Release Notes for JMP 15.2

JMP 15.2 is a general maintenance release that contains enhancements and bug fixes. Reproducible crashes and numeric issues have been corrected. Applying this maintenance release is recommended for all users.

New Features

- In Oneway, the Equivalence Test option now reports results with the Equivalence Test scatterplot and the Equivalence Test TOST table.
- HDF5 libraries were updated to the latest version.
- In Functional Data Explorer, if the output is transformed or the input is aligned, the axes are renamed in all of the report plots to indicate the new scale.
- JMP Live is now available in French, Spanish, Italian, German, Chinese, Japanese, and Korean. From your profile, click Edit and change your preferred language.

Structural Equation Models

- After you fit a model, the resulting path diagram now shows a different transparency for each effect. The transparency is mapped to the effect size; darker lines represent stronger effects. Edges that are not significant (default alpha = .05) are displayed as dashed lines.
- You can show or hide any part of the path diagram. Previously, the mean structure was never shown in the diagram. Now, the mean structure is not shown by default but can be turned on.
- You can make changes to the model specification directly on the path diagram.
- The layout options have been simplified from 6 down to 2.
- You can turn on the grid to make it easier to align path diagram elements.
- You can lock the path diagram at any stage to avoid a fresh redrawing of the model and, instead, keep the elements where they are at a given stage.

General Improvements

- In Japanese JMP, axis settings are preserved when you save a Variability Chart with two By variables as a journal. This issue was also fixed in the Oneway platform.

Application Builder

- When an application has multiple Local Data Filters, the filters no longer use the same data table when the application is run.

Data Filter

- The Where clause that appears when you use Match None in Local Data Filter for a Multiple Response column is correct.
- The Local Data Filter preserves the manual input of limits. Previously, the data filter erroneously used the same value to approximate both the upper bound and lower bound.

Data Table

- Values selected as Missing Value Codes are saved properly when you create a Missing Values Codes list with Standardize Attributes.
- The Value Ordering column property was renamed Value Order. Value Ordering is no longer referred to in Summary's inherited columns.

Hover Labels

- For table-based images, hover labels in maps now show the correct images.
- For multiple response columns, when you drill-down into a graphlet, the correct filters are applied.
- Multiple response variables used in grouping roles now show consistent values.

Import and Export

- The Japanese mode of JMP no longer adds underscores to the dataset name and column names when you save a data table as an XPT file.
- A case in which imported Microsoft Excel sheets were named with the form R1 and R2 was fixed.

JMP Live

- Some JMP Live pages have an updated look and feel and an enhanced experience on mobile devices.
- You can decide whether to share the data or JSL associated with a report.
- You can delete all comments on a folder or individual post.
- Search filters in JMP Live now appear under the filter icon.
- You can now clear all notifications.
- Notifications for administrators now appear under a single notifications icon at right. The icon contains two tabs: one for user notifications and one for administrator notifications.

macOS

- All JMP files are accessible in iCloud Drive.
- Link style buttons (blue underlined text) are now left-aligned rather than center-aligned.
- Pressing Control-click and selecting Edit Script on a script from the Home Window that has //! on the first line opens the script in a script window.

Recode

- Removing empty and duplicate items works as expected.

Sample Scripts

- The sample script ConfidenceIntervalsForTheMean.jsl no longer fails when you select Raw Data for a data table with a single column.

Windows Automation

- Data tables shown through automation can be closed without a warning,

Graphics

Graph Builder

- On macOS, changes to the major and minor grid lines for individual graphs in the axis settings work properly.
- When Y columns are in the X zone and another column is in the Color zone, the points have different colors.
- When the Per Factor box in the first Caption box is selected, the labels for the Min, Q1 Median, and so on are no longer inverted.
- In heatmaps, you can specify binning based on the minor tick interval.

Statistics

Categorical

- Bar charts correctly show the transition rates from the Transition Report.

Control Chart Builder

- The Between and Within Sigma Capability report always appears in three-way charts when appropriate.

Control Charts

- When Sample Grouped by Sample Label is selected in a CUSUM, EWMA, or UMWA chart, the sample size is correct.

Design of Experiments

- The Color Map on Correlations and Alias Matrix results in the DOE Custom platform match in JMP 15.2 and JMP 14.
- The Color Map on Correlations Blue to Gray to Red color theme now functions in the Design Evaluation for Group Orthogonal Supersaturated Designs.
- When you specify the number of factors in a Group Orthogonal Supersaturated Design, sometimes an error message appears. The message now provides a clearer explanation.
- If the design region is constrained by linear constraints or disallowed combinations, the average variance of prediction is calculated from the values in the Fraction of Design Space plot.

Discriminant

- The probability of Others plus the probability of predicted is no longer greater than one.

Distribution

- When you run Fit Smooth Curve in JMP 15.2 and compare the results in JMP 14, fitted quantiles match.

Explore Outliers

- The Local Data Filter is available for all methods in the Explore Outliers platform.

Fit Life by X

- Clicking the points in the scatterplot no longer produces a data out of range error.

