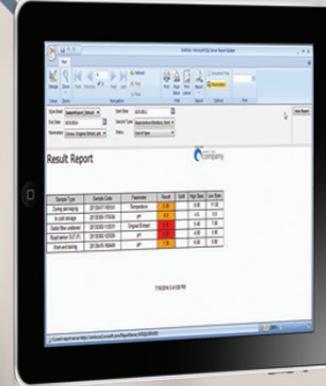
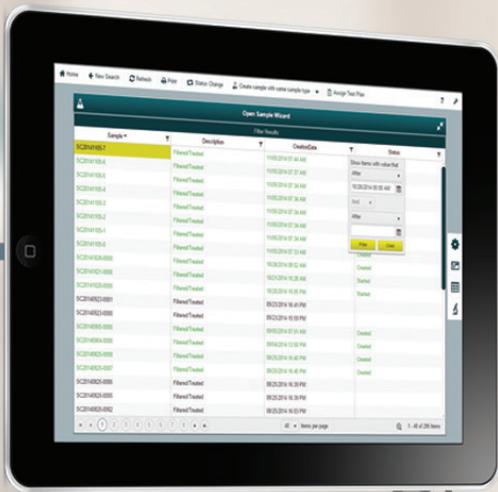


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Siemens PLM Software

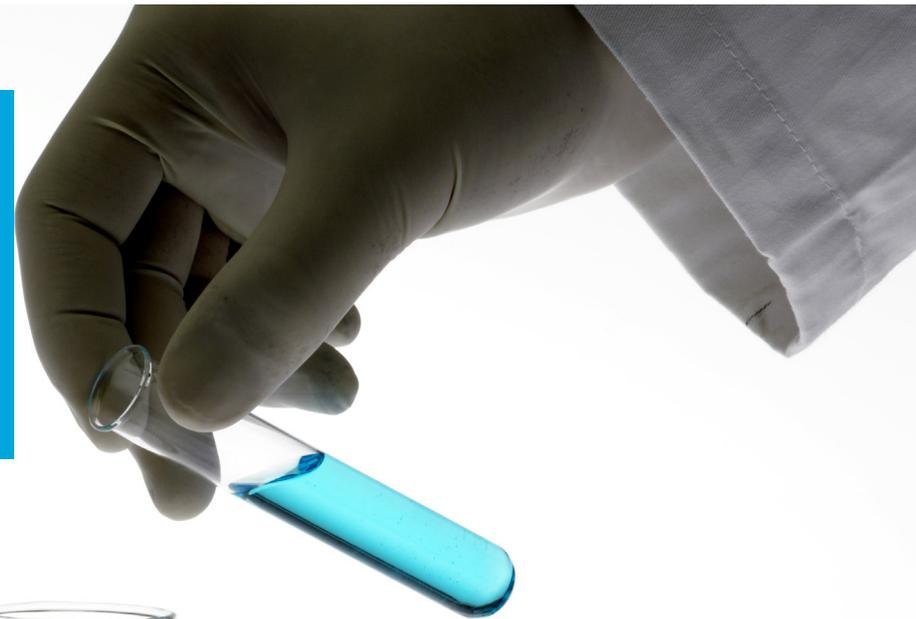
# SIMATIC IT Unilab

Your next generation LIMS



[siemens.com/lims](http://siemens.com/lims)

Laboratories are under enormous pressure to do an ever-increasing amount of work with fewer employees and at lower cost.





# SIMATIC IT Unilab

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# SIMATIC IT Unilab – Your next generation LIMS

## Quality

Efficient quality management

Industrial QC laboratories need to protect a company's reputation

The QC lab has to ensure overall product conformity and quality. SIMATIC IT Unilab bridges the gap between the lab and production.

It supports the shift from off-line analysis to at-line quality checks during production, as defined in the SOPs, with immediate feedback to the plant.

This optimizes decision-making and supports corrective action taking and drastically reduces scrap and rework.

