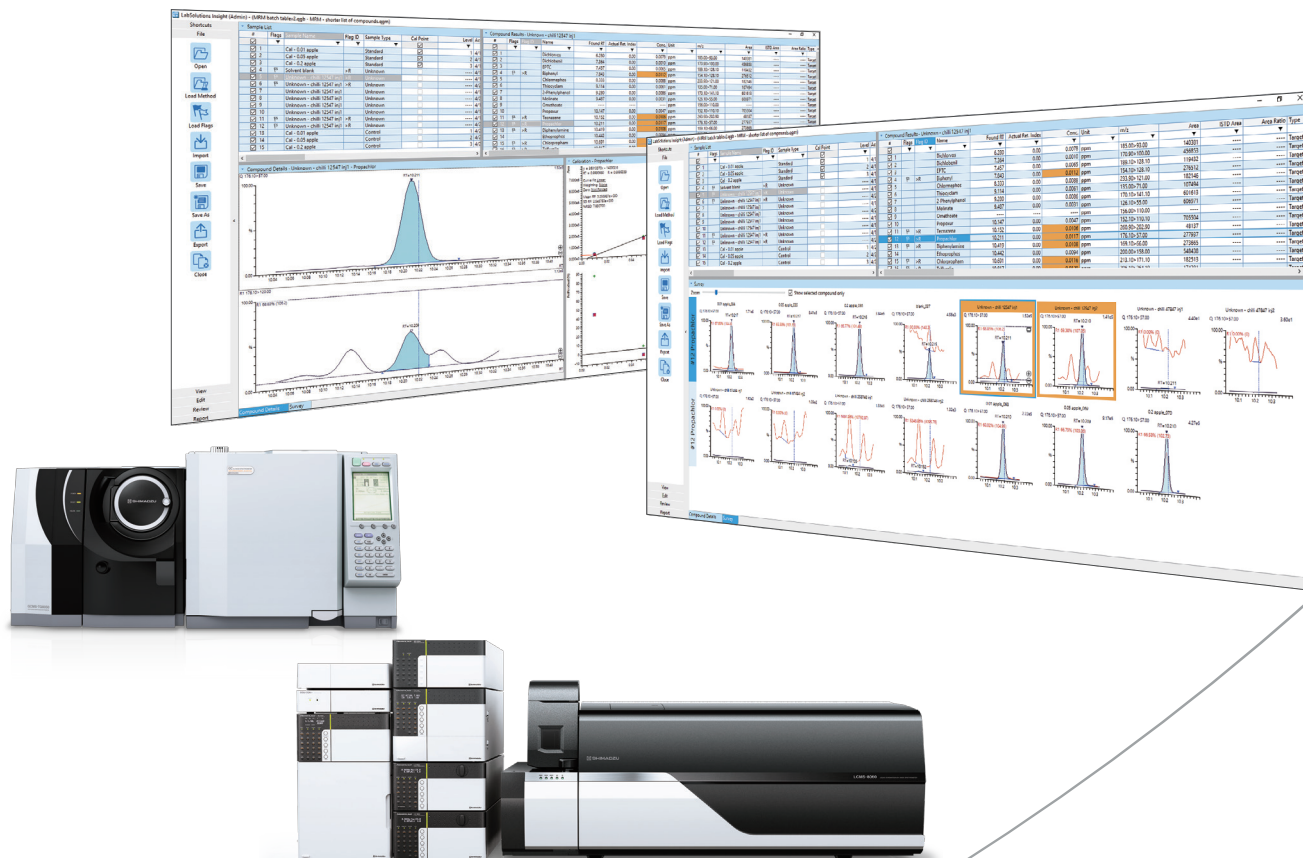


Multi-Analyte Quantitation Software

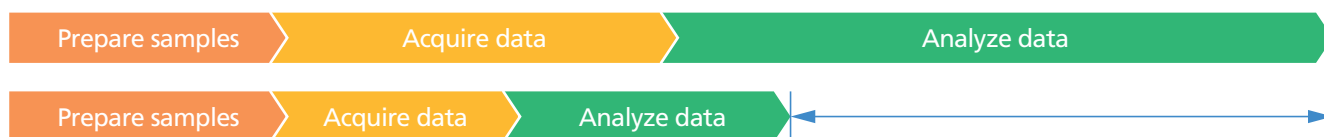
LabSolutions Insight



LabSolutions Insight

Next-Generation Software Enables Faster Quantitative Analysis and Dramatically Higher Productivity

