



Release Notes for L7|ESP
Version 3.3.0.0
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Table of Contents

| | |
|--|---|
| New Features..... | 5 |
| General..... | 5 |
| Customer logo(s) on Reports..... | 5 |
| Configuration..... | 5 |
| Exception Assessments (MES)..... | 5 |
| Workflow Chain Transitions..... | 5 |
| Core..... | 5 |
| ESP - User Monitoring & Control..... | 5 |
| ESP License Management..... | 5 |
| Leverage OpenAPI (Swagger) for ESP's API definitions..... | 5 |
| General Core Updates..... | 5 |
| Dynamic Execution Plans (DEP) Support in LIMS..... | 5 |
| Improved Global Search..... | 6 |
| Electronic Notebooks..... | 6 |
| Audit History in Notebooks..... | 6 |
| Signatures in Notebook Entries..... | 6 |
| Template Creation and Management..... | 6 |
| Collaboration feature in Notebooks..... | 6 |
| Embedding Workflows in ELN..... | 6 |
| Entry Details Page Creation and Management..... | 6 |
| Spreadsheet Capabilities and Enhanced Tables in Notebooks..... | 7 |
| Increased Visualizations in ELN..... | 7 |
| PDF Preview and PDF export for Notebook Entries with wide tables..... | 7 |
| Searching within Notebook App..... | 7 |
| Viewing archived entries..... | 7 |
| Ingest..... | 7 |
| Inventory..... | 7 |
| Item naming in Kit Containers..... | 7 |
| L7 HUB..... | 8 |
| Ability to Export Bundle Review History..... | 8 |
| Bundle Creation Wizard..... | 8 |
| Bundle File Support from GUI..... | 8 |
| Compare Content - view content side by-side..... | 8 |
| Content Version Stacking..... | 8 |
| L7 HUB: Location loading and Bundles install performance improvements..... | 8 |
| L7 Master..... | 8 |
| Exception Assessments..... | 8 |
| Explicit Process Versioning..... | 8 |
| Consistent interface for adding fields on Protocols and Entity Types..... | 8 |

| | |
|--|----|
| Maintain and Update Resource Availability..... | 9 |
| General Updates..... | 9 |
| Retiring Workflow Chain Versions..... | 9 |
| Signature Flow Updates..... | 9 |
| Workflow Chain Transitions..... | 9 |
| LIMS..... | 9 |
| LIMS Landing Page UI updates..... | 9 |
| Auto-Population of Samples..... | 10 |
| Informational Tab in LIMS Cell inspectors..... | 10 |
| Signature Flow Updates..... | 10 |
| MES..... | 10 |
| Exception Assessments..... | 10 |
| Quality Review..... | 10 |
| General Updates..... | 10 |
| Report Refinements/Updates..... | 10 |
| Retiring Workflow Chain Versions..... | 11 |
| Signature Flow Updates..... | 11 |
| Projects..... | 11 |
| Retiring Workflow Chain Versions..... | 11 |
| Reports..... | 11 |
| Custom Logos..... | 11 |
| Scheduling App..... | 11 |
| Ability to apply different time zones..... | 11 |
| General Updates..... | 11 |
| Integrate Non-linear Workflow Chains..... | 11 |
| Improved User Experience..... | 12 |
| Maintain and Update Resource Availability..... | 12 |
| Maintain the Monitor Section..... | 12 |
| Resource Management Tool in Monitor..... | 12 |
| Resolved Issues..... | 12 |
| Known Issues..... | 13 |
| Upgrade Considerations..... | 15 |
| Dependencies..... | 15 |
| Behavior Changes..... | 16 |
| Ag-grid version upgrade..... | 17 |
| LIMS: Changes in ag-grid API..... | 17 |
| LIMS: Copying and Pasting on grouped sample protocols changes..... | 17 |
| LIMS: Copying and Pasting Performance..... | 18 |
| Custom Reports with Async Data..... | 18 |
| Branding CSS variable changes..... | 19 |

| | |
|------------------------------------|----|
| Licenses..... | 19 |
| Core configuration updates..... | 19 |
| api.setDataAt within onRender..... | 21 |

New Features

General

Customer logo(s) on Reports

Users can now upload a logo file that can be used system-wide, where allowed. MES reports will include customer-specific logos as desired.

