Release Notes for JMP 17.2

JMP 17.2 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.

This document contains the following content:

- "New Features"
- "General Improvements"
- "Statistics"

New Features

Structural Equation Models

Two new model shortcuts for longitudinal data analysis are now available: Define Time Values and Cross-Lagged Panel Model. These shortcuts make the specification of numerous longitudinal models much faster than it was previously.

The Define Time Values shortcut enables you to specify the time associated with each repeated measure in a model. Previously, all of the longitudinal model shortcuts assumed that the variables were in ascending order. However, the Define Time Values shortcut relaxes this assumption and makes shortcuts more robust to unequal time points between repeated measures. This shortcut also simplifies the process of centering the intercepts of the growth curve models at different occasions of measurement.

The Cross-Lagged Panel Model shortcut enables you to specify complex multivariate models that are useful for testing lead-lag relationships across variables. These models have previously been accessible in the SEM platform, but you were required to manually specify numerous equality constraints. The Cross-Lagged Panel Model shortcut includes options for setting equality constraints in auto regression and cross-lagged effects, as well as residual variances and covariances. These options make empirical testing of model assumptions much faster than previously possible.

General Improvements

Display

Saving an edited JRP file no longer produces an error.

Import and Export

- JMP now supports SPSS 28.0.1.1 file import in all languages.
- JMP now supports XLSM file import on MacOS.

JMP Live

- You can now publish control charts with local data filters and control chart warnings to JMP Live 17.2.
- When changing Keycloak settings, the CLI is no longer supported. Update the keycloak.conf file instead.

Preferences

You can now set Conditional Formatting Rules in the Preferences window.

SAS Integration

- You can now connect to the latest version of SAS Viya 4.
- Starting in JMP 18.0, JMP will no longer offer support for SAS 9.4 Integrated Object Model (IOM) and Web Infrastructure Platform (WIP) server connections. The SAS integration JAR files will not be shipped with JMP. Therefore, Submit to SAS, SAS Query Builder, and Browse SAS Data will not be available in JMP 18.0. JMP 17.2 and prior versions still support connections to IOM and WIP servers and support those products.

JMP will also no longer create SAS on Demand for Academics (SODA) JAR files for JMP 18.0. In JMP 17.2 and previous versions, academic customers can still connect to SAS servers that are hosted on campuses using the JMP 17 SODA JAR files.

SAS features that allow select JMP platforms to generate SAS code for analysis and the ability to open SAS data sets in JMP will continue to be supported in JMP 18.0.

Statistics

Categorical

• The filter preference for Categorical has been re-installed.

Design of Experiments

• The Reliability Life Testing calculations now have improved accuracy while maintaining the speed of the previous explorer.

Generalized Regression

The Std Error of Predicted Formula option is now available for Lognormal models.

Mixed Models

 When a repeated effect subject is specified, it now applies only to repeated terms and does not affect random terms.

Oneway

- Performance for plots with jittered points has been improved.
- The columns for standard deviation confidence intervals in the Means and Std Deviations table are now hidden columns by default.

Process Capability

• The Goal Plot in Process Capability no longer loses data when using the Local Data Filter. When the data filter is cleared, the report returns back to its original state.

Standard Least Squares

- In cases where a nested effect has a missing level, the LSMeans plot is now correct.
- Confidence limits are now reported as missing in models with zero error variance.

Time Series Forecast

• JMP no longer closes unexpectedly if columns are incorrectly specified in the Time Series Forecast launch window. An error message is shown and the launch window is closed.

Release Notes for JMP 17.1

JMP 17.1 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.

This document contains the following content:

- "New Features"
- "General Improvements"
- "Statistical Improvements"

New Features

Fit Response Screening

Fit Response Screening now supports categorical Switch columns.

JMP Live

- When publishing reports that include data, the options to use an existing JMP Live data table or
 create a new data table are presented in a new window. Instead of clicking Data Options, these
 options appear in the Configure Data window.
- In the publish success window, external links to JMP Live content are more apparent.
- There is a new Admin page for managing spaces. This page appears not only to JMP Live administrators but to anyone who is given permission to manage all JMP Live spaces.
- There are new ways to quickly find control chart alarms that are visible to you.
 - Find alarms across all spaces from the Filter icon on the Home page.
 - Find alarms within a space from the Active Warnings icon.
- You can see any credentials you have created for refresh scripts and any data tables that are using the credentials. In JMP Live, click *your user icon* > **Settings** > Credentials icon.
- When updating data in a JMP Live post, the Undo Recent Updates button has been replaced with an option in the More menu called Restore previous version.

Measurement Systems Analysis

 When saving metadata, there are new options to save the lower and upper tolerance values as Spec Limits column properties. These options appear when you select Save > Save Metadata as Column Properties from the platform's red triangle menu.

