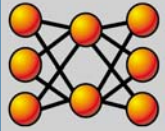


# STATISTICA



## Neural Networks

The ultimate data mining, exploration, and modeling tool

### Intelligent Problem Solver Wizard

Automates the difficult choice of network architecture and input variable selection by comparing multiple potential solutions with different network types combined with different selections of input variables (feature selection)

### Comprehensive Selection of Methods, Architectures, and Algorithms

Regression, Classification, Time Series, Cluster Analysis and Feature Selection; MLP, RBF, PNN, GRNN, SOFM, Linear, PCA, Cluster Networks and Ensembles; Back Propagation, Conjugate Gradient Descent, Quasi-Newton, Levenberg-Marquardt, Quick Propagation, Delta-Bar-Delta, LVQ, PCA, pruning and Feature Selection algorithms (including Forward & Backward Selection and Genetic Algorithms), and more

### Resampling and Ensembles

Includes cross validation, bootstrapping and random sampling, voting and averaging techniques

### Effective Statistics and Charts

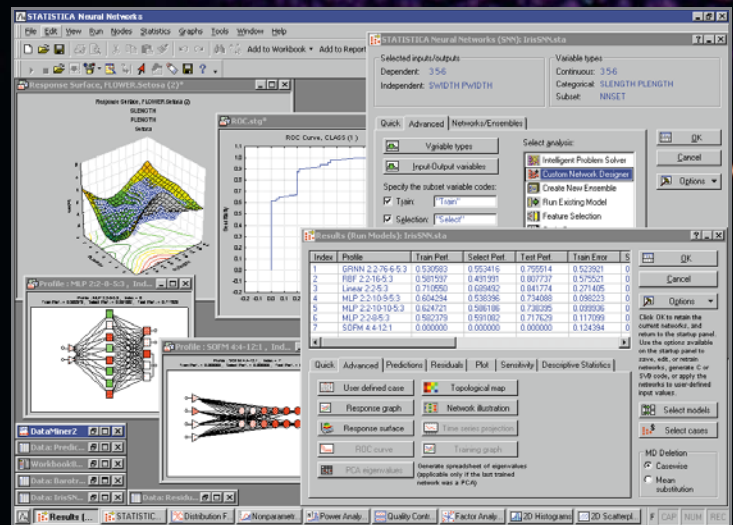
Response 2D graphs and surfaces, what-if analyses, real-time training graphs, graphical network illustrations, topological maps, summary statistics, sensitivity analysis, ROC curves, and more

### Complete Automation, Code Generator

Record interactive analyses as Visual Basic macros for repeated use; embed *SNW* within your C++, VB or MS Excel programs with the API; generate C source code for custom applications with Code Generator

### Complete STATISTICA Environment

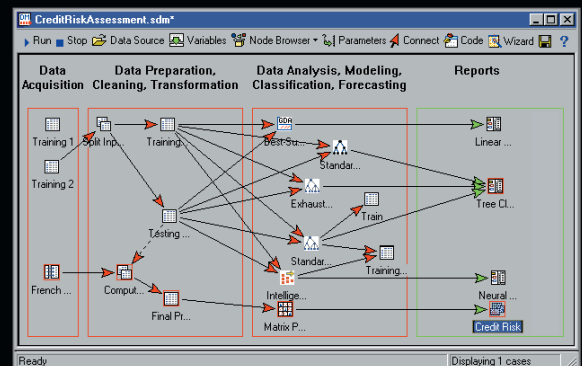
All advantages of the STATISTICA system, optional complete Web enablement and integration with STATISTICA Data Miner



[www.statsoft.com](http://www.statsoft.com)



Also Available:  
**STATISTICA Data Miner  
Enterprise System**




**STATISTICA has received the highest rating in EVERY comparative review of statistics software in which it has been featured since its first release in 1993.**

# System Features

- Fully customizable user interfaces
- Flexible output management
- Presentation-quality reporting
- Full Web-enablement options
- Optimized for large data sets
- Interactive database query tools
- Wide set of import/export facilities
- Multiple input files, instances, & multitasking
- Highest quality, interactive graphics
- Complete set of automation options
- Fully integrated Visual Basic
- Distributed processing, Client-Server options

# STATISTICA

A comprehensive array of analytical tools for virtually any application

 **STATISTICA Neural Networks** (available as a stand-alone product or a seamless add-on to a STATISTICA base product) - contains the most comprehensive selection of neural network methods with intelligent problem solvers and automatic wizards. A C-code (in addition to STATISTICA Visual Basic) generator add-on is also available to build custom applications.

