L7 INFORMATICS

L7|ESP Enterprise Science Platform™

Release Notes for L7|ESP®

Version 3.4.0.0

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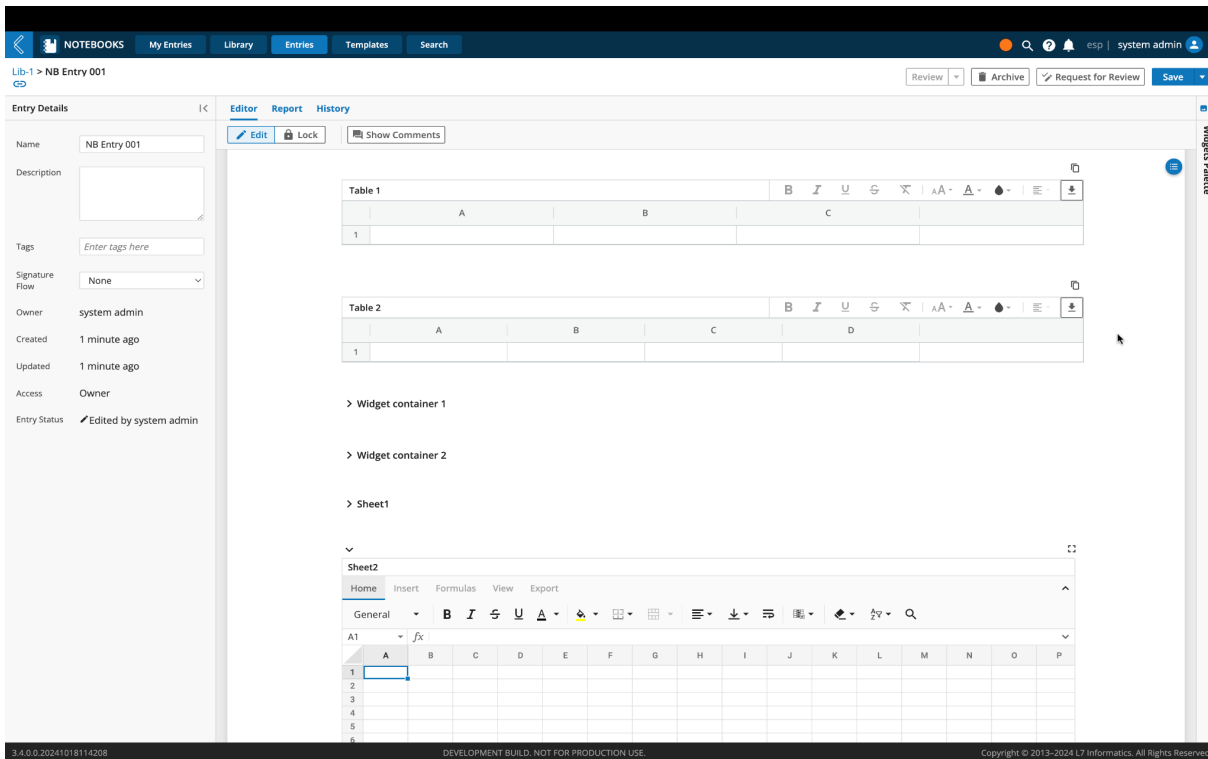
New Features

Custom Fields

Vector Fields in L7 MES

Introduced functionality to allow for tables of data, with columns that can be set as text or numbers. Vector fields can also be configured as time series, with a date/timestamp as the first column, if desired.

L7 Notebooks

Naming Notebook Widgets

L7 Notebooks now provides the ability to auto-generate unique names for Advanced Table, Widget Container and Spreadsheet widgets when these are added to the entry and/or template. Additionally, these auto-generated names can be modified as needed to provide more meaningful names to the widgets. To make it more flexible and intuitive, the application warns the user if there are duplicate or empty names for the widgets but does not block the user from saving such entries.

Autosave Entries to avoid data loss

L7 Notebooks provides the option to auto-save entries at user defined intervals so that data is not lost in case of system timeout or user navigating out from the entry unintentionally. The auto-save can be enabled, and the interval can be configured through the config app.

Audit History in Notebooks

L7 Notebooks now provides the capability to select a printer and physically print the audit trail (records in the History page) for the Library, Entries, Entry Details, Templates and Template Details pages.

Increased Visualizations

L7 Notebooks now supports the feature to create charts using data from the spreadsheet widget.

PDF generation for Notebook Entries

Expanded capability in L7 Notebooks to download a .zip file which contains a PDF version of the latest notebook entry version including all attached images and files in their native formats.

