These days, the challenges are great so the goals must be lofty. Those who hope to reach the peaks of achievement must choose tools that make the difference between merely surviving or outperforming both their expectations and their competition. Since 1980, STATGRAPHICS® has been providing those tools. Now, with STATGRAPHICS® Centurion XVI, the power has been elevated to new heights.

The NEW STATGRAPHICS® Centurion VERSION XVI is packed with superior value that others promise but don’t deliver. Unveil vital meaning in your data and reach better decisions. Improve quality and efficiency. Ensure accuracy. Drive dollars to the bottom-line. STATGRAPHICS® delivers unmatched solutions for understanding and acting upon the information in your data.

THE UNIVERSE WILL HAVE FEWER SECRETS…
**Design of Experiments**

- **Design Creation**
  - Screening Designs
  - Response Surface Designs
  - Mixture Designs
  - D-Optimal Designs

- **Design Analysis**
  - Analyze Design
  - Multiple Response Optimization

**Statistical Process Control**

- **Quality Assessment**
  - Pareto Analysis
  - QFD Matrix

**Exploratory Plots**

- **Scatterplots**
  - X Plot
  - X-Y Plot
  - Multiple X-Y Plot
  - Polar Coordinates Plot

- **Matrix Plot**

- **Bubble Chart**

- **Spider Plot for Comparing Attributes**

- **Mosaic Plot**

- **Weibull Plot**

- **Dendrogram**

**Tools**

- **Expression Evaluator**
- **Sample Size Determination**
  - One Sample
  - Two or More Samples
- **Control Chart Design**
  - Six Sigma Calculator
  - Screening Design Selection

**Compare**

- **Two Samples**
- **Multiple Samples**
- **Analysis of Variance**

**Relate**

- **Single Factor**
- **Multiple Factors**

**Classification Methods**

- **Attribute Data**
- **Life Data**

**Relate**

- **Multivariate Methods**
  - Principal Components
  - Factor Analysis
  - Numeric Data
  - Categorical Data
  - Hypothesis Tests
  - Weibull Analysis

- **Canonical Correlations**
- **Cluster Analysis**
- **Distribution Fitting**
- **Life Data Analysis**
- **Multiple-Variable Analysis**

**Forecast**

- **User-Specified Model**
  - Box-Jenkins ARIMA Models
  - Trend Models
  - Simple Exponential Smoothing
  - Brown's and Holt's Linear Smoothing

- **Automatic Model Selection**

**SnapStats**

- **Capability Assessment**
- **Gage R&R**
- **Automatic Forecasting**

**Design of Experiments**

- **Capability Analysis**
  - Variables
  - Multivariate Capability
  - Attributes

- **Control Charts**
  - Attributes
  - Variables

- **Time-Weighted Control Charts**
  - Moving Average Charts
  - EWMA Charts
  - CuSum Charts (V-Mask & Tabular)

- **Multivariate Control Charts**
  - Special Purpose Control Charts

- **Gage Studies**
  - Variable Data
  - Gage Linearity and Accuracy
  - Attribute Data

- **Acceptance Sampling**
  - Attributes & Variables
Design of Experiments Wizard
The Experimental Design section of STATGRAPHICS contains a new wizard that assists users in constructing and analyzing designed experiments. It guides the user through twelve important steps in the creation of the design:
- Define responses
- Select design
- Select runs
- Save experiment
- Optimize responses
- Augment design
- Define exp. factors
- Select model
- Evaluate design
- Analyze data
- Save results
- Extrapolate

Interactive Exploration of Response Surface and Contour Plots
Response surface and contour plots can be explored interactively. Sliders change the levels of the variables in the underlying statistical model, which is immediately reflected in the plot. Ascend and Descend buttons instruct the program to move in steps along the path of steepest ascent, which causes the surface or contour plot to change dynamically.

Interactive 3D Rotation
When a 3D graph is maximized, scrollbars are now placed below and to the right of the graph. The scrollbar at the bottom allows the user to interactively rotate the graph left or right. The scrollbar at the right rotates the graph up or down.

StatFolios™
Do you get tired of doing the same thing over and over again? With StatFolios, you won’t have to. You can save your analyses to rerun them whenever you want.

StatFolio Alerts
StatFolios may be set to automatically generate alerts whenever certain conditions occur. Message boxes, audio alarms, and automatic e-mail notification are available options.

