Release Notes for JMP 14.3

JMP 14.3 is a general maintenance release that contains enhancements and bug fixes. Applying this maintenance release is recommended for all users.

New Features

- On Windows, the libcurl DLL files have been upgraded to version 7.63.0.
- The *Using JMP* documentation PDF file is available in Korean.

General Improvements

- When closing a custom window that contains a platform and an `On Close()` function that closes a data table, JMP no longer closes abruptly.
- On Windows, the Oracle JRE has been removed from the installer. In JMP 15, the Azul JRE will be included.
- Dragging multiple response columns on the Structured tab in Categorical no longer causes JMP to close abruptly.
- In REML, the DenDF is now correct when the response is of great magnitude.
- In MaxDiff, the bar charts reflect the correct marginal probability values.

Release Notes for JMP 14.2

JMP 14.2 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

JMP Public

- The File > Publish feature has a new option called Publish to JMP Public, which enables users to share JMP reports on an online collaboration site at https://public.jmp.com. Users can interact with reports in a similar way to Interactive HTML reports published in standalone in previous versions of JMP. Please be aware that data and reports are typically visible to anybody using the https://public.jmp.com site.

JMP PRO Functional Data Explorer

- The root integrated square error (RISE) and root integrated function square (RIFS) appear in the Function Summaries report.
- When cleaning up data, you can filter values above or below a certain threshold on the X or Y axis.
- You can specify a supplementary (Z) variable that appears in any tables created by the Save Data or Save Summaries options.

General Improvements

Data Tables

- When you use Standardized Attributes to delete an Event Handler column property, JMP no longer closes abruptly.
- When you use JSL to run the Fit Model dialog after closing the data table, JMP no longer closes abruptly.
- When creating a summary table with value labels, the value labels now appear for unlinked tables.

Import and Export

- Importing FCS files now works for files that have more than 32 columns.
- When importing data from an ODBC database, if you use the data table list subscription, JMP no longer closes abruptly.
- The SAS variable labels as column names preference for importing version 5 and 6 XPT files is supported. This preference is on the Open window.

Interactive HTML

- In variability charts, box plots without response variables are now interactive.

Macintosh

- The Use a Floating Window preference for data filters now works properly.

Recode

- When recoding data, if a column has a List Check column property, the values can now be recoded in a new column.

Graphs

Graph Builder

- Copying axis settings with reference lines no longer causes JMP to close abruptly under certain conditions.
- In a stock-style bar chart, the right angles on the bars now appear.

Scatterplot 3D

- When you add a 3D scatterplot with a weight variable to a journal, the drawing now appears correctly.

Scatterplot Matrix

- Some preferences, such as Show Points and Shaded Ellipses, are now honored correctly.

Surface Plot

- When you adjust the scaling of the z axis then try to save to a script, JMP no longer closes abruptly.
- You can now select options in the Group menu.

Statistics

ANOVA

- t Ratios and *p*-values in the Equivalence Test report are now aligned with the correct hypotheses.
- For nonparametric multiple comparisons, the Steel With Control report now produces the correct results for any choice of control group.

Boosted Tree

- Outcome variable labels are no longer switched in the Prediction Profiler.

Bootstrap

- When you have continuous X variables that are centered, the resulting estimate names now line up, and there are no missing values.

Categorical

- When Count Missing Values is selected, if nothing specified matches, it is counted as missing. If none are specified or all are empty, it is counted as missing.
- When you import data from SPSS, JMP no longer closes abruptly.
- An option to exclude nonresponses when testing multiple responses has been added.

Design of Experiments

- In Custom Design, when trying to define a formula on a continuous factor's Disallowed Combination Filter constraint, JMP no longer closes abruptly.
- In Custom Design, when loading factors and selecting Use Disallowed Combinations Filter, JMP no longer closes abruptly.

Distribution

- If a script makes complex changes to an axis scale, JMP no longer closes abruptly.
- If you have assigned a Spec Limits column property to a continuous column, you can now set the minimum axis value higher than the LSL or set the maximum axis value lower than the USL.
- After turning on Automatic Recalc, the histogram bins no longer change.

