Release Notes for RISAFoundation

Version 16.0.1 Enhancements/Corrections

- Design:
  - Fixed an issue where certain design rules used in the solution could reference inputs from another element type in the Design Rules spreadsheet.
- Detail Report:
  - Corrected a behavior where the load combination dropdown for a wall footing detail report would show unsolved load combinations.
- Spreadsheet:
  - Fixed an issue in the Nodal Loads and Load Combination spreadsheets where an error message would prevent the copying and pasting of data.
  - Resolved a display issue in the Load Categories spreadsheet where loads might appear as duplicate entries or under incorrect load types.
  - Fixed an issue where pedestal height for spread footing was retained in solution after changing element type from pedestal to post in the Spread Footing Definitions spreadsheet.
  - Updated spreadsheet behavior to prevent false geometry checks and error messages when switching wall type between retaining wall and strip footing in the Wall Footing Definition spreadsheet.
  - Fixed an issue where the existing boundary condition type could not be changed in the boundary condition spreadsheet.
  - Corrected an issue where the load combination generator would produce load combinations with missing categories from the 'Wind X and Z w/Ecc Quart' option for wind loads.
- General:
  - Updated the links for the 'Training' and 'Tutorial' buttons in the startup dialog to point to the new RISA training platform site.
  - Enhanced the behavior where the program might display an exception message for model files with missing or corrupted data under the Pile Definitions spreadsheet for design rules.
- Integration:
  - Fixed an issue where orphan nodes from integration (e.g. nodes that previously came from RISAFloor or RISA-3D but had been decoupled) could not be deleted or edited.
  - Fixed an issue where nodes created in RISAFoundation could not be deleted or edited after new base nodes were added from RISA-3D during integration.

    - Corrected an issue where the program may set up model defaults (e.g. default design rules, member definitions) in standard imperial units during the first-time integration with RISA-3D models using non-standard imperial units.
    - Resolved an issue where tnxTower files (.rt3) were not recognized as a supported file type during integration with RISA-3D.
    - Fixed a rare issue where load reactions transferred from elements with analysis offsets in RISA-3D might have incorrect magnitudes.
- Operations:
    - Fixed an issue where drawing design strips after deleting strips generated by the circular slabs or strip footing generators might cause the program to close unexpectedly.
    - Fixed an issue where elements drawn simultaneously using the box assign method might display offset labels in detail reports.
    - Fixed an issue where piles and pile caps drawn simultaneously using the box assign method might have exception messages in the design result spreadsheets.
    - Resolved an issue where an exception message might occur when using the 'Apply to Selected' button to assign boundary conditions in models with no existing boundary conditions.
- Printing/Reports:
    - Fixed a printing issue where the load category labels were absent from the section header for loading reports.

Version 16.0 Enhancements/Corrections

- Interface/Graphics:
    - New graphical user interface with ribbon toolbar.
    - Added synchronous display of results based on the load combination selected in the 3D View drop-down.
    - Added preview thumbnails for recent projects accessible from the File menu.
    - Added custom Snap View options to allow snapping to a view other than the default ISO or PLN
    - Added the Dim Lock tool which allows the user to Lock a model, but still display the unlocked elements as grayed-out elements.
    - Added Viewer Mode to quickly show element information only for selected elements. Input and result spreadsheets are also automatically filtered based on which elements are selected.
    - Added the ability to customize the 3D view toolbar with custom bins and functions.
    - Added the ability to rotate the 3D axes by 45 degree increments by holding the SHIFT key while rotating.

    - Added functionality to show input and output information graphically when hovering over elements. Hover Detail settings are accessible through the Application Settings and the right click menu.
    - Added functionality to show the default soil region in the 3D view within Model View Settings
    - Added the graphical option to customize the scale of nodes.
    - Added the capability to delete the rotation bin from the 3D view toolbar.
    - Added input dialog for Spread Footing Definitions spreadsheet.
    - Added input dialog for Spread Footing spreadsheet.
    - Added the ability to click white space to clear the current selection.
    - Improved graphic display options in the Quick View toolbar.
    - Updated the Shape Selection dialog to be more intuitive.
    - Updated URLs in the Subscription Login Dialog to direct users to the revised sections of the customer portal website.
- Operations:
    - Added functionality allowing users to move nodes using the mouse.
    - Added the ability to select and edit loads graphically.
    - Added the ability to select and edit soil regions.
    - Added the ability to select and edit slab regions and slab openings.
    - Added the option to Relabel Selected elements in addition to All elements.
    - Improved the Select Elements by Property tool to group section sets and shapes together.
    - Added the ability to use the Ctrl key + Mouse wheel to cycle through items that are able to be selected within the 3D view.
    - Added the ability to Move elements Point-to-Point.
    - Added modification tools for Design Strips.
    - Added the ability to match properties of one element to another element.
    - Added the ability to select the spreadsheet to automatically open after solution including disabling the Node Reactions spreadsheet.
    - Added the ability to increase and decrease the text size displayed in a model.
    - Added functionality into the warning log dialog to find and select elements reported in the warning log.
    - Added 'Center of Selection' as an origin option for the Move Rotate function.
    - Added the ability to select 'Model View Settings' and 'Results View Settings' by right clicking in the 3D model view.
    - Added options for window behavior to choose between Single Window Focus, Multiple Screen, and Auto-Docking Windows.