Due to increasingly sophisticated automation, large quantities of high-quality mass spectrometer data can be obtained day and night. However, checking and analyzing all that data can be extremely time-consuming, which significantly decreases the efficiency of research and investigation work. Therefore, Shimadzu offers LabSolutions Insight multi-analyte quantitation software for GC/MS (/MS) and LC/MS/MS analysis that helps analyze such multi-analyte data more conveniently and more efficiently.



In order to increase analytical productivity, it is important to reduce the burden of analyzing the resulting data. Used in conjunction with Shimadzu's GC/MS (/MS) or LC/MS/MS systems, which offer ultra-high and high-speed acquisition, LabSolutions Insight can significantly shorten the time required for acquisition and data analysis, making it easy to obtain high-quality data.

› Intuitive Operations

The intuitive user interface ensures the analytical process progresses smoothly from confirming peaks to outputting results.

› Powerful Peak Integration Algorithm

The new i-PeakFinder peak integration algorithm is based on powerful peak identification technology that significantly improves data analysis efficiency by reducing the amount of manual correction work.

› Carefully Selected Functionality for Supporting Data Analysis

Flag-based labeling, filtering, and peak comparison functions provide powerful support for analyzing multi-analyte multi-component data and are especially beneficial for food safety and forensic toxicology applications.

› Compliance with Data Integrity Requirements

LabSolutions Insight is compliant with FDA regulatory standards, such as traceability and audit trail requirements for user and data management, required in pharmaceutical and CRO fields.