Fit Model

- In Standard Least Squares, if you specify multiple responses and the sum of the mixture factors is other than 1, the Cox Effect Values and component ranges are now correct.
- The Prediction Profiler now correctly finds Cox directions for mixture models when a mixture size other than one is used.
- In Standard Least Squares, if you specify the REML method, the levels in the Tukey Connecting Letters report are now accurate.
- JMP PRO In Mixed Models, if you have a non-estimable indicator parameterization, JMP no longer closes abruptly.

Fit Proportional Hazards

- If you show Risk Ratios for effects and then run Likelihood Ratio Tests and Likelihood Confidence Intervals, the values in these reports are now correct.

JMP PRO Generalized Regression

- Excluded rows are no longer included in confusion matrix counts.
- When you request adjusted *p*-values with Dunnett's test for binomial distribution, JMP no longer closes abruptly.
- If a response has only one level, the platform now displays an error message.
- Generalized Regression saves functional response prediction formulas.

Life Distribution

- When you change the quantity of any of the distributions in Competing Risk Mixture to a decimal value less than 1, JMP no longer closes abruptly.

Measurement Systems Analysis

- When you set the preference for the analysis type of variability charts to be REML and then run MSA, JMP no longer closes abruptly.

Multidimensional Scaling

- If you save coordinates in data that have excluded rows, JMP now places the coordinates on the correct rows.

Partition

- You can now successfully run a saved script with numeric categorical X factor and missing values.

Process Capability

- The histogram now updates when you change the kernel bandwidth values.

Profilers

- Contour Profiler now recognizes non-linear axes and calculates contours correctly for them.
- In the Surface Profiler, certain options in the red triangle menu now work properly.
- If you have a Surface Profiler in a Fit Group, and you change the sheet properties, then save to a script, the settings are now saved correctly.

- In the Prediction Profiler, if a custom format is applied to the response column, in most cases the value now appears correctly.

Text Explorer

- If you add phrases to a term list while the phrase list is being filtered, or if you recode text while phrases containing the text are highlighted in the phrases list, JMP no longer closes abruptly.
- When you search within a project, there is no longer a lag when you type.

Transform

- Simulate using a transform column no longer causes JMP to close abruptly.

Variability Chart

- When you use the Column Switcher with a Gauge R&R analysis, the analysis is updated with the correct specification limits.

Scripting

- You can now use `Python Init()` to specify your Python environment on Windows.
- In the Formula Editor, if the `Validate Formula` option is turned on, you can now use the `As Column()` and `Column()` functions in a formula without errors.
- In the Bivariate platform, Fit Where now evaluates expressions, so there is no need to replace variables with their values.
- In the Process Screening platform, `Select Where` is no longer case sensitive.

Release Notes for JMP 14.1

JMP 14.1 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

- In interactive HTML, inverted sliders in data filters are supported.
- In interactive HTML, proportional highlighting in box plots is improved.
- In interactive HTML, the most frequently used data can be ordered first in filtered data rather than lexicographically.
- In interactive HTML, large data sets are optimized by compression.
- Multiple File Import imports XLSX files.
- In Explore Outliers, you can add missing value codes when using a By variable.
- In the summary reports in Process Screening and Process Capability, the following values are color coded: Stability Index, Ppk, Cpk, Cp, and Target Index. Green, yellow, and red indicate adequate, marginal, and poor stability or capability. The color coding can be customized or removed.
- If you select the Show Limits option for a process and then save the specification limits to a column property, the Show as Graph Reference Lines option is selected in the saved Spec Limits column property.
- The Stability Index has been added to Process Capability and is the default type of stability assessment. The Process Performance Plot also uses this index by default.
- In Process Screening, the Process Performance graph now uses a stability index of 1.25 to indicate that a process is unstable. Also, a red line on the graph indicates where the Cpk value is 1.33 and therefore unstable.
- In Process Screening, a Target Index column is included in the Summary table. The Target Index is the ability to hit the target value and is calculated as 3(Cp - Cpk).
- In Process Screening, you can add specification limits to the Summary table by selecting Show Capability > Spec Limits from the red triangle menu.
- Global data filter applications appear in Categorical reports, to make clear which data is included.
- In Cluster Variables, when you save cluster components, the new columns in the data table are saved as grouped columns.
- In a CUSUM control chart, if the response column in the data table contains a Target value in a Spec Limits property, it is also used as the Target value in the control chart.
- In a CUSUM control chart, both the upper (positive) and the lower (negative) values for the cumulative sum appear by default.
- In Functional Data Explorer, Dynamic Time Warping is supported. DTW is a function alignment technique that finds an optimal warping to align two or more functions together, with respect to the input variable. DTW provides a warping function plot along with options to save the distance matrix and the warping functions to separate data tables.

