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LABWORKS LIMS v6.10

Labworks Development History

Last Updated: May 2020

LABWORKS 6.10 May 2020

- Analysis Qualification based on Method instead of Analysis Code for Personnel and Instruments
- Visually group analyses inside containers without having to use #group analyses
- QuickTrack enhancements making container movement easier
- Corrective Action / Preventive Action Reporting (CAPA)
- New personnel training & instrument calibration with events view
- Scheduled Calibration and Maintenance Events
- Event notifications for Personnel Training & Instrument Maintenance, as well as CAPA
- Persisted Group Enhancements (they now work as log batch details constructs) & Migration Tool for them
- Support CAS number for containers in analysis maintenance
- Analysis List Maintenance - Improve Delete Analyte
- For imports audit trail entries for newly added results and filespec are stored
- AutoLogin640 application enhanced to provide a specific list of analytes through the command prompt
- Automatic Exception Report to support Crystal formats and CRGEN6 options (export, mail...)
- Backlog report save to XLS improvement
- Support for CMDP
- CROSS REFERENCE enhanced with filtering capability.
- Report number tracking capability to include Revision Number
- Increase analyte name field size to accommodate longer names
- Add edit capability to eWorksheet fields
- Add ability to leave eWorksheets locked for cells containing macro/formula/code.
- Display container ID in eWorksheets
- LW Client-Install/Uninstall Script
- LWMCT: Update MDL and PQL based on Dilution Factor changes
- Allow user to see list of PR2 records in LABWORKS database when saving prelogin groups+
- QAQC Batching Query/Display in Data Viewer
- Data viewer export to Excel in a "sortable" way
- Audit old value and new value of long text when changing comments in LABWORKS Desktop
- LW EXPLORER - Print Comments
- Add QA/QC batch number functions in Explorer
- Viewing the Secondary Result from LWExp_DotNet
- LWInventory ability to transport only a fraction (specific quantity) of a stock item.
- LWInventoryManagement Manufacturer picklist available in the Itemstock table, not the item table
- Inventory Management - Filter Contains instead of Starts With
- Improve license count debugging - display dangling session
- LW Login - Entering Comments
- Sample Login - Add the capability for the Picklist for a field to be a combo/edit field
- LWWebtop - Request option to turn autocomplete off for password
- MCSelect6 - Filtering and Sorting Options
- MultiSample Login application enhanced to display a list of analytes related to the selected Multicomponent
- MULTI-SAMPLE LOGIN - Create/Modify PR2 files
- Attach Multiple Files to Sample or Analysis
- OPCEXP6 ability to export non numeric results
- Import Container IDs through PostResults6
- PostResults6 - Posting Replicate to be Reportable Result
- PostResult6 - Posting Violations
- Allow comment import from post result 6 on analyte level
- Adding MCSelect6 option to ProcessScheduler - Analysis Display

- Process Scheduler - Filters for Columns in Grid
- PS Sample Receipt Attach COC Persisted Group Button and Receive Samples Even if Not All Containers Received
- PS Schedule - Add Designated Printer to schedule setup, Print from Service
- Process Scheduler - Scheduled Time Frequency Logic improvement
- Process Scheduler - List to Select Multiple COC Report Formats
- RESULT/ANALYSIS - Prep Date/Timestamp supports
- Integrating MCSelect and LWQAQCBatchBuilder
- LWQAQCBatchBuilder - Carry MCSelect6 components from samples to QC Analyses
- QC Batching - Multiple sets of qc
- QC Batching - Move Ellipse to left and auto open
- LWQuickTrack application: Container Management Enhancements
- A system wide default setting "DEFAULT_REPLICATE_POLICY" added for the default Replicate Policy in SYSMGR and added functionality so that empty replicate rows are filled before appending new replicate rows.
- Add Validation User and Validated By to Results Entry Multi-comp Edit Screen
- Result Entry - Analysis Code Sub-filtering support
- Improve Calculation Performance
- Add option for specifications to be \Rightarrow $=$ $<$ OR $<$ $>$ only
- Result Entry Replicates ability to select the latest replicate for In Process Control
- Attachments - link to web page in addition to file attachments
- Sample Modify - Update Analysis Order
- Sample Modify ability to lock the configured fields
- Sample Modify prompt when data type mismatch
- SYSMGR - Rounding imported single component results

