Release Notes for JMP 16.2

JMP 16.2 is a general maintenance release that contains enhancements and bug fixes. Reproducible issues that cause JMP to close abruptly and reproducible numeric issues have been corrected. Applying this maintenance release is recommended for all users.

New Features

- In JSL scripts, the Verify SSL(Boolean) message disables certificate revocation checks for SSL back ends. This option is supported only for Schannel (the native Windows SSL library) except in the case of Windows Untrusted Publishers block list, which cannot be bypassed as of 7.44.0.
- JMP now supports the SAS street map server and MapBox options.
- The following teaching scripts are now available from the Help > Sample Data window.
 - Confidence Interval for Two Means
 - Confidence Interval for Two Proportions
 - Confidence Interval for Two Variances
 - Hypothesis Test for Two Variances

General Improvements

Application Builder

- When you select bars in an application's local data filter, only the selected bars are shown in Distribution.
- When you close an application that contains a report with a subset table, JMP no longer closes abruptly.

Database

- When you open a database using the MySQL ODBC driver version 8.00.26.00, the operation successfully completes.
- Issues with opening tables from SQL Server by selecting File > Database > Open Table have been resolved.

Dashboard

• When you remove the hierarchical selection filter from a dashboard, JMP no longer freezes or closes abruptly.

Data Filter

- When the wrong column name is specified in an unstructured data filter, JMP no longer closes abruptly.
- When Grouped by AND is selected, and you click a bar, only that bar is selected. Previously, all bars were selected.

Data Table

- Clicking on web links in a user-created data table no longer cause JMP to close abruptly.
- When a numeric column contains a thousand comma separator, the search option recognizes the matching cells. This option is restricted to match the entire value in a cell.
- Missing values are converted correctly from numerical to character on compressed columns.
- The combination of grouping scripts, creating a new script, and then attempting to delete the last group no longer causes JMP to close abruptly.
- When you select a value in a column, hide the column, and then resize the rows, JMP no longer closes abruptly.

Formula Editor

• Using transform columns no longer causes JMP to close abruptly.

Import and Export

- JMP launches an external browser that enables you to sign in and copy the URL or code that is given after a successful sign in. This change is due to Google's new policy that took effect on September 30th, 2021: Google disallows Google OAuth authentication using embedded browser controls including WebView2.
- Windows Regional formats are recognized when you import commas from a Microsoft Excel spreadsheet that represent decimal places.
- When you export a Distribution graph to the Microsoft Word format, and you close the Distribution window while the export is still working, JMP no longer closes abruptly.
- Graphs that contain a Page variable are no longer overlaid in HTML files.
- Exporting a large number of graphs to PNG format or PDF no longer produces blank graphs.
- When you click the _JMP* files in Browse SAS Data three times, JMP no longer closes abruptly.
- When you select columns and then export data to SAS, JMP no longer closes abruptly.

JMP Live

• During publishing, if there is a failure to store any of the objects (data table, thumbnail image, and so on), you will see an error message.

Menu Editor

• On Windows, the Menu Editor Toolbars menu item list no longer disappears after you select an item in the Change Customization Set window and click OK.

Preferences

• In the Preferences, when you filter by the word "crash" and then click Reset All, JMP no longer closes abruptly.

Projects

- When you open a data table in a project from the Contents tool pane, you can export the data to the Microsoft Excel format.
- When you close a project, JMP no longer closes abruptly.
- Exporting from a project window's Contents pane to an external file type on macOS no longer causes JMP to close abruptly.
- On macOS, when you close a tab that contains a report within a project, JMP no longer prompts to save the file as a journal.
- When you copy a picture, the legend no longer shifts position.

Query Builder

- When a schema is not selected in a Query Builder query, JMP no longer closes abruptly.
- When a Query Builder query that contains custom SQL is run, JMP no longer closes abruptly.