Rich Text Editor

L7 Notebooks now supports the capability to add nested bullets and number lists in its Rich Text Editor widget. Additional configuration has been added to hide or show the Table Creation option within the rich text editor (Table Creation icon is set to be hidden by default).
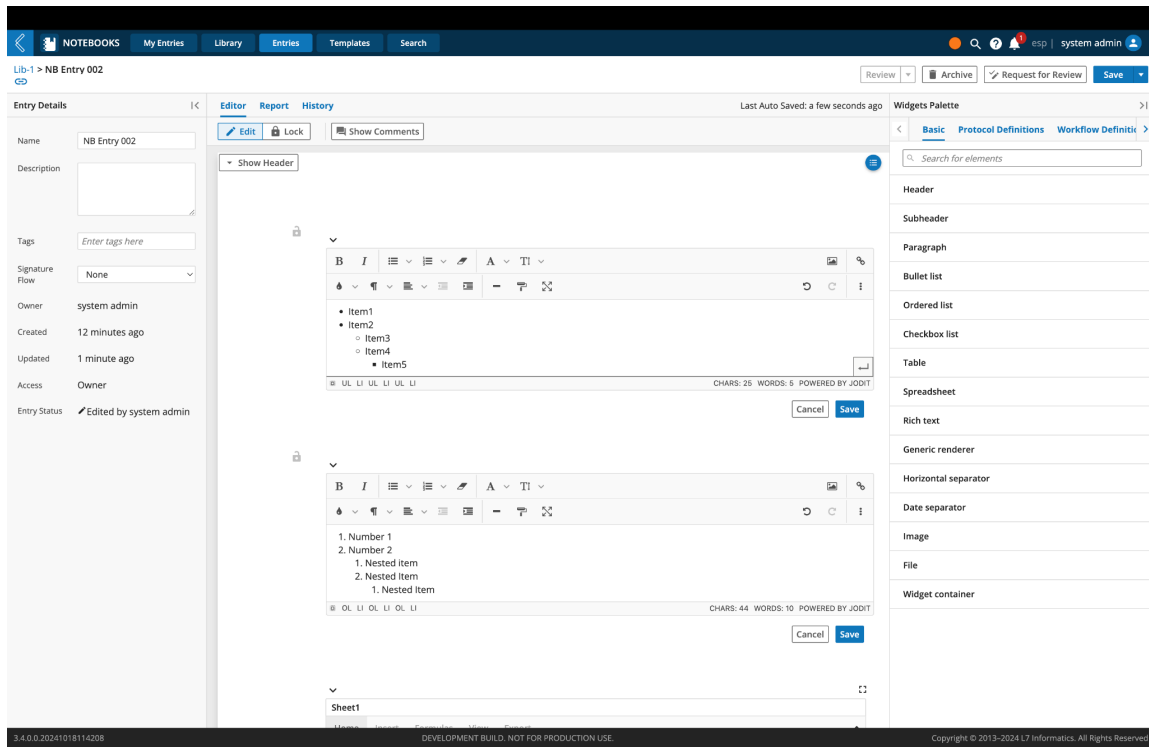
Signatures in Notebook Entries

Users can now sign Notebook Entries asynchronously. Email notifications for asynchronous signatures will all be sent at the start of the signature flow while Email notifications for synchronous signatures will continue to be sent sequentially.

L7 Notebooks has added the ability to sign in as another signer in cases when a specific signer is unavailable to sign the entry or is acting as a witness to approving details in the experiment. This feature is driven through the configuration flag, other_user_approval which is disabled by default. If the flag is enabled, a user can sign an entry as another user who is part of the currently assigned signature flow.

To avoid unnecessary edits to the entry during sign-off, a capability has been added to block signers from unlocking the entry under review. The capability to unlock a notebook entry under review is now limited to only the Owner and Admins of the entry.
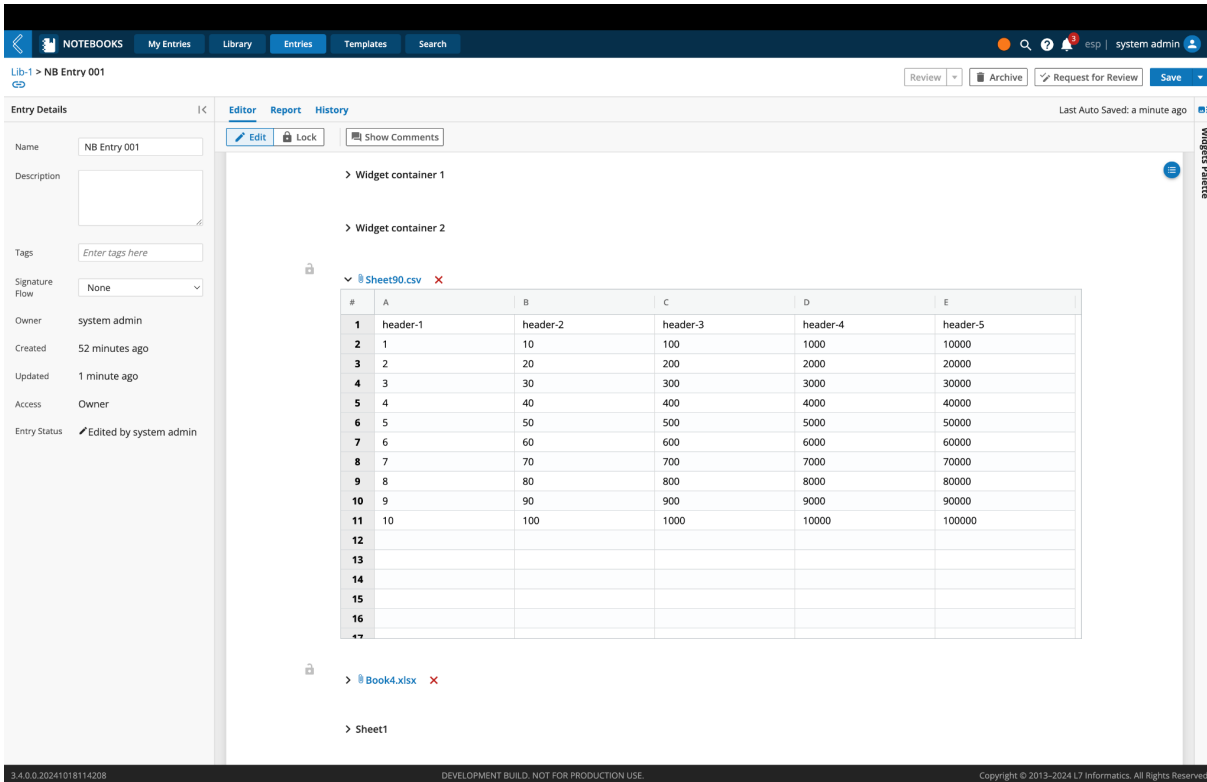
Extending widget features for Notebook entry

