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Release Notes - Build 2.5s1

New Features

Enterprise Projects

- Users now have the option to discard checked out project objects.

LOPA

- Bow Tie functionality moved over to the LOPA module where Bow Tie diagrams and views will be created directly from, and share, LOPA data objects.

Refinements

Enterprise Projects

- Only Approvers and Administrators responsible for a specific Project receive an e-mail when objects are in a check-in/out process.

Fixes

Operate/Maintain

- Fixed "Replaced In Kind" for Devices from Service Status Change workflow.

Release Notes - Build 2.5s2

New Features

Global

- LOPA Sheet Summary views and reports have been updated to display distinct tables for the Enabling Events and Conditional Modifiers and their respective effects on the LOPA scenario calculations. Effects to the LOPA calculation results specifically by the Conditional Modifiers were previously unclear.

LOPA

- Updated LOPA Sheet Summary template with conditional modifiers table and displayed their related calculations.

Releases

- Release Notes are stored in the database and displayed in HTML format from the Releases module.

Instrumented Systems

- Added a new Logic Solver Generic Model object type to PIU Certificates. This is feature affect any related Logic Solver and calculation at SIL Calc.

Refinements

General

- Transitioning SSRS to KoolReport, starting with SSRS SIS/sif_report for demo

Enterprise Projects

- Removed the Check-Out button on the Toolbar from the Project environment for all the scopes.

LOPA

- The field name for the Enabling Event Description has been updated from "Modifier" to "Enabling Factor" for clarification and to prevent confusion between the Enabling Events and Conditional Modifiers in SLM's LOPA functionality.

System

- Enabled "Create WebView functionality" feature as a default to any regular account type.

Instrumented Systems

- User Interface Enhancement: Tables that perform lookups and/or queries of existing data will now disable actions buttons while the lookup or query is executing. Disabling of these buttons during the search time will prevent any inadvertent overwriting of existing data that was previously experienced on rare occasion.
- User Interface Enhancement: Object tables that allow for creation of new objects will now allow for new row deletion during table editing, enhancing the user experience by speeding up object creation in data tables when too many new rows have been created. For example, if a data table contains 10 rows of data, or 10 objects, and the user wishes to add 2 new rows but inadvertently adds 3 rows, the 3rd row may now be canceled and deleted before saving the first 2 rows.

Fixes

Adapters

- Fixed Enterprise DataSet export.

LOPA

- Added TMEL column data to Excel Export in the "LOPA Worksheets" table.

Operate/Maintain

- Fixed "Replaced In Kind" for Devices from Service Status Change workflow.

Instrumented Systems

- Updated SIL Calc equations to consider any mission time uom selected.

Release Notes - Build 2.5s3

New Features

General

- Added the ability to un-finalize a "Finalized object".

Refinements

LOPA

- Included the IPL barrier long description as a hover tip when hovering over the "Applicable IPLs" field area.

Operate/Maintain

- Execution of a Service Status Change Event specific to a function device has been previously automatic application of the change to all devices in the function. This is not desirable when executing status changes such as Replace In Kind to a single or specific device. Service Status Change Events where an option is selected from the "Device Only" options will now apply the new status only to the devices that are selected in the workflow step that follows the option selection. Additionally, in a related matter, the Replace in Kind status change option will change the Device ID of the selected device(s) to append a "-REPLACED" text while at the same time creating a new device with the same original ID. This will keep the device events from the "replaced" device in the system and available to continue to contribute to event tracking calculations.

Instrumented Systems

- SIF Selected Set Points matrix field: Displaying "Tolerance Range" values in decimal format.
- Add the Set Point Time Delay into the calculation for the SIF Response time.
- P&ID object IDs from child output objects of the SIF were included on the SIF P&ID Reference row in SLM Design SRS report.
- Increased speed of Function List Grids by removing Checklist column on levels higher than the Unit.