Recode

- When you recode a column from a DOE data table (making a formula column out of numeric values where the data was converted to character data), JMP no longer closes abruptly.
- When you convert labels to codes, the View Groups check box is deselected, and you select Undo, View Groups is selected again.
- You can enter values in the New Value text boxes in Recode. Previously, this option did not work if there was no scroll bar.

Samples

• Running the DLL_DeclareFunction.jsl sample script no longer causes JMP to close abruptly.

SAS Integration

• The SAS Browse Data option provides a complete preview for specific Windows region settings.

Tabulate

• Dragging a Tabulate report onto a blank dashboard no longer causes JMP to freeze.

Windows Installer

• The Windows installer is delivered as a single file.

Graphics

Graph Builder

- Selecting rows in a pie chart with multiple Y variables now highlights the correct rows.
- In a hexagonal heat map, missing values no longer appear.

- In contour plots, if you select a color using the Fill Color legend menu option, the Density Gradient and Gradient Transparency settings persist when you redo the analysis.
- Switching from a contour plot to a bag plot no longer causes JMP to close abruptly.
- When applying a street map where the latitude and longitude values are not in the geographic format, JMP no longer closes abruptly.
- If you right-click on a nested axis with many variables, JMP no longer closes abruptly.
- Using the ruler tool no longer causes JMP to quit unexpectedly.

Scatterplot 3-D

• Deselecting rows no longer results in missing colors.

Scatterplot Matrix

• When you have missing data, the ellipses drawn are consistent with other JMP platforms, such as Multivariate with pairwise estimation, Graph Builder, and Bivariate.

Statistics

• For an analysis based on a data table with excluded rows, if you create a data table from a report table using Make Data Table or Make Combined Data Table, there are no longer excluded rows in the resulting table.

Control Chart Builder

• When selecting Undo and changing chart types, the Three Way Control Chart now works as expected.

Control Charts

• Requesting an EWMA chart with multiple Y variables and an empty BY-group no longer causes JMP to close abruptly.

Design of Experiments

- For an MSA design with the error variance set to zero, JMP no longer closes abruptly. MSA designs with zero replicates now correctly do not display error terms and diagnostics.
- Multiple improvements and enhancements are now available in the sample size explorers. Improvements include better handling of edge cases, improved error messages, and improved tool tips.
- The Evaluate Design script saved from a split-plot or other custom design with random blocks now scopes whole plot or random block columns correctly.

Explore Missing Values

• The Missing Value Snapshot and Missing Value Clustering reports are now correct when Explore Missing Values is used with categorical columns.

Partial Least Squares

• Selecting the Distance Plot or Diagnostics Plot when there are missing values in the validation column no longer caused JMP to close abruptly.

Process Capability

• Adding a nested subgroup to an existing nested subgroup no longer causes JMP to close abruptly.

Variability Chart

• The correct specification limits are now used for Gauge R&R when broadcasting from red triangle menus.

Scripting

- In the time selector portion of a calendar box, you can highlight the minutes again.
- When you specify both Conditional and Group by AND in a data filter script and run the script, JMP warns that Group by AND is not permitted.
- Rename Directory() works correctly on network drives.
- When a script is run on a computer with the English locale, date separators other than "/" are recognized by JMP.
- When you sort a column by values in Col Box(), the values are sorted correctly with values in other columns.
- When you run a script that contains a formula with Shift(), JMP no longer closes abruptly.
- When you save a script from non-English JMP with the **Save Scripts in English** General preference selected, display box message keywords are saved in English.
- The Remove Ref Line message now works as expected.
- JMP no longer closes abruptly when initializing Python.org if you specify Path() but do not specify Python Sys Path(), or if you specify a wrong Python Sys Path().
- The "Unable to import the 'scipy' Python module" error no longer appears when JMP initializes Python 3.6.X and 3.7.X on Windows.
- When you run a script to create a bivariate graph, clear the row states, and then create another bivariate graph, the second graph correctly shows the data.

Release Notes for JMP 16.1

JMP 16.1 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

Bootstrap Forest

• Bootstrap Forest includes new default values for some tuning parameters.

