

## Release Summary

This release introduces new features, algorithms, enhancements, and platform update, focusing on advanced statistical methods, user experience improvements, and enterprise administration capabilities.

## Key highlights:

- Curated Help Designer
- Advanced statistical procedures: Mediation Analysis, VAR models, Genomic Analysis
- Enhanced Output Viewer with selective column control
- Passkey authentication support
- New features

## Curated Help Designer

The Curated Help Designer is a feature in IBM SPSS Statistics that can be used to create and edit custom curated help for statistical tables. You can define the help text for specific value ranges and color code the cells in a statistics dimension for which the value ranges apply. This help text and defined color codes are applied to the cells in the pivot table that match with the value ranges that you configured.

## Mediation Analysis

Mediation analysis is a statistical method used to understand the mechanism through which an independent variable influences a dependent variable through one or more mediating variables. This procedure helps you test hypotheses about indirect effects and understand the pathways of influence in your data.

## Vector Autoregressive Models

A Vector Autoregressive (VAR) model is a fundamental tool in multivariate time series analysis. A VAR model captures the linear interdependencies among multiple time series variables.

This feature is available in SPSS Statistics Professional Edition or the Forecasting option.

## Genomic Analysis

With the Genomic Analysis feature, you can import and analyze genomic data files directly within SPSS Statistics. This feature bridges genomics research and statistical analysis by allowing researchers to import genomic data and apply statistical procedures without external data conversion tools.

## Permutation test

This extension procedure with R plug-in provides permutation tests for simple two-group t tests, ANOVA, and regression. These tests do not rely on a normality assumption and are appropriate for small datasets where asymptotic properties might not be reliable.

Installation: Search and install the extension STATS PERM from the extension hub (Extensions > Extension hub).

How to access: You can access this feature from the menu after you install the extension: Analyze > Regression > Permutation Tests .

## Independent Samples Permutation t Test for Windows

This extension procedure with R plug-in does permutation t tests. It allows for two groups and one variable or two variables in one group. Variance can be assumed equal or not (Welch). Two-sided or one-sided alternative hypotheses can be specified. It's functionality overlaps with the STATS PERM extension command, but it has some additional options for these tests.

Installation: Search and install the extension STATS\_PERMTTEST from the extension hub (Extensions > Extension hub).

How to access: You can access this feature from the menu after you install the extension: Analyze > Compare Means and Proportions > Independent Samples Permutation t Tests.

## Bayesian Variable Selection for Regression

This extension procedure with R plug-in provides a Bayesian method for selecting independent variables for linear and generalized linear regression models by comparing their Bayes factors, using the ratio of integrated (marginal) likelihoods.

Installation: Search and install the extension STATS BAYES SELECTVARS from the extension hub (Extensions > Extension hub).

How to access: You can access this feature from the menu after you install the extension: Analyze > Generalized Linear Models > Bayesian Regression Variable Selection

### Mixed Type Cluster with Variable Selection

This extension procedure with R plug-in is used to create a clustering model where variable selection and number of clusters can be determined simultaneously. It can be used to create a latent class model and assign a class for each case in the estimation data. The estimated model can be saved and then used to assign classes to new data.

Installation: Search and install the extension STATS MIXED CLUSTER2 from the extension hub (Extensions > Extension hub).

How to access: You can access this feature from the menu after you install the extension: Analyze > Classify > Mixed Type Cluster with Variable Selection

## Enhancements

### Configuring CRAN mirror sites for R extensions

You might face errors when you install a new extension as it requires R packages from CRAN when you run the extension for the first time. The error appears if the default CRAN URL is inaccessible.

**What's changed:** R-based extensions installed from the Extension Hub now support configuring a custom CRAN mirror.

**Benefits:** You can specify an approved CRAN mirror by updating the key `CranURL` in the `spssprod.inf` file to prevent such errors.

**Configuration:** The file is located in the product installation directory on Windows or macOS. When you set this key, SPSS Statistics uses this URL for all R package requests. Otherwise, the default CRAN repository is used.

### Simplified default chart titles

**What's changed:** Default titles generated for charts in Chart Builder have been simplified to remove redundant chart-type wording.

**Benefits:** The new titles focus on the measured variables, making chart titles shorter, clearer, and easier to read without manual editing.

### Clarified interpretation of Asymptotic Standard Errors in PROPORTIONS output

**What's changed:** The PROPORTIONS procedure now includes a footnote for Asymptotic Standard Error (ASE) columns in Confidence Interval and Test tables.

**Benefits:** The footnote clarifies that these standard errors are calculated without assuming the null hypothesis, aligning PROPORTIONS output with similar tables in CROSSTABS.

## Output Viewer enhancement

What's changed: Selectively unhide columns in output tables. A new Show Column option is available in the Modify Output menu, allowing you to choose one or more previously hidden columns to display again.

1. Right click and select Modify Output > Show Column
2. In the Show Column dialog box, select the table column that you need to unhide from the Table columns drop-down list.
3. Click Continue to apply the changes.

Benefits: You can now selectively restore hidden columns in output tables.

Impact: This enhancement removes the need to use View > Select All Categories to unhide all columns at once and provides finer control when you customize output tables.

## Authentication and Security

### Passkey

What's new: IBM SPSS Statistics Digital now supports passkeys for signing in with an IBMid.

Benefits: Passkeys provide a secure, password-free sign-in experience using the authentication features available on your device, helping simplify access to the product.

## Administration

### Disable the AI Output Assistant

What's changed: For restricted enterprise or academic setups, administrators can now completely disable and remove AI Output Assistant from the user interface.

## JRE upgrade

JRE version is upgraded to 17.0.18.1.