Configuration

Exception Assessments (MES)

Triage and assessment settings can be configured to allow customer specific terminology and ranking for assessing exceptions from the manufacturing process.

Workflow Chain Transitions

ESP Administrators now have access to change the default setting used for workflow chain transitions. When a transition is added to a workflow chain, the default method will be either "User Selected", "Always Transition", or "ESP Expression" depending on what the administrator has set.

Core

ESP - User Monitoring & Control

ESP services now have priorities to reduce the risk of services failing and not starting up again.

Improvements to Configuration for easier migration and upgrading of ESP and associated databases.

Improvements to restarting ESP services.

ESP License Management

Enhancements to the security and authenticity of the software licensing system by transitioning to a private/public key encryption mechanism for license generation and verification.

Leverage OpenAPI (Swagger) for ESP's API definitions

Added access to OpenAPI documentation via URL.

General Core Updates

Changed 'Fail Samples' button to 'Abort Samples' as this aligns closer with user processes.

Dynamic Execution Plans (DEP) Support in LIMS

Added support for Dynamic Execution Plans (DEP) in LIMS.

Improved Global Search

Enhanced global search capabilities within ESP.

Electronic Notebooks

Audit History in Notebooks

Enhancements to Audit History in Notebooks. Notebook libraries, Templates, and entries will show the creation, modification, and archive events in Audit History. The addition of widgets as well as the modification of data in the widget will show in Audit History, including the old value and the new value it was changed to. Audit History can also be exported into a CSV file.

Signatures in Notebook Entries

Enhancements to signature approval in Notebooks add the capability to inform the user of the underlying changes that would take place as part of unlocking and users should be able to decide whether or not to proceed with unlocking.

Redesign of the entry review modal more intuitive for end users.

Template Creation and Management

Added the ability to lock the template page so that accidental modifications can be avoided.

Collaboration feature in Notebooks

Updates to Notebooks to allow users to collaborate easily with other ESP users. Owners of the notebook can add or remove collaborators. When a collaborator is added the collaborator will receive an email notification letting them know that they now have access to the notebook or entry.

Owners of a notebook can also track changes by collaborators through audit history.

Embedding Workflows in ELN

Users can now embed workflows within Notebook entries. Embedding workflows will allow users to use a workflow created in L7|Masters and not have to re-enter data on each step. With these updates users are also now able to add existing or new samples to the workflow and execute the workflow.

Entry Details Page Creation and Management

Users now have the ability to view the widget list in a section and should be able to click on one and navigate to the desired widget without having to scroll a lot in the entry page.

Enhancements to the notebook entry page to allow for sections to be selectable and draggable onto the entry page.

Spreadsheet Capabilities and Enhanced Tables in Notebooks

Users can now enter text in the table widget and perform text formatting options on cells. Text automatically wraps based on the default column width.

Spreadsheet functionality includes formula entry, column and row management, dragging/copying text, and other common spreadsheet functions.

Users can have multiple instances of the spreadsheet widget in the entry and should be able to access cell values of one spreadsheet widget from another spreadsheet widget.

Data in tables as well as Spreadsheet widget can be exported into a CSV file.

Increased Visualizations in ELN

Added support for adding workflow data to charts so that users can plot the data as needed for further analysis.

PDF Preview and PDF export for Notebook Entries with wide tables

Enabled the capability to preview and print PDFs with widgets having multiple columns and rows. A history of all generated PDFs for entry is also available to the user.

Users also have the ability to apply different print scales to wide tables within a notebook entry so that the PDF generated includes all data without any data getting truncated.