Control Chart Builder

- The XBar control chart launch window now contains options to specify a constant sample size and the type of dispersion chart that appears below the XBar chart.
- Sample Label is now an alias for Subgroup in Control Chart Builder.
- Sample Label and Sort by Sample Label have been added to the IMR launch window.

Database Integration

- To omit the Save to DB script from a table that is imported through ODBC, deselect the Tables preference called ODBC Allow Table Replace. This prevents accidental updates to the database.
- SQL Native 11 and ODBC for SQL Server 17 don't return the column length. When a driver does not return a column length, the limit is 4MB.

Functional Data Explorer

- The new Reset button for the Functional Principal Components profiler resets all of the functional principal components scores to zero.
- Log X and Align by Function are new data processing options.

JMP Live

- Use a new command line interface to update SSL certificates for Keycloak.
- You can download JMP Live posts as JMP Projects, and then open them in JMP.
- Administrator features have an updated look and feel.
- Instead of doing a full installation of JMP Live, you can update your version.
- You can see who has accessed your JMP Live posts. Administrators can search and view all JMP Live post accesses.
- You can delete a data table that is no longer referenced by posts.
- Use Get HTTP Request() to get an HTTP Request from a Live Connection object.

Model Screening

- Prediction profilers are now available for models fit on continuous responses in Model Screening.
- Select Fit() JSL enables you to select specific models in the Model Screening report.
- You can now save the prediction formulas from individual models.

Principal Components

- You can now save the predicted variables as formulas that are linear combinations of a specified number of components using the Save Predicteds As Component Formulas option.
- You can now launch Model Driven Multivariate Control Charts from the Principal Components report.

Process Screening

- Multiple subgroup columns are supported in Process Screening.
- The Sort by Subgroup option has been added to the launch window.
- If a column has a Distribution or Process Capability Distribution column property with a nonnormal distribution type, a Warnings outline is shown below the Summary table in the Process Screening report.
- The Details table now has a column for the value of the subgroup variable, if specified.

Structural Equation Models

• There are two new options for fitted structural equation models. You can now request tables of total effects and indirect effects.

Teaching Resources

- Four new calculator JSL scripts are available:
 - Confidence Interval for Two Means
 - Confidence Interval for Two Proportions
 - Confidence Interval for Two Variances
 - Hypothesis Test for Two Variances

Open the scripts from the JMP installation directory's Samples/Scripts/Calculators folder.

Toolbars and Menus

- New buttons have been added to toolbars in reports, journals, applications, and projects.
 - *Properties* for editing display box properties is available in reports, journals, applications, and projects. The button is called *Show Properties* on macOS.
 - *Lock Journal* for locking and unlocking journals is available in journals. The button is called *Locked* on macOS.

General Improvements

Database Integration

- You can securely connect to a database with Microsoft's SQL Server Driver using Multifactor Authentication (MFA).
- Issues with date-time variables and time stamps in database queries have been resolved.

Data Filters

- The data filter no longer closes abruptly if given a Close(1) message as an argument for the creation of the data filter.
- In some instances, the Order by Count option that was set in a script might have been ignored, therefore it appeared that the option was not set.

Data Tables

- When JMP attempts to pull data from a source that is empty, JMP no longer closes unexpectedly.
- The Row Editor shows a subset of the selected columns. Previously, it was not possible to just look at a subset of the columns. The new Tables preference called **Row Editor Always Show All Columns** is set by default so that you can still edit a subset of the columns.
- Column properties that are supported only in JMP Pro (such as Detection Limits and Informative Missing) are now omitted from the list of column properties when you view the data table in standard JMP.
- The string length used to determine whether rows are duplicates or when doing a Table Summary is unlimited.
- Less memory is required to select duplicate rows.

Display

- Tab performance has been improved so that switching between many tabs in a custom window is faster.
- When a column name includes a hyphen, the *x*-axis label is completely shown when you select comparison circles.

Hover Labels

• The URLs on hover labels are now correct when the local data filter is applied to a column.

Import and Export

• Microsoft Excel columns with MATCH formulas no longer import as blank columns.