- In Functional Data Explorer, the data table that results from Save Summaries contains formula columns for the eigenfunctions, mean function, prediction function, and conditional prediction function for each of the Y variables. There is a profiler script for each Y variable that launches the prediction profilers for the prediction and conditional prediction formulas. These formulas are functions of the input variable, the ID variable, and the eigenfunctions.
- In Multiple Correspondence Analysis, the plot and legend are interactive. Clicking on the legend items highlights the corresponding points in the plot, and the other way around.
- Multiple Factor Analysis has the option of running the platform by a grouping variable.
- In Multiple Factor Analysis, the plots and legends are interactive. Clicking on the legend items highlights the corresponding points in the plot, and the other way around.
- In Formula Depot, JMP can use the Python NumPy library to implement linear algebra operators and advanced operators, such as Vec Quadratic and Design Norm in Python. These operators are used in the scoring of models such as Discriminant, PCA, and the Neural Networks "fast formulas" (matrix based) formulation.
- Using JSL, you can find the rank of a matrix with the `Matrix Rank()` function.
- Using JSL, you can get the windows of an application or dashboard with the `Get Windows` message.
- The new `Fourier Basis Coef()` and `P Spline Basis Coef()` functions in JSL enable you to find the matrix of basis coefficients for a Fourier basis and a penalized spline, respectively. These functions are used in column formulas created by the Functional Data Explorer platform.

General Improvements

Application Builder

- Multi-line scripts defined in the Validate option for Modal Dialogs now execute properly.

Data Tables

- When you join data tables using the Merge same name columns option, all rows are complete and not missing.
- Residuals are saved to the correct rows when there is both a By variable and a WHERE clause.
- When you create supercategories in the Japanese display mode of JMP, change the language to English, and restart JMP, the supercategories are correctly shown in the Column Info window.
- With virtually joined data tables opened, when you save a data table to a new name, JMP no longer closes abruptly.

Import and Export

- When you export a data table that contains colored cells using File > Create Excel Workbook, the colored cells in the output spreadsheet appear on the correct row.
- Saving a Oneway analysis report as HTML retains the vertical layout in the exported HTML.

- When you import a Triple-S file that contains a column with text preceding and following the comma, the text preceding and following the comma appears in the correct columns in JMP.
- JMP-generated worksheets can be added as an external data source in Microsoft Excel.
- Date columns (dd.mm.yyyy) from Microsoft Excel are properly imported.
- When opening SPSS files with value labels longer than 120 bytes, JMP no longer closes abruptly.
- JMP imports SPSS files that contain multiple response columns.

JMP Query Builder

- When SQL Server is configured with DATEFORMAT set to something other than “mdy”, date filters produce correct results.

Journals

- Journals that contain probability scales can be opened again.
- When a journal with a categorical analysis is saved and reopened, an alert no longer appears.

Macintosh

- The default letter size is A4 in the European display modes.
- If JMP is closed when the Home Window is open, changes to Favorites are saved.

Projects

- Pressing the Delete key on a highlighted annotation or shape no longer closes the current tab of the graph.
- With a project open, creating a journal from a report and then selecting File > Save to save the contents of a journal to a PDF file no longer closes JMP abruptly.

Recode

- The speed of recoding large data tables has been improved.
- Recoding long strings runs faster and more accurately.

Summary

- Table Summary preserves the group column format.

Windows

- The crosshairs tool zooms as expected on touchpads.
- Scrolling with a high-resolution mouse is supported.

Graphs

Cell Plot

- When you use the Scale Uniformly option, missing values in columns are recognized.

Graph Builder

- The size of error bar caps is equal after you select the Log scale for an X axis.
- In mosaic plots, the axis labels are correct after you enable chi-square testing.
- Bar charts prefer a Y response axis when there is an X but no Y if the element can handle an implicit response, such as a count.
- In various situations when a variable is dragged, JMP no longer closes abruptly.