Added functionality to expand/collapse widgets for better editing and better readability of Notebook entries.

Added the capability to hide or show a preview of an uploaded file to improve the editing experience.

Users can now create nested ordered lists and bullet lists within the notebook entry.

Introduced functionality to duplicate the advanced table widget along with the format and data in the table widget and use the duplicated widget as a new independent table widget.

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Added ability to expand the spreadsheet widget offering a better view to edit data in the widget.
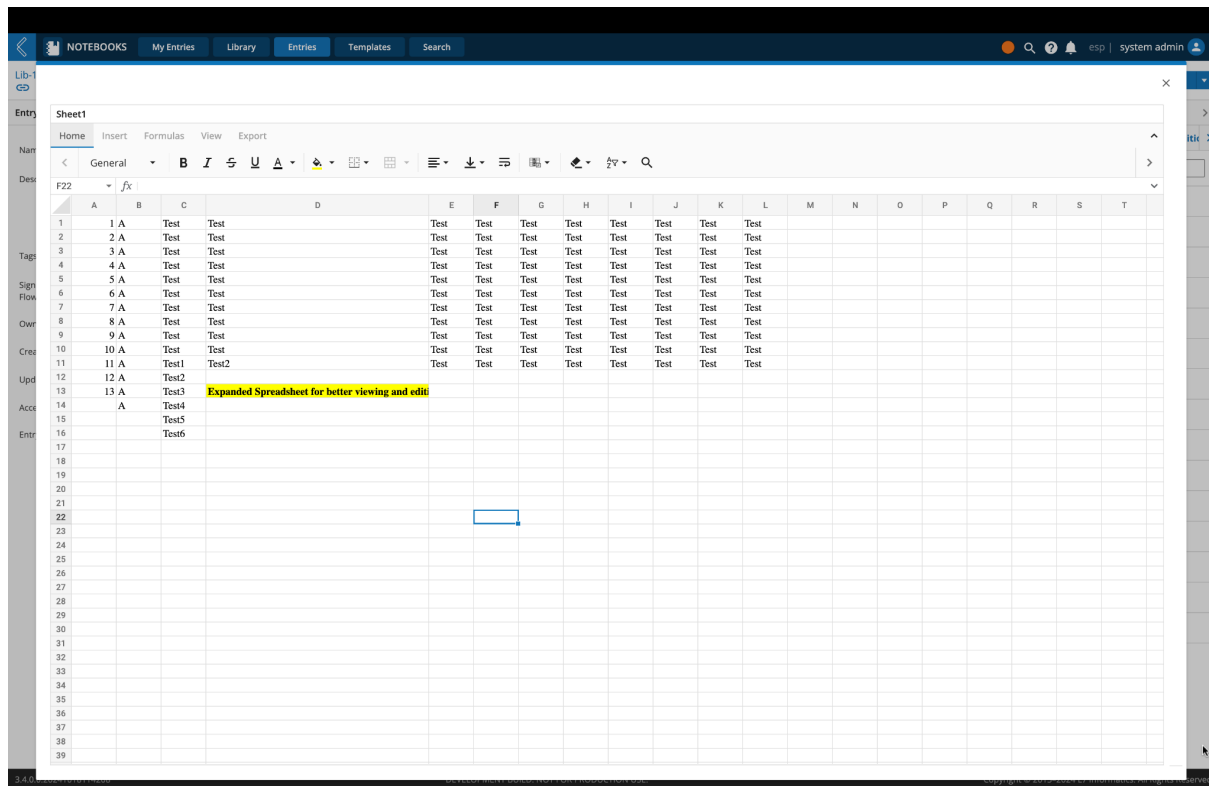
L7|HUB®

Support (Bundle) approvals across systems

Administrators now have the ability to see and filter on the review status of remote bundles. Installation of remote bundles may be based on review status, based on configuration.