Multivariate Embedding

• The Uniform Manifold Approximation and Projection (UMAP) method is now the default dimension reduction method in the Multivariate Embedding platform. Previously, the default method was the t-Distributed Stochastic Neighbor Embedding (t-SNE) method.

Response Screening

You can change the default maximum number of levels that are allowed for categorical variables
using the new JSL-only option called Max Comparison Levels. If you have categorical variables
with more than 10 levels and try to use the Show Mean Differences option or the Practical
Differences and Equivalences option, an error message is shown. Using the new option, you can
change the default value of 10 to some other value.

Scripting

• To automate the license renewal process, you can use the Renew License() function to specify the file path where your jmp.per or SID file resides.

Structural Equation Models

- The frequency column role is now supported.
- You can now edit the name of a model in the Model Comparison table.
- The relative noncentrality index (RNI) and the BIC relative to the unrestricted model (BICu) are now reported.
- A new model shortcut enables you to model an error-free latent variable by specifying an estimate of error variance for an observed variable.
- The one-click Bootstrap feature is now supported.

Variability Chart

 When saving metadata, there are new options to save the lower and upper tolerance values as Spec Limits column properties. These options appear when you select Save > Save Metadata as Column Properties from the platform's red triangle menu.

General Improvements

Data Tables

 When you select the Hide ODBC Connection Strings option, the Source, Updated from Database, and Modify Query table scripts are removed from Query Builder and Open Table.

Import and Export

• The OSIsoft PI Server Wizard now includes a Timeout option. The default setting is 60 seconds.

Preferences

• The Privacy preferences provide information about the collection of telemetry data and the handling of unexpected errors. What you see depends on whether you are running the trial version of JMP.

Statistical Improvements

Cumulative Damage

• The calculations for the confidence intervals in step-stress models has been improved.

Design of Experiments

- The MSA Design platform now includes buttons to implement typical MSA design structures.
- The Sample Size and Power platform is deprecated, meaning it is an older platform that contains features that can be accessed in a newer platform. This legacy platform might not be available in future releases of JMP. Sample size and power calculators are now available in the Sample Size Explorers platform. Select **DOE** > **Sample Size Explorers** for sample size calculations.
- The linear constraint dialog is now more stable when updates are made to it.
- The run order is now automatically randomized for FFF space filling designs.

Decision Threshold

• The True Classification by Threshold and True Classification by Portion graphs in the Decision Threshold report are now correct when there are missing values.

Distribution

• The Fit Handle[] syntax in Distribution once again accepts a variable argument.

Explore Outliers

• JMP no longer closes unexpectedly when you use the RPCA save commands across multiple By groups.

Fit Model

- The Mixed Model, Nominal Logistic, and Ordinal Logistic personalities of the Fit Model platform now support a Switch column role, which enables you to specify columns that can be switched, one at a time, into the model.
- Mixed models with many levels in a random effect no longer produce results that are dependent on the reference level of a fixed effect.

Fit Y by X

• The labeling of confidence intervals for superiority, noninferiority, and equivalence tests in the Oneway and Contingency platforms has been improved for clarity.

Functional Data Explorer

- The Wavelets DOE Analysis report now includes diagnostic plots.
- The FDOE Profiler in the Wavelets DOE Analysis report now supports target functions.
- When using the Save Data or Save Summaries options with a validation set, the original values and value labels are now saved for the validation column. This is relevant if your validation column contains a Test set.

Generalized Linear Model

• The calculation for the AICc in models with overdispersion has been updated and does not include the overdispersion parameter.

Generalized Linear Mixed Model

• The Indicator Parameterization Estimates option is no longer available when the No Intercept option is selected in the Fit Model launch window.

Generalized Regression

 The odds ratios, hazard ratios, and incident ratios for ordinal effects in Generalized Regression are now correct.

Measurement System Analysis

- The calculations of the heterogeneity of variance (HOV) limits for the test-retest error report have been updated. This improves the false-alarm rate.
- The AIAG Gauge R&R Results option is now invoked correctly from scripts in non-English JMP.

Mixed Model

• The Indicator Parameterization Estimates option is no longer available when the No Intercept option is selected in the Fit Model launch window.

Process Capability

- The Process Capability results are now correct when the data have a range of zero.
- The formulas for calculating the points in the Goal Plot have been updated.

Process Screening

• The formulas for calculating the points in the Goal Plot have been updated.

Profilers

• If the Compute Shapley values for all rows, excluded and unexcluded option is selected, Shapley values are now correctly computed for all rows when using the Profiler from the Formula Depot.

Standard Least Squares

• The Indicator Parameterization Estimates option is no longer available when the No Intercept option is selected in the Fit Model launch window.

