



Application Deployment

- ✓ Stand-alone application and
- ✓ ActiveX control – functions in:
 - Internet Explorer (IE 6)
 - Office applications (VBA)
 - Visual Basic
 - HMI Applications: InTouch, iFix, RSVIEW and others
- ✓ Automation interface (scripting)
 - 82 methods
 - 169 properties
 - 99 events
- ✓ Application tool-bar for quick access to most common operations
- ✓ Quick & Easy Installation
- ✓ Software license
 - License Administrator
 - Stand-alone or Concurrent
 - Alias Name Server

Display Components

- ✓ Trend Area
- ✓ Left / Right Scales Area
- ✓ Legend Area
- ✓ Time Display Indicators
 - Live Edge
 - Historical Edge
 - Chart Length

Display Configuration

- ✓ Graph Display Property Page
- ✓ Data Flow Orientation:
 - Horizontal & Vertical : Left to Right, Right to Left, Top to Bottom, Bottom to Top
- ✓ Legend: Top, Bottom, None
- ✓ Scales: Left, Right, Both, None
- ✓ Time Displays: Top, Bottom, None
- ✓ Background Color
- ✓ Line Magnification
- ✓ Double Click Control
 - Touch Screen / Mouse
- ✓ Live / Historical Mode
- ✓ Value Bar
- ✓ % Live Scroll from Edge
- ✓ Batch Mode
- ✓ Annotations On / Off

Trends

- ✓ Up to 200 Trends / Chart
- ✓ Data Access sequence: newest data to oldest data
- ✓ Add Trend Dialog
- ✓ Remove Trend
- ✓ Property Page
- ✓ Reorder Trends (Drag and drop)
- ✓ Handles Variant data types: Boolean, Integers (I1, I2 & I4), Floating point real numbers (R4 & R8) and Strings (both 1 and 2 byte characters encoding)
- ✓ Display of tags containing strings

Time Controls

- ✓ TimeStamps (100ns resolution)
- ✓ Automatic cross Timezone adjustments
- ✓ Properly handles spring and fall Daylight saving time changes
- ✓ Scroll Bar
 - Represents total available time span
 - Sized thumb track
 - Use Drag, Page and Step functions to change times
 - Context Menu
- ✓ Slow scroll by dragging cursor
- ✓ Historical / Live Edge Time Displays
 - In-place editing of time
 - Sub-second time control (down to 1 microsecond resolution)
 - Live mode background indicator
 - Color / Font and Font Size selections
 - Time formatting according to Operating System Locale settings
 - Time Display – AutoSizing
 - One, Two or Variable Lines
 - Auto-Dropout
 - Tool-tip Display
 - Synchronized time formatting between all Trend Link time display fields
 - Touch Screen Edit mode
- ✓ Chart Interval Time Display
 - In-place editing
 - Preset context menu chart interval selections
 - Definable chart interval selections
 - Last chart interval selections
- ✓ Time Undo / Redo
 - 50 levels of undo (user settable)
- ✓ Zoom-In (via cursor selection with double click)

Legend Area

- ✓ Sizable with the Trend area
- ✓ Selectable Columns
 - Name, Description, Batch Name, Scale Range, Sample Frequency, Engineering Units, Value Bar, Last Value (from screen or database), Hexadecimal Quality, Decimal Quality
- ✓ Font control: Heading and Lines
- ✓ Font type, size and font effects
- ✓ Color coding background to match trend color
- ✓ Sizeable columns
- ✓ Text align within column
 - Left, Right or Centered
- ✓ Sort by any column, ascending or descending by clicking on column heading
- ✓ Context menu access to trend properties

Scales

- ✓ Synchronized Left / Right Scales
- ✓ Font control: Font type, Size and Font effects
- ✓ Each Scale can be independently enabled / disabled
- ✓ Tick Marks
 - Automatic
 - Specified Interval
- ✓ Tick marks can be tied to background grid
- ✓ Sizable scale area (via cursor)
 - Top & Bottom
- ✓ Movable scale area (drag and drop)
- ✓ In-place editing of High / Low scale values
- ✓ Context menu access to Tag Properties
- ✓ Tag Scaling Property Page
- ✓ High/Low Scale Values
- ✓ High/Low Band Percentages
- ✓ Default Scale from Historian using the Tag Attributes
- ✓ Linear & Logarithmic Scales
- ✓ AutoScaling – Setting High & Low scale parameters according to data variation
- ✓ Dynamic Auto Scale
- ✓ AutoScale Precision Control
 - Tight <> Loose
- ✓ AutoBand – Stacking Trends
- ✓ FullBand – Overlaid Trends

