

## VISUAL DATA DISCOVERY THROUGH

### DESIGNER

Allows users to build analytical real time HTML dashboards, connect to data and publish to the web.

### SERVER

Allows users to analyze fully interactive dashboards via web browsers.

### ANALYST

HTML delivery for desktop and mobile applications.

## DEPLOYMENT OPTIONS

### DESKTOP

Standalone dashboard design and analysis tool, with design and analysis modes.

### ENTERPRISE

The Server component enables large scale delivery via the web client, plus PDF report generation.

## SYSTEM REQUIREMENTS

### DESIGNER

MS Windows OS (7, 10, 2012) with .NET 4.5

2GB free disk space and 4GB available RAM

### SERVER

Apache Tomcat 8.0.x (where x is > 31)

Java JRE 8. (64-bit)

MS Windows OS (7, 10, 2012) (64-bit)

LINUX Redhat/SUSE (64-bit)

4GB free disk space and 8GB available RAM

In Memory Caching limited to available Server RAM

### DATAWATCH ANALYST (WEB CLIENT)

MS IE 11+, Chrome 40+, Safari 8+

2GB available RAM

Certified for MS Windows, iOS & Android

## ENTERPRISE

- Windows or Linux
- Acts as a caching data conduit
- Security integration with LDAP & Active Directory & SSO
- Split Deployments supported on DMZ & Firewalls
- PDF Report Generation & Emailing
- Audit Logging & JMX Counters
- Permission Workbook Access to Users & Groups

## MAJOR DESIGN & ANALYSIS FEATURES

### REAL TIME STREAMING & REAL TIME UPDATES

- Display Real Time Streaming Dashboards
- Push Subscribe for Streaming Sources
- Automatic Pull for non-Streaming Sources
- Pause Data Updates as required

- Alert on Outliers
- Investigate by jumping from real time to historic data
- Throttle Subscriptions to minimize CPU & Memory
- Show latest or scrolling time windows
- Process Full or Filtered Data Requests & Subscriptions

### INTRA DAY & HISTORIC TIME SERIES

- Display Time series from Years down to Nanosecond
- Playback through time
- Select Tick time, or calendar time to playback
- Resample from barred down to transaction level
- Fill forward (interpolate)
- Conflate time series when resampling and barring

### VISUAL ANALYSIS

- Pre-Attentive Techniques
- High density displays
- Peer Comparisons
- Hierarchical displays
- Dynamic selection of visible detail level (Depth)
- Trend, Clustering & Outlier detection
- Numeric Correlations
- Categorical Correlations
- Relationships
- Cross Tabbing
- Brushing
- Visual Filtering

### HIERARCHY ANALYSIS

- Hierarchical displays
- Dynamic hierarchy rearrangement
- Multiple concurrent hierarchies
- Aggregation (Additive) with over 25 aggregates supported
- Non-additive external aggregate retrieval for complex risk scenarios

### CUSTOM UI BUILDING

- Various UI Form Controls
- Parameterization
- Data Entry
- Actions – Navigation, URL & Script

## DATA CONNECTIVITY

### TICK DATA CONNECTIVITY

- OneMarketData OneTick
- Kx kdb+
- InfluxDB
- Native Connectivity
- Request / Response
- Subscriptions

**REAL TIME STREAMING CONNECTIVITY**

- OneMarketData OneTick CEP
- kx kdb+Tick
- JMX (e.g., Active MQ)
- Tibco Streambase CEP
- Tibco LiveView DataMart
- SAP Sybase ESP
- 60East AMPS
- Informatica Ultra Messaging
- Web Sockets
- Thomson Reuters TREP-RT
- Apache Kafka
- Apache Qpid
- Google Analytics Streaming
- RabbitMQ

**BIG DATA CONNECTIVITY**

- Active Pivot
- Apache Hadoop Hive
- Cloudera Impala
- Apache Spark SQL
- Apache / Datastax Cassandra
- Apache Kafka
- IBM Cloudant
- Splunk

**GENERAL CONNECTIVITY**

- MS Excel
- Text, XML & JSON
- Restful Web Services (Returning Text, XML or JSON)
- ODBC / JDBC Databases including: Cloudera Impala, MySQL, Oracle, PostgreSQL, Spark SQL, IBM DB2, Greenplum, MS SQL Server, Sybase IQ, Sybase ASE, Teradata, Vertica)
- SAP Business Objects Universe
- MS SQL Server Analysis Services
- Livy Spark
- Google Analytics

**PREDICTIVE****PYTHON & R**

- Python 2.7 & Python 3.x
- R
- Embedded as part of the data pipeline
- Additionally act as a separate data source
- Dynamically change script execution

**DATA VISUALIZATIONS****TIME SERIES**

- Candlestick / OHLC Graph
- Horizon Graph
- Line Graph
- Needle Graph (Standard / Stacked / Grouped)
- Spread Graph
- Stack Area Graph
- Table with Micro Charts
- Timeseries Combination Graph
- Timeseries Scatter Plot

**SNAPSHOT & TIME SLICE**

- Bar Graph (Horizontal / Vertical)
- Bullet Graph (Horizontal / Vertical)
- Categorical Line Graph
- Circle Pack
- Donut Chart
- Donut Gauge
- Dot Plot (Horizontal / Vertical)
- Heat Matrix
- Map Plot
- Network Graph
- Numeric Line Graph (Horizontal / Vertical)
- Numeric Needle Graph (Standard & Stacked)
- Pareto Chart
- Pie Chart
- Scatter Plot
- Shapes / Choropleth
- Surface Plot
- Surface Plot 3D
- Table with Micro Charts
- Ticker Tile
- Treemap (Classic, Cluster & Window)

**FILTERING & DATA CAPABILITIES**

- Casting, Renaming & Setting Display Formats
- Calculations including Time Series
- Time & Numeric Bucketing
- Custom Groups
- Visual Filtering
- Categorical filtering via check list, radio list & free text entry
- Numeric Range & Percentile Distribution Filters
- Time Window Filtering & Snapshot Time Selection
- Parameterization