Interactive HTML

• After you first touch a touchscreen enabled device, Interactive HTML pages now respond to all mouse interactions.

• When the Percent format is applied to a column, and only a partial label can be shown on an Interactive HTML page, the partial label ends with "...".

Journals

• JMP 16.1 correctly reads JMP 15 journals.

macOS

- When you click in a data table cell or box and paste multiple lines, the text appears in separate cells no matter how you paste the data.
- Canonical plot labels are now visible in Dark Mode on macOS.

Preferences

• The Script Editor preference **Show line numbers in script editor boxes** is now saved in the JMP preference file, so you don't have to set the preference each time you open JMP.

Tabulate

• After you change a column name in the Tabulate window, revert the column name, and make a data table, the original column name is now included in the data table. Previously, the changed column name appeared in the data table.

Visual Basic Automation

• The error messages for LaunchSelectEffect have been improved.

Graphics

Graph Builder

• The granularity constraint in the smoother logic designed for wider intervals is properly applied.

Ternary Plot

• The slider now works when a ternary plot script has been saved and re-run.

Statistics

Design of Experiments

- The handling of constants and nominal factors in Augment design has been improved.
- When using a subset of a design where an original factor is only at one level, Augment Design now converts such factors to constants and alerts the user to add additional levels if desired.
- The handling of repeated covariates controls has been improved.

- JMP no longer closes unexpectedly after you add center points and then select a user-specified value in the Design Generation step of a custom design.
- The handing of mixture factors and categorical factors as covariates in Custom Design has been improved.
- Evaluate Design now handles mixture factors recorded as percents.
- Columns for the run order and replicates are now included in the MSA design table.

Distribution

- The confidence interval calculations for the normal fit have been updated. Confidence intervals for the mean estimate are based on the *t* distribution. Confidence intervals for the scale parameter are based on the χ^2 distribution.
- The slider control in the Capability Animation report correctly updates the report.

Fit Y by X

• The drawing of polynomial fits in the Bivariate platform has been improved.

Functional Data Explorer

• You can view the mean model by setting the number of functional principal components to zero.

K Nearest Neighbors

• There are no longer issues with the calculation of Entropy R Square when the categorical response contains missing values.

Model Driven Multivariate Control Charts

• When control limits are specified in the Controls Limits column property, the bar coloring in the MDMVCC platform respects those limits.

Model Screening

- When the Run Selected or Save Script Selected options are used in the Summary Across Fits table, the model that is run or saved is now the model that produces the highest weighted average RSquare.
- JMP no longer closes unexpectedly when leave-one-out validation is requested for Partial Least Squares models in Model Screening.

Neural

• If you have By groups, separate Prediction Formula columns and Most Likely columns are now created for each of the multiple fits.

Partial Least Squares

• If you have By groups and use the Save Prediction Formula option, a formula column is now created for each of the multiple fits.

Process Capability

- The shading in the Goal Plot now updates as the axis settings change.
- Graph customizations in the Process Performance Graph have been improved.

Process Screening

• If you have multiple subgroup variables where the inner subgroup variable is not sorted within the outer subgroup variable, a new subgroup variable column is created and used when Control Charts (Process Capability) for Selected Items is launched. This does not apply if Sort by Subgroup is selected in the Process Screening launch window.

Recurrence Analysis

• Confidence intervals now respect the specified confidence level.

Response Screening

• The Result Table and PValues Table are now linked.

Support Vector Machines

- SVM no longer uses excluded rows in the analysis for continuous responses.
- If you have By groups and use the Save Prediction Formula option, a formula column is now created for each of the multiple fits.

Scripting

- Compare Columns() is no longer included in recorded actions that contain Select Where clauses.
- Subscribe to Data Table List() now passes the data table name that is specified in New Data Table().
- Using <<Get Values(Format("Locale Date")) and Use Locale(0) formats the date according to the JMP display language as expected.
- On macOS X, Open() works as expected with aliases.
- The date parser properly reads the separator between the date and time.