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Support for Dynamic Execution Plans

Dynamic Execution Plans may now be included in collections and bundles, and can be transferred between systems through L7|HUB.

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General Dynamic Execution Plans

L7|ESP now supports General Execution Plans, which enable run-time modifications to the configuration of any fields in a Workflow Chain.

BOM (Bill of Materials) Dynamic Execution Plan

L7|ESP now supports BOM (Bill of Materials) Execution Plans, which enable run-time modifications to the configuration of Inventory Item Use fields and the Resource Link to Container fields that are referenced by them.
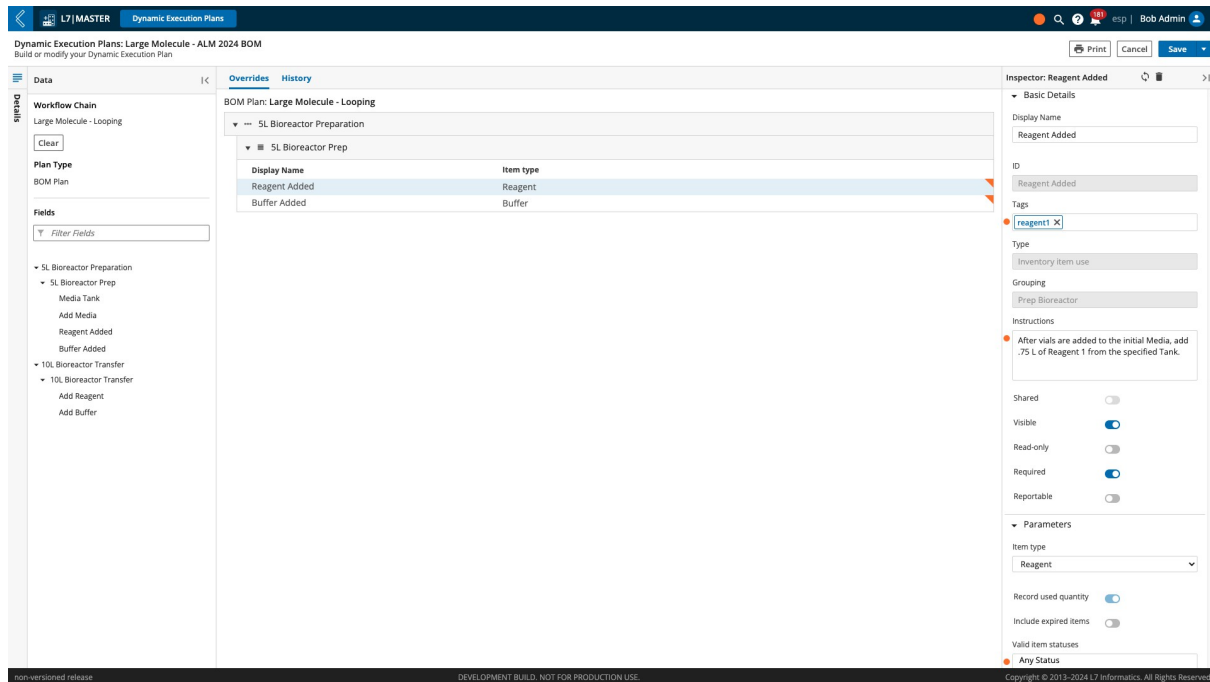
Dynamic Execution Plans - Save As

Users may now save a copy of a Dynamic Execution Plan in order to create a similar Execution Plan more easily.

Vector Fields

Vector fields can be added to protocols intended for use in L7 MES (Use in Manufacturing = Yes). These fields are structured as tables, with columns that can be set as text or numbers. Vector fields can also be configured as time series, with a date/timestamp as the first column, if desired.

Numeric columns can be configured with a specification type, units of measure, decimal digits, and minimum/maximum ranges.

The vector table can be configured with a minimum, maximum, and default number of rows.

Protocol Actions

The Protocol Actions **Create MES Batch** and **Start MES Workflow Chain** now support all four Dynamic Execution Plans types: General, BOM, Specification, and Sample.

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L7 MES

Looping and Repeating Batch Sections

L7 MES Recipes (Workflow Chains) can be configured to re-execute Batch Sections (Workflows), by repeating the same Batch Section one or more times, or by looping backward in the Chain. When a Batch Section is re-executed, the system appends a (sequential) letter to the Section's number.

Users may sort the data displayed in all tabs (except EBR) by numeric order or by order of execution. All reports also observe the tab-based sort order.

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A new Transition Genealogy Report lists the order of transition between Batch Sections.