LABWORKS 6.9 May 2019

- Support has been added for electronically submitting CMDP compliance reports.
- Sample Login date/time fields have enhanced usability
- Added ability to group Prelogin group records in LABWORKS database
- Multi Sample Login has been enhanced to provide copy-paste support
- CRGEN has been enhanced to allow more control over which folder to store the report in, including support for nested folders.
- DataViewer application has been enhanced to display Sample Turn-Around Time
- LABWORKS has been enhanced to support LDAP authentication for LDAP User IDs upto 256 characters
- DataViewer application usability has been enhanced by displaying the sample comments and by providing enhanced result sorting functionality
- SQC application has been enhanced to display Raw Result in NWA chart based on the configuration
- Process Scheduler now allows you to right click on a "ready to collect" sample and sort the spreadsheet used to edit sample fields.
- Process Scheduler has been enhanced to request username and password for data entry
- Added new SHOW_MCSELECT = YES to Process_Scheduler
- Process Scheduler has been enhanced to display scheduled groups as per the order of location codes
- It is now possible to set Process Scheduler initial status from LWSampleLogin. System Manager SHOW_STATUS needs to be checked.
- An improvement has been made to implement "PS Sample Edit" privilege for restricting PS Sample Edit to privileged users

- Performance of Process Scheduler - Edit Schedule functionality has been improved to support large number of items
- In Process Scheduler, the collection date is maintained as it is upon right-click on the samples to login.
- Inventory Management application has been enhanced to allow the user to enter the actual quantity used during Mixture creation.
- A new feature is added to support receive batch of inventory item.
- In LWInventoryManagement application, "OVRD_EXP_DATE" privilege has been changed to "CINV_OVRD_EXP_DATE"
- Application has been enhanced to support filtering by Department in Sample Selection dialog for 'Analyses Awaiting Validation' option.
- Result Entry application has been enhanced so that user can select the Sample Object Attachments from any folder available in the network.
- In Result Entry application, Analysis Start Date > Analysis End Date message prompt is now displayed on click of "Save" button
- Result Entry application has been enhanced to navigate to next Sample/Analysis Code directly from Component Result Entry screen for Multi-Component Analysis
- UX improvements have been implemented for Result Entry, Multi-Sample Login applications
- Sample Selection Dialog used across LABWORKS application has been enhanced so that the fields displayed in the dialog can be selected via configuration.
- QA QC Batch Builder has been enhanced to display the Update Batch button if a change is made to a previously created batch and a value in one of the Special Info Form fields is changed
- "My Templates" tab has been added in QA QC Batch Builder to provide a filtered view of templates for batch creation
- Improvement has been made in Explorer .NET History form to resize contents after resizing the form
- Sample Modify application has been enhanced to support configuration of the default update due date option e.g. "Always", "Never", "Prompt" SystemManager
SAMPMODIFY_DUEDATE_RECALC
- Instrument Maintenance and Calibration application has been enhanced to support sending automatic warning email messages and disabling instruments for which maintenance/calibration due dates are elapsed.
- LABOBSPECINFO, LABOBJMAILLIST performance has been optimized
- eWorksheet application has been enhanced to allow the user to change the status from Completed back to InProgress
- eWorksheet application has been enhanced to support Excel Macros, pick up Sample List from QA QC Batch, import Sample Header information, prompt Audit Reason and eSignature
- eWorksheet has been enhanced to configure in the template and validate the cells that must have values before being posted
- An improvement has been made for the user to select the Y axis label as Raw Result for the Trend Plot
- Replicate Management forms have been enhanced to capture more audit trail data.
- LABWORKS application has been enhanced to support SPECINFO table from previous versions
- Analysis Maintenance Load from Analysis button size is enhanced to be consistent with other buttons
- Design guidelines have been applied to LABWORKS Explorer application to improve the usability
- LWExplorer has been enhanced to display date as well as time for user fields of datetime type

LABWORKS 6.8.5 December 2018

- Enhanced Chemical Inventory Application

- Replicate Support for Single and Multicomponent Instrument interfacing through Result Entry.
- Replicate Support using PR6 file through Result Entry.
- Replicate support for multiple data records for same sample/analysis in instrument file.
- Replicate Support using Multicomponent transfer
- Replicate Management Audit Trail.
- COA application - NWA 6.2 Support.
- MOR Report application - Macro execution in excel file.
- Analysis Reference to use Pick List instead of free form input.
- Default result support for Single Components analysis.

