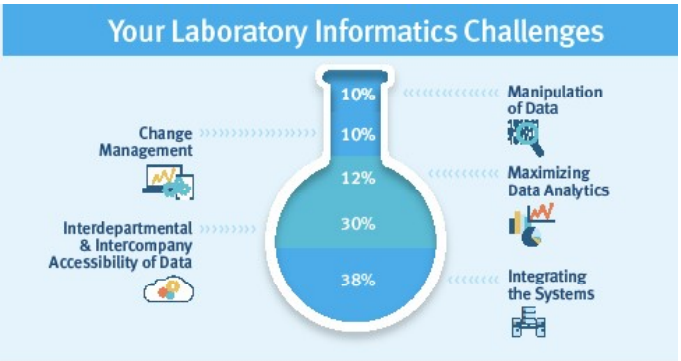
Thermo Scientific Integration Manager Software

Your lab. Connected.

Keywords: laboratory integration, workflow efficiency, productivity improvements, cost savings



An integrated lab is an efficient lab. A profitable lab. But in most of today's businesses, the vision of an integrated lab is far from reality.

Even with significant investments in enterprise tools and technologies to improve data flow, increase information sharing and optimize their business processes, research indicates that 38% of lab managers still consider integration a key business challenge.

To realize the full value of these investments, companies need a seamless and fully integrated operation connecting their laboratories with R&D and the manufacturing floor, as well as external partners, collaborators and contract laboratories. Only with a holistic view can businesses make faster, more informed decisions.

Thermo Scientific™ Integration Manager™ software helps laboratories make the most of their technology and equipment investment.

Integration Manager software is a flexible and powerful data transformation tool that delivers bi-directional data distribution across the enterprise. This easily deployed system provides connectivity to all parts of the laboratory workflow, translating data generated by any of an organization's instruments, services, or third-party enterprise applications. With Integration Manager software, data is transmitted between systems regardless of the individual output formats produced by each instrument or manual process. This includes analytical run information like sample lists, analytical results and disposition. With built-in reliability and fault tolerance features, Integration Manager software functions efficiently and securely in even the most unstable network environments.

ThermoFisher SCIENTIFIC

Integration Manager software helps laboratories make the most of their technology and equipment investment. By connecting the laboratory with enterprise data systems, Integration Manager software synthesizes disparate data for a complete picture of the business. Integration Manager software also helps automate manual data collection processes, improving data integrity and efficiency. Integration Manager software builds greater confidence in decision making, helping laboratory managers move from analysis to action.

With Integration Manager software, laboratories can take full advantage of their instrumentation and enforce best practices in data capture.

Maximize the value of your lab investment

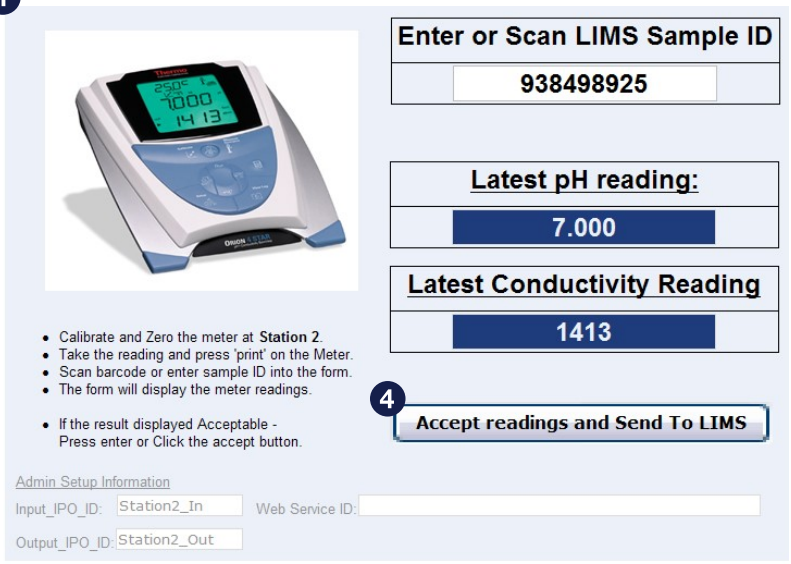
A coherent strategy that can connect data from Laboratory Information Management Systems (LIMS), Chromatography Data Systems (CDS), and other sources (e.g., Enterprise Resource Planning [ERP] and Manufacturing Execution Systems [MES]) across the enterprise is a key business driver today.

Integration Manager software transforms today's laboratories into tightly integrated, productive environments. Acting as a "translator," Integration Manager software leverages existing investments in software systems, databases, and laboratory equipment from a wide variety of commercial vendors. Integration Manager software removes the traditional "language barrier" existing between these instruments, systems, and vendors, transforming data into information that can be used across the enterprise.

Simple instrument connectivity

Orion Star pH and Conductivity Data Capture: Station 2

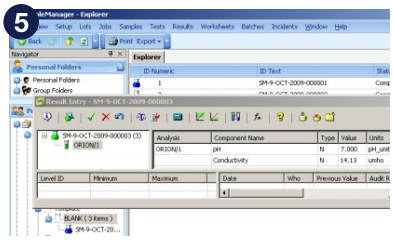
1



2

3

5



1. For instruments that do not recognize Sample and Test identification data, Integration Manager software provides an easy link to the LIMS through workstation tailored forms.
2. Sample ID is requested and entered manually or via a barcode reader.
3. As the ID is entered, multiple data items are read from the instrument (via local or remote COM agent) and displayed on the form.
4. If acceptable, the technician submits results to the LIMS.
5. Sample data is transmitted and available in the LIMS.