Material Number: ALM Capybara
Process: Large Molecule - Looping
Version: 12.4 (10/31/2024 10:37 am CDT)
Batch Number: LMS-0031

Transition Genealogy Report

Execution Order

Section	Next Section
1.0 Thaw Large Molecule	2.0 5L Bioreactor Preparation
2.0 5L Bioreactor Preparation	3.0 5L Bioreactor Monitoring
3.0 5L Bioreactor Monitoring	3A.0 5L Bioreactor Monitoring
3A.0 5L Bioreactor Monitoring	3B.0 5L Bioreactor Monitoring
3B.0 5L Bioreactor Monitoring	4.0 10L Bioreactor Transfer
4.0 10L Bioreactor Transfer	5.0 10L Bioreactor Monitoring
5.0 10L Bioreactor Monitoring	5A.0 10L Bioreactor Monitoring
5A.0 10L Bioreactor Monitoring	5B.0 10L Bioreactor Monitoring
5B.0 10L Bioreactor Monitoring	5C.0 10L Bioreactor Monitoring
5C.0 10L Bioreactor Monitoring	5D.0 10L Bioreactor Monitoring
5D.0 10L Bioreactor Monitoring	6.0 Purification 1
6.0 Purification 1	7.0 Purification 2
7.0 Purification 2	Process Finished

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Transition Genealogy Report
Printed By: aoper
Printed Date: 10/31/2024 01:35 pm CDT

General Plan: LML - General US
Specification Plan: LML - Specs US
Sample Plan: Default
BOM Plan: Default

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Vector Field Support

L7 MES now supports Vector field types.

In EBR, Quality Review, and the final Batch Report, vector fields appear as tables. Users can add and remove rows within the minimum/maximum number of rows defined for the vector table.

Users may add comments to individual cells in the vector table, and may set individual cells as N/A.

Numeric columns are recognized as specifications. Out of range errors are highlighted in EBR and Quality Review, and are included in the Specifications tab and Specifications report.

In Quality Review and the Exceptions Report, exceptions in individual table cells are highlighted.

Improved Tablet Support in EBR

EBR has been modified for an improved tablet experience. Fixed modal windows are now scrollable to allow easier access to buttons while the virtual keyboard is displayed, and other issues with excessive scrolling in EBR have been addressed.

Applying Dynamic Execution Plans in MES

L7 MES now supports four types of Execution Plan: General, BOM, Specification, and Sample. All four may be applied when creating an MES batch. For more information about the new General and BOM Plan types, see the L7|MASTER section of these release notes.

It is possible for the same field to be included in both the General and one of the three specialized Plans. If both are applied, the system will apply all configuration settings that are unique within the two Plan types; where there is overlap, the system will apply the configuration setting from the specialized Plan type.

L7 Scheduling

Archive Availability

When archiving a scheduled resource, users will now be asked if they would like the resource removed from all future scheduled assignments as well.
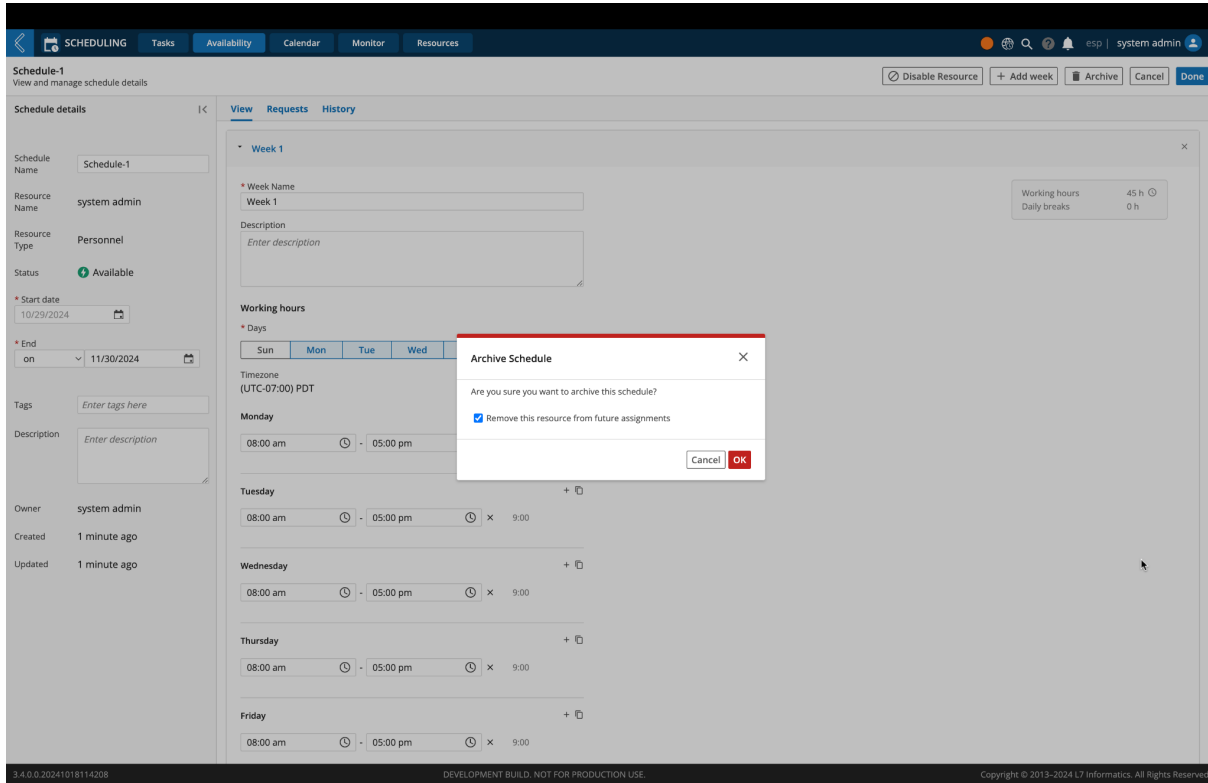
Archive Tasks in the Calendar Tab