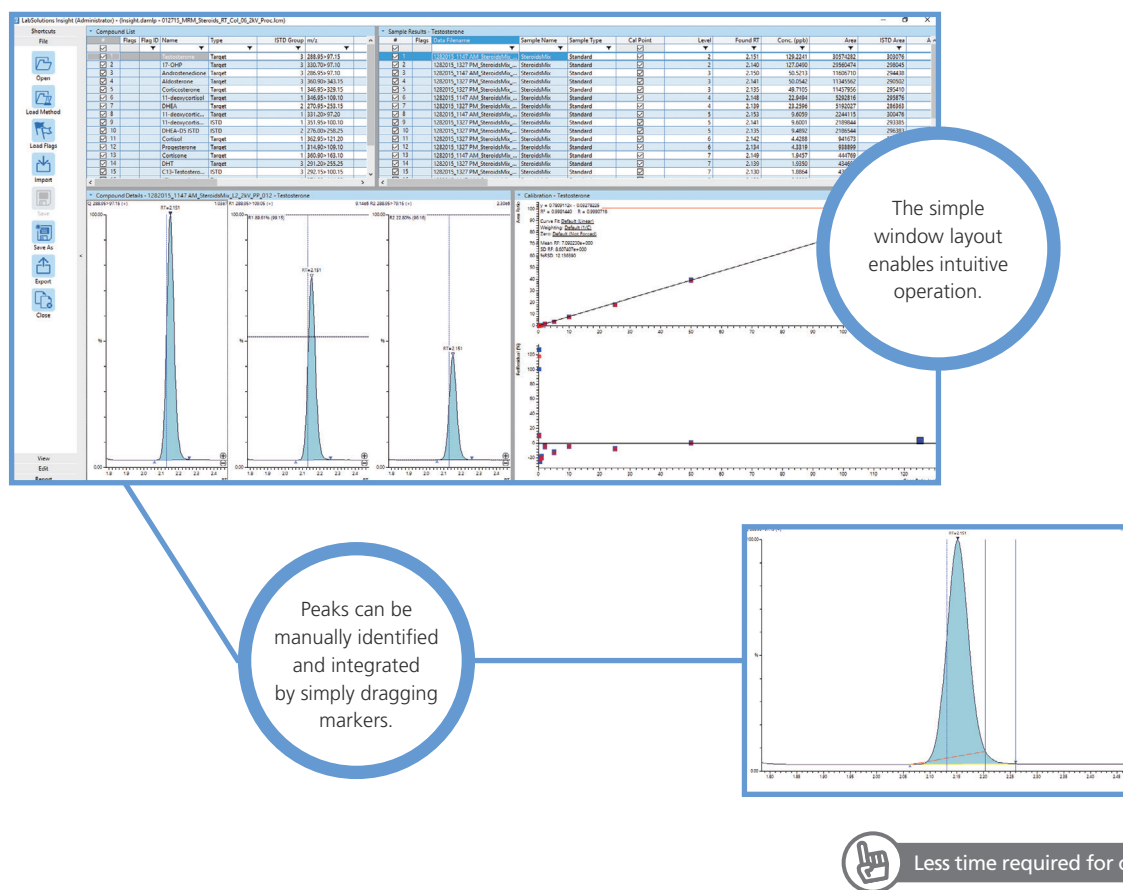
› Convenient Workflow

To dramatically improve data analysis efficiency, Shimadzu focused on the process of managing results from multi-analyte data analysis. Consequently, LabSolutions Insight offers a new workflow that not only enables convenient and robust management of data analysis results for massive amounts of acquired data, but also enables the results to be reviewed much more quickly.

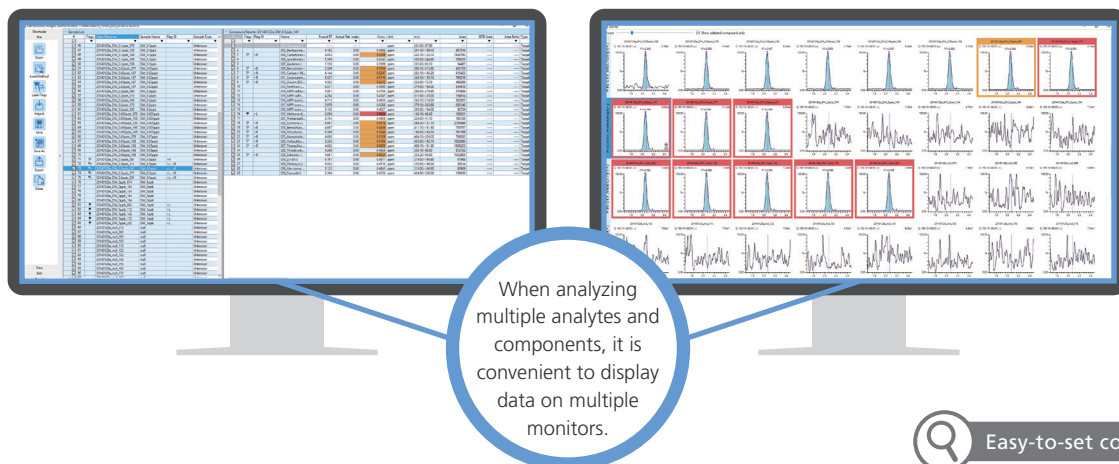
Note: i-PeakFinder algorithm, database and new workflow are compatible with LCMS only.

Intuitive Operations

LabSolutions Insight displays data in a format that enables intuitive operation and accommodates multiple user working environments. Peak information is displayed in an easy-to-understand way for selected compounds to ensure that data analysis work can progress smoothly.