Fixes

LOPA

- An issue was found with the SIF Credited on LOPA field logic that was giving a false positive value when a SIF would be applied to a LOPA that was set to not be a LOPA scenario Of Record. The field logic has been updated to account for LOPAs that are removed from and Of Record status for more accuracy.
- Fixed incorrect Hazard value on Bowtie Consequences grid, should be pulling the LOPA Consequence from the LOPA Sheet or from the Consequence if the LOPA Sheet is linked to a HAZOP Scenario.

Instrumented Systems

- Fixed calculation of action in delete and cascade functionality. SIS Related Function should show as unlink instead of delete.

Release Notes - Build 2.5s4

New Features

LOPA

- Allow users to add barriers that are not part of the LOPAS in the Bowtie.

Fixes

LOPA

- Fixed error when the user click the "Save Changes" button on LOPA Template Library table, the system keep loading unstop.

Operate/Maintain

- Filtering template objects on Tier 3 Scorecard reports.

Instrumented Systems

- Fixed error on PFD by Type not generating charts correctly.
- Fixed error on PFD by Type, more decimals were used in the calculation since rounding was giving different results between the grid and the graph.

Release Notes - Build 2.5s5

New Features

General

- Fixed Role Security issue.
- Added a functionality that marks an object for night automatic Calculations.

Refinements

General

- The WebView displays the user full name, and the datetime of generation.

Instrumented Systems

- Added the Safety Critical field to the Input List, and Output List reports.
- Allowing Chinese characters on Action Upon Failure field for the Device, Input, and Output types.

Release Notes - Build 2.5s6

New Features

Adapters

- New "Unlink Objects" adapter has been added for bulk unlinking.

Global

- Added a feature on the Site in the Global module that will allow to enable and disable a unit from creating events at the CGI.

LOPA

- Added a field at the LOPA barrier called "PST"

Refinements

General

- Improvements were made to make the tooltip hide faster.

LOPA

- Change "Modifier" to "Enabling Events" field name on LOPA Sheet SSRS report.

Instrumented Systems

- Added custom action buttons to the object listing grid: Unlink, Delete, and Delete & Cascade.
- Implemented the multi-logic solver object diagram view for all functions as the logic solver box of the SIF diagram.
- Displaying the Logic Solver Function field on the SIL Verification template.
- Changed type_name of hips object from HIPPS to HIPS.

Fixes

General

- Fixed printing GoJS Diagram.
- Modified the `sif_lopa_references` column of the `design_srs` custom table with no text limit.
- Fixes to serial charts to display Chinese characters on labels.
- Fixes while printing views with grids containing Chinese characters.
- Fixes to highlight search result

Instrumented Systems

- Fixing default value for boolean fields.

Release Notes - Build 2.5s7

New Features

Instrumented Systems

- Port over "SLM SIS SRS Printout" to KoolReport.
- Port over "SIF Design SRS Report" to KoolReport

Fixes

Global

- Fixed error transferring a Site to another Company.
- Fixed error updating a Site

LOPA

- Fixed precision on Assumed PFD field to accept decimal value out to multiple decimal points.
- Change to allow execute the use "Update Barrier Calculations" with or without any related LOPA Sheet.

System

- Fixed User Usage Report.

Instrumented Systems

- Display the same failure rate values in the SIL Verification for External Result option that would be shown if the selected option was Custom Failure Rate in the Governing Result Source field.
- Changed the column Input/Output Type referenced on the Input/Output list, the column was querying the wrong field.

Release Notes - Build 2.5s8

Refinements

General

- Improvements were made to Barrier Target Calculations. A new way of calculation has been added "Highest Gap" and there are two calculation modes "Cause Summation" and "Highest Gap".

Global

- Improved the color font in enable Approval Policies.

System

- Added User Account column to the Manage Security Roles grid.