Ternary Plot

- Points are plotted if the constant sum is not 1.0 and there is no Mixture column property.
- Alerts no longer appear when you plot negative values.

Statistics

ANOVA

- The procedure for the Each Pair Stepwise, Newman-Keuls multiple comparison option is improved, such that means that have been declared not significant are not included in further tests. The procedure also better handles the case where there are tied means.
- The Ordered Difference Report and Threshold Matrix are not available for the Each Pair Stepwise, Newman-Keuls multiple comparison option.

Bivariate

- Residuals are correctly saved from a spline fit.

Bootstrap

- Pop-up messages no longer appear. Messages are reported in the log instead, to avoid multiple pop-ups during bootstrapping.

Control Chart Builder

- Undo support has been improved throughout Control Chart Builder.
- The Event Chooser no longer includes missing values in the responses (Ys).

Design of Experiments

- In Max Diff, numbers are correct in the Pairwise Incidence Matrix.
- In Screening, the headers of Design List (Number of Runs and Block Size) are overlapped in the Japanese display mode of JMP.
- In Definitive Screening, handling of categorical factors in Stage 1 of Fit Definitive Screening is improved.
- In Definitive Screening, the numerical check for center points is improved.
- In Screening, Plackett-Burman designs use the simulate responses mechanism properly. Previously, it updated the response Y instead of a Y simulated column (and did not have the DOE Simulate table property).
- Balanced Incomplete Block Designs on Macintosh no longer cause JMP to close abruptly.
- In Definitive Screening, the main effects plots are now residual plots.

Distribution

- Fractional frequencies are converted to the smallest integer greater than or equal to the specified frequency for stem-and-leaf plots and nonparametric tolerance intervals.
- Quantile confidence intervals and smoothed empirical likelihood quantiles are not available with fractional frequencies.
- The CDF plot is more precise due to an increase in the maximum number of points allowed in the plot.
- The Capability Analysis report no longer disappears when Automatic Recalc is turned on and there is a change in the data table.
- The black LSL and USL labels that are added by the capability analysis line up correctly with the specification limits.

Fit Model

JMP PRO Generalized Regression

- The Best Subset estimation method is faster for ordinary least squares models (Normal response distribution).

Least Squares

- Least Square Means plots that include a plot by term match the data. This occurs only with effects that have more than three categorical terms and when an overlay and plot by term are selected for the plot.

Mixed Models

- JMP no longer closes abruptly when the repeated effect has missing values.

Parametric Survival

- You can publish probability and quantile formulas to the Formula Depot platform.

Stepwise

- JMP no longer closes abruptly when you click Go in a Stepwise report that contains the Criterion History plot.

JMP PRO Formula Depot

- You can generate Python code for models generated through bagging in the Prediction Profiler.
- On non-English systems, C-code generation no longer uses commas as the decimal place separator.
- Variable name mapping for SAS code has been updated to better handle DBCS column names, making sure the equivalent SAS name is unique. SAS code now includes a variable name mapping section in the comment block that precedes the code.

JMP PRO Functional Data Explorer

- The Functional PCA report lists the eigenvalues that correspond to each functional principal component (FPC) in order from largest to smallest. The percent of variation accounted for by each FPC, as well as the cumulative percent, is listed and also appears in a bar chart.
- The Data Processing options Remove Selected and Remove Unselected work the same for all data formats.
- Several reports in the Functional Data Explorer platform have been reorganized. The Data Processing report contains data cleaning, transformation, and alignment buttons that correspond to the options in the Data Processing red triangle menu. In the Model Selection report, the modeled data is on the left and the solution path plot is on the right. A table of fit statistics also appears.
- The knot markers are diamonds on the overall prediction plot in the Model Selection report.
- The Customize Summaries option enables you to specify the number of functional principal components to show in the Function Summaries report. The Functional PCA report updates according to the specified number.
- Relaunch Analysis and Redo Analysis are available when you have multiple functional responses.
- Click on a spline in the legend of the solution path plot to change the current model selection.
- If there are fewer than three unique input values, neither a Fourier basis model or a P-Spline model can be fit to the data, and a warning message appears.
- The maximum number of knots allowed for B-Spline models is the maximum number of observations per function or the number of unique inputs. The maximum number of knots allowed for P-Spline models is two less than the number of unique inputs. If you specify a number larger than the maximum, a warning message appears.