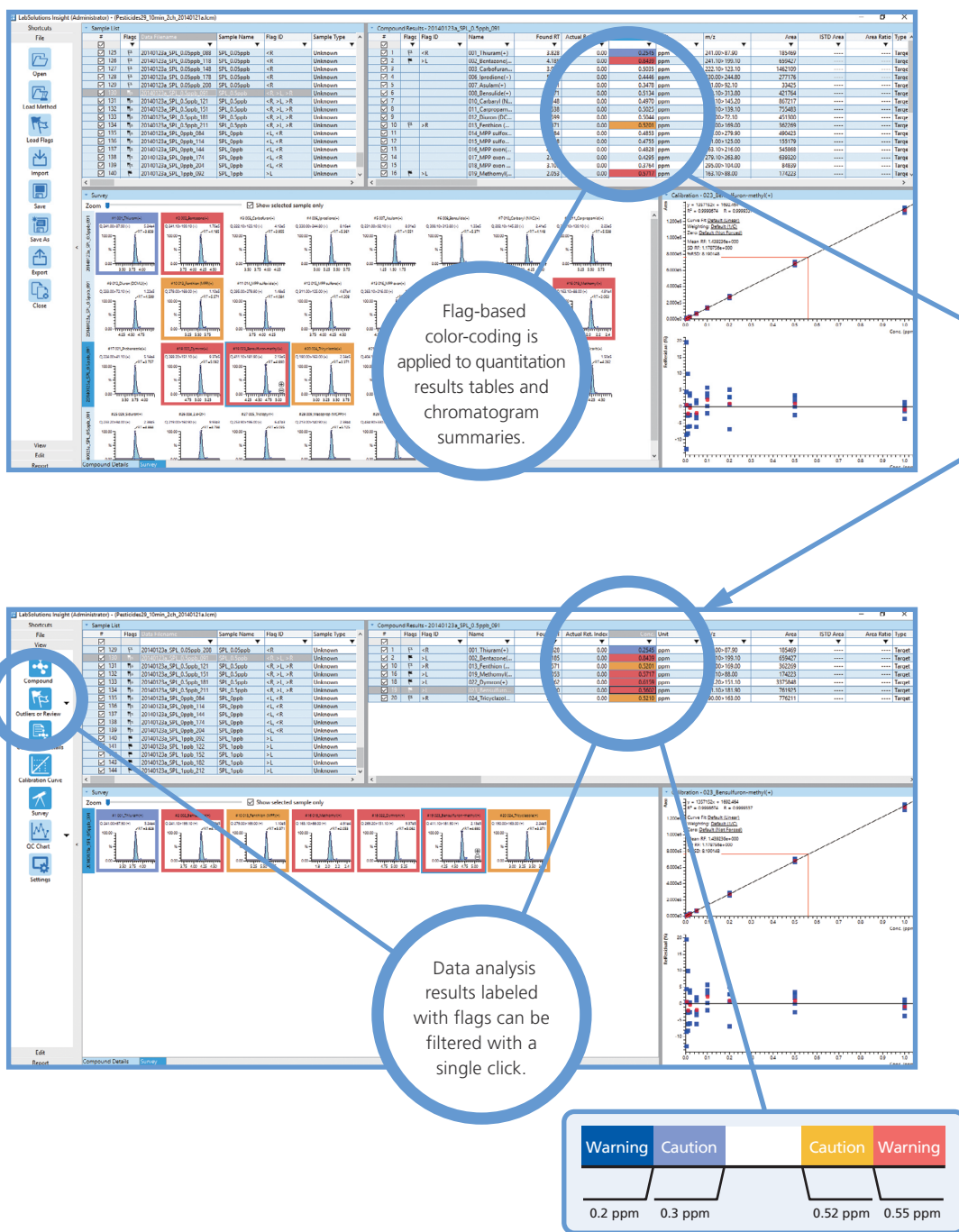


LabSolutions Insight supports using multiple monitors for data analysis, so that data for multiple analytes can be analyzed more efficiently. In addition to normal display windows, data can be displayed in a wide variety of formats to facilitate finding peaks that exceed specified criteria values.