As a stand-alone system or as an integrated part of SIMATIC IT, in smaller lab environments or as an enterprise LIMS, SIMATIC IT Unilab is one of the world's leading LIMS solutions – with a top position in the process industry. SIMATIC IT Unilab has proven its reliability at a large number of multinational companies in process industries.

## Innovation

Efficient time-to-market

R&D laboratories need to bring new products to the market faster

The lab is the source of innovation in a company. SIMATIC IT Unilab includes tools for brand-watching and R&D and stability studies. As a core module of SIMATIC IT R&D Suite Unilab helps bridge the gap between the lab and production. It closely interacts with formula management and ELN tools.

This allows scientists to make optimum use of their time, and speed up new product introductions.

In addition, SIMATIC IT Unilab is an asset to a large number of laboratories in the environmental, animal health and water analysis sectors as well as various other industrial environments. SIMATIC IT Unilab is a multi-lab, multi-language enterprise LIMS for QC, service and R&D labs. It includes modules for stability

## Service

Maximize lab efficiency

Independent service labs need to increase customer satisfaction

Lab information has to be available 24/7 for customers to follow up their analysis.

SIMATIC IT Unilab offers functionality to support direct customer interaction, immediate cost calculation for analysis requests and automated invoicing.

This reduces the number of entry-errors, decreases administrative workload for the lab staff, and increases customer satisfaction.

testing, instrument connection, equipment management, personnel qualification management, barcoding, user management, cost calculation, and reporting.

All over the world, laboratories are under enormous pressure to do an ever-increasing amount of work with fewer employees and at lower cost.

This situation is emphasized by the fact that regulations are becoming more complex and stringent.

## Your lab in good hands

### Security



Access definition – User management:

Definition of access and access type is possible per user or user-group

- to applications or functionality
- to data (read/write)

Single sign on for Windows users is possible

Full audit trail of user actions

As access to your LIMS is possible from outside the company's network, the most innovative and stringent security measures are in place to protect your data.

### Configurability



Adapt your LIMS to your lab requirements through configuration of the application (over 80% of functional configuration can be done by your own staff).

There is no need to modify the standard software itself. No IT staff or vendor involvement is required.

The configuration approach guarantees your full benefit from functional enhancements in future releases.

### Availability



The browser based approach considerably limits the need for hardware and software handling, as no application rollout is required and any device running a web browser can be used.

Easy network set-up and LIMS integration with other systems based on the flexible and scalable architecture

The back-up and archiving procedures enable the availability of historic data as well as real-time data.

# Unleash your lab

SIMATIC IT Unilab enables fast exchange of quality information all along the production workflow covering multiple sites and involving different departments,

making life easier for the various roles within the laboratory and production test environment.

## Easy to use – easy to consult

### User friendly

- Dedicated user interface: Only see what you need and what your access level will allow you to use.
- Worklists and guidance through automated workflows
- Easy browsing and searching
- Pre-defined reports
- Direct access for external parties (customers, suppliers and field workers)
- Instrument connections with dynamic connection for data exchange
- QR-code scanning
- Result verification and validation upon entry
- Automatic analysis request handling based on test-plan
- Cost calculation for analysis requests
- Automated invoicing processes

## Lab manager – easy lab management

### Transparency

- Centralized collection, management, and storage of all lab data
- Model and manage workflows
- Reporting and dashboards for short and long term lab management
- Detailed management of users and user groups
- Availability of historic data as well as real-time data
- Trending and SQC for decision making support
- Management by exception
- Standard operating procedures for off-line and atline quality checks
- Equipment and qualification management
- Lab performance analysis
- Supports GLP, GAMP, ISO 9001:2000, ISA 17025 and 21 CFR Part 11

## IT manager – easy to maintain

### Future oriented

- Modular and scalable structure of functionality
- Pay for what you need
- Use what you have (platform, device and browser agnostic)
- Access definition (single sign on for Windows users is possible)
- Service oriented architecture
- Easy network set-up, easy implementation
- LIMS integration with other systems (interfaces to ERP, MES, PLM)
- Standard lab equipment interfaces
- Reduce IT cost, no application rollout needed anymore

