What Is SAS Visual Analytics?

SAS Visual Analytics leverages SAS high-performance analytic technologies and empowers organizations to explore huge volumes of data quickly to identify patterns, trends, and opportunities for further analysis. The highly visual, drag-and-drop data interface of SAS Visual Analytics, combined with the speed of SAS Cloud Analytic Services (CAS), accelerates analytic computations and enables organizations to derive value from massive amounts of data. This creates an unprecedented ability to solve difficult problems, improve business performance, predict future performance, and mitigate risk rapidly and confidently. Users can quickly design reports or dashboards, which can be viewed on a mobile device or on the web.

SAS Visual Analytics enables you to explore, discover, and predict by using your data. If the SAS Visual Statistics add-on is licensed at your site, then you can create, test, and compare models based on the patterns that you discovered when you explored your data. You can export a model before or after you perform a model comparison in order to use it with other SAS products and to put it into production. If the SAS Visual Data Mining and Machine Learning add-on is licensed at your site, then additional models are available. (The SAS Visual Data Mining and Machine Learning add-on cannot be licensed without the SAS Visual Statistics add-on.)

One type of document, a report, is created in SAS Visual Analytics. Whether you are working with text, a table, or a linear regression, all objects are added to pages in a report. All objects can be presented in the various layouts supported by SAS Visual Analytics. For more information, see SAS Visual Analytics: Designing Reports.

For information about new features, see SAS Visual Analytics: What’s New.
What Are the SAS Visual Analytics Apps?

The SAS Visual Analytics Apps (previously called SAS Mobile BI) are free mobile apps. You can download the apps from the following locations:

- Apple App Store
- Google Play
- Microsoft Store

Using these apps, you can view and interact with SAS Visual Analytics reports, as well as share comments and observations with others. The apps support all charts and graphs that are available in SAS Visual Analytics.

SAS SDKs

SAS Visual Analytics SDK

The SAS Visual Analytics SDK is a collection of JavaScript libraries that you can use to embed SAS Visual Analytics insights within your web pages and web apps. The SAS Visual Analytics SDK enables you to do the following:

- embed entire SAS Visual Analytics reports
- embed individual SAS Visual Analytics objects from one or more reports
- perform interactions between multiple SAS Visual Analytics objects
- share data and actions between SAS Visual Analytics objects and JavaScript controls (by using data-driven content)

The SAS Visual Analytics SDK is free and is available from the SAS Visual Analytics SDK product page.

Mobile SDKs

The SAS SDK for iOS and the SAS SDK for Android let you create mobile apps that include SAS Visual Analytics content. The SAS SDK gives you the ability to personalize, preconfigure, customize, and manage the user experience of including SAS Visual Analytics content in your apps.

- Personalize your apps by substituting your organization’s name and icon in the SAS Visual Analytics App.
- Preconfigure your apps to include server connections and report subscriptions so that your users do not have to perform these tasks.
- Create completely customized mobile apps that combine the interactivity of SAS Visual Analytics reports with any other external content and capabilities that you choose.
- Manage and secure your mobile deployments by integrating your mobile apps with your mobile device management (MDM) service.

Your mobile apps can connect to your SAS servers and can be managed by your organization’s SAS administrators. The SAS SDK is free and is available for iOS and Android devices from the SAS SDK product page.
Benefits of Using SAS Visual Analytics

By using SAS Visual Analytics, users can enhance the analytic power of their data, explore new data sources, uncover relevant patterns, and create reports. In traditional reporting, the resulting output is well defined up-front. That is, you know what you are looking at and what you need to convey. In contrast, data discovery invites you to plumb the data, its characteristics, and its relationships. Reports can be made available on a mobile device or on the web.