Searching within Notebook App

Enhanced searching capabilities that include search history for easy reference and highlighting of search terms in results of the search for improved readability. Advanced searching is also now available to help filter search results quickly and efficiently.

Viewing archived entries

Added functionality to view and restore archived notebook entries.

Ingest

Added support for item type entities within containers when an ingest runs as a result of a pipeline.

Inventory

Item naming in Kit Containers

Inventory items moved into containers (kits) now list the item name first, with the container name second.

L7|HUB

Ability to Export Bundle Review History

Added functionality to export branded PDFs with Bundle details, review history and content lists.

Bundle Creation Wizard

Enhancements to the Bundle Creation Wizard to include Bundle Review. Views are available that present the user with relevant Bundle information to enable an informed decision. Bundle input details can be added to the Bundle and Bundle dependencies are checked before the Bundle is created.

Bundle File Support from GUI

Attachments and files may not be added to Bundles.

Compare Content - view content side by-side

Users are now able to compare content between Bundles and add or remove content items from the comparison.

Content Version Stacking

Bundle version details are now available from a single right drawer in the UI.

L7|HUB: Location loading and Bundles install performance improvements

Improved Bundle installation performance.

L7|Master

Exception Assessments

Workflow Chains may now be associated with a pipeline used for pushing Exception Assessment information to an external system from Quality Review, allowing reviewers to push exception assessments to QMS systems.

Explicit Process Versioning

Improved support to allow users to select specific versions of workflows to use in workflow chains. This ensures that unintentional changes to workflow chains are not introduced when updating workflows or protocols.

Consistent interface for adding fields on Protocols and Entity Types

Field configurations have been enhanced to present an easier interface when managing fields in Protocols, Entity Types, Container Types, and Item Types. Fields are now listed in a table, along with pertinent information about the field. Error icons appear in fields where the user enters data incorrectly, and the Remove Field icon has been moved to the top so that it is available without scrolling.

All fields previously in the Protocol Fields tab have been moved to the Fields tab for easier viewing. The Protocol Field designation is now configured as a Shared flag.

The “Var Group” configuration is now labeled as “Grouping”.

Workflow Chains no longer contain Custom Fields. Instead, when the Workflow Chain is intended for use in manufacturing, the left panel includes a required Signature Flow used in final Sign Off and optional Pipelines for printing labels and interfacing with external systems in Quality Review.

Maintain and Update Resource Availability

Users are now able to select what specific entity classes and types can be schedulable, so that they can be used in the Scheduling Application.

General Updates

Batch and Experiment creation can now require a DEP, allowing for more unit op-centric recipes and procedures which can be tuned for a particular product or site.

Instruction fields may now be edited as rich text format, in addition to the HTML format supported in previous releases..

Retiring Workflow Chain Versions

Pinned workflow chain versions can now be retired so that they are not available for use in MES or LIMS experiments. Retired versions may be reactivated if desired.

Signature Flow Updates

Signature Flows can now be configured so that approval can be completed asynchronously.

In addition, Signature Flows may be configured to require that user signatures be unique.

Workflow Chain Transitions

Transition Rules may now be configured by selecting the appropriate transition rule, rather than having to type code for the rule. In addition the “User selected” (“is_node_selected()”) rule no longer requires a matching “Next Step (“next_node_choices()”) field in the last protocol of the workflow; if the field does not already exist, the system will add it as the last field of the last protocol at runtime.

LIMS

LIMS Landing Page UI updates

The LIMS sample sheet listing now includes workflow chain and workflow chain node information. Filtering by workflow chain and workflow chain node has also been added. Workflow chain and workflow chain node information has also been added to other areas in LIMS including backlog grouping and cards.

Auto-Population of Samples

Added support to LIMS to auto-populate the sample type when there is only one specified during sample registration.

Informational Tab in LIMS Cell inspectors

Cell inspectors enhancements to provide more information for improved review of workflows during execution.

Signature Flow Updates

An updated Signature Flow interface allows signatures to be added in one step.

