



interactive analyzer

understanding data

Product information: Interactive Analyzer

Key Facts

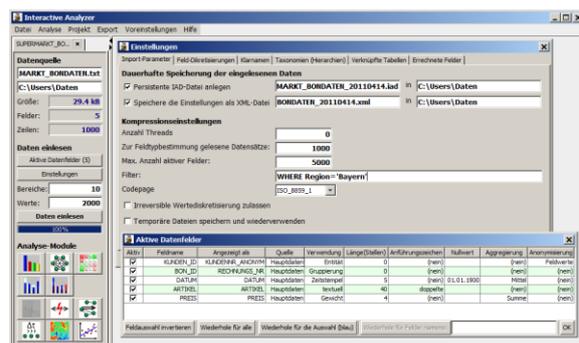
The software *Interactive Analyzer* is a modular component system for interactive data analysis („ad-hoc drill down“), data quality monitoring, data visualization, data mining, forecasting and pattern detection. Hence, the software covers functional areas which are traditionally spread across different software packages from the areas of data warehousing, business intelligence, reporting, ad-hoc analytics, data mining and data visualization.

Compared to conventional reporting, OLAP or Data Mining software packages, Interactive Analyzer provides the following differentiating aspects:

- **Ease of use and short learning curve:** Interactive Analyzer requires neither a complex data preparation process nor the creation of a cube model or data warehouse. Just access your existing data bases and views, or simply an Excel sheet or flat text file and start graphically exploring the data.
- **Speed, scalability, interactivity:** often, you obtain the first interesting results only minutes after having started working with Interactive Analyzer on a new data base. The software automatically performs many data preparation steps such as attribute selection or the creation of classes and value intervals. Due to in-memory technology and parallel scalable algorithms, the single drill-down and data mining steps return their results within seconds even on very large data.
- **Unique Combination of ad-hoc drill-down and data mining features:** Interactive Analyzer combines the advantages of analytical databases optimized for business intelligence applications with the flexible drill-down capabilities of an OLAP server and the sophisticated algorithms of a data mining expert tool.
- **Integration into existing IT infrastructures and processes:** Interactive Analyzer interacts with databases, reporting systems and other enterprise applications via standardized interfaces such as JDBC, web services (SOA) and XML. You can define automated tasks and deploy them for regular execution as a batch job or system service.
- **Attractive total cost of ownership:** small hardware, administration and training demands and the flexible pricing model make the software interesting for enterprises of every size and industry.

Modules

- **Data preprocessing, ETL:** Data import from arbitrary relational database systems, Excel spreadsheets, or text files; combining and joining several tables, computing new formula fields, definition of alias names and hierarchies, filtering of data rows and attributes, anonymization, aggregation, pivot tables; save the preprocessing results and deploy automatic preprocessing tasks.



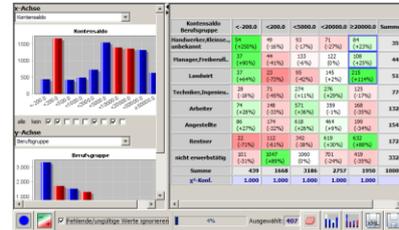
- **Value distributions, statistics and charts on data attributes:**

The value distribution properties and statistical properties of all data attributes are displayed on screen in tabular and graphical form. The software automatically detects distribution characteristics and selects appropriate classes, intervals and scalings. Data errors and data gaps become visible.



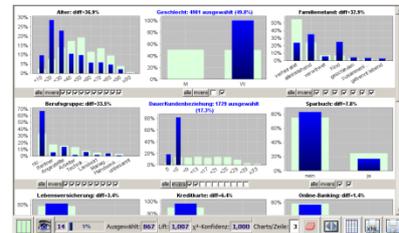
- **Correlations analysis, bivariate exploration:**

Compute field-field correlations between data fields; detail analysis of the interrelations between two fields using a bivariate matrix; graphical representation of significantly over- and underrepresented value combinations.



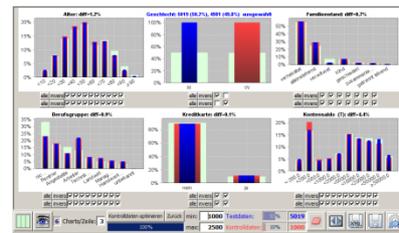
- **Multivariate exploration (ad-hoc drill down):**

The preprocessed data are stored in optimized and compressed form in the computer's memory, which enables a highly flexible real-time drill down with value selections on arbitrary combinations of attributes. Possible use cases are target group selection in CRM, controlling, quality monitoring and many more.



- **Split analysis and hypothesis tests:**

The statistical comparison of two data subsets, a test and a control group, is used for a quantitative test of hypotheses and assumptions as well as for. The control group can be made representative for the test group, enabling an unbiased ROI calculation of sales or cost reduction campaigns.



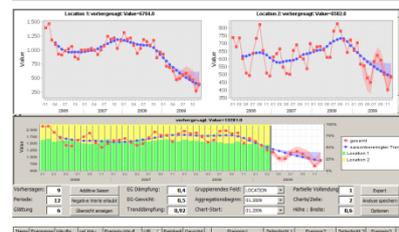
- **Deviations, data errors and inconsistencies:**

Traditional methods of data quality assurance depend on the manual definition of filter criteria; therefore, they new or unexpected error patterns often slip through these filters. Interactive Analyzer provides a 'hypothesis-free', autonomous method for detecting inconsistencies and data errors.



- **Time series analysis and forecast:**

Time series on revenues, cost, sales numbers and many more can be analyzed for trends and cyclical patterns; the software is able to forecast the future behavior of the analyzed time series under various assumptions (scenario analysis, what-if-analysis).



- **Assoziations and sequential patterns analysis:**

Using highly scalable pattern detection algorithms, you can perform market basket analyses and purchase pattern profilings, up- and cross-selling optimization campaigns, you can find the hidden root causes of production problems or warranty claims and generate ideas for marketing campaigns.



- **Clustering, prediction and scoring:**

Various neural and non-neural data mining algorithms enable you to cluster your data, to predict unknown data attributes and to calculate score values, for example on payment default risks, profitability or future customer potential.