Carefully Selected Functionality for Supporting Data Analysis

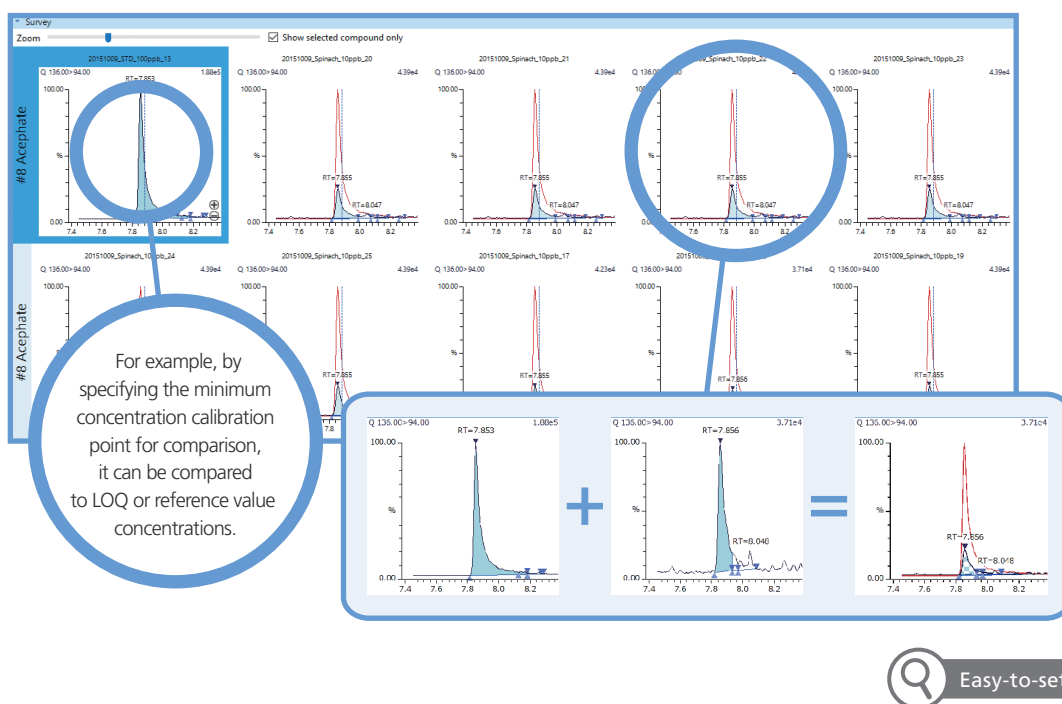
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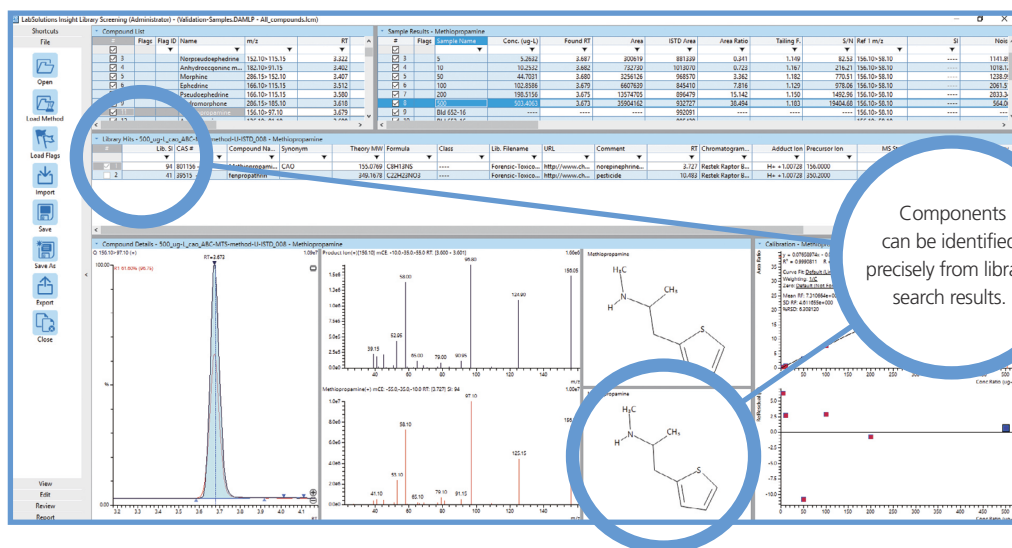
Easy-to-set comparison

Quantitative screening of multi-analyte data requires comparing and reviewing large amounts of data.

LabSolutions Insight is able to display reference chromatograms for comparison overlaid with sample chromatograms, so that the peak intensity and area can be confirmed intuitively for large numbers of chromatograms.



LabSolutions Insight Library Screening software^{*1} can display library search results for multiple analytes at the same time. That means target components can be identified precisely from MRM chromatograms and library search results.