How much integration do you think is standard in your industry?

The chart below illustrates just how much room there is to more fully integrate the laboratory, and to realize productivity and cost savings. How does your laboratory compare?

Typical lab and enterprise software installations	Percent not yet Integrated with LIMS
Chromatography Data Systems	65%
Enterprise Resource Planning	60%
Data Analysis/Analytical Software	65%
Manufacturing Execution System	60%
Enterprise Content Management	73%
Modeling/Simulation	80%
Electronic Lab Notebook	64%
Scientific Data Management Software	71%
Bioinformatics/Cheminformatics	79%
Other Data Acquisition Software	61%
Total Average	**64%**

Intelligent integration to drive workflow

Today's lab instruments are more capable than ever. To maximize these capabilities, laboratories need an intelligent integration that can help drive the lab workflow. The Integration Manager software Workflow Agents use Microsoft™ Windows Workflow Foundation™ technology to connect instruments, and other external systems, to the LIMS. This flexible platform allows Integration Manager software to interface easily with instruments and systems requiring multiple stages of import/export.

Further maximizing the lab investment, Integration Manager software applies configurable business logic to laboratory instruments. The Workflow Agents can communicate with end points that require more than a simple push or pull to transfer data. For example, the Workflow Agents can walk a user through a smart balance process, or communicate with a series of individual web service methods to pull data from an external system.

With Integration Manager software, laboratories can take full advantage of their instrumentation and enforce best practices in data capture.

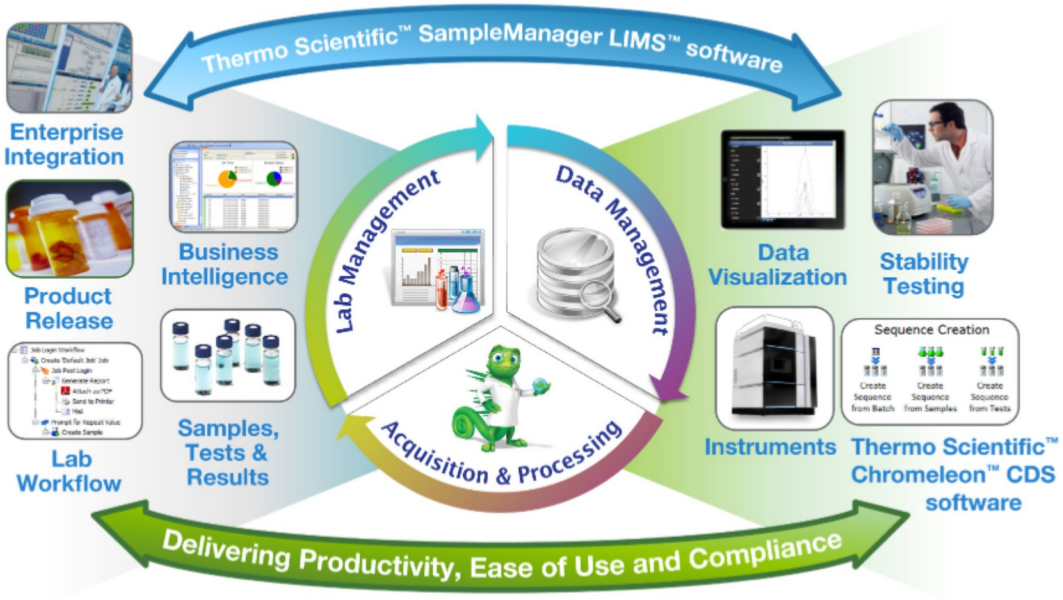
Improve data integrity and efficiency through automation

For many enterprises, data collection and aggregation is a manual and inefficient process. Distilling the mountain of available structured and unstructured data into relevant information can be tedious and error-prone. Because data formats and applications are frequently inconsistent and not well integrated, there is no coherent way for scientists to aggregate all of their work in one place. All of these are barriers to making effective business decisions and increasing return on investment (ROI).

> Integration Manager software helps an organization reduce or eliminate inefficiencies or error-prone processes while helping standardize data collection practices.

Integration Manager software reduces manual data handling through process automation. By automating the collection and aggregation of data, laboratories gain efficiency and reduce errors. The software helps an organization reduce or eliminate inefficiencies or error-prone processes, while helping standardize data collection practices. The result is improved data integrity and greater confidence in decision making, helping laboratory managers move from analysis to action.

Thermo Fisher enterprise software portfolio for paperless lab



A Paperless Lab has taken advantage of opportunities to integrate the laboratory with the enterprise and automates systems by eliminating paper-based, manual and error-prone processes. While most companies have invested in many instruments and software solutions in the laboratory, manufacturing and the enterprise to improve operations, these systems are not seamlessly integrated, creating data silos, or standalone information repositories that do not communicate with one another. By automating operations and integrating these individual solutions, organizations can reduce paperwork, increase efficiency and throughput, automate regulatory compliance, reduce costs, foster collaboration and make faster, better informed business decisions.

Find out more at **thermofisher.com/digitalscience**

ThermoFisher SCIENTIFIC

© 2020 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. Microsoft™ Windows Workflow Foundation is a trademark of Microsoft™. **PSB80255-EN0820**