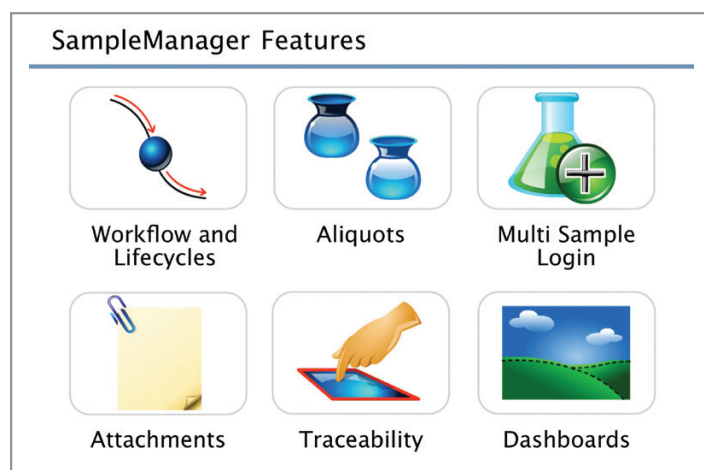


Thermo Scientific™ SampleManager LIMS™

Put Control in the Hands of Your LIMS Users and Transform Your Business

Key Words

Configurability, Workflow Design, Lifecycle Workflow, Aliquots, Attachments, Traceability, Process Mapping, Multi Sample Login, Extensibility, Data Mining, Integration, Paperless Lab, Dashboards



SampleManager features advanced tools and user-interface enhancements that improve laboratory process mapping, management and automation. Workflow capabilities simplify implementation, allowing lab managers to easily model their processes in SampleManager. As laboratory needs evolve, workflows can be modified to change with them.

SampleManager puts decision-making power where it belongs, in the hands of users who can make logical choices about workflow, instrument integration and data reporting for management metrics or regulatory requirements. Ideally, today's labs aren't only paperless; they are powerful enterprise drivers for business transformation.

A workflow-driven LIMS delivers the agility necessary for today's businesses to transform as the regulatory or economic environment requires.

Labs face pressure to be more efficient and manage increased throughput while simultaneously improving data accuracy, analysis and reporting, all in an environment of stricter regulation. SampleManager empowers lab users, putting control in the hands of the right people at the point of decision.

Users can now build workflows to reflect their individual laboratory processes and take ownership of workflow management, allowing them to be synchronized with the changing requirements of the lab, all without specialist IT intervention.

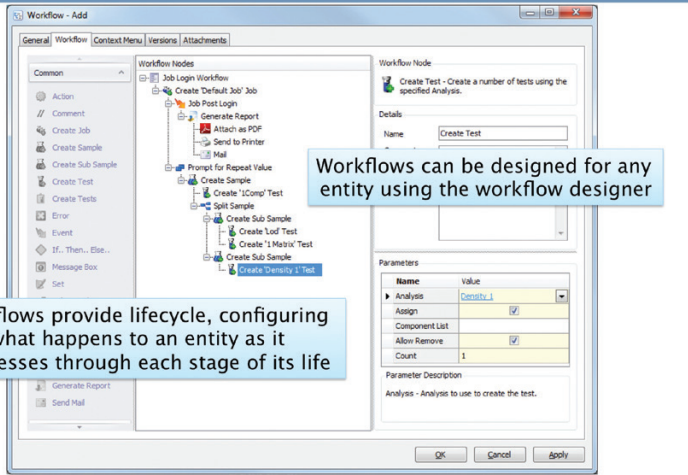
Lab personnel can rely on the LIMS workflow to automate the logical decisions driving their activities, improving throughput by saving time and simplifying user interactions. System configuration and deployment is dramatically easier – and therefore more valuable – for lab managers and the users they support, resulting in a lower cost of ownership to the business.

SampleManager delivers workflow configurability, user-intuitive multiple sample login, point and click extensibility and enhanced data mining and tracking capabilities to benefit a wide variety of industries, including pharmaceutical QA/QC, oil and gas, contract labs, food producers, environmental industries and others. In each of these sectors, productivity and compliance must be in constant balance, even as requirements shift.

Find out more at thermofisher.com/LIMS

ThermoFisher
SCIENTIFIC

Workflow Designer



Workflows provide lifecycle, configuring what happens to an entity as it progresses through each stage of its life

SampleManager makes workflow configuration easier, with support for dynamic hierarchies, empowering lab users and putting control in the hands of personnel at the point of decision.