^{*1} Separate optional module must be installed to enable LabSolutions Insight Library Screening functionality.

Powerful Peak Integration Algorithm

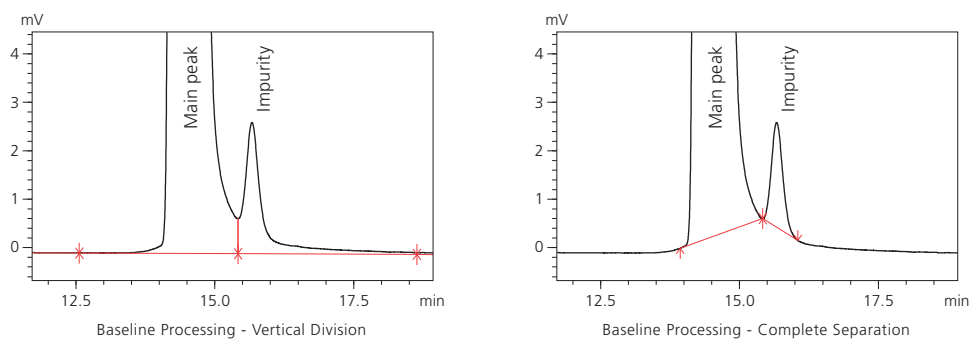
i-PeakFinder, LabSolutions new peak integration algorithm, features functionality for fully-automatic integration, so that peaks can be detected with precision without any special parameter setting process. For screening analysis, which requires checking massive amounts of chromatogram data, i-PeakFinder can dramatically increase the productivity of data analysis.

High-Precision Peak Detection Without Any Detailed Parameter Setting Process Required

The i-PeakFinder fully-automatic integration function can appropriately integrate peaks, even without reconfiguring parameter settings.

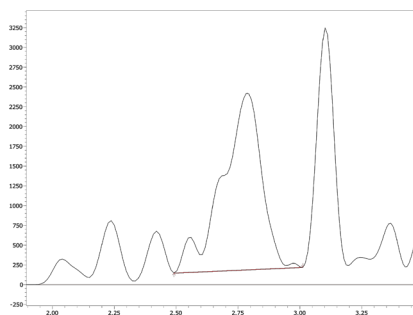
Baseline Processing Made Simple

The optimal baseline processing method for given objectives can be selected and implemented easily.



Peak Detection Without Being Affected by Noise

Detecting peaks with almost no difference from noise can be extremely difficult, especially when analyzing low-concentration components. However, i-PeakFinder can detect such peaks with high precision, by focusing on the full width at half maximum of the peak.



Improved Area Reproducibility and Linearity

For leading and tailing peaks, the peak area can vary depending on how the peak edge is determined, which can end up affecting area reproducibility. i-PeakFinder ensures reliable area reproducibility and linearity by using a proprietary algorithm to calculate baselines.

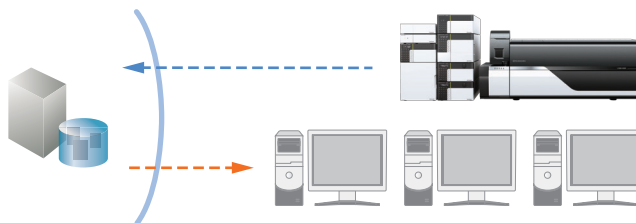


Less time required for corrections

Note: i-PeakFinder algorithm, database and new workflow are compatible with LCMS only.

Compliance with Data Integrity Requirements

LabSolutions Insight is compliant with FDA regulatory standards, such as traceability and audit trail requirements for user and data management, required in pharmaceutical and CRO fields.



Database Used to Ensure Safety

LabSolutions Insight is able to create data analysis results by safely accessing data managed in LabSolutions databases. Therefore, it can create an environment where data can be analyzed in the safety of a LabSolutions DB/CS database.

Robust Security

LabSolutions Insight can ensure system operations that satisfy legal and regulatory requirements, such as user management, assignment of user rights, and data version management requirements.

Easily Understandable Audit Trails

The new workflow offered by LabSolutions Insight manages all information related to data analysis as a single file to achieve optimized, simple, and easy-to-understand audit trail functionality for multi-analyte data analysis logs.