Personnel will be notified via an orange toast notification and an email notification when a task they were assigned to has been archived and the option to send the notification is selected during task archival.

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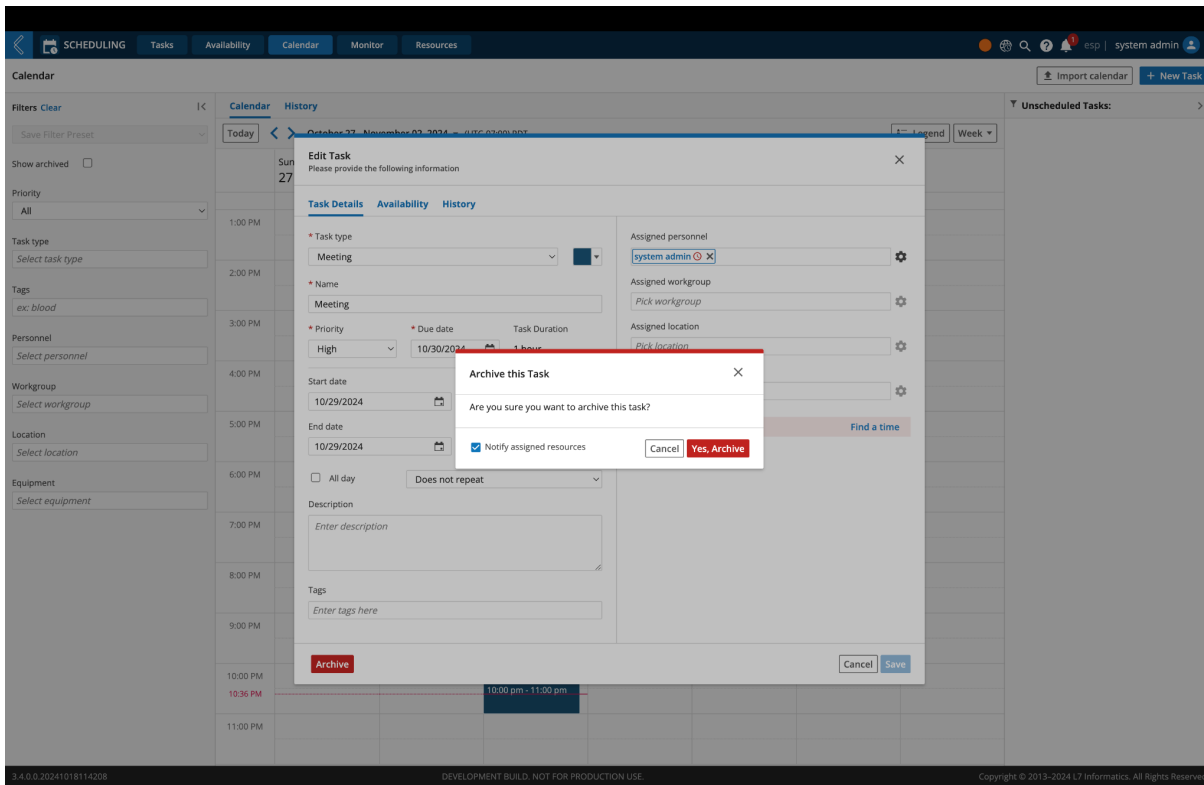
Create and Maintain Auto-generated Tasks

Improvements were made to the Save Confirmation modals along with the notifications for editing Planned Action Chains through the Task Edit modal.