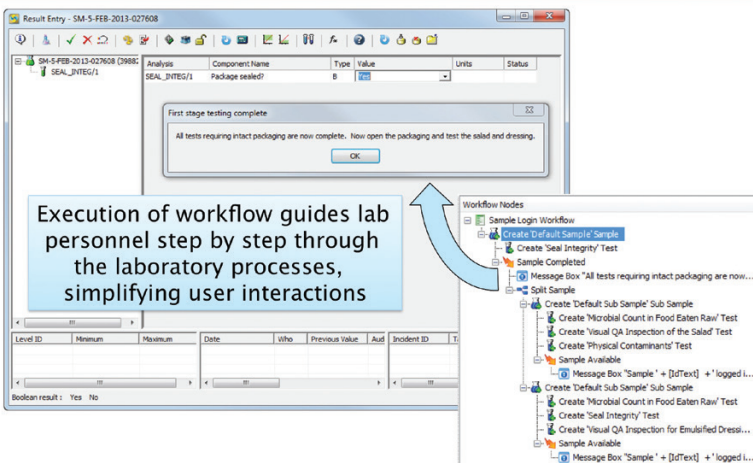
Workflow Types

- Login – Create records using the Login screen –Job, Sample, Aliquot
- Method – Test specific workflow
- Entity – Apply workflow and lifecycle to 'static' entities
- Lifecycle – Status transitions/actions
- Extended Lifecycle – Override the default lifecycle
- General – Simple workflow not tied to an entity



Users can now build workflows to reflect their individual laboratory processes, and take ownership of workflow management.

Workflows



Lab personnel can rely on the LIMS workflow to automate the logical decisions driving their activities, improving throughput by saving time and simplifying user interactions.

Enhanced traceability features in SampleManager, including the ability to track aliquots and composites, enable finer control over samples and more granular data for decision-making and compliance.

SampleManager LIMS, the most widely deployed industrial LIMS in the world, is unique in its delivery of version releases that are built upon collective user experiences and industry knowledge. Each new release of SampleManager ensures an upgrade path that respects your previous investment and reflects continuous customer input. Now SampleManager allows you to take advantage of that collected industry knowledge while gaining the agility you need to respond to changing business or regulatory demands and make cost and time saving decisions that can help you transform your business.

SampleManager At a Glance

- Configurable workflow and extended lifecycle features
- Simplified User Interface where users can create multiple daily toolbars, providing easy access to frequently used functions
- New Sample Login giving more flexibility in splitting and merging samples and aliquots
- Internet Explorer® features and improved support for Windows® 7 and 8 with user-friendly search syntax
- Files, web links and text notes/ attachments for any entity available for inclusion in reports, ensuring compliance over the sample lifecycle

Something For Everyone

For LIMS Users – Automated workflow guides users through lab processes, saving time and simplifying user interactions

For Lab Managers – Easily configurable workflow design allows the lab to adapt to changing business or regulatory requirements

For IT and Systems Administration – .NET development environment for rapid prototyping and easier integration

For Management – State-of-the-art data visualization tools to monitor and measure performance against key metrics

Lifecycle / Extended Lifecycle Workflows

An entity's default lifecycle is defined by a lifecycle workflow. Customers can extend/override default lifecycles using extended lifecycle workflows.

Definition of multiple concurrent lifecycles allows data to follow differing procedures within the same system, e.g. running compliance and non-compliance processes.

Simply extending lifecycle to include additional states allows direct process mapping with no compromise.

```

    graph TD
      U --> D
      D --> WVC[W/V/C]
  
```

Workflows can be auto-documented by generating a WORD document that includes information about the workflow definition, comments and all nodes used. Users can create multiple default lifecycles to manage compliant and non-compliant processes within the same system.

Multi Sample Login

A grid UI manages details for multiple records

Additional jobs, samples, aliquots and tests can be created using the toolbar

Job, sample and test details are all managed within one window

The grid can be transposed to provide alternative data views

Enhanced traceability features in SampleManager, including the ability to track aliquots and composites, enable finer control over samples and more reliable data for decision-making and compliance.