- Sample Collection App - Collection group creation in Process Scheduler.
- Audit reason in Analysis Maintenance and LocList Maintenance Application.
- Data Viewer support for better selection/view options in analysis list.
- Result Entry - Personal Training filter.
- Multicomponent multiple partial result entry without result modify privilege.
- WebTop enhancements.
- PS Sample Login enhanced to accept Collection Date as calendar input.
- OPCEXP6 ability to export non numeric results.
- eWorksheet history export to Excel.
- Support analysis validation rules for QA/QC batching custom statuses.
- QA/QC batch & Result Entry template support to order samples by BATCHSAMPS. BATCH_NAME, BATCHSAMPS.BATCH_INDEX.
- Enhanced Sample Login to support setting of Process Scheduler Initial Status.
- COA application enhanced to limit COA History Range.
- Support for CMDP

LABWORKS 6.8 April 2018

- Replicates
- NGII Instrument Interfaces
- Analysis/Location Code Delete
- Report Number/Report History
- ProcessScheduler Service – LogBatch Improvements, Label Printing
- ScanDaemon Service – Support Optional Parameters
- PostResults6 – Only update result records when modified.
- Analysis DueTime support – Configurable to Calculate due time.
- QAQC Batch Edit – Update Batch Sample ID

LABWORKS 6.7

- eWorksheets – Added new electronic worksheet application
- Mobile Sample Collection – Added new optional Tablet (Android/Windows/IOS) Sample Collection App.
- COA – Evaluate specifications when result values include > <
- Cross Reference Search – Added search for comments and results
- Exception Trail – Add search for Hold Time violations
- DataViewer – New Filter Saving, Comment indicators, Graphical Trend Integration, Sorting
- ProcessScheduler Service – Restart from last update
- SampleModify – Recalculate due dates when submit/collection date updated PostResults6 – Added support for post run programs.
- Workflow – Now support Retired back to Draft/Active

Labworks 6.6

- ResultsEntry – Color coding of Multi-component results
- ResultsEntry – Added Support for NGII Instrument Interfacing
- ProcessScheduler – Added Service option for sample creation
- DMR – netDMR format
- ScanDaemon – Service based ScanDaemon
- Improved specification handling in both ResultsEntry and Certificate of analysis to support evaluations when the result includes “>” or “<” sign.
- Dataviewer - Multi-component at top level
- Email Gateway – Single security point for SMTP
- MOR report improvements for Daily Report

LABWORKS 6.5

- Graphic Trend Viewer added.

LABWORKS 6.4.2 (Build 761) /6.5 (Build 762) - December 2015

- SFRound – Improved updating of RawResult value when updating non-result data.
- PostResult6 – Validation status on multiple uploads. Multiple analyte comments
- PostScr6 – Work around for SQL 2012 defect.
- Bartender Interface – Windows 8/10 support improved.
- SAP Interface support for SAP 4.6 Client
- ResultsEntry – Excel calculation added support to Run Macro
- ResultsEntry – Added support for PostResults6 format

LABWORKS 6.4.2 (Build 749) - September 2015

- ResultsEntry – Improved handling of scientific notation.
- COA – Updated header field handling
- Validation – Added configuration of display

LABWORKS 6.4.2 (Build 742) - August 2015

- ResultsEntry Excel calculations – Rounding of values returned from Excel
- Userfield limit increased from 50 to 99
- New QA Batching performance when using sample ownership improved
- SystemManager – Audit Trail of changes

LABWORKS 6.4.2 (Build 730) - July 2015

- Multi-Sample Login – Prelogin groups moved to database
- DataViewer – Added ReportAddress grouping
- New SampleLogin – added Container support
- History – added PQL, RawResult to display options
- ProcessScheduler – Removed internal analysis length limitation.