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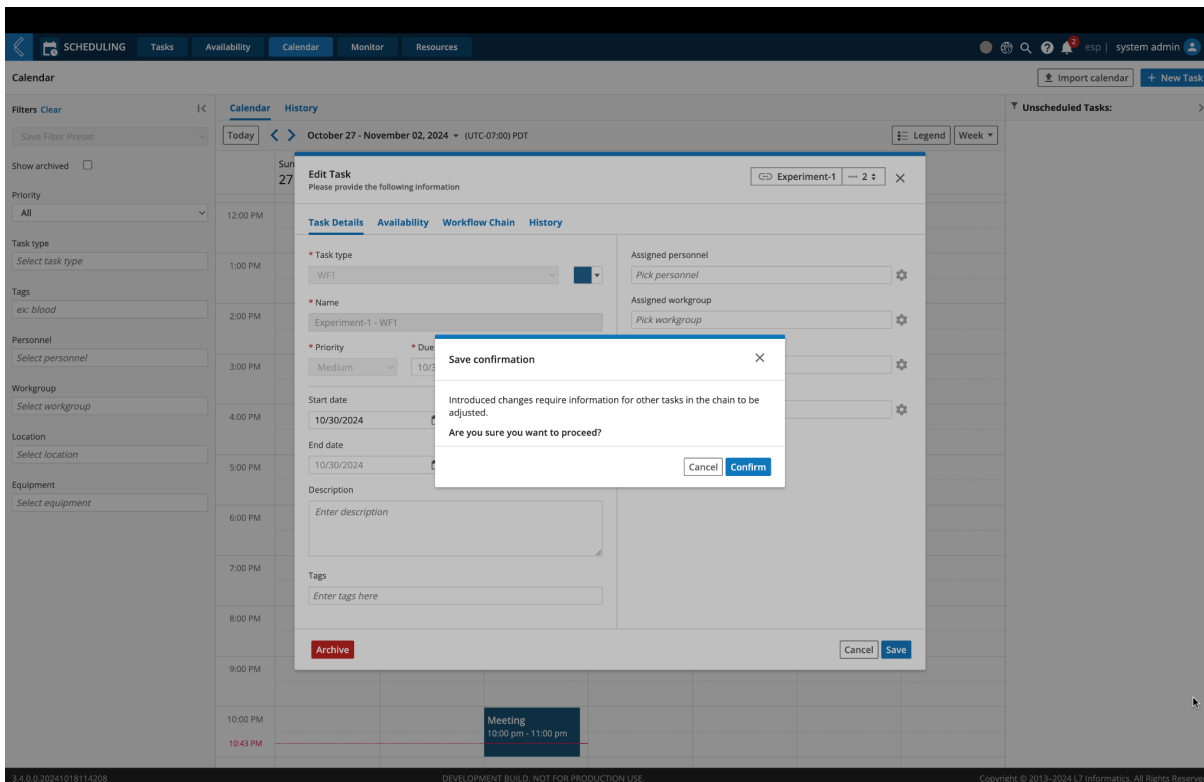
Maintain and Update Resource Availability

L7 Scheduling now supports editing the start date for a future schedule.
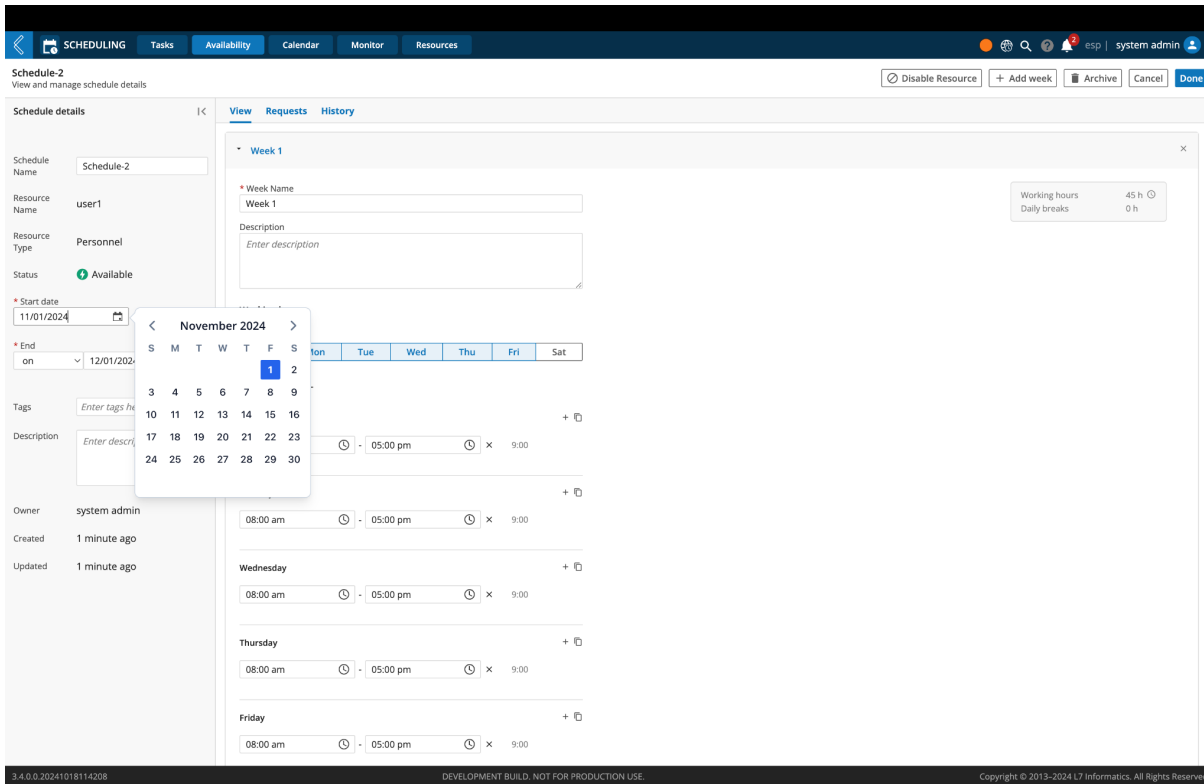
Resource Management Tool in Monitor

