

# Laboratory Software



**Power Your Titration Bench**  
with LabX<sup>®</sup>

**METTLER TOLEDO**

# Single Software For Many Laboratory Instruments

The new LabX® from METTLER TOLEDO offers a great new possibility to connect your titrators, balances, density meters and refractometers, melting point instruments, Quantos systems, SevenExcellence™ multiparameter benchtop meter and UV/VIS spectrophotometers all with one single software. This uniform software and interface means less training and also helps to increase your efficiency. With a unique approach, LabX allows you to work from either the instrument or PC or both and if required, with complete compliance.

## Workflow Optimization



LabX offers many tools to help you optimize your workflow in the laboratory and increase efficiency. Connect your METTLER TOLEDO instruments to LabX and benefit from simplified operation, efficient method editing with the graphical layout, fast sample series modifications and tailored reports.

## Less Training



Less training also means less time and money spent educating your workforce. LabX offers the same concept of use for all instruments. Beyond that, users will recognize similar workflow concepts throughout the instrument terminals for fast adaptation to new instruments and seamless integration.

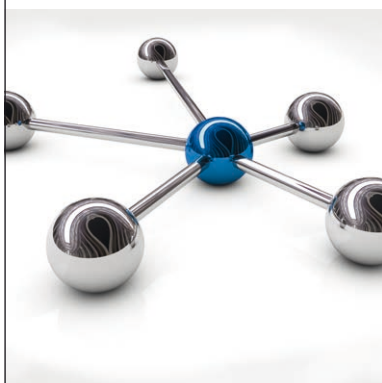
## Cost Effective



Reducing redundant software for different instruments helps you save time and money spent on maintenance and support. Use LabX to increase the efficiency of your workflow and eliminate waste by using LabX for your paperless lab documentation. Integrate LabX with 3<sup>rd</sup> party software such as LIMS, ERP, etc. for a fully integrated process.

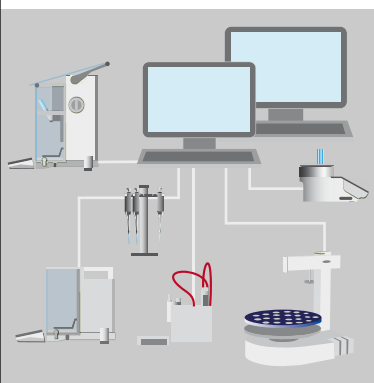


### Central Management



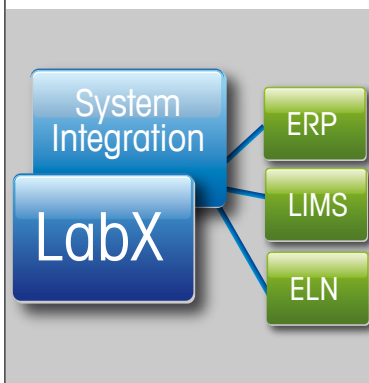
LabX offers you all the convenience of centrally managed software. With one database all users have access to the same data, which can be restricted to the appropriate access according to your user management. Create your SOP methods once and all the instruments from different laboratories will always have access to the latest version.

### Software Architecture



To meet your demands, LabX can be installed as a single software installation or as a distributed system. Build up the system that suits your need and have access from any PC to LabX and your instruments in the laboratory. Your results are stored on the well-versed SQL server for highest reliability.

### System Integration



The relevance of system integration increases every year. With the Integration option of LabX 3<sup>rd</sup> party software such as ERPs, LIMS and ELN can easily be integrated. As an interface LabX offers API web service to exchange e.g. sample lists, start tasks and get the results back into your main system.

# Work from PC or Titrator or Both For Flexible Operation

LabX offers you full flexibility for the way you want to work. Either start your analysis at the instrument or from the PC and have constant access to both your current sample analysis and latest results. No matter where you are use LabX Mail to receive a tailored message with the latest results, when a sample changer is ready to test new samples or when results are out of specification.

## Flexible Operation



LabX anticipates the different demands of users and the way they like to work. Thus, LabX offers you full flexibility wherever you work. For example: start your sample series at the titrator and move to other daily tasks. Open up the workbench from your office and monitor the same series you previously started.

## Methods & Series



All methods and series are stored in one database. Thus the methods and sample series that you create in LabX or at the instrument are always available wherever you are. Beyond that, the titrator and workbench intelligently display solely those methods and sample series that can be run by the selected titrator model.

## Workbench



Each instrument connected to LabX has its own workbench correlating to that instrument. It offers all the components needed to run your daily tasks and the tools to monitor your sample series and results. Use the statistics view for quick and easy inspection of results to see if they are within established limits.



### Results



Have access to your results from the titrator or your PC. Use search folders to structure results from different analyses. LabX offers you a sample and a series based view of your results to match your needs. Each series offers the statistics tab for a quick and simple overview of the results.

### Automation



Use LabX to simplify sample changer operation with the transparent and easy-to-manage sample series tables. Track the state of your series from any LabX connected PC in your laboratory. Alter your series by adding or inserting urgent samples while operating.