If configured with Enforce Uniqueness, Signature Flows will ensure that no user can sign more than once.

Signature flows can now be signed asynchronously, eliminating the need to have all prior signatures entered before being able to sign a stage.

MES

Exception Assessments

MES now allows quality reviewers to triage exceptions by assigning a Risk Level and Exception Type, such as CAPA, Deviation, etc. Risk Levels and Exception Type categories are configurable.

If so configured,, Exception Assessment information can be pushed into a QMS, training, or other external system with a simple click, eliminating the additional step of

Quality Review

Improved Reviewer Portal and EBR interfaces to allow Ops and Quality Reviewers to identify flagged exceptions easily.

General Updates

Improved error messages list specific reasons when workflow chains cannot be used in a batch.

Users can now set custom fields on the batch entity as "N/A" when creating a batch..

Users can now request changes to batch data up to the point that the final Sign Off signatures are completed. Requesting changes will place the batch back into "in review" status, and all previously entered Quality Signatures and Sign Off signatures must be re-entered.

Report Refinements/Updates

Batch sections that were not executed are now watermarked to give any reviewers better understanding of why no data is recorded in those sections.

The Final Batch Report now includes a new Quality Assessment Report. This may also be generated as a standalone report.

Retiring Workflow Chain Versions

Workflow Chain pinned versions that were retired in Workflow Chain builder can no longer be used to create new batches. Batches that are already in progress are not affected when the Workflow Chain version on which they are based is retired.

Signature Flow Updates

Signature Flows can now be configured to prevent users from signing more than one stage. They can also be configured to allow asynchronous approvals.

Projects

Retiring Workflow Chain Versions

Workflow Chain pinned versions that were retired in Workflow Chain builder can no longer be used to create new Experiments. Experiments that are already in progress are not affected when the Workflow Chain version on which they are based is retired.

Reports

Custom Logos

MES reports can now display a custom logo in the header. Logos may be set globally or may be configured at the MES Product level.

Scheduling App

Ability to apply different time zones

The “Day of week” filter automatically calculates and adjusts to time zone differences, including daylight savings times across all timezones (worldwide).

General Updates

Users can now start a worksheet in LIMS and have the associated unscheduled tasks auto-scheduled in the Scheduling based on the start date and time.

Integrate Non-linear Workflow Chains

The Scheduling Application now supports non-linear workflow chains. Updates include:

- Filtering by Resource Type

- Adding the ability to reschedule a planned action within a workflow chain that is in progress to account for delays.
- Support for view of multiple statuses associated with planned actions with multiple experiments.

Workflow chains now support selecting a start node and have only downstream nodes that can accept samples displayed in the scheduling calendar.

Improved User Experience

The following activities can now be completed directly in the Scheduling Application:

- Archiving of tasks
- Worksheet creation and navigation

Improved visualizations within the task dashboard widget.

UI updates to allow easier distinction between workflow chain versions.

Added the ability to review the number of tasks assigned in the task buckets area of the task review panel.

Improvements to drag and drop element styles within the “Unscheduled Task Panel”.

Updates to the Workflow Details Modal to allow users to select a workflow on the calendar and be able to see all details, including assigned icons and their meanings for easier review of information.

Maintain and Update Resource Availability

Added support to allow administrators to choose which entity classes and types are schedulable and have the flexibility to assign schedulable entities.

Users can now edit existing resource schedules.

Maintain the Monitor Section

UI improvements to allow users to see when resources are unassigned. Views of unassigned resources can be represented by several different visual representations.

Color coded visual representations can be viewed in a newly created legend in Monitor.

Resource Management Tool in Monitor

Enhanced views to allow data from the capacity chart to display while visualizing scheduled tasks in the calendar. Users have the option to display data for personnel, workgroups, equipment, and locations.