StatWizard™
The StatWizard has been developed to assist you in selecting the proper analyses for your data. You begin by specifying the columns containing the data to be analyzed. The StatWizard then:
- Suggests analyses appropriate for that type of data.
- Offers to transform one or more of the variables.
- Helps you select a subset of the data if desired.
- Repeats the analyses for every level of a “BY” variable.

StatGallery™
The StatGallery allows you to take graphics created in different procedures and arrange them side by side on a single page. You can also overlay two graphs on top of one another to create displays even our developers never dreamed of.

Pan and Scroll
A new icon has been added to the toolbar in the shape of a magnifying glass that allows users to zoom in on a graph and then scroll and pan. This is particularly helpful when displaying a large number of data points.

SnapStats™
When you need to do a common statistical analysis, SnapStats provide a quick way to produce a single page of preformatted output. Just enter the names of the columns with your data, click OK, and you’re done.

StatReporter™
When analyzing data, it is important to share your results with everyone involved in the decision-making process. The StatReporter is designed to assist you in creating presentation-quality reports within STATGRAPHICS Centurion. You can take any table or graph created in the program and paste it into the StatReporter with a simple click of the mouse. Better yet, you can paste link the output so that the reports will automatically update whenever the source data change.

StatAdvisor™
If you’re not a professional statistician, you’ll love the StatAdvisor. Whenever statistical results are displayed, the StatAdvisor will craft a paragraph or two interpreting the results. If you like, you can copy and paste the interpretations directly into your reports.
StatPublish™
When you’re ready to disseminate your results throughout the entire organization, use StatPublish to create HTML output that can be viewed with any web browser.

You can also automate the entire analysis and publishing process by creating a script that you can launch at a fixed time every day.

StatLink™
If you repeat the same analyses frequently, then StatLink is for you. It allows you to:

(1) Link a STATGRAPHICS StatFolio to one or more data sources. When the StatFolio is loaded, the data sources are queried and all analyses are updated.

(2) Automatically poll the data sources at a predefined increment of time. Combined with StatPublish, you can set up STATGRAPHICS to automatically maintain output on a web server.

Six Sigma Menu
The Professional Edition of STATGRAPHICS Centurion XVI is ideal for use in Six Sigma projects. The program includes:

(1) An optional Six Sigma menu that arranges the statistical procedures according to the DMAIC paradigm (Define, Measure, Analyze, Improve, and Control).

(2) A complete set of Six Sigma management tools, including cause-and-effect diagrams, QFD matrices, Pareto charts, and process maps.

(3) Capability analysis for both variables and attributes.

(4) Gage studies following the latest AIAG guidelines.

(5) Design of Experiments and all of the other statistical modeling tools you need to improve the quality of your goods and services.

STATGRAPHICS Centurion XVI
features more than 160 statistical procedures for:

- Exploratory data analysis
- Regression and analysis of variance
- Distribution fitting
- Statistical process control
- Design of Experiments
- Six Sigma
- Reliability and life data analysis
- Time series analysis & forecasting
- Multivariate methods
- Nonparametric techniques
- Visualization

Documentation
STATGRAPHICS Centurion XVI comes with a more than 280-page on-line User’s Guide containing seven tutorials, and PDF documents describing each of the statistical procedures. A context-sensitive help system allows you to search for topics by name or keywords. Additional resources are available on the web, where we post information such as Frequently Asked Questions and notices about new updates to the program.

Training
StatPoint Technologies, Inc. and its international dealers conduct both public and on-site seminars covering the use of STATGRAPHICS for statistical analysis. The seminars are suitable for both new and advanced users.

Validation
Before release of each new version, extensive tests are performed to insure that the program operates properly. For users needing to validate the statistical results for regulatory agencies, we will be happy to cooperate in providing information about our software development and testing procedures.

Technical Support
StatPoint and its dealers are dedicated to providing you with first-class technical support. You’ll find our support specialists to be highly knowledgeable about both STATGRAPHICS and statistical methods.

System Requirements
STATGRAPHICS Centurion XVI runs on a Pentium or equivalent computer with at least 512 MB of RAM, Windows 98 or later, a mouse, a CD-ROM drive, and access to at least 100 MB of available disk storage.

How to Get STATGRAPHICS
A trial copy of STATGRAPHICS Centurion XVI can be downloaded from www.statgraphics.com. You will also find an order form and a list of international dealers at that site.