### LabX Mail



Whether you are on the go or currently not located next to your titrator or LabX network, use LabX Mail to have messages or results sent to you. Increase your efficiency by receiving tailored messages: e.g. "Results out of specifications" or "Ready for more samples".

# Execute Your Daily Tasks With One Click®

**One Click is a well-recognized concept of METTLER TOLEDO instruments. LabX offers you the same concept and helps to easily distribute shortcuts for different users over various instruments. To facilitate your workflow, LabX offers the task scheduler and SmartCodes™ to automate your analyses. Use SmartSample™ for secure and efficient titration weighing.**

## Shortcuts



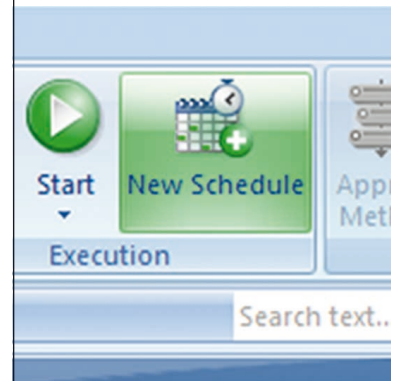
Execute your tasks with One Click. Simply create a shortcut to methods, sample series, series sequences, tasks or manual operations, e.g. drain your beaker to waste, and have direct access to your most common analyses. All the shortcuts you create at the workbench are also displayed at the titrator and vice versa.

## Simple Weighing



Excellence Balances connected to LabX have a dedicated entry point for titration tasks that require weighing. Simply pick the task and the balance will guide you through the samples. Start your titration and add more sample weights as you're testing for improved productivity.

## Schedule Tasks



Use the Scheduler to automatically start tasks, e.g. begin Karl Fischer pretitrations just before coming into the lab for the day. Or schedule LabX to do the daily sensor calibration for you. Periodically take samples of production-line baths to observe the correct ion concentrations.



### SmartSample™



Remove transcription and ordering errors as well as improve efficiency with the new SmartSample RFID technology workflow. Identify and weigh your titration samples at an Excellence Analytical Balance with the SmartSample kit. Enter the sample identification (ID) at the balance to make sure the ID and weight are properly assigned to the physical sample.

### SmartCodes™



Fully automate the selection of the correct method and transcription of samples IDs with a barcode or SmartSample RFID tag. Thus, eliminate sample order errors by reading the sample information as you test it, as well as ensuring the right method is selected for each product. Use the automated 1D and 2D barcode reader with InMotion™ Autosamplers.

# Traceable and Compliant Ensured with LabX<sup>®</sup>

Work from the instrument or PC and LabX will ensure that you are fully compliant with regulatory standards such as FDA 21 CFR Part 11. Use the services offered from METTLER TOLEDO for software verification (IPac) or full validation of your system with the Validation Manuals I & II. A sophisticated user management, electronic signatures and release process for methods and reports are additional handy features of LabX that support your daily reporting.

## IPac



The LabX Initial Software verification Package (IPac) is a service product of METTLER TOLEDO to ensure successful software installation and proper operation at the installation site. Use the IPac to meet your standards for quality management and documentation. IPac contents are:

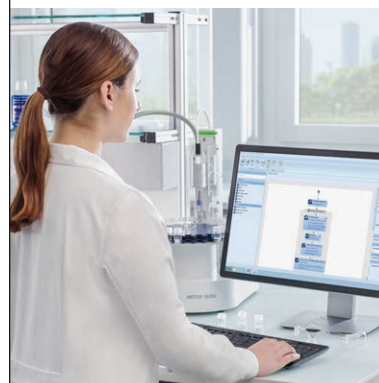
- Installation Qualification (IQ)
- Operational Qualification (OQ)
- General System Suitability Test

## Validation Manual I and II



For software validation in accordance with regulatory bodies such as FDA, METTLER TOLEDO offers onsite validation support with the Validation Manuals I and II. Validation Manual I offers the necessary documentation for vendor qualification and Validation Manual II for the validation of the software including installation and operational qualification (IQ & OQ).

## User Management



Centrally set up the user management with users and assign rights to roles. Instruments connected to LabX have the same user management, i.e. use the same login at the instrument and PC, to offer full traceability whether you work at the instrument or in LabX. Enforce your own account policies to meet company or regulatory guidelines and standards.



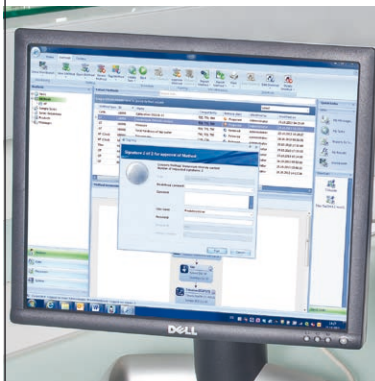


### Regulatory Compliance



The Regulation option of LabX server provides all the necessary tools to meet the FDA regulation (21 CFR Part 11) for data management and storage. All relevant actions taken at the instrument or PC are recorded in the audit trail of LabX for full traceability and flexibility, no matter where you work.

### Electronic Signature



Define your electronic signature policies according to your standards. For example, make sure that new methods follow your own review and approval process before they are released for your daily applications in the lab. Reviewed objects such as methods, results or reports, etc. are protected from any alteration.