JMP PRO K Nearest Neighbors

- JMP no longer closes abruptly when the validation column has missing values or contains more than three levels.

Life Distribution

- JMP no longer closes abruptly when trying to remove an Estimate Probability using the [-].

Measurement Systems Analysis

- Specification limits are no longer placed on dispersion charts when there are Spec Limit column properties.

Multiple Factor Analysis

- MFA saves the Individual Squared Cosines in the correct rows when the analysis is done by a grouping variable.

Neural

- You cannot use boosting with a two-layer neural network. If you specify any nonzero values in the second layer and also specify boosting, the second layer is ignored.

Nonlinear

- When you select a formula column that contains a parameter list item that does not have an assignment, JMP no longer closes abruptly.

Principal Components

- Principal Components shows the correct values for the supplementary categorical variable coordinates in Sparse and Wide PCA reports.
- If you select the loading matrix option and you specified a supplementary variable, an additional table of coordinates appears for each supplementary continuous variable and each level of the supplementary categorical variables. These values are graphed in the loading plot for continuous supplementary variables.
- JMP no longer closes abruptly when the Outlier Analysis option is used with the Wide estimation method.

Process Capability

- Spaces in column names are recognized so that specification limits are read correctly.
- The Process Capability Process Performance Plot preference appears with the other Process Capability preferences.

Profilers

- The Profiler output script saves the Unthreaded and Default N Levels options if they are different from the default specifications.
- When optimizing desirability, adding the Surface Profiler no longer produces different optimization results.
- In Profiler labels, the p-values are updated after you maximize each grid point.

- In the Prediction Profiler, JMP no longer closes abruptly when you change the distribution for a variable.

Text Explorer

- Saving customized regular expressions to a column no longer repeats text in the new column.

Time Series

- If you specify a Time Frequency column property but the time column is not in a date time format, the Time Frequency column property is ignored.

Variability Chart

- You can use the Ctrl key to resize the Variability Gauge chart and the Std Dev chart together.

Scripting

- The Save Interactive HTML `Is Static` argument omits the data from the web page and saves a static version of the web page.
- If you created a formula column that contains `Col Std Dev()` with a By variable argument in a previous version of JMP, you should re-evaluate the column formula in JMP 14.1 or later. This ensures that the correct centering values are used in the standard deviation calculations for all levels of the By variable.
- Getting the currently selected item from a column switcher list returns a string with no errors.
- If you have a Col Box containing Icon Boxes and you change the title of some of the Icon Boxes, the Col Box remains the same size.
- When you specify columns in the `Open()` function, all columns are imported.
- `Slider Box()` recognizes `As Scoped()` correctly.
- `Mouse Box()` recognizes the Window scoping variable.
- If you specify the size of a text box for an annotation, it is now sized as specified.
- A loop in a class instantiating through a list of other classes no longer stops after the first iteration.
- The `Clone` message for a JSL class object creates a new class object that is a copy of the original class object. The `=` operator now creates another reference to the original class object.
- An associative array created with an expression column contains the correct values.
- In `Show()`, scoped global variables no longer show the value of the `here` namespace variable.
- In the Debugger, the value of the variable correctly appears in tooltips.
- When using a column statistic with a By variable, the correct results appear in the first row.
- Curves and predicted values no longer disappear from the profiler of a complicated model.
- Code folding accurately folds code in a script.
- An empty constructor function no longer causes JMP to close abruptly.

- When resizing a Graph Builder display box in a script, JMP no longer closes abruptly.
- `Associative Array()` and `Matrix()` are supported for Python code generation in Formula Depot.
- Col statistic functions, such as `Col Min()` and `Col Mean()`, resolve columns to a private table when the `Current Data Table()` is `Empty()`.
- `Parse JSON()` and other JSON parsing functions (such `As JSON Expr()` and `JSON To Data Table()`) return Empty if `Empty()` is used as the parameter.
- When `Context Box()` is used with a `Graph Box()`, the built-in display box namespace no longer returns an error regarding the scoping variable.
- The `Delete Property` message no longer results in an error when the specified property does not exist.
- If you select items in a graph, then make a change using the local data filter, the graph now updates instead of still showing your selection. This issue occurred when you added a custom filter script using `Make Filter Change Handler` in JSL.