



SAS® Enterprise Guide®

Delivering the power of SAS® Analytics with easy deployment of results in a Windows client interface

What does SAS® Enterprise Guide® do?

SAS Enterprise Guide is a powerful Microsoft Windows client application that provides a guided mechanism to exploit the power of SAS and publish dynamic results throughout the organization.

Why is SAS® Enterprise Guide® important?

It is the preferred interface to SAS for business analysts, programmers and statisticians and a key application in SAS Business Intelligence offerings.

For whom is SAS® Enterprise Guide® designed?

SAS Enterprise Guide is designed for use by business analysts, programmers and statisticians.

In an attempt to be more proactive, organizations are decentralizing their decision-making processes. As a result, more and more people need convenient access to the right intelligence to make effective decisions.

With the ever-increasing demand for timely business intelligence, IT departments are under constant pressure to support advanced user needs and expectations with a comprehensive application.

Business analysts need a simple mechanism for presenting and sharing everything from basic to advanced analytic results to gain insight and enable their management to make forward-looking decisions. Providing this can prove difficult since the majority of analysts are not experienced programmers, yet they still need self-sufficient, transparent and quick access to data and analytic capabilities.

SAS Enterprise Guide, a powerful Windows client application, meets these needs by providing a point-and-click interface to the full power of SAS. Interactive dialog boxes guide users through analytic and reporting tasks that range from simple to complex. It also provides transparent access to SAS data and external data and enables exporting the results to other Windows and server-based applications. Reports created using SAS Enterprise Guide can be distributed on a periodic basis to targeted groups of users within the organization, enabling the latest intelligence to reach those who need it to make the right business decisions.

Key benefits

- Liberate IT by providing business analysts and statisticians with a self-service environment tailored to meet their needs.** Only SAS Enterprise Guide integrates the extensive array of analytics with the power of SAS software in an efficient, friendly graphical user interface application. Business analysts can produce the analyses and distribute reports they need, freeing IT to focus on other strategic projects.
- Provide self-sufficient and easy access to enterprise data sources for business analysts, programmers and statisticians.** SAS Enterprise Guide is the only front end that provides a guided mechanism to access data across the enterprise on multiple platforms, operating systems and databases, in conjunction with access to advanced analytics and other SAS capabilities. A centralized system for managing access to corporate data ensures that users have appropriate access privileges while empowering them to react quickly to evolving business conditions.
- Adapt to changing needs with flexible distribution mechanisms that make reporting and analytics available to the masses.** The ability to develop and deploy customized tasks lets users extend the core functionality to create custom wizards, which can be distributed easily as needed. Information can be delivered through an established publishing framework with the ability to publish dynamic, interactive content to Microsoft Office and Web users.



Product overview

SAS Enterprise Guide is a powerful Windows .NET client application with an easy-to-use graphical user interface designed to enable self-sufficient and fast guided access to much of the analytic power of SAS software.

Business analysts, programmers and statisticians can leverage the power of SAS transparently on many platforms. They can access data quickly, manipulate it, perform basic reporting and carry out basic and complex analyses. With SAS Enterprise Guide, they can also distribute the results to targeted groups of users, disseminating the latest intelligence to those who need it for making decisions quickly and effectively.

Guided analytics

SAS Enterprise Guide provides a graphical user interface that allows transparent access to the power of SAS. A process

flow diagram facility lets users organize, view and maintain their projects visually.

The software delivers many “out-of-the-box” analytical tasks, including forecasting, correlations and predictive models. Results from the analyses can then be shared seamlessly with decision makers. More than 80 wizards and tasks are provided, making specific capabilities easily accessible. For both beginners and advanced users, programming time is eliminated because the code is generated automatically.

In addition, advanced users can combine the use of wizards and programming to create business-specific custom task wizards that guide less sophisticated users step-by-step through complex business processes. These customized wizards, which extend the product’s core functionality, can be shared easily with other SAS Enterprise Guide users from the Web

and Microsoft Office via other SAS BI applications.