### Propose & Release

Name	Compatibility	Release state
Calibration DG111-SC	T50, T70, T90	Proposed
Ammonium chloride content	T50, T70, T90	Proposed
Measure	T50, T70, T90	Released
Total hardness of tap water	T50, T70, T90	Released
Toluene dty	C20, C30	Released
Water standard 1.0 mg/lg	C20, C30	Released
Titer 0.1 mol/L NaOH	T50, T70, T90	Released
Total hardness of tap water	G20	Proposed
Chloride Content in Ketchup	T50, T70, T90	Released
m-value of tap water (EP)	T90	Released

To differentiate between development and the final version of methods, report templates and other objects can be approved and then released. Use the flexible views at the titrator and LabX to display only the released method for daily use or switch to the latest amended method for any further modifications needed.

# Build the System That Perfectly Matches Your Needs

**LabX® offers a modular licensing approach to meet your needs today and in the future. Choose the starter pack that suits your requirements and add optional licenses to match your customized needs. Integrate additional instruments to your LabX system by simply activating the relevant instrument license key in LabX.**

## Titration Starter Packs

	LabX Titration Express	LabX Titration Server
	Titrator Instrument License	Titrator Instrument License
	Excellence Balance License	Excellence Balance License
		User Management
		Auto Import / Export
Included		
Optional	User Management	Regulation
	Auto Import / Export	System Integration
	Statistical Evaluation	Advanced Report Designer
	Instrument License (1 additional)	Statistical Evaluation
		Instrument License (28 additional)

## Options

User Management	Define users (Individual users) and roles (Lab Technician, Lab Manager, Quality Control, Administrator, etc.) in the LabX software. Access to functionality is based on the defined rights each user or role is given. Login to all your instruments and PCs on your LabX network with the same username and password or fingerprint via the LogStraight™ fingerprint reader.
Auto Import / Export	Simply define the export settings for your results and sample series for automated file creation in a defined directory. With a simple process, import your tasks and sample series automatically into LabX creating tasks or even start the analyses directly. Import and export data directly in CSV and XML formats. Exporting and importing was never more powerful and able to meet your needs.
Regulation*	This option includes audit trail and e-signatures (releasing and signing) of methods (SOPs), reports, results, etc. Electronic signature is possible via username and password or via Log-Straight fingerprint reader. With the regulation option combined with the user management option, your system will be audit-ready at any time.
System Integration*	Bring your tasks directly to the instrument's touch screen with bi-directional integration into your ELN, LIMS, or ERPs. Much more than just capturing data from an instrument, the LabX system integration option allows bi-directional integration. Centrally start and control tasks directly from your ELN or LIMS. These 3 <sup>rd</sup> party systems are able to send tasks directly to the METTLER TOLEDO instrument touchscreen terminal.
Advanced Report Design*	The Advanced Report Designer goes beyond the flexibility of the standard LabX report editor for completely flexible layouts. This advanced design of your LabX reports allows you to freely customize reports with all details and options, such as charts, plots, and tables.
Statistical Evaluation	This option is a powerful tool to help analyze measurement results and monitor process changes over a period of time. The user has the flexibility to filter data based on parameters such as result name, sample ID, instrument ID, and more in order to display the relevant information in a comprehensive report. Warnings and rejection criteria can be easily customized according to user requirements.

\* Only available with LabX Server

## LabX® Services

for efficient LabX system qualification and validation

Name	Description	Part No.
LabX IPac	LabX Initial Software verification Package (IPac) ensures successful software installation	51710898
LabX Validation Manual I	All information necessary for the qualification of METTLER TOLEDO as the software supplier (vendor qualification)	30003640
LabX Validation Manual II Starterpack Titration	All instructions and forms necessary for the validation of the software (IQ, OQ).	30097758



## Multiparameter Analysis with One Click®

Today's quality control and testing labs have a multitude of tests to be performed on a single sample and often have multiple samples to run at the same time. Combining tests with a multiparameter system can optimize accuracy and reproducibility while saving valuable time and ensuring proper correlation of results to sample identification.

### Benefits of a Multiparameter Analysis System:

- Efficient high sample throughput
- Robust system layout and smart security checks for reliable unattended operation
- Simple and ergonomic operation – pleasant to work with, short learning period
- Optimized for fast, accurate and repeatable tests, and cleaning
- Secure data handling thanks to our powerful LabX® software
- Onsite METTLER TOLEDO service installation, qualification and training

See what METTLER TOLEDO can do to optimize your lab with a Multiparameter Analysis system: [www.mt.com/titration-multiparameter](http://www.mt.com/titration-multiparameter)

[www.mt.com/LabXTitration](http://www.mt.com/LabXTitration)

For more information

One Click is a Registered Trademark of METTLER TOLEDO in Switzerland, the European Union, Russia and Singapore. LabX is a Registered Trademark of METTLER TOLEDO in Switzerland, USA, China, Germany and a further 13 countries.

### METTLER TOLEDO Group

Laboratory Division

Local contact: [www.mt.com/contact](http://www.mt.com/contact)



Subject to technical changes.

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