Fixes

General

- Modify the relationship between Barrier and Functions from Parent-Child to a relational field within the barrier data. This adjustment will eliminate redundant descendant connections that contribute to system slowdown.

LOPA

- Displaying HAZOP Scenarios on the LOPA Worksheet feature: Create LOPA Sheet from HAZOP.
- The counting and summarization columns were corrected at "LOPA IPL Overview" Grid.

Instrumented Systems

- Displaying the Logic Solver voting configuration on the SIL Calculations Diagram.
- Fixed Missing Template Equipment Grid on template object listing.

Release Notes - Build 2.5s9

Refinements

General

- Update Kendo Libraries.

Instrumented Systems

- Improved edit mode on SLM Design SRS template at SIF level.
- Added Color coding to the SIL Calc Architecture tables of the SIF object.

Fixes

General

- Corrected the following items:
 - Fixed merge at barrier object when there is a new update of the barrier object and try to update a previous version in another window.
 - Fixed empty revision entries when there were no changes in the object.
- Several things were updated:
 - Fixed revision template when is opened while there is a SIL Calculation process at background task.
 - In the SIL Calculation, the process to store decimal numbers was reviewed and fixed a few things. At this point there were problems to compare long decimal numbers with PHP and to fix it, has been used "bcmath" library that can be support long decimals.
 - The revision store was fixed. The revision process will generate a new revision only if there is any change at data. With this updated, the Revision template won't show revisions without any data change, except old revisions already stored.

Instrumented Systems

- Fixed the SIF listing table, allowing SIF objects to be properly unlinked from the parent unit.
- Fixed the PFD Sensitivity Chart with the last changes by using logic solver in SIL Calculations.

Release Notes - Build 2.5s10

New Features

General

- Access Action Items Through the API.

Refinements

HAZOP

- Removed HAZOP Scenario Object Id link in the HAZOP Facilitation table.

Operate/Maintain

- Added delete action on Bypass Activations in the AER Table.
- Made generic object id editable.

Instrumented Systems

- Added logic rules to calculate "SIF Hardware Fault Tolerance" field.
- Added "Last Update SIL Calculations" field to show the last date time that was updated the SIL Calculation.
- Added the "PSTI" field to the "SIF List" report.

Fixes

General

- Fixed error loading template path when a template is edited in System module.
- Allowing to add templates on data types defined by the user.

Global

- Fixed "Sync Risk Matrix with Enterprise Setup" functionality by allowing the underscore characters in the class key value field of the severity class object.

Instrumented Systems

- Fixed display the object id of P&ID Object when try to update the field with an older object version in another tab at browser.

Release Notes - Build 2.5s11

New Features

HAZOP

- Port Over HAZOP Review Report (SSRS)

LOPA

- Port Over LOPA Sheet Report (SSRS)

Refinements

LOPA

- Added the link to any function at "Function Link" field Barrier.

Instrumented Systems

- Added a feature to allow edit multiple C&E intersection.
- Added a notification when the Credited on LOPA field value is "No" when it should be calculated as "Yes".
- Added instructions to the "SIF Hardware Fault Tolerance" field in SIF object.
- The "Hardware Fault Tolerance" field in SIF/HIPS object was splitted into Sensor and Final Element.

Fixes

General

- Normalizing Database Tables between Reports and Modules.

HAZOP

- Fixed HAZOP Recommendations report.

Operate/Maintain

- Fixed the "Demand Event List" Grid on the AER tab.
- Fixed Performance template in Operate/Maintain module to displaying the Achieved SIL/RRF/PFD fields.
- Resolved the issue with event execution. Previously, events were halting and failing to process, resulting in device events not being created.

Instrumented Systems

- Fixed unlink input group from a SIF using "Unlink Parents" workflow.
- Fixed the losing of data when connecting device to output voting group.
- Fixed the "Non-Linked Functions" table. It is to show only functions that are not linked to a LOPA barrier.
- Fixed the generation of I/O Sensitivity Chart.