    - Enhanced the interface behavior to switch between open windows when using Ctrl+Tab and Ctrl+Shift+Tab.
- Spreadsheet
    - Added all input spreadsheets into the Data Entry drop-down list.
    - Added individual spreadsheets for Piles, Pile Caps, Spread Footings and Boundary Conditions in lieu of the single All Support Types spreadsheet.
    - Added Soil Regions spreadsheet in the Data Entry list.
    - Added additional tabs in the Slabs spreadsheet for Slab Regions and Slab Openings.
    - Added the ability to filter Input spreadsheets based on the graphical selection.
    - Enhanced the Design Rules spreadsheet so that each element type can have individualized maximum bending and shear check allowable code checks.
    - Enhanced spreadsheets allow for improved sorting and auto-sizing columns.
    - Improved functionality of selecting/resizing cells in spreadsheets.
    - Added a Spreadsheet dropdown menu where you can open spreadsheets and show open spreadsheets.
    - Added Undo and Redo options into the right-click menu from within spreadsheets.
    - Added the ability to reset the spreadsheet column widths to Default values.
    - Added additional sorting capabilities for several results spreadsheets.
    - Fixed an issue where Save As Default was not working properly in the Wall Footing Definitions spreadsheet, Wall (Masonry) tab.
    - Fixed an issue where sorting functionality in the Wall Footing (Masonry) Spreadsheet was non-operational.
    - Fixed an issue where sorting functionality in the Design Cut Results Spreadsheet was non-operational.
- Printing/Reports
    - Added an interactive Print Preview for the graphical view and reports.
    - Added batch printing of detail reports.
    - Added a preview of the custom logo in the print reports.
    - Added functionality to edit saved custom report templates.
    - Added the ability to print an individual spreadsheet.
    - Added the ability to Print Selected Lines in spreadsheets.
    - Saved page setup properties specified in Printing dialogs as default settings.
    - Added the ability to adjust the text size of spreadsheets when printing a report.
    - Added the ability to change view options of individual detail reports within a printed report.
    - Added project notes as an available section for the printed report.

    - Corrected printing layout for Pile Detail Report to ensure complete content fits appropriately across multiple pages.
- Detail Report
    - Improved Detail Reports layouts for all elements.
    - Added a vertical tracking line that follows the cursor when viewing enlarged force diagrams.
    - Fixed an issue causing overlapping lines in the printed detail report for piles.
- Concrete
    - Added ACI 318-19 (22) concrete code for concrete design.
    - Corrected shear capacity calculations for retaining walls using CSA 23.3-14 and CSA 23.3-04 codes.
    - Fixed the display of Governing Load Combination number for shear checks in the wall portion of retaining walls across all codes.
    - Resolved an issue where footing thickness was not optimally calculated, resulting in the default use of maximum thickness values in the footing design process.
    - Corrected CSA one-way shear Vr calculation methodology.
    - Fixed an issue that caused incorrect shear bar spacing when the units changed from imperial to metric.
- Masonry
    - Updated the default Masonry strength f'm in the Material Spreadsheet to be 2000psi.
- Integration
    - Resolved an integration issue with RISAFoundation where changing units in RISA-3D after initial integration caused discrepancies.
    - Fixed an issue with incorrect unit conversion of user-defined loads in RISAFoundation when switching from imperial to metric units in a RISA-3D.
    - Fixed an issue where changing units in RISA-3D did not properly update in RISAFoundation, causing discrepancies in load and geometry representation when models were transferred between applications.
    - Corrected an issue where the RISAFoundation Merge Tolerance was not accurately converted when switching units.
- General
    - Modify tools improved to allow rotation and scaling based on a click point.
    - Improved the Distance Measure tool to remain active while in use.
    - Simplified the terms "joint", “point” and "node" to now use node exclusively in all input and output.
    - Enhanced the Starting a Model dialog to include access to learning tools.
    - Centered the model file name in the title bar.

- Improved the file format of the Help file.
- Improved Log File reporting when an error message occurs on startup.