Streamlined the Inspector Panel in the Resources tab to only expand the details for the specific item selected.

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Experiments in L7 LIMS

Applying Dynamic Execution Plans when creating an Experiment for L7 LIMS

L7 LIMS now supports four types of Execution Plan: General, BOM, Specification, and Sample. All four may be applied when creating an experiment for L7 LIMS. For more information about the new General and BOM Plan types, see the L7|MASTER section of these release notes.

It is possible for the same field to be included in both the General and one of the three specialized Plans. If both are applied, the system will apply all configuration settings that are unique within the two Plan types; where there is overlap, the system will apply the configuration setting from the specialized Plan type.

Resolved Issues

Known Issues from previous releases resolved in 3.4.0.0

Key	Summary	Application	ZenDesk ID
APPS-19206	Entities App: Custom views not saving/appearing correctly when custom view is set to default view	Entities	N/A
APPS-18986	LIMS: Unable to scan sample barcodes into worksheets (Context lost)	LIMS	N/A

Known Issues

| Key	Summary	Application
APPS-19632	DEP creation - WFC should not be a live link	L7|MASTER
APPS-19628	3.3.0.x hotfix CLONE - LIMS left sidebar Filtering throws error	L7 LIMS
APPS-19625	DEP - Save As sometimes saves additional information in original DEP	L7|MASTER
APPS-19618	L7|MASTER > DEP: In the DEP details page, unable to add Workgroups to the DEP (only Default option 'Any' is displayed)	L7|MASTER
APPS-19617	L7|MASTER > DEP: Workgroup pick list is displayed within a very small scrollable section making it difficult to select workgroup options in the DEP creation modal	L7|MASTER
APPS-19599	L7 LIMS left sidebar Filtering throws error	L7 LIMS
APPS-19561	L7|MASTER: Container Type - Unable to remove resource types from Container Type field 'Contains'	L7|MASTER
APPS-19559	L7 MES - Exception Report doesn't include vector field cells with out of range or incomplete	L7 MES
APPS-19556	L7 MES - column headings cut off on some tabs	L7 MES
APPS-19527	L7|MASTER - DEP - Sample point type is displaying in BOM and Spec Plan DEP	L7|MASTER
APPS-19526	L7 MES: DEP not applied to Protocol in 2nd WF	L7 MES
APPS-19517	Various onRender and onChange issues with grouped protocols	L7 LIMS
APPS-19508	L7 MES/Quality Review - Next Step should be read only in Editor Portal	L7 MES
APPS-19449	L7 MES- Vector Columns name updates to match Figma	L7 MES
APPS-19441	L7|MASTER > DEPs: Notify groups unable to be modified	L7|MASTER
APPS-19415	L7 Notebooks: The Auto-save keeps triggering even if the user is not actively working on any entry	L7 Notebooks
APPS-19351	L7 LIMS: OnRender called twice when switching from Rows/Transpose to Flexview view	L7 LIMS

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APPS-19097	L7 MES: No error toast upon creation of EBR with DEP when process WFC had field removed after creation of that DEP which included that field	L7 MES
APPS-18951	L7 MES: EBR > BOM tab > Available Items & Item Usage Tables - Lot expiration dates 2 days before Inventory app expiration dates	L7 MES
APPS-18930	L7 MES: Custom field in Entity Type with DEP Resource Link restricted to a plan & WFC - Field name is cut off in new EBR modal	L7 MES
APPS-16403	Uploading file names with '#' breaks viewing/download ability for that file.	Data
APPS-15918	Duplicate toast notifications when POST is used	L7|ESP Core

Constraints

In order to meet regulatory requirements for end-to-end encryption, L7 Informatics strongly recommends customers run L7|ESP with SSL enabled even in network environments where L7|ESP is not accessible from the internet. This ensures data integrity from the point of data origin through data storage.

L7|ESP is validated only in SSL-enabled environments, running with SSL disabled constitutes running in an unvalidated state and L7 Informatics cannot guarantee that L7|ESP will function properly without SSL enabled in future releases.

Seeding Users

Seeding user files will recognize the workgroups. When seeding a customer repo, workgroups in the user file should be removed. L7|ESP client re-organizes the resources, where users are seeded before the workgroups.

L7|ESP Testing activities for L7|ESP 3.4.0.0 were successfully concluded at 17-Oct-2024.

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