## Application manager – easy to configure

### Configurable

- Standard templates fit 80 percent of your lab requirements
- Clear graphical user interface for lab configuration
- Minimum hardware and software handling
- Limited database administration requirements
- Backup and archive procedures
- Brand-watching and R&D and stability studies
- Reduce downtimes during interventions
- Corporate architecture with multi-lab, multi-language

# Leverage your lab activities

## Regulatory compliance

- Full workflow management
- Access definition and control
- Secure log in
- Electronic signatures
- Audit trail and version control
- Standard operating procedures (SOP) support
- Instrument data storage
- Lab and quality data archive and backup
- Equipment management
- Personnel qualification management

## Lab efficiency

- Time- or event-based sample planning
- Worklists and worksheet management
- Verification and validation
- Trending and SQC
- Unicode and Multilanguage support
- Multi-time zone and multi-site support
- Centralized lab and quality data
- Manages all types of analyses
- Instrument connections
- Automated reporting

*A network of Siemens offices and strategic business partners supports SIMATIC IT Unilab with relevant skills and know-how, providing a complete range of services, including training, support, implementation and validation.*



# Make your lab work for you

## User management

Define access to features and data based on site, department, user profile or user group.

## Equipment management

Centralizes all information on each piece of equipment and supports calibration and maintenance, including the required audit trails.

## Management by exception and alarm handling

Lab workflow configuration to support automatic validation of in-spec analysis, leaving the lab supervisor the time to focus on off-spec samples.

## Reporting

Advanced web-enabled query, data analysis and reporting tool based on Microsoft® SQL Server® reporting services technology, for data retrieval and manipulation in automated predefined standard or ad-hoc reports.

## Qualification management

Centralizes all information on personnel to ensure appropriate certification and training.

## Cost calculation module

Automates the invoicing process for commercial labs by calculating the costs of an analysis based on price catalogs and passing these to accounting.

## Validation pack

Confirms that SIMATIC IT Unilab was developed, encoded, reviewed and tested following a verifiable lifecycle and includes a Certificate of Independent Audit.

## Instrument connection (device input agent)

Through a dynamic connection for data exchange, instruments can interact with LIMS, for example, to change specifications, log in samples, enter parameter or method results, extract data, validate metrics, etc.

## Stability module

Detects the effect on quality of environmental aspects (temperature, humidity, light) to determine storage conditions, retest periods, and shelf life when new products, ingredients or dosage forms are introduced.

## Worklists and work instructions

Worklists per user with guidance through automated workflows and instructions on methods and procedures to follow.

## Verification and validation of results

Verification of results against physical constraints and automatic input validation against specifications, set limits or historic data, with notifications in case of deviation.

## Barcoding, QR-coding

SIMATIC IT Unilab can generate and define barcode labels for faster uploading and tracing of quality data.

## Trending and SQC

Trending from the results window based on constantly updated statistical graphs enables you to identify and follow quality trends online or via statistical quality control (SQC), and to underpin any decisions with factual information.

## Integration and interoperability

Data from other systems can be transformed using any type of enterprise application integration (EAI) tool into a standardized format that can be imported into Unilab through its service-oriented architecture.