Sample Aliquots

Sample splits can be defined in the workflow, or created ad-hoc during or after login

Sample	Analysis	Component Name	Value
SM-12-FEB-2013-027705 (3995)	PH/1	pH	
SM-12-FEB-2013-027705-1	CELL_COUNT/1	bacteria	
SM-12-FEB-2013-027705-2	PHYS_CONT/1	yeasts	
		Physical Contaminants	
		Description of Contaminants	

Child samples are represented in result entry

Sample decisions can be predefined at login, established at login based on new criteria, made during processing, or made on an ad-hoc basis either at login or during processing.

Workflow

In SampleManager, workflow configuration is easier for users and lab managers to design, with intuitive shortcuts for node manipulation, drag and drop functions, and multiple workflow types. A "Login" workflow defines what will happen to a job, sample or aliquot throughout its life. A "Method" workflow is used to define the lifecycle for specific tests such as managing preparation steps or scheduling additional testing when a scheduled test fails specification criteria. An "Entity" workflow can be defined for any entity that needs a lifecycle associated with it, including instruments, suppliers and stocks. A "Lifecycle" or "Extended Lifecycle" workflow defines a default or non-standard lifecycle for an entity. SampleManager enables creation of multiple lifecycles to separately manage both compliant and non-compliant processes within the same system. Both "Entity" and "Lifecycle" workflow capabilities are unique to SampleManager. Workflows can be auto-documented, generating a text document that includes information about the workflow definition, workflow comments and all the nodes used, which can form the basis of customer validation collateral.

Samples and Aliquots

With SampleManager enhanced Internet Explorer® features, workflow for samples and aliquots can be predefined at login, decided at login or changed during processing, giving users ultimate flexibility in managing samples. These files can also be version controlled and are then available for inclusion in any report required of management or regulatory bodies. Internet Explorer links may also be configured to show linked data such as specific tests and child samples.

Attachments

Files, web links and text notes can be associated with any entity, stored and uploaded to a configurable secure location.

Traceability

Data mining and tracking capabilities, with new browse control abilities, allow users to browse and search in a hierarchical fashion. This key-word based capability is applied across the system and is based on the hierarchy setup introduced in SampleManager 10. The addition of GUID (Globally Unique Identifiers) data types enhances security and ensures consistent data when moving configurations from test to live environments.

Find out how the hardest working LIMS in the industry now gives LIMS users more control to design and manage workflow in the lab.

Traceability

Search data within the current view

Data can be highlighted by property values

SampleManager - Explorer

Expression: [StatusPhraseID] == 'Y' (ForestGreen) [StatusPhraseID] == 'C' (Blue) [Incidents] (Black)

Procedure ID	Description	Data Type	Action Type	Members	TableName
35143	ADD	STATIC	ADD	WORKFLOW	

SampleManager is built with enhanced data mining and tracking capabilities, including user defined toolbars, shortcut keys and Explorer-conditional formatting.

Attachments

Simple text notes, file and web links and uploaded documents can be attached to any data item

Attachments can be managed manually or automatically by workflow

Attachments can be viewed, modified, versioned and embedded in reports

Name	Version	Type	Category	Group	Created D...
Hazard Info	1	Note	General		22/05/201...
CEL_BMP	1	File	General		22/05/201...
C:\Users\Kate.evans\Documen...	1	Link	General		22/05/201...

In SampleManager, attachments can be archived and related to specific tests or samples, ensuring industry and regulatory compliance.

Dashboards

From design to elegant dashboard using built-in visual controls and designer capabilities

Assigned Testing by Instrument

Unassigned Tests by Type

Instrument Status

Users can create the reports and dashboards they need using new design capabilities.

Find out more at thermofisher.com/LIMS

Austria: +43 (0)800 20 88 40 **Belgium:** +32 (0)056 260 260 **Denmark:** +45 70 27 99 20
Germany: +49 2304 932-5 **Ireland:** +353 (0)1 885 5854 **Italy:** +39 02 950 59 478
Finland: +358 (0)9 8027 6280 **France:** +33 (0)3 88 67 14 14 **Netherlands:** +31 (0)20 487 70 00
Norway: +47 22 95 59 59 **Portugal:** +351 21 425 33 50 **Spain:** +34 902 239 303
Sweden: +46 31 352 32 00 **Switzerland:** +41 (0)56 618 41 11 **UK:** +44 (0)1509 555 500

ThermoFisher
SCIENTIFIC

©2016 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries unless otherwise specified. This information is presented as an example of the capabilities of Thermo Fisher Scientific Inc. products. It is not intended to encourage use of these products in any manners that might infringe the intellectual property rights of others. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.

PS8006EN 1020S