Formula Depot

- The Python scoring generated from Neural Network Fast Formulas has been updated.

Functional Data Explorer

- When no X variable is specified in the Profiler, the Profiler now appears.
- The changes made in Generalized Regression are in saved scripts.
- When Functional Design of Experiment (FDOE) is performed, the report automatically scrolls to the FDOE analysis.
- The range of the Residual by Predicted Plot is now scaled to be on a similar scale as the original data.
- If the number of factors is greater than 6 or the number of functions is greater than 1,000, the Generalized Regression models in FDOE use pruned forward selection instead of best subset selection.
- You can now save the prediction formula and residual formula from an FDOE analysis.

JMP PRO Generalized Regression

- Pruned forward selection no longer stops too early when there are a small number of effects combined with heredity.
- Profilers and saved column formulas in the Cox Proportional Hazards distribution model now use the correct baseline function.

Nonlinear

- The Nonlinear platform, when using by groups or where clauses, accesses the correct rows in the data table for the X variables.

Process Capability

- The goal plot shading is correct after you modify the axis.
- Normal Mixtures AICc and BIC in the Compare Distributions report match the AICc and BIC for the distribution fit.

Profilers

- After you start the simulator in the Prediction Profiler, the response histogram and mean value are correct when the model contains a discrete numeric design role.
- The desirabilities are saved in a script only if they are changed outside of the data table properties.
- In the Mixture Profiler, the shaded region matches the factor constraints.
- Individual settings can be removed from Remembered Settings.

Standard Least Squares

- The upper and lower bounds are now correctly labeled in the two one-sided test Equivalence Tests report.
- Box-Cox Y Transformations no longer give a negative confidence interval for lambda.

Support Vector Machines

- Moving the slider bars in the Response Profiler plot no longer causes the point size to shrink.
- The points in the Response Profiler plot are shown by default when there are only two X variables.

Tabulate

- Tabulate no longer closes abruptly when you use the selection tool to rearrange the display boxes.

Text Explorer

- Recode operations are now processed internally in one pass regardless of the order that they are specified in the report window.

Variability Chart

- Variance components calculations that were incorrect due to poor starting values have been fixed.

Scripting

- In non-English modes of JMP, `Level[n] << Colors(xx)` works in a Graph Builder bar chart.
- Formula Depot supports `IfMZ()`.
- `ColumnSwitcherObject << Close Outline` is processed like `ColumnSwitcherObject << Close Outline(1)`.
- In Column Switcher, the ability to specify a script to run when the column switches has been added.
- JMP's interface to R statistical software is once again functional on macOS. JMP's `R Connect()` and related functionality was not working due to changes in the R software and security features added to macOS.

Release Notes for JMP 15.1

JMP 15.1 is a general maintenance release that contains enhancements and bug fixes. Reproducible crashes and numeric issues have been corrected. Applying this maintenance release is recommended for all users.

New Features

- TLI, NFI, RMR, SRMR, Revised GFI, and Revised AGFI fit indices are available in the Structural Equation Models platform.
- The Structural Equation Models report contains a Status tab that checks a variety of identification rules to ensure that the currently specified model is identifiable.
- You can open the *Discovering JMP* book from the Help menu.
- New sample data have been added for documentation examples:
  - Graph Builder: Bands.jmp, Bullet Measures.jmp, Corn Wheat Soybean Production.jmp, Likert Survey.jmp, Pie Sales.jmp, and STEM Jobs.jmp.
  - Model-Driven Multivariate Control Chart: Polyethylene Process.jmp
- In Interactive HTML Control Charts, marker support is improved.
- In Control Chart Builder, a window is provided for creating an IMR on Means control chart.

General Improvements

Axis

- When the reference line is set to a value outside the axis range, and you change the scale to Log, JMP no longer closes abruptly.

Data Tables

- The table script that is generated by Summary results is correct in the Summary table if there is a column named "None".
- The List Check column property supports more than 256 values. This change causes issues when you try to open the JMP 15 files in previous versions because previous versions do not allow list checks with more than 256 values. Here are the rules:
  - Fewer or equal to 255 values are saved in the old format readable by JMP 14 or 15. The List Check column property is preserved in both JMP 14 and JMP 15 data tables.
  - Greater than 255 and 65535 values are in the new format, readable only by JMP 15. If you attempt to open the data table in JMP 14, the List Check column property is not preserved.
- Selecting New Formula Column > Distributional > SHASH runs faster.
- When a column has a Supercategory property, you use the Column Info window to change the data type, and you try to re-create the Supercategory property, JMP no longer closes abruptly.

Hover Labels

- Support was added for generating filters from Graph Builder grouping roles (Wrap, Page, Group X and Group Y).

Import and Export

- Multiple File Import finds files on Microsoft OneDrive.
- JMP allocates enough memory when opening large XML files.

JMP Help

- The Help no longer uses port 3000, which prevented some users from opening the Help.

Projects

- When you journal a report in a project and then save the journal as a PDF file, JMP no longer freezes.