Resolved Issues

Known Issues from previous release resolved in 3.3.0.0

| Key | Summary | Application | ZenDesk ID |
|------------|---|-------------|------------|
| APPS-17082 | Projects - Experiment Creation (Entity creation) | Core | N/A |
| APPS-15192 | espcient-Core: Migration to a new Entity Type Definition does not show new columns in espcient | Core | N/A |
| APPS-15191 | Entities-Core: Migration to a new Entity Type Definition Causes Entities to Fail to Render Data Tab | Core | N/A |
| APPS-16149 | The explanation for why the Schedule Task field is disabled is missing | Projects | N/A |
| APPS-15677 | Projects - Unable to open a project details page | Projects | N/A |

Known Issues

Known Issues found during Validation of 3.3.0.0. List should be received from QA after Validation completion.

| Key | Summary | Application |
|------------|---|-------------|
| APPS-19119 | precommit - test_single_head_revision dependency conflict | Core |
| APPS-19110 | openapi docs - broken reference in Item openapi docs | Core |
| APPS-19099 | MES - EBR starts at the top of the step and scrolls down to the next entry field after every save | MES |
| APPS-19098 | Entities - Entity detail displays only first grouping | Entities |
| APPS-19097 | 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 | MES |
| APPS-19026 | ELN: Detailed acceptance toast does not appear for signatures of users other than owner of review | ELN |
| APPS-19025 | Projects: When adding custom entities via resource link modal, user cannot see the submit or cancel button | Projects |
| APPS-19022 | Notebooks: Date separator has invalid date if widget unlocked at time review requested | ELN |
| APPS-19007 | Locations: 'Sample Cannot be found' Error message displayed when scanning a container to open on the main Locations page | Location |
| APPS-19005 | LIMS: DocView: Data selected by the user from the resource link modal is not displayed in docview until user does a hard refresh | LIMS |
| APPS-19004 | LIMS:DocView -Location picker- item pool does not display any samples in the item pool | LIMS |

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| APPS-19002 | LIMS: DocView: QR, 1D and Mini DataMatrix does not display the barcode image under the barcode field | LIMS |
| APPS-18983 | LIMS: Print table view displays multiple entities in the container as single line without any space or comma | LIMS |
| APPS-18964 | ELN: Header and footer widgets are sometimes cut off by other elements in generated PDF report | ELN |
| APPS-18963 | Scheduling: Availability tab - 'Copy shifts to' modal is cut off for Friday and user is unable to scroll all the way down in the modal | Scheduling App |
| APPS-18962 | L7 Hub - PDF display - Part of the signature flow details is not displayed in the review history data. | L7 HUB |
| APPS-18939 | Updated values not saved for an unprocessed Ingest | Ingest |
| APPS-18930 | MES: Custom field in Entity Type with DEP Resource Link restricted to a plan & WFC - Field name is cut off in new EBR modal | MES |
| APPS-18929 | Performance: Transition a chain | Workflow Chains (WFC) |
| APPS-18928 | Performance: Open a workflow after creation | L7 MASTER |
| APPS-18920 | L7 Hub - Collections - Missing dependency warning disappear and reappears when the user switches between collections | L7 HUB |
| APPS-18919 | Inventory App - Process Data tab for an inventory item does remains empty after item was used in experiments | Inventory |
| APPS-18916 | L7 Hub: When installing a notebook template the list of dependencies modal is displaying a deleted protocol. | L7 HUB |
| APPS-18915 | L7 HUB - Pinned WFC gives an error when installing from remote hub | L7 HUB |
| APPS-18890 | MES: Batch section #s do not match L7 Master for seeded WFC & some EBRs won't open | ESP Client |
| APPS-18871 | L7 Master: Entity Classes - Details View Template tab - Default view in Select template dropdown becomes blank when the user creates a new custom view | L7 MASTER |
| APPS-18869 | Success toast and notification headers show contain concatenated header+body strings | Core |
| APPS-18864 | Dashboard: Sample Count By Sample Type and Samples Assigned To Workflows dropdown does not work | Dashboard |
| APPS-18855 | ELN: Search tab - Clicking Clear filters button does not work as expected after entering a past date in Create Before left Advanced Filters panel | ELN |