## Search and filter

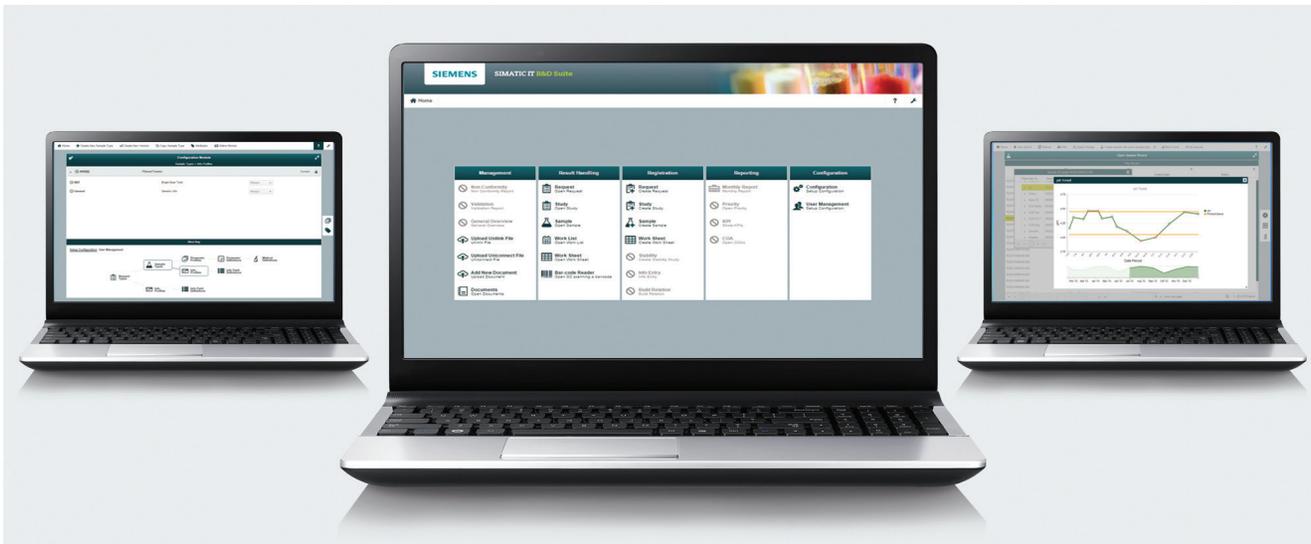
Easy search function including auto-completion, filter in list, text search or time-stamp search.

# Capitalize on quality

SIMATIC IT Unilab goes beyond lab efficiency to support overall quality, product innovation and production efficiency in the bargain.

Much more than a LIMS, it is a complete quality management system. It offers high performance functionality to handle all lab activities in the most effective and least time-consuming manner.

- Realize the paperless lab
- Big data handling
- Integration with ERP, MES, PLM
- Integrated quality management
- Reduce IT costs
- Easy implementation and roll-out
- Reduced scrap and rework
- Optimum lab automation
- Greater lab efficiency
- Less lab administration
- Greater accuracy, fewer entry errors
- Eliminates application downtime
- Better decision support
- Cost-efficient compliance
- Cost-efficient innovation



*“With the release of Unilab V7, Siemens has done a very nice job of re-imagining the application for a modern platform. Undoubtedly their customers will like it.”*

