

# Data Analyzer

## Web-Based Visualization Tool

To remain competitive, banks must do more than just monitor business activities and objectives. How often are you left wondering, "Is my business performing to plan?" Are you spending most of your time searching through different reports and spreadsheets to piece answers together? Seeing and interacting with data are the two factors essential for understanding the answers hidden in them. Data Analyzer provides you the insight you need to monitor and understand any impact that a problem or outage can have on your business. The interactive visual models, dashboards and graphs can transform information that is relevant to your business needs and what makes the most sense to you.

## Functions & Benefits

- A visualization tool that provides the ease and comfort that comes with using a simple web browser.
- No impact to production systems
- Detect network problems associated with void codes and processing times
- Provides high-level trends and analysis about ATMs, POS devices, and EFT network usage
- Manage ATM cash positions and canister loads using the system's ATM reports and indicators
- Highly customizable filtered search features
- Near real-time presentation of data shows up-to-the-minute metrics for the entire switch network
- Highly customizable reports, graphs and metrics
- Wide variety of presentation options, including line graphs, pie charts, lighted indicators, and more
- Graphs and charts are exportable to MS Excel for enhanced manipulation and presentation of data
- Display reports for the last five minutes, last hour, last day or any other customizable time span



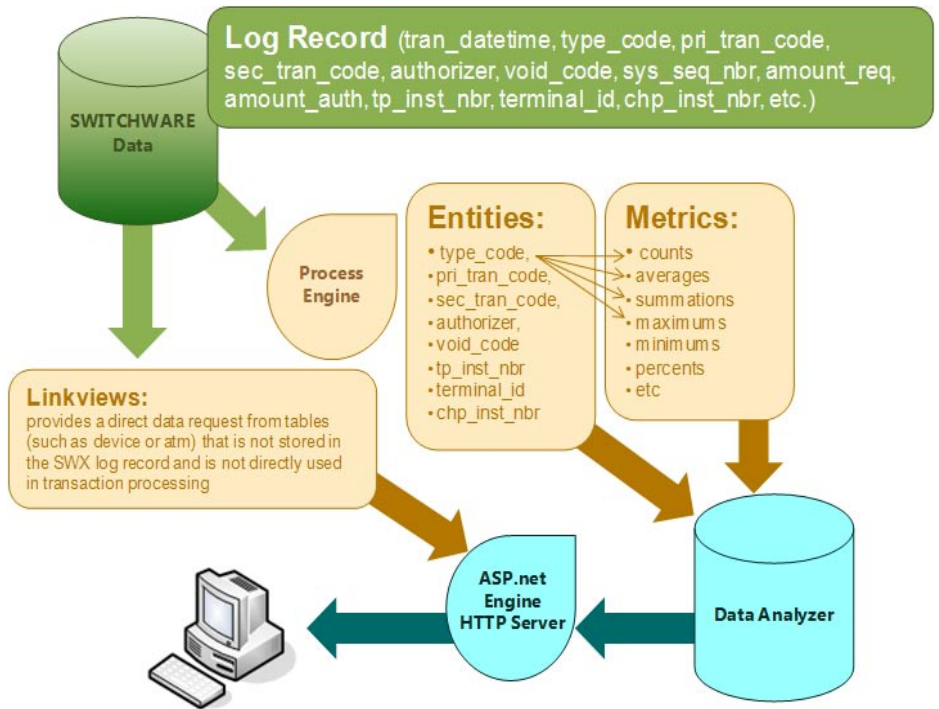
## About CSFi

CSF International™ is a global leader in providing software for payment authorization, transaction switching, ATM driving, and debit card management. The company's software solutions offer services to hundreds of companies in over twenty countries, processing millions of transactions each year, and supporting thousands of ATM and POS terminals worldwide. Clients range from community banks and credit unions, to national banks, to multi-bank holding companies and to processing centers worldwide.



## Data Analyzer

Data Analyzer is a web-based analytical data visualization tool that provides graphical representations of data and information extracted from the SWITCHWARE® system. It easily combines multiple data elements from various sources within the SWITCHWARE database and then presents the information in a unified display, giving the user a command-level view of ATM switching operations from a web browser. Interactive visual models, dashboards and graphs transform near real-time system and transaction activity into usable business information.



## Entity & Metric Relationship

Data Analyzer is designed to process sequential log record data into a usable and analytical structure. The entities represent critical data elements such as transaction types, location of purchase, authorizing institution, acquiring institution, and much more. The metrics represent aggregate functions such as total counts, averages, maximum values, minimum values, percentages, and more. Combining these two pieces, the Data Analyzer process engine will extract the critical entities from the SWITCHWARE® log record, apply the appropriate metrics, and then store it in a usable format within the Data Analyzer database. Data Analyzer users can access this information using a compatible web browser, and have the freedom to display any combination of entities and metrics in a variety of visually appealing formats.