What’s New in SAS Visual Analytics 8.2: General Enhancements

- The user interface has many new enhancements, including new objects for reports.
- There are new and enhanced objects.
- There are new data items and new calculations.
- There are enhanced actions, links, and parameters.
- There is a new Locale for regional formats and sorting setting available in SAS global settings. The default setting is the browser locale. This setting should be used when you are formatting numbers, formatting dates, or sorting in SAS Visual Analytics.

See Also

- What’s New in SAS 9.4 and SAS Viya

What’s New in SAS Visual Analytics 8.2: Details

The following lists include the new features and enhancements since SAS Visual Analytics 8.1 was released.

Enhanced User Interface

- The banner has been updated. It provides the ability to access and open recent reports.
- The application toolbar now displays the report name and has a new icon for saving reports. Report prompts and page prompts are now available from the application toolbar menu.
- The page bar has been redesigned. A new menu enables you to quickly rename and duplicate pages. There is a new way to hide pages in a report.
There is a new feature for automatically recovering reports, which are saved every five seconds. SAS Visual Analytics saves one draft of each report per user. It also saves a draft of a new report that has never been saved.

There are new report themes that are called Marine, Aqua, and High Contrast. There are new SAS application themes that are called Inspire and High Contrast.

You can print or email a report.

You can save an image from a report.

You can distribute reports once or at recurring intervals, such as daily, weekly, or monthly.

You can add alert notifications for an object using display rules.

You can show or hide objects in the Objects pane.

You can specify the height and the width for a hidden page.

You can change the data source used in a report.

You can add margins to your report and to your pages by using the Padding option.

New and Enhanced Objects

Maximize mode replaces explore mode from previous releases. You can maximize an object at any time to expand it to the full size of the canvas and display the details table for the object. Only a single object can be maximized at one time.

There are many new style options for objects. It is now possible to specify the colors for data fills and for gradients.

The object toolbar now enables you to duplicate an object and change its type at the same time. For example, you can duplicate a pie chart as a bar chart.

Many graph objects now support reference lines.

Automatic titles are available for objects. The title changes as data is added or modified, unless you customize the title. There is a new setting available for object titles if you want to use the same type of title across sessions.

Automatic charts have been updated. You can now easily return to the system-recommended object. A new menu item lets you select the recommended object.

The following graph objects are new:
- bubble change plot
- comparative time series plot
- data-driven content
- dot plot
- forecasting
- key value
- needle plot
- numeric series plot
- parallel coordinates plot
- path analysis
- schedule chart
- step plot
The new key value object can be used to highlight numeric and categorical values in an infographic. The key value updates automatically when your data updates.

The new data-driven content object can be used to add third-party visualizations to your SAS Visual Analytics reports. The third-party visualization can be authored in any JavaScript charting framework, such as D3.js, Google Charts, or CanvasJS. The visualization in a data-driven content object receives its data from SAS Visual Analytics and interacts with filters, ranks, and actions in the same way as other objects in your report.

A new path analysis object displays flows of data from one event to another as a series of paths. In SAS Visual Analytics 7.4 and earlier, the Sankey diagram object provided this feature.

Forecasting is now a dedicated object rather than a feature of the time series plot.

Containers have new layout options to specify how containers and their contents are resized.

Gauge objects can display a lattice of gauges (also known as a KPI grid) by assigning the **Group** role.

Text objects have a new dynamic text feature. The dynamic text can display the most recent date that the current data source was updated. It can display the value of a parameter or a measure. It can display a summary of the current interactive filters.

You can now add row numbers to tables using a calculation. By using the `AggregateCells` function, you can create a `RowNumber` calculated item.

List tables can now have sparklines. By default, the columns in list tables are automatically sized based on the space available.

Crosstabs can be sorted by clicking the column heading. Crosstabs now have one-click calculations (for example, percent of column total, percent of column subtotal, or percent of row total) that are available from a pop-up menu. And, crosstabs can now have measures on rows.

In a correlation matrix, if you have SAS Visual Statistics, then you can explore selected data as a new object, such as a heat map or analytical model.

Text topics objects have the following enhancements:

- Thirty languages are now supported. The languages that are available in your deployment depend on your license.
- You can view the full text of your documents in a pop-up window or in a list table object.
- You can create derived topics data items from the topics list in your results.

By default, SAS Visual Analytics automatically computes the height and width of any control or text object when the report is rendered. (This makes reports or text objects more portable across various screen sizes.) There are new **Specify width** and **Specify height** layout options that let you specify the width or height as a percentage of the space on the canvas when the report is opened in SAS Report Viewer (the report viewer).

In box plots, the display of outlier values has been enhanced. When the range of outlier values is represented by a bar, the bar is divided into heat map bins.

Geo map objects have the following enhancements:

- They can display background maps from a private Esri ArcGIS server.
- They have enhanced features from Esri premium services. Radius-based selections can specify the mode of transportation and account for traffic in travel times. You can retrieve demographic data for your radius-based selections.
- You can perform point clustering for geo map objects that display custom coordinate data.

Network analysis objects have the following enhancements:

- You can now select network metrics from the **Roles** pane.
A new Communities option enables you to manage the number of communities when the Community metric is assigned.

- You can select the shortest path between two nodes.

- Controls can now dynamically select the first or last value in the data set.

## Enhanced Data Items

- You can show or hide data items in the Data pane.
- You can define geography data items for custom geographic regions.
- You can create a custom sort so that category data items in a table or graph can be sorted to the top or to the bottom.
- The new Hidden role for data items enables you to include a category or date in the data query without it being displayed. You can use the hidden data items in actions.

## Enhanced Calculations

- There are new one-click calculations. These include cumulative total (which can work across any dimension), moving average, and data suppression (which obscures an aggregated measure value if detail measure values could be easily inferred when too few rows contribute to the aggregated measure value).
- A new AggregateCells operator enables you to aggregate a specific range of cell values in a crosstab or list table.
- The CumulativePeriod operator now enables you to customize the starting month for each year (for example, to calculate year-to-date based on the fiscal year for your company).
- For periodic calculations, you can choose to ignore data filters that are based on the same date data item.
- The new IsSet operator enables you to test whether a parameter value is set.
- A new scoping feature for aggregated items enables you to apply different expressions for different crossings of categories.

## Enhanced Actions, Links, and Parameters

- You can synchronize prompt values and parameters across linked reports.
- Actions have been improved. There are automatic actions for linked selections, two-way filters, and one-way filters. There is a new setting available for actions. A new Actions Diagram enables you to visualize and create actions.
- Expression-based display rules support parameters.
- Parameters have been enhanced. You can have parameters with multiple values, which enables you to use them in a list control. And, parameters can now be based on date and datetime formats.