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|------------|--|-----------|
| APPS-18841 | I18N: Unable to bulk export resources | Core |
| APPS-18828 | LIMS: 'Cache' button does not changes to 'Cached a few second ago' | LIMS |
| APPS-18816 | ELN: Rich Text Editor Widget table breaks when user merges two cells and uses these two cells to add another row/column | ELN |
| APPS-18806 | ELN: @ Link to option does not work as expected in Paragraph widget when text is added | ELN |
| APPS-18736 | LIMS: 'Send Samples to Next Workflow' button changes to 'Submit to Next Workflow' if all samples failed on the last protocol | LIMS |
| APPS-18615 | Container types: values for the manual picklist are not retained while saved with entered value for the ESP Expression | L7 MASTER |
| APPS-17955 | MES: MESProduct app does not display an error for fan-in protocol type. | MES |
| APPS-17883 | Locations: Error message for multiple samples with the same barcode doesn't appear after the first time | Location |
| APPS-17262 | Projects>Experiment : Version of an experiment is not displayed in inspector panel at experiment list page | Projects |
| APPS-15750 | Entities app: When user from different workgroup adds more than 50 entities, entities created by other user disappears from the UI | Entities |

Upgrade Considerations

Dependencies

- Dependency upgrades:
 - PyYAML was upgraded from 5.0.x to 6.0.x. with notable changes:
 - Support for python 2.7 has been dropped
 - Calls to `yaml.load` in ESP extensions and other customer code must supply the `Loader` argument. Note that calling `yaml.load` without the `Loader` argument has been deprecated for several years and support has finally been removed. Calls to `yaml.load(file_)`, can be quickly updated to `yaml.load(file_, Loader=yaml.SafeLoader)`
 - PostgreSQL:
 - Postgres 10 is no longer included in the container image.

- 3.1 = first version that added PG13 as new default - customers could continue using PG10 even though EOL
 - 3.2 = last version with PG10 as a built-in option - customers told they need to upgrade to PG13 when going to 3.2
 - 3.3 = first version that does NOT have PG10 as an option - customers should all be on PG13 before upgrading to 3.3
- Minimum required version is now Postgres 13.
- Vue 2.6.14 → Vue 3.3.4: L7|ESP's front-end now uses Vue 3. For backwards compatibility, applets and reports are still supplied with the Vue2 library, but this may change in the future. See also behavioral changes below.
- ag-grid: 21.2.2 → 30.1.0. Ag-grid has several API changes that may impact implementations if they are making direct use of ag-grid APIs. See also behavioral changes below.
- Telemetry
 - Opentracing was replaced by opentelemetry and the `traced_function_17` decorator was removed.. Extensions that `import traced_function_17`, must remove the import.

Behavior Changes

LocalStorage replacement

Use of localStorage was replaced with indexedDB as the store mechanism for the following sections:

- the LIMS cache
- the MES cache
- the "recently opened items" on (for example) L7Master > Protocols (and any other section)

In general, this will have no impact on user-facing functionality, but users may notice "breadcrumb" links reset. For this upgrade, it is also best if users are not working in MES or LIMS while the upgrade is occurring.

Children instance property has been removed (Vue2 to Vue3 upgrade)

Vue 3 component objects have some changes relative to Vue2. Notably:

- The \$children instance property has been removed from Vue 3.0 and is no longer supported ([Vue migration guide](#))

That means that no Vue component will have access to their children component instances through the \$children instance property.

For fas-content, invocables.js and/or other scripts that interact with Vue 3 objects, the following breaking changes should be considered:
<https://v3-migration.vuejs.org/breaking-changes/>. This doesn't apply for Multi Entity apps, Applets, and Reports since they are executed within an iframe and still supplied with the Vue 2 library.