SAS Visual Analytics provides users with the following benefits:

- enables users to apply the power of SAS analytics to massive amounts of data
- empowers users to visually explore data, based on any variety of measures, at amazingly fast speeds
- enables users to quickly create powerful statistical models if the SAS Visual Statistics add-on is licensed at your site
- enables users to work with factorization machines, forests, gradient boosting, neural networks, support vector machines, and Bayesian networks if the SAS Visual Data Mining and Machine Learning add-on is licensed at your site
- enables users to quickly create reports or dashboards using standard tables, graphs, and gauges
- enables users to share insights with anyone, anywhere, via the web or a mobile device

SAS Visual Analytics Community

The SAS Visual Analytics community is dedicated to users who are focused on exploratory visualization and analytical techniques, data preparation, dashboard reporting, and mobile reporting. Using the community, you can share your experiences, discuss topics and ideas, seek help from your peers, and share information about upcoming events. You can access the user community at communities.sas.com/visual-analytics.

For questions requiring immediate technical assistance, contact SAS Technical Support at support.sas.com.

Accessing SAS Visual Analytics

Authenticated Users

After you sign in to SAS Visual Analytics using the standard sign-in window for SAS applications, you will see SAS Drive, which enables you to access SAS Visual Analytics. In addition, it enables you to access content that you and others have created.
Use the Side Menu to Access SAS Visual Analytics

If you are using another SAS Viya application (for example, SAS Theme Designer), you can access SAS Visual Analytics from the side menu. Click ☰ in the application bar. Using the side menu, click Explore and Visualize. Here is an example of what you might see in the side menu:

```
SAS Drive

> ACTIONS
  Develop SAS Code
  Manage Data
  Explore and Visualize
  Explore Lineage
  Build Graphs

> ADMINISTRATION
  Manage Environment
  Manage Themes
```

Note: The items available in the side menu depend on your assigned identity and the products licensed at your site.

Sign Out of SAS Visual Analytics

Use the application bar to sign out of SAS Visual Analytics. Click the user name button, and then click Sign out. When you click Sign out, you are signed out of all SAS web applications. For example, suppose that you have SAS Studio and SAS Visual Analytics open, and then you click Sign out when you finish working on a report in SAS Visual Analytics. In this case, you have also signed out of both SAS Studio and SAS Visual Analytics.

Access to SAS Visual Analytics Functionality

Users might have access to different functionality, depending on the assigned rules. Rules can give all authenticated users access to functionality or they can provide subsets of users access to specific functionality.
Note: Access to functionality depends on how SAS Visual Analytics is installed at your site. For example, a site might not have SAS Visual Statistics.

In addition to your identity, the following conditions influence whether a SAS Visual Analytics menu or menu selection is available:

- your location in SAS Visual Analytics. For example, some application features are available only if SAS Visual Statistics is licensed at your site.
- the currently selected object. For example, ranges are not available for list tables.
- whether the data for a report has been defined. For example, if the data has not been added, then you cannot create a filter.

For more information about identity management and rules, see SAS Viya Administration: Identity Management.

Moving Content from a Previous Release of SAS Visual Analytics

Promotion is the process of capturing content and moving it to a different location. The following scenarios are supported for SAS Visual Analytics:

- Content can be promoted from the 7.1, 7.2, 7.3, 7.4, or 7.5 release to the 8.4 release.
- Content can be moved from the 8.1, 8.2, or 8.3 releases to the 8.4 release or from one 8.4 release to another 8.4 release (for example, from a test environment to a production environment).

An administrator can promote the following types of SAS Visual Analytics content:

- reports and folders
- explorations (from a 7.1, 7.2, 7.3, or 7.4 release)
- statistical models
- externally created files
- graph templates (from a 7.1, 7.2, 7.3, 7.4, or 7.5 release)
- comments

For more information and instructions, see SAS Viya Administration: Promotion (Import and Export).

Recommended Reading

Here is the recommended reading list for SAS Visual Analytics:

- SAS Visual Analytics: What’s New
- SAS Visual Statistics: What’s New
- SAS Visual Analytics: Getting Started with Reports
- SAS Visual Analytics: Getting Started with Analytical Models
- SAS Visual Analytics: Designing Reports
If you are an administrator for SAS Visual Analytics, here are some additional resources:

- “SAS Visual Analytics Administration” in SAS Viya: Overview
- SAS Viya Administration: Orientation
- SAS Viya Administration: Promotion (Import and Export)