC-LIMS hyperlink base folder defined, we can now safely add hyperlinks to any documents within this folder and its subfolders. The screen below shows the hyperlink for our ABC Company letter. Note that the Customers\ABC Co path to the letter in the Address field omits the C:\MSC-LIMS base folder. Our path to the letter is now relative to the C:\MSC-LIMS folder.



If we move to an MSC-LIMS multi-user environment, all hyperlinks will continue to work with proper selection of the hyperlink base. For example, in a simple two-workstation peer-to-peer network configuration where the LIMS database is shared from the original workstation's C:\MSC-LIMS folder, the original workstation's hyperlink base remains C:\MSC-LIMS and the second workstation's hyperlink base is set to the name of the first workstation's shared folder. If the LIMS database is moved to a shared file server folder, simply move all of the hyperlinked documents folders to a file server folder and set the hyperlink base on all workstations to the server folder.

There is nothing inherently wrong with absolute paths to hyperlinked documents. Only when you move the documents will the shortcomings of absolute paths become apparent. To avoid manually editing all of your hyperlinks after moving documents, take advantage of the benefits of the hyperlink base. 

## Notes from Technical Support

### Inactive Items in Pick Lists

The following technical support email raises an important issue:

*I was wondering how not to show the 'Inactive' projects to other users except me as the Admin when [querying]. Right now, the technicians can see the 'Inactive' projects and they are confused which projects to choose. Please let me know if it's possible.*

Most of the major configuration items in MSC-LIMS, such as projects, analyses, customers, and locations include an Inactive check box on their setup screen. A member of the Admins security role can mark an item Inactive to prevent further use of the item. For example, if one of your customers goes out of business, you can inactivate the customer to prevent logging any new samples for the customer. Inactive items will not appear in pick lists on screens where new data entry occurs such as in the login screens. However, inactive items will appear in the query controls' pick lists, which is by design since there would be no easy way to find samples for inactive items if they were not included in these pick lists.

Deleting an item is the only way to eliminate it from a query pick list. However, you can not delete an item if related items remain in the database. For example, you can not delete an inactive project if at least one sample exists for the project. Only after you have archived all related data can you delete the item from your production database. In the meantime, you can help avoid confusion with inactive items by developing a naming convention that sorts inactive items to the bottom of the pick list. For example, when inactivating an item preface its name with a lower case "z".

### Splitting One Sample Batch into Two

An MSC-LIMS user recently asked:

*Is it possible to separate items within a batch to form separate batches? I have a couple of shelf life studies going that involve multiple products. I put them into the same batch a while back and the reports are messy now that the testing has gone on for a while. I'd like to separate them into separate reports for ease of access for my clients.*

Yes, you can split the samples in an existing batch into two batches. First, log a new single-sample batch so that the system allocates a new batch number. The characteristics of the new sample, which you will soon delete, are unimportant. Open the single sample login screen, switch to edit mode, and query the existing batch. Change the existing batch number to the new batch number for each sample you want to move from the existing batch to the new the batch. Now delete the new batch's original sample, which you logged only to get a new batch number.

### Querying the Most Recent N Samples

An MSC-LIMS user submitted this request:

*How can I query the most recent 16 samples for a customer?*

A one-time query is simple. First, query either all the customer's samples or recent samples using a date range criterion that results in more than 16 samples. Now use the [Select] button to open the Select Samples screen, right-click within the Login Order column and choose Sort Descending from the popup menu to place the samples in reverse chronological order. Use the [Clear All] button then enter 16 and click the [First N] button to select the first 16 samples.

In this case, the user needed a simpler solution with fewer steps since others would use the query frequently. For a repetitive query, an SQL expression is a good solution. You can add the following expression to the SQL Expressions screen to accomplish the same task:

```
SampleID IN (SELECT TOP 16 SampleID FROM Sample WHERE CustomerID=99 ORDER BY Format$(Sample.AddedDate, "yyyymmddhhnnss ") & Right$(Sample.SampleID,3) Desc)
```

Use the appropriate value in the "TOP N" clause in the expression. Replace the 99 with the specific customer's internal CustomerID value, which you can find by reviewing the "SQL for last query" on the SQL tab of the query controls after querying any customer samples. While the example above uses only a customer criterion, you can expand the expression with multiple criteria as necessary.

# MSC-LIMS™ *Insights*

## 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.

### File Library

#### [Excel Export Templates](#)

This archive file contains all the example Export templates currently installed by MSC-LIMS. New templates are frequently added to the list and others may be updated from time to time. Download this file to get all current export templates. See each template's Read Me sheet for more information. See *Current Example Excel Export Templates* above for a complete list.

#### [Work Order and Work Sheet Templates](#)

Use these Excel templates to create your own custom work order or work sheet report. Modify the report layout on the template's first worksheet any way you like then preview and export a work order or work sheet report to the appropriate template. See each template's Read Me sheet for more information. 

## Contact Us

Questions, comments, suggestions?

Reach us at:



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