Ag-grid version upgrade

Ag-grid library was updated from version 21.2.2 to version 30.1.0. The library introduced quite a few changes. The Changelog is here:
<https://www.ag-grid.com/changelog/?fixVersion=30.1.0>. There, you can inspect what were the changes from version to version using the dropdown on the Release Notes panel. Also, here it is the documentation corresponding to that version:
<https://www.ag-grid.com/archive/30.1.0/vue-data-grid/getting-started/>

LIMS: Changes in ag-grid API

Some implementations have made use of internal ag-grid APIs that have been removed or changed in the new version of ag-grid. As a general rule, L7 recommends custom code rely only on functionality provided directly by L7 to improve upgradability. Notably:

- Some implementations referenced `columnApi.columnController`, which has been renamed to `columnApi.columnModel`, but it would be even better to use the public API function `params.api.getColumnDefs()`
- When declaring the `gridOptions` object, the arguments passed to `getRowStyle` method have changed. This would affect for instance the declaration of the `gridOptions` on the `renderers.js` file when extending the default renderers.

There might be other changes on the API, so make sure to check the following ag-grid documentation:

- <https://www.ag-grid.com/archive/30.1.0/vue-data-grid/grid-interface/>
- <https://www.ag-grid.com/archive/30.1.0/vue-data-grid/column-interface/>

LIMS: Copying and Pasting on grouped sample protocols changes

Ag-grid version was upgraded, and with it, some internal behavior has changed. For instance, pasting a value over grouped samples is not allowed anymore. To overcome this limitation, L7 manually implemented the paste operation, but limitations in ag-grid APIs prevented a perfect replication of previously available functionality.: when copying values from 2 columns on a spreadsheet and then pasting them into a LIMS worksheet with grouped samples, the values are pasted into a single column instead of split across two columns.

LIMS: Copying and Pasting Performance

Pasting two columns of single character strings into 1000 rows of free text fields takes can impact performance. L7 has added global configurations to the feature flags configuration for turning off cell auto-height and auto-width which can boost grid performance for implementations that do not need the auto-sizing.

Custom Reports with Async Data

For customers who have custom MES reports that rely on asynchronous data to be returned before they are ready, L7 has updated the method on how the report will tell L7|ESP it is ready.

The report must set `hasAsyncData = true` at the very beginning of its first script tag.

```
Unset
<script>

window.reportInteractionApi.hasAsyncData = true;

// This is an optional setting on how long to wait before
timing out

window.reportInteractionApi.asyncDataTimeout = 5000; //
Default is already 5 seconds

...

</script>
```

When the asynchronous call is complete, the report must post a message with a specific status where previously ESP accepted any message.

```
Unset
<script>

window.reportInteractionApi.hasAsyncData = true;

async function myFnc() {

  // old way
```

```
window.parent.postMessage("Your message", "*");

// new way

window.parent.postMessage({ status: "report:ready" },
"*");

}

await myFnc();

</script>
```

Branding CSS variable changes

For customers using the `white_label` system feature flag, the CSS variable names and inheritance changed significantly from [3.2](#) → [3.3](#). These settings can be considered more stable than 3.2 and it is unlikely such a significant change will happen again.

Licenses

Licenses generated for versions of ESP ≤ 3.2 won't work, new licenses must be generated for 3.3 (note that Licenses generated for L7|ESP 3.3 will work on older ESP implementations, so customers can future-proof by requesting an updated license key prior to upgrading to 3.3).

Core configuration updates

Translation (i18n) files and the `supervisord` files have changed from 3.2 to 3.3 and should be updated.

- The `supervisord.conf` was updated, changing the way L7|ESP services are grouped. No changes should be necessary for scripts that use `l7 stop/stop/restart` commands as backwards compatibility has been maintained. Because the `supervisord.conf` file lives in the data volume, it needs to be updated before `l7 start` will function correctly. The most common symptom of an out-of-date `supervisord.conf` file is the container is crashing when trying to start it via, e.g., `docker compose up`. For implementations deployed using

`docker compose`, please run `docker compose run --rm server bash` and copy the updated configuration file into place and perform any edits needed if the file is customized. After it is in place, please start the container the normal way. K8s users should work with their implementation team to ensure their startup scripts are updated appropriately.