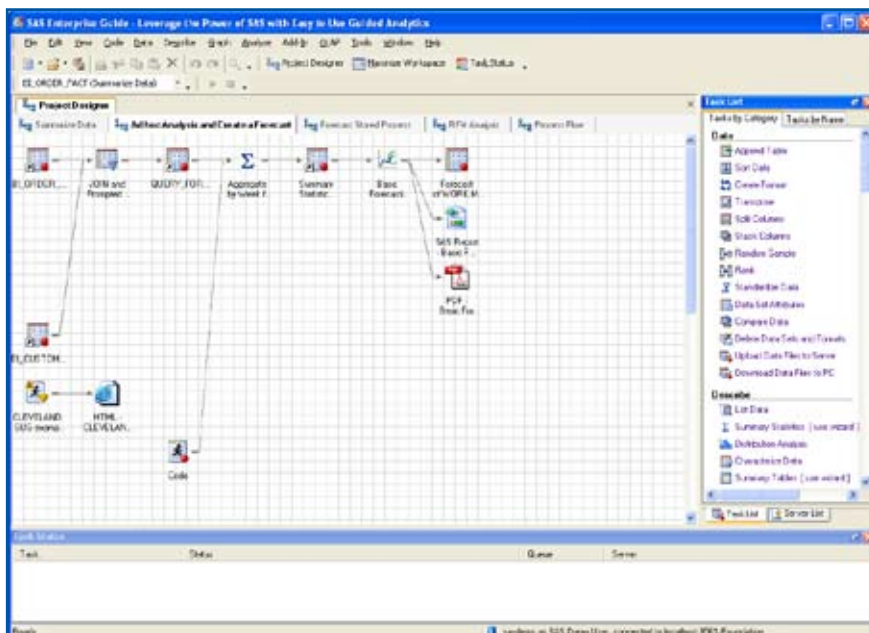
Data access and management

With SAS Enterprise Guide, users can visually access any data type supported by SAS as well as native Windows data types via ODBC, OLE DB, OLE DB for OLAP, and from MS Exchange mail servers. A powerful, graphical query builder lets users create, update, subset and join tables without involving IT specialists. This enables them to visually manipulate data without being SQL experts. They can preview the query code that is generated and check query syntax validity. Guided tasks also are provided for organizing information and transposing, ranking, normalizing and subsetting almost any enterprise data source.

Users have access to information created with the SAS Information Map Studio component of SAS Enterprise BI Server, which presents data and information in familiar terminology that business users can understand. There is no need for them to know about behind-the-scenes data joins and derived calculations. This allows business users to quickly access and update the data sources they need to create tables, charts and analytics, while leveraging a centralized system to ensure reports always contain the most up-to-date information.

OLAP exploitation

A dedicated, intuitive and advanced interface is provided for analyzing business information stored in OLAP data cubes. The OLAP Analyzer supports all of the functionality required to navigate through multidimensional data, add topic-specific business calculations and extract information from multidimensional sources for further analysis with advanced statistical procedures or data mining. It also



SAS® Enterprise Guide® provides an easy-to-use interface to access the power of SAS data access, reporting and analytics, enabling you to quickly create and publish SAS Stored Processes that can be leveraged from Microsoft Office applications or Web browsers.

enables business users to share their results with others. It features drillable, interactive graphics and allows users to generate ad hoc queries for analytics based on cube data.

Users can slice and dice data as needed to explore the information, as well as drill through to underlying detailed data. Capabilities are provided for simple calculations, count analysis, relative contribution analysis and custom calculations such as time series analysis. Individual views on multidimensional information can be saved as bookmarks for easy reuse, and slices from multidimensional information can be provided to other analytical SAS procedures for advanced analysis.

SAS Enterprise Guide surfaces OLAP data sources from SAS OLAP Server or other third-party vendors supporting OLE DB for OLAP.

Result distribution and sharing

Result distribution and sharing is managed centrally by the IT department. SAS Enterprise Guide is integrated with the Microsoft Windows Scheduler, enabling those who need reports refreshed regularly to schedule the automated execution of the code required to generate the report at regular intervals. Planning task execution and publishing results to multiple channels, including shared report folders and portals, reduces the time it takes to deliver information across an enterprise.

Key Features

Graphical user interface

- Intuitive wizards provide access to SAS capabilities from basic reporting to complex analyses.
- Each wizard has a wide range of flexible options that are easily adjusted.
- Results can be delivered in HTML, RTF, text and/or PDF form. Most results also can be output as SAS data sets for further analysis with other tasks.
- Graphs can be created as ActiveX (dynamic or image), Java Applets (dynamic or image), GIFs or JPEGs. ActiveX and Java Applets permit direct interaction with the graph objects without resubmitting requests to the server.
- An intuitive process flow diagram facility allows users to organize, view and maintain their projects visually.
- Easily extend the range of business problems that can be quickly solved with the development and deployment of custom tasks that appear alongside the core product functionality.