Greg Gorbach  
Vice President  
ARC Advisory Group

# LIMS in the cloud

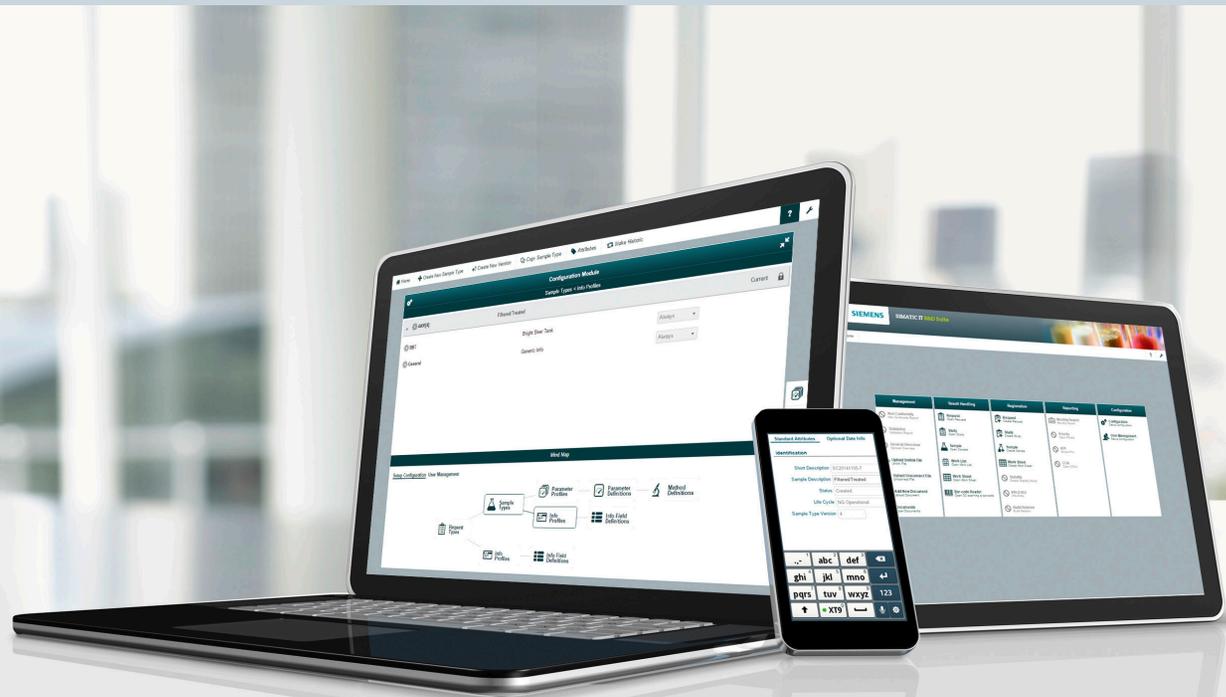
SIMATIC IT Unilab is fully web-based. No application downloads or installations are required to start using the software, and it is completely device-, brand-, and platform-independent.

Accessing data and functionality is possible through any HTML5 web browser (Internet Explorer®, Safari®, Chrome™, Firefox®).

SIMATIC IT Unilab makes optimum use of available hardware. Horizontal and vertical scalability of databases enables users on different sites to share data available on the server database.

With its single-page-application-based responsive web design, SIMATIC IT Unilab supports tablets. Users can easily switch between compact and comfort screens to match viewing devices.

The ergonomic screen design displays only the active functions, and offers drag-and-drop and docking features that help users rearrange and adapt the display to specific tasks and preferences.



# Integrated solutions for paperless manufacturing

The Siemens vision for the digital factory includes the digital enterprise portfolio, a software platform combining the tools for the digitalization of the complete

product and production lifecycle, ranging from product design and definition, through plant design and planning, to production scheduling and execution.

Among these integrated solutions for paperless manufacturing is the Siemens Manufacturing Operations Management (MOM) suite. This is a holistic solution for modeling, visualizing and harmonizing business processes globally, meeting companies' growing need for manufacturing IT that can handle product, production, quality and plant data, and share these among the various parts of a manufacturing organization.

Siemens MOM comes complete with manufacturing intelligence capabilities. It also provides all links in the chain connecting product development with production. In process industries, it does this through a software platform for R&D, including LIMS, specification, formulation and recipe management. In discrete industries, it connects directly to the engineering world.

The standards-based integration with PLM, ERP and Industrial Automation completes the unique offer that creates the flexibility and scalability to maximize manufacturing and market responsiveness.

#### Increase manufacturing and market responsiveness

- Faster from idea to finished product
- Optimized quality performance
- Operational intelligence based on process, production and quality data

#### Manufacturing Operations Management covers:

- Product specification and formulation
- Manufacturing execution systems
- Advanced planning and scheduling
- Enterprise manufacturing intelligence
- LIMS for lab automation and QA/QC
- Integrated quality management
- HMI software/SCADA
- Distributed control systems

## About Siemens PLM Software

Siemens PLM Software, a business unit of the Siemens Digital Factory Division, is a leading global provider of product lifecycle management (PLM) and manufacturing operations management (MOM) software, systems and services with over 15 million licensed seats and more than 140,000 customers worldwide. Headquartered in Plano, Texas, Siemens PLM Software works collaboratively with its customers to provide industry software solutions that help companies everywhere achieve a sustainable competitive advantage by making real the innovations that matter. For more information on Siemens PLM Software products and services, visit [www.siemens.com/plm](http://www.siemens.com/plm).

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