- `i18n` files: translations files have been updated and need to be copied fresh into the data folder for english translations.
- The `iamRoles` configuration has been updated. If users are unable to open the “Permissions” tab of a given user role, or rendering it takes a long time, or it fails to render completely, importing the 3.3 version of `iamRoles` is recommended.
- The template file for the `HAProxy` configuration was moved from living in the `Data/conf` directory to be stored in the database. It can now be viewed and modified via the Configuration app. Customers who have customized this configuration will need to apply their customizations to this configuration via the Configuration app after migrating to 3.3.0.0 or as part of their SDK deployment scripts.

Supervisor

`jemalloc` is now the default memory allocator as some of our most demanding customers have seen only positives from its use. Customers wishing to opt-out of this change can remove the `LD_PRELOAD` environment variable from `supervisord.conf`.

Note: environment variables, like `LD_PRELOAD`, are inherited by all child processes. As such, `jemalloc` will also be the default memory allocator for any pipeline scripts. If a pipeline contains a software (e.g. Cypress) that is failing due to memory related issues, such as `SIGSEGV`, disabling `jemalloc` may resolve the issue.

To disable use of `jemalloc` for all pipelines, set `environment=LD_PRELOAD=` (empty value) under `[program:l7-esp.executor]` in the `~/data/conf/supervisord.conf` file, or set `export LD_PRELOAD=` in the `executor.job_header`. To disable `jemalloc` for a single pipeline task, ensure that task starts with `export LD_PRELOAD=`. You may also have luck disabling at runtime within Python scripts:

```
Unset
if os.environ.get("LD_PRELOAD"):
    del os.environ["LD_PRELOAD"]
```

Permissions

Some permissions has been renamed or removed:

- `PlannedActionType` has been renamed to `ManualTaskType`
- `AvailabilityBlock` has been removed.

Implementations that push role permissions as part of their deployment scripts (typically in `content/admin/userroles.yaml`) should review and revise accordingly.

If you are unable to make changes to an existing role in IAM, you can re-import it with the changes using:

```
Unset
$ esp --password "${L7ESP_PASSWORD}" export role admin >
admin.yaml

$ sed -i -e 's/PlannedActionType/ManualTaskType/g' -e
'/AvailabilityBlock:/,+3d' admin.yaml

$ esp --password "${L7ESP_PASSWORD}" import role admin.yaml
```

`api.setDataAt` within `onRender`

When using `api.setDataAt(...)` in these contexts (particularly within `onrender`), there are potential timing issues. Setting data in the grid during the render isn't formally supported at this time. In general, initial/default values of custom fields should be set via expressions. For other use cases, explicit buttons, API Callbacks, and other types of extensions are more appropriate.

1. On first load of the `SampleSheet`, if data is modified in the first protocol via `api.setDataAt` in the `onrender`, the data will be set but the data change will not be reflected in the UI. After clicking save or completing the row, the correct data will be displayed.
2. Changes initiated by `api.setDataAt` within `onRender` do not update the sheet dirty status, leaving the Save button in a disabled state. For the user to persist these automated changes, they must make additional changes to the sheet. This had previously not been required by the user.

In general, L7 recommends not using `api.setDataAt` in the `onRender` hook for any version of L7|ESP as the behavior is (a) not formally supported by L7|ESP requirements and (b) can too easily result in unanticipated behavior. L7 reserves the right to fully disable the functionality of `api.setDataAt` in a future release of L7|ESP given the inherent risks of using the functionality in this manner. For most scenarios, using an expression to set the default value of a field is the preferred approach. If this approach is not viable for a given scenario, contact L7 support to discuss sustainable, safe approaches.

ESP Testing activities for ESP 3.3.0.0 were successfully concluded on 08-Jul-2024.