Convenient Workflow

The previous software provided simple and robust data management by managing all information, such as acquisition conditions, acquired data, and data analysis results, in **one file per analyte**.



In the new workflow offered by LabSolutions Insight, results for **all analytes** are managed in a single file, so that results can be managed across multiple analytes to improve the efficiency of data analysis.



Centralized Management of Data Analysis Information

Multi-analyte data analysis requires evaluating data across multiple analytes and then managing those results. Managing that entire set of information as a single file enables simpler, more robust management of analyzed data.

Easily Compare and Review Results





The new workflow manages all data analysis results generated from a series of analyses in a centralized manner, so that any differences in results due to data analysis methods can be easily compared and evaluated.

Significantly Faster Loading Speed

To make the new workflow even more convenient, new technology was developed to significantly increase data loading speeds. That means the process of reviewing results can be started immediately, even when processing large amounts of data at the same time.

Using LabSolutions Insight in Combination with Databases and Method Packages

When used in combination with databases or application-specific method packages, the entire analytical process, from measurement to data analysis, can be performed easily without having to optimize analytical conditions.

Food Safety Analysis 	GC/MS <ul style="list-style-type: none"> Quick-DB Database for Residual Pesticide Analysis Smart Pesticides Database LC/MS <ul style="list-style-type: none"> Method Package for Residual Pesticides Method Package for Veterinary Drugs 	Metabolite Component Analysis 	GC/MS <ul style="list-style-type: none"> Smart Metabolites Database LC/MS <ul style="list-style-type: none"> MRM Library for Metabolic Enzymes (Yeasts) Library Method Package for Lipid Mediators Method Package for Primary Metabolites
Environmental Pollutant Analysis 	GC/MS <ul style="list-style-type: none"> Database Software for Environmental Simultaneous Analysis Smart Environmental Database LC/MS <ul style="list-style-type: none"> Method Package for Water Analysis 	Forensic Toxicological Analysis 	GC/MS <ul style="list-style-type: none"> Smart Forensic Database Quick-DB GC/MS/MS Forensic Toxicological Database LC/MS <ul style="list-style-type: none"> Rapid Toxicological Drug Screening System Method Package for Forensic Toxins

Using Multiple Client Computers

If multiple computers are used to analyze multi-analyte data, LabSolutions Insight does not need to be installed on all the computers. As long as the computers are connected via a network, even client computers without LabSolutions Insight installed can be used for data analysis.*¹

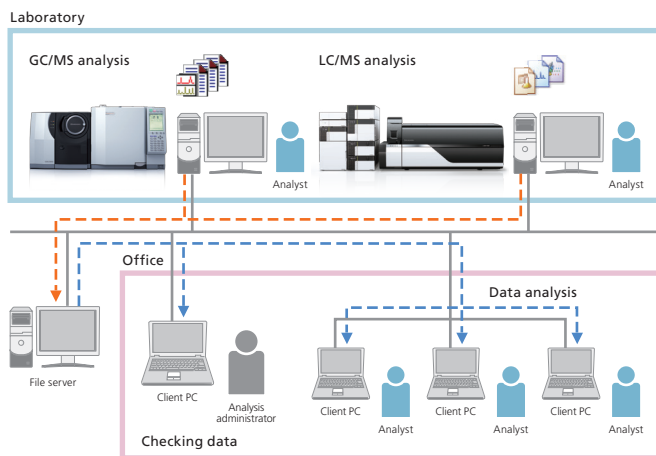
*¹ An additional license is required for each computer used to analyze data.

Compatible Models

GCMS-TQ series, GCMS-QP series
LCMS-8030, LCMS-8040, LCMS-8045, LCMS-8050, LCMS-8060

Conditions

Operating system: Microsoft Windows 7 Professional/Microsoft Windows 10 Professional
Workstation software: GCMSolution Ver. 4.42 or later
LabSolutions LCMS Ver. 5.91 or later
LabSolutions DB LCMS/LabSolutions CS Ver. 6.81 or later



Note: For more than five users, using a file server for file management is recommended.



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