LABWORKS 6.4.2 (Build 724) - June 2015

- ProcessScheduler – 5th week corrections
- NWA – International date/number formats
- Domain Authentication on Server 2012
- ResultsEntry – added CAS number to display configuration
- DataViewer – Export to Excel as numbers/single spreadsheet
- Validation – Search for Samples with all analyses validated
- Validation – Reorder All/Scratch All...
- Sample Modify - Add/Remove test from All.
- AuditTrail – Apply to All...

LABWORKS 6.4.2 (Build 716) - May 2015

- COA – Create email message with PDF Attachment
- ProcessScheduler/ResultsEntry – Capture Analyst when different user for ResultsEntry
- Sample Validation – Load QC results Performance
- DMR – Enhancements – Added eDMR output/Performance

LABWORKS 6.4.2 (Build 698)- March 2015

- PostResults6 – Updated results proper spec violation update
- SQL 2012 Support improvements/Performance
- SQC Chart Performance
- Support for > 100K Location/Analysis Codes
- Export Data – Xtab samples down/tests across direct export
- DataViewer – added Relative dates.

LABWORKS 6.4.2 (Build 684) - January 2015

- LWLicenseManager – Added ability to release all but most recent license for a user.
- Analysis List Maintenance – Added Paste Component list
- PostResults6 – Changed parser to handle columns with mixed numbers/strings
- New Sample Login Improvements – Saving User context/Column Sizes.... Lots of stuff (fill down, copy/paste... Prelogin group selection enhanced.
- Process Scheduler – Link to new Sample Login
- Domain Authentication support workstations and users in different domains/trusted domains.

LABWORKS 6.4.2 (Build 670) - December 2014

- SMTP Configuration support alternate ports
- Refresh of Service Connections – Eliminated 90% of Errors in Errorlog
- WebTop Refresh of UI for compatibility with Chrome, Firefox, IE 10...
- Diagnostic Tool added individual Service check
- Location List/Analysis List – Added AuditTrail tabs to display change history
- New QA/QC Batching – User configurable fields
- New QA/QC Batching – Run instrument command/Crgen support/Sequence file generation.
- Crystal Report Runtime updated to Crystal 2013

LABWORKS 6.4.1 - April 2013

- Analysis Substitution UI
- Sample Modify – Assign Container
- Progress Report formats moved to database
- AuditTrail management moved to database/ Managed via UI
- Application Startup performance – MSI improvement
- Increased \$Code components from 300 to 1000
- Windows located User/Temp paths
- QA Batching – Delete batch
- PostResults6 – Added AVALUSER/AVALDATE fields
- Citrix Mapped drive support improvement in ResultsEntry/MCXfer
- Added Printer Selection to ResultsEntry/Progress Report....
- Audit Trail of Narrative Text

Q2 – 2012 – LABWORKS 6.4 – July 2012

- Sample Archive
- Enhance batching to allow assigning multiple QA samples, pre-assigned and ad hoc
- Sample login enhanced to allow user definable grouping
- Set location code specification without assigning test
- Lock or mark calculated result fields

- Ability to configure sample receipt, worksheets and routing reports with Crystal Reports
- Option to send sample reports to selected printers
- Webtop browser compatibility

Q2 – 2011 – LABWORKS 6.3 – New QA Batching Module

- Results Posting program improvements
- New License types provide more flexibility
- License management by group/location

Q4 2010 – LABWORKS V6.2.220 & 6.1.220 (maintenance releases)

- New SYSMGR options
- Result Entry/Result Reporting improvements

Q3 2010 – LABWORKS 6.2.188

- New Data Viewer Module for analysis-oriented data viewing. – New Discharge Monitoring Report (DMR)
- Improved consistence in behavior of result posting routines
- Special Info Forms Designer
- License Manager – allows user to view their current license/usage
- User Password Management for improved security
- Performance Improvements/Diagnostic tools
- Web Top Configuration Utility

Q2 2010 – LABWORKS 6.2

- Redesigned DMR (Discharge Monitoring Report) Module
- Improved instrument Interfacing Capabilities
- Data Viewer 1.0 - New Cross-Tab-Style Data Viewer
- Results Posting Improvements
- Data Integrity for Special Info Forms
- Platform Improvements

Q2 2010 – LABWORKS 6.1.158 (maintenance release) –

Improved implementation of VB6 applications start up.