Recode

- When a script clones a column that contains aliases (which is the case for data tables in our sample data library), the original and cloned column no longer have the same name after you reopen the data table.

Samples

- The standard error is correctly calculated in the Confidence Interval for Proportion calculator (available from the Help > Sample Data Index window).

Tabulate

- In Tabulate with summary statistics, if all rows that have missing values in the grouping column are excluded, adding a grouping column to the Column table might cause JMP to close abruptly.

Transformations

- Creating a new formula column using the Distributional, Johnson Normalizing transform no longer causes JMP to close abruptly.

Graph Builder

- Using a logarithmic scale with low values no longer causes JMP to close abruptly.
- Saving a file as a JPG works when the default JPG application is Microsoft Paint.

- With certain bivariate contours, using Column Switcher to replace the Y variable with all responses no longer causes an error.
- Graph Builder correctly scales the Y axis when more than 50 Y variables are selected.
- Categorical colors no longer create black contours.

Statistics

Control Chart Builder

- When you create a control chart with Get Limits, and then select Redo Analysis from the red triangle menu, Get Limits is used in the new analysis.
- Checking tests in the control panel no longer closes the control panel.
- Capability customizations are saved to the script.
- The Alarm Report shows the tests that have been turned on.
- Box plots are correctly drawn with continuous subgroups.

Discriminant

- When you run a discriminant analysis in French, German, Spanish, or Italian, requesting the scatterplot matrix no longer fails.

Distribution

- The confidence level restriction for quantile confidence limits have been removed.
- The Process Capability report appears when the "Create Process Capability" Distribution platform preference is turned on and the column has spec limits.

Fit Distribution

- Check marks have been added to the model comparison for hiding and showing the individual fits.
- Preferences for the new fitter commands are available.
- Row states are supported in QQ and PP charts.
- The ZI Negative Binomial CDF and Distribution function now decrease to 0.

Fit Model

- When the second column in the Select Columns list of the launch window is double-clicked, it is no longer added as a Random Effect. The column is also added to the Construct Model Effects box.

JMP PRO Generalized Regression

- Residual by Predicted Plot no longer has points for rows that should be missing.

Fit Y by X

- When report title options are turned on, and Arrange in Rows is selected, a Oneway analysis is displayed correctly.

Functional Data Explorer

- You can customize the number of functional principal components from the Functional PCA red triangle menu.
- There are three techniques available to reduce the data over the X values.

Manage Spec Limits Utility

- When spec limit values are all missing, the Spec Limits column property is removed.

Multivariate

- The Auto Recalc setting is included in the Multivariate script saved from an analysis.
- Correlation Probabilities by Pairwise estimation are correct when there are missing values.

Nominal Logistic

- The ROC Curve is available when one two-level categorical effect is specified and Validation column used.

Principal Components

- The Score and Loading plots are labeled correctly when there are more than 101 components displayed in the scatterplot matrix.

Profilers

- New Profiler preferences have been added. You might need to update the syntax of the preferences in your scripts, or the scripts won't run.

Standard Least Squares

- Cox Effect estimates based on the component range rather than the constrained space range are correct.
- Editing effects in Effect Summary no longer repeatedly shows the window of the LS Means plot option.

Structural Equation Models

- The options for arranging the path diagram elements have been improved, and you can move items around by dragging them.
- You can choose to show parameter estimates (standardized or unstandardized) on the path diagram.

Support Vector Machines

- Frequency columns are supported in SVM.

Variability Chart

- Points are centered above X-axis labels in the Gauge R&R Mean Plot. The problem occurred only with a nested model type when the data were unbalanced.
- Medians in imbalanced data are calculated correctly in the Variability Chart summary report.
- The appropriate error message appears when a continuous part column is used for random effects.
- Units column properties are shown on the axes for variability charts.

Scripting

- Programmatically adding columns to a col list box runs the OnChange event in JSL scripts.
- Inserting a number as the first character in the `imageLocCol` variable no longer prevents the image from displaying in the data table. Clicking on the data table cell with the missing image no longer causes JMP to close abruptly.
- `Number Editable Box()` supports the font property during sizing and displaying.
- `Col List Box()` settings for the `Set Analysis Type` and `Set Data Type` messages are honored.
- In the Script Editor on macOS, folded expressions remain folded after you save and reopen a script.
- Using a custom script to remove rows from a data table no longer causes JMP to close abruptly.
- Trying to add new columns to a data table with an incorrect script no longer causes JMP to close abruptly.
- The `Navigate` message for `Web Browser Box()` now accepts a column reference.
- When columns are preselected in the data table and a Col List Box is created, the selections of the columns are shown in the Col List Box. Previously, only the last selected column displayed in the Col List Box.
- When you try to save predicted Kernel Smoother values, JMP no longer closes abruptly.
- Text boxes that show the data filter conditions based on the selections made in the Local Data Filter can now be removed.
- When a Column Rank with the `Tie` argument is performed, JMP no longer closes abruptly.