Reporting, graphical and analytical tasks

- Descriptive reports and analysis: basic listings, summary statistics tables, one-way frequencies tables, correlations tables and graphs, and tabular or graphical distribution analysis.
- Graphs: area chart, bar chart, box plot, bubble plot, donut chart, line plot, map graph, pie chart, radar chart, scatter plot, surface plot and contour plot.
- Analysis of Variance (ANOVA) predictive models: t-Test, one-way ANOVA, nonparametric one-way ANOVA, linear models and mixed linear models.
- Regression models: linear, logistic, nonlinear and Generalized Linear Models.
- Multivariate relationship models: cluster analysis, factor analysis, principal components, canonical correlation and discriminant function analysis.
- Survival analysis: life table and proportional hazards.
- Capability analysis: CDF plots, histograms, P-P plots, probability plots, and Q-Q plots.
- Control charts: mean and range, mean and standard deviation, individual measurements, box, p , np , u and c charts.
- Pareto: Pareto charts.
- Forecasting: data transformation, basic forecasting, ARIMA modeling and forecasting, regression analysis with autoregressive errors and regression analysis of panel data.
- Table analysis.

Data management

- Visually access any data type supported by SAS and native Windows data types via ODBC, OLE DB, OLE DB for OLAP (specifically SAS OLAP Server, Microsoft Analysis Services and SAP BW), and from MS Exchange mail servers. Accessible local file types include: Microsoft Word Documents (embeddable in project files to help document your project work), Excel, HTML, Access, Lotus 123, Paradox, .TXT files (fixed width), ASC files (ASCII), TAB delimited files and CSV files (comma delimited).
- Provides access to information maps created in SAS Information Map Studio.
- Powerful, graphical query builder allows users to visually access and manipulate their data without SQL expertise:
 - Join up to 32 tables simultaneously.
 - Graphically or programmatically subset data to reduce the results to acceptable sizes and to identify the data you require.
 - Parameterize data to interactively filter the information needed for intelligent decision making.
 - Organize information for easy viewing with a Select and Sort interface. Users can format existing variables and create new calculated variables.
 - Visually build calculated variables from a comprehensive list of SAS functions.
 - Change column order.
 - Preview generated query code, check the query syntax validity or copy the code for reuse in other applications.
- Transpose data from long, narrow data to wide, short data, etc.

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SAS® Enterprise Guide® Technical Requirements

Supported platforms

- Windows (x86-32): Windows 2000 Professional, Windows XP Professional, Windows Server 2003

Required

- Base SAS®.
- SAS Enterprise Guide 4.1 is compatible with both SAS Version 8 and SAS®9. Some features, including stored process authoring and consumption, are available only with SAS®9.

Optional software

- SAS Integration Technologies is required for a distributed server deployment.
- SAS Enterprise BI Server (or SAS BI Server) is required for using information produced with SAS Information Map Studio.
- SAS includes a reference implementation of Apache Tomcat (for the use with Java applets).
- SAS client and mid-tier require JRE 1.4.2_09 for Java applets.

Key Features (continued)

- Rank your data in multiple ways: absolute, percentile, decile, quartiles, fractional, normal, Savage.
- Perform data subsets using a variety of basic and statistical methods.

OLAP access, visualization and manipulation

- Supports drilling, slicing and pivoting as needed to explore the information, as well as the ability to drill through to the underlying detailed data.
- Calculation support includes: simple calculations, count analysis, relative contribution analysis and custom calculations (e.g., time series analysis).
- Specific views on multidimensional information can be saved as bookmarks for easy reuse.
- Allows for slices from multidimensional information to be surfaced to other analytical SAS procedures for advanced analysis, including use in data mining procedures.
- Provides an MDX Viewer/Editor for the more advanced users.
- Able to surface OLAP data sources from SAS OLAP Server or other third-party vendors supporting OLE DB for OLAP (e.g., SAP BW and Microsoft Analysis Services).

Result distribution and sharing

- Distribute results by publishing to multiple channels, including the SAS BI report/content repository, the SAS Stored Process Server, printers, Microsoft Office documents and e-mail.
- Share results in the form of SAS Stored Processes for use in other applications such as SAS Add-In for Microsoft Office, SAS Web Report Studio or other third-party clients.
- Export results to other applications such as Adobe Acrobat, Microsoft Excel, Microsoft Access or Microsoft Word.
- Update analyses and results on a periodic basis using the native Windows scheduler.

Administration and security

- SAS Enterprise Guide can be deployed and updated automatically via Microsoft SMS services.
- SAS Enterprise Guide is fully integrated with Windows/DCOM, database and SAS Metadata Server security.



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POWER
TO KNOW.

SAS Institute Inc. World Headquarters +1 919 677 8000

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