- Re-engineered data export/reporting engine – performance improvements 50%-200%

Q4 2009 – LABWORKS 6.1.128 (maintenance release)

- Workflow Architect – modify state of multiple items in a single transaction
- Process Scheduler Updates
- PDA/PDET – output template improvements
- PAM – increased maximum number of analytes
- MOR support for Excel workbooks
- Access reports improvements
- New key controls correction of PQL's by dilution factor.

March 2009 – LABWORKS 6.1

- Web Top Environment
- AJAX technology

- *Zero Client Footprint*

January 2008 – LABWORKS 6.0 –
WebEdition

- Graphical Workflow Designer

June 2006 - LABWORKS VS 5.8 BLD 405

- Sample Selection Enhancements
- LABWORKS Explorer 2 – Split Screen Viewer
- Process Scheduler 3 – Expanded Column Displays
- Crystal Reporting with Invoicing

March 2005 – LABWORKS Enhanced Security VS 5.8 BLD 311

- Dynamic Control Limits. (Optional Program)
- LABWORKS Online Administrator, which allows creation of Web-based access to laboratory test results and reports. (Optional Program)
- A maximum of 512 analyses can be assigned to a location code.
- Gateway administrator enhancements

May 2004 – LABWORKS Enhanced Security VS 5.8 BLD 258

- Creation of update tool to assist clients in updating their systems to the latest database

February 2004 – LABWORKS Enhanced Security VS 5.8 BLD 256

- Multi-language capabilities for English, French, German, Spanish, Italian, Chinese and Russian utilizing a new LABWORKS internationalization tool
- Microsoft Outlook® styled interface and new calendar view in Process Scheduler
- Web enablement (automated e-mail and web reporting using the Crystal Enterprise® tool)
- Domain password authentication allows three options for LABWORKS logon
- Query Engine linked to LABWORKS Cross Reference Search function

June 2003 – LABWORKS Enhanced Security VS 5.0 BLD 255

- Tool creation to enable customers to comply with 21 CFR Part 11 regulations.
- E-mailing capability
- Citrix® security features
- Fully-integrated report tool using Crystal Reports® technology
- Hand-held computer integration to Process Scheduler®

April 2001 – LABWORKS Enterprise Version 4.6 Build 253 – Industrial
Pretreatment Program.

- History List for Multi-Sample login fields that require same data is entered more than once.

February 2000 – LABWORKS Enterprise VS 4.6 BLD 252

- 2000 compliant
- Ownership groups allow the system manager to assign certain groups to sample points.
- Introduce Exception Report Setup/Generator - Allows user to select a report run for a specified time, analysis, sample, etc. Once the report is run, it can be sent to a directory path or via e-mail.

November 2000 – LABWORKS Enterprise VS 4.6 BLD 252

- A user program can be run automatically after saving new or changed sample results.
- Monthly Operating Report program
- Introduce Picklist Setup program

July 1999 – LABWORKS Enterprise VS 4.1 BLD 251

- All 32 bit LABWORKS new multi-sample login

April 1999 – LABWORKS Enterprise VS 4.1 BLD 250

- LABWORKS servers in Visual Basic 6.0,
- New Setup

March 1999 - LABWORKS Enterprise VS 4.1 BLD 174

- Sample log list, after multi-sample login, can now be printed.

September 1998 - LABWORKS Enterprise VS 4.1 BLD 174

- Most upgraded and new modules are related to instrument interfacing.

March 1998 - LABWORKS Enterprise VS 4.1 BLD 172 – Field Data Entry Terminal with GPS.

- Added Sybase to list of supported ODBC databases.

September 1997 - LABWORKS Enterprise VS 4.1 BLD 160

- Instrument Maintenance and Calibration Module
- Personnel Training Module

March 1997 - LABWORKS Enterprise VS 4.1 BLD 154

- Intranet/Internet LABWORKS Explorer Module

September 1996 - LABWORKS Enterprise VS 4.1 BLD 149

- Integration of Analyst and Instrument Databases

March 1996 - LABWORKS™ Enterprise VS 4.1 BLD 75

1995-98 Version 4.0 – 4.10 LABWORKS Desktop Windows

1985-94 Version 2.0 – 3.20 LABWORKS DOS

In 1985, the first operational installation of the LABWORKS LIMS was accomplished for the New Orleans Water Board.