

UNIFI Features and Benefits Guide

Introduction

This document summarizes the features and associated benefits for all UNIFI software releases subsequent to UNIFI 1.8 SR2. Note that all of the functionalities listed for a particular release are also included in the subsequent release. For detailed information, please refer to the UNIFI release notes that are available for download at waters.com:

http://www.waters.com/waters/supportList.htm?cid=511442&locale=zh cn

Overview of features and benefits for UNIFI 1.8 SR3

[Note: This version of UNIFI is not commercially available.]

Application Enhancements

- Lock mass and peak processing (3D or 4D) are available in acquire-only analysis methods, improving the overall workflow and increasing users' confidence in their results.
- Metabolite Identification analysis types are renamed as "Pathway Profiling", to reflect their more generic use opportunities.
- Specify metabolite transformations for accurate mass screening analyses, improving processing efficiency.
- Apply filters directly from the manage filter dialog, increasing efficiency and improving workflow.
- Import a workflow across analyses of a similar category, increasing workflow efficiency.
- View the Extracted Ion Chromatogram (XIC) of a reference sample along with the XIC for the currently selected component for pathway profiling and accurate mass screening analyses, increasing efficiency and improving the workflows for data review.
- Display the intensity of the selected candidate component across samples for accurate mass screening, pathway profiling and peptide mapping analyses to facilitate unknown identification.
- Export MS^E data acquired on a Vion to MassLynx, enabling processing in MassLynx or third-party applications.
- Use send to Scientific Library for peptide mapping, accurate mass screening, and pathway profiling analyses, increasing storage efficiency for all data types supported in the scientific library.
- Performance improvements to the reporting engine to decrease the report generation times and improve the user experience.

Qualification

Qualification Center usability improvements (ability to adjust injection volume, rerun system readiness checks that fail, manually define multiple temperature accuracy tests, and manually define flow rate accuracy tests) saves the user time and money in running qualifications.

Overview of features and benefits for UNIFI 1.9 SR2

Robustness Improvements

- Windows 10 support for UNIFI workstation and network deployments (clients and LNDs only) brings the latest Windows security updates and operating system performance improvements.
- Improved installation and upgrade processes increase reliability and consistency in the deployment experience.
- Improved stability and robustness for long-running acquisitions reduces system downtime.
- For systems that include an ACQUITY UPLC Sample Organizer and an ACQUITY UPLC Sample Manager (SM-FTN), the two modules maintain communication when idle, increasing overall system robustness and reliability.

Application Enhancements

- UNIFI Application Programming Interface (API) v1.0 enables connectivity and integration with third-party applications.
- Waters 2AA (2-aminobenzoic acid) Glycan Scientific Library from NIBRT expands compatibility with the glycan reagent tagging mechanisms used by pharma labs.
- Ability to specify the "minimum allowed monoisotopic/largest isotope intensity ratio" for glycan analysis methods improves peak detection and data quality.
- Ability to apply a manual assignment across all injections for accurate mass screening and pathway profiling analyses increases efficiency and improves the workflows for data review.
- BayesSpray support for oligonucleotides in the Top Down (MS-peak based) analysis type expands the application portfolio to simple oligonucleotide analysis.

Data Management

- Watson LIMS connectivity improvements increase workflow efficiency for customers who use Watson LIMS to manage their data.
- Improvements to the Offline Storage Manager (OSM) maximize the use of database storage and save disk space, without duplicating data content on external storage devices.

Overview of features and benefits for UNIFI 1.9 SR3

Robustness Improvements

- The issue of communications loss between Xevo QToF and the Tune Page while tuning is resolved, increasing system robustness and reliability.
- When multiple instruments are being brought online, if any instrument fails to initialize, the program does not become unresponsive, which improves system robustness and reliability.
- Aborting an Analysis successfully transitions the Analysis out of the "Running state", allowing acquisitions to continue and improving overall system robustness and reliability.

Installer Improvement

- The Waters UNIFI installation requires a system reboot at the end of the installation process, ensuring the that the system is consistent and that all expected install changes are applied.
- The 1.9.0 Workstation Database imports successfully, increasing system efficiency.
- Installing .NET 4.7 will no longer lead to an error, improving the installation workflow efficiency;

- The MSMQ Prerequisite is removed, increasing system robustness.
- New firewall exceptions are added, increasing system efficiency.

Application Enhancements

- New MassLynx data importing mechanism generates sample sets with improved performance and
- Waters Database Manager (WDM) is upgraded to version 1.8 (from 1.7) to support the deployment of UNIFI 1.9 series. The upgrade improves confidence and increases efficiency by displaying the database uptime on the WDM dashboard. Users can create an incremental backup schedule and prevent multiple backups from running simultaneously.

Overview of features and benefits for UNIFI 1.9 SR4

Robustness Improvements

- Database Disaster Recovery issues are resolved, increasing system robustness and efficiency.
- The system no longer hangs if an instrument fails to initialize, increasing system robustness and efficiency.
- The workstation/LND comes online after Database recovery, increasing system reliability and efficiency.
- The issue with excessive exception logging is resolved, increasing system efficiency.
- In-place upgrades (1.8 SR2; 1.9 SR2; 1.9 SR3 to 1.9 SR4) are fully operational, increasing system robustness and efficiency and improving productivity.
- Oracle has been configured to not install unnecessary binaries, thus avoiding failures and unnecessary sleep time and increasing system efficiency.
- LC Diagnostic Channels can now be exported to MassLynx file format, viewed in Review, and successfully included in reports, increasing efficiencies when working with both UNIFI and MassLynx.

Application Enhancements

- Peptide components with the same retention times and neutral masses but different charge states and drift times can be grouped together in a single component, improving data quality.
- Three new Natural Products Libraries can be imported as "Read-Only", without having a dedicated library license activated. This grants our collaborators access to the scientific libraries that they created, increasing collaboration efficiency and improving data confidence.
- UNIFI API Memory performance improvements for MS^E and HDMS^E data and data quality improvement for Observed CCS values (converting bin to CSS endpoint) enables third parties to consume and manage UNIFI data more efficiently, improving confidence.