Intelligent Problem Solver Wizard  
Automatic Search for Best Architecture  
Regression, Classification, Time Series  
Cluster Analysis, Feature Selection  
API Interface

## Architectures

Multilayer Perceptrons  
Radial Basis Function Networks  
Self-Organizing Feature Map  
Probabilistic Neural Networks  
Generalized Regression Neural Networks  
Linear Models  
Principal Components Networks  
Cluster Networks  
Network Ensembles

## Algorithms

Back Propagation  
Conjugate Gradient Descent  
Quasi-Newton  
Levenberg-Marquardt  
Quick Propagation  
Delta-Bar-Delta  
Learned Vector Quantization  
Genetic Algorithm

## Sampling

Cross Validation  
Bootstrap  
Random

## Numerous Analytical Graphs

Sensitivity Analysis  
ROC Curves  
Real-time Progress Graphs  
Response 2D Graphs and Surfaces

## New Features

### A Quicker, More Simplified Interface

**New Network types** - Self-Organizing Feature Map, Generalized Regression Neural Networks, Linear Models, Cluster Networks & Network Ensembles

**Training algorithms** - Delta Bar Delta, Conjugate Gradient Descent, BFGS, & Quick-Propagation

**Overfitting algorithms** - early stopping, weight decay regularization, ensemble learning, cross-validation, Monte-Carlo & bootstrap techniques

**Improved Intelligent Wizard** - automatically selects network types, complexity, & input variables

**Ensemble Models and Resampling** - the ability to create and store cooperative networks provides a powerful learning tool that can result in a lower generalization error


**Comparative results from multiple models** - a powerful feature simplifies comparing models in a single spreadsheet or plots the response curves of several models on one graph

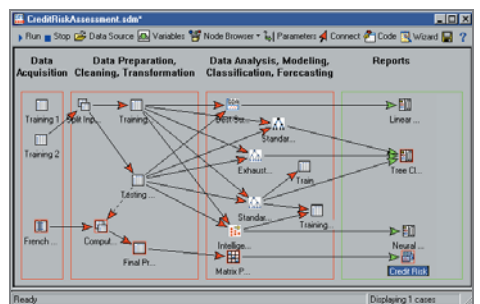
**Full Integration with STATISTICA** - multitasking, simultaneous analyses, workbooks, reports

**Visual Basic Scripting** - a fully programmable system: users can record interactive analyses as Visual Basic macros for repeated use, access all features from the object model, and integrate STATISTICA with a multitude of other applications such as Excel, C++, C#, Java, etc.

**Efficient Output Management** - MS Binder-style workbook functionality & customizable reports


## Ask About


 **STATISTICA Enterprise-wide Data Mining System (Data Miner)** - the most comprehensive selection of data mining solutions on the market, with an icon-based, extremely easy-to-use user interface (optionally Web browser based via WebSTATISTICA, see below) and a deployment engine. It features a selection of completely integrated, and automated, ready to deploy "as is" (but also easily customizable) specific data mining solutions for a wide variety of business applications. A designated SPC version (QC Data Stream Analyzer) to analyze or mine large streams of QC data is also available.




For detailed technical information, please visit [www.statsoft.com](http://www.statsoft.com).


## Other STATISTICA Products

 **STATISTICA Enterprise-wide Data Analysis System (SEDAS)** - an integrated, multi-user software system designed for data analysis and business intelligence applications in research, marketing, finance, and other industries.

 **STATISTICA Enterprise-wide SPC System (SEWSS)** - based on state-of-the-art connectivity, multitasking, distributed processing technologies, designed for local and global enterprise quality control/improvement applications, including Six Sigma; it offers real-time monitoring and alarm notification for the production floor, a comprehensive set of analytical tools for engineers, sophisticated reporting features for management, Six Sigma Reporting options, and much more.

 **WebSTATISTICA Server Applications** - the ultimate enterprise system that offers full Web enablement: run STATISTICA from a Web browser on any computer (including Linux, UNIX), offload large tasks to the servers, use multi-tier Client-Server architecture, manage projects over the Web, and collaborate "across the hall or across continents."

 **STATISTICA Base** (stand-alone) - offers a comprehensive set of essential statistics in a user-friendly package and all the performance, power, and ease of use of the STATISTICA technology.

 **STATISTICA Advanced Linear/Non-Linear Models** (add-on) - an array of the most advanced modeling and forecasting tools, including automatic model selection facilities and extensive, interactive visualization tools.

 **STATISTICA Multivariate Exploratory Techniques** (add-on) - a broad selection of exploratory techniques for various data types with extensive, interactive visualization tools.

 **STATISTICA Power Analysis** (add-on) - an extremely precise and user-friendly, specialized tool for analyzing all aspects of statistical power and sample size calculation.

 **STATISTICA Quality Control Charts** (stand-alone or add-on) - offers fully customizable (e.g. callable from other environments), quick and easy to use, versatile charts with a selection of automation options, and shortcuts to simplify routine work.

 **STATISTICA Process Analysis** (add-on) - a comprehensive package for process capability, Gage R & R, and other quality control/improvement applications.

 **STATISTICA Design of Experiments** (add-on) - features the largest selection of DOE and related visualization techniques including interactive desirability profilers.

For the Enterprise



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