Trend Properties

- ✓ Property Page
- ✓ Drawing Methods
 - Weighted Average
 - High / Low Range
- ✓ Background Color
- ✓ Visibility
- ✓ Use Short / Long Name
- ✓ Description (override default)
- ✓ Engineering Units (override default)
- ✓ Available Time Range
- ✓ Sample Frequency
- ✓ Time Shift Offset
- ✓ Tag Independent Properties: Scaling, Limits, Floating Label, Value Formatting, Batch

Limit Parameters

- ✓ Property Page
- ✓ High and Low Limits
- ✓ Independent Enable / Disable
- ✓ Enable / Disable shading outside of limit
- ✓ Shading Color
- ✓ Trend Color when limit exceeded
- ✓ 3 pairs of configurable limit line indicators

Floating Label

- ✓ Property Page
- ✓ Visibility
- ✓ Selectable Display Items:
 - Name, Description, Batch Name, Scale, Sample Frequency, Last Value, Engineering Units, Hex Quality, Decimal Quality, Value Bar
- ✓ Display Field ordering
- ✓ Default position near curve
- ✓ Position on Trend Area (Drag and Drop)

Value Formatting

- ✓ Property Page
- ✓ General Number with adjustable Significant Digits
- ✓ Decimal Numbers with adjustable Decimal place
- ✓ Scientific Notation with adjustable Decimal Places
- ✓ Selectable 1000's separator
- ✓ Uses Operating System Locale to format number
- ✓ Value formatting synchronization across all controls (scales, value cursor, etc.)

Batch

- ✓ When in batch mode all time displays automatically change from absolute times to relative times
- ✓ Batch property page
- ✓ No Batch or select Batch Name from list
- ✓ Dynamic Batch (Automatically changes batch selection to one of last 32 batches)

Grid Lines

- ✓ Property Page
- ✓ Display Grid: Enable / Disable
- ✓ Grid Color
- ✓ Line Style
 - Solid, Dash, Dot
- ✓ Thin Lines (when line magnification is enabled)
- ✓ Time Axis Lines
 - Specified Calculated interval
 - Specified Constant interval
 - Specified number of pixels
 - None
- ✓ Scale Axis Lines
 - Use Scale Tick marks
 - Specified number of pixels
 - None

Value Cursor

- ✓ Activation via mouse cursor
- ✓ High-speed response & updates
- ✓ Delta Cursor mode – measure time and value differences
- ✓ Property Page
- ✓ Specified number of pop-up value boxes (decluttering)
- ✓ Sub-Second Timestamp display
 - Automatic / Manual
- ✓ Selectable Value Cursor Fields:
 - Name, Description, Batch Name, Absolute Time, Scale, Sample Frequency, Value, Engineering Units, Hexadecimal Quality, Decimal Quality
- ✓ Ordering of Value Cursor fields
- ✓ AutoCursor: Enable / Disable
- ✓ Value Cursor display
 - Timestamp marker
 - Smart approximate positioning of value boxes
 - Collision avoidance

Annotations

- ✓ Annotation Support
- ✓ Attach to Trend (tag) at specified time
- ✓ Annotation Fields
 - User name, Creation time, Classification level and Text comment
- ✓ Add Annotation Dialog
- ✓ Tag and Timestamp attachment via cursor (context menu)
- ✓ Tool Tip view of annotations

Statistics

- ✓ Time Selection via chart
- ✓ Tag Selection via Trends property page
- ✓ Statistics Report includes:
 - Time Range / Sample interval
 - Number of valid samples (number and percentage)
 - Sum
 - Mean
 - Standard Deviation
 - 0, 25th, 50th, 75th and 100th percentile
 - Histogram plot of the data
- ✓ Histogram query via cursor

XY Plot

- ✓ Time Selection via chart
- ✓ Tag Selection via Trends property page
- ✓ XY plot: markers and connectors
- ✓ 3D XY Plot
- ✓ Property Page (Settable items)
 - X & Y Scale Trend selections
 - Start Time & Interval Time
 - Magnification
 - Connect Points checkbox
 - Default Scale checkbox
 - High / Low Scales for each axis
 - Number formatting
 - Color
 - Font
- ✓ Query XY intersection and data frequency with cursor

Add Trend Dialog

- ✓ Supports Hierarchical Name space for tags
- ✓ Tag Data Sources (on local & remote computers)
 - Enterprise Historian
 - OPC UA (Unified Architecture) (communication through TCP-IP)
 - OPCHDA compatible Historians
 - OPC Data Access Servers (real-time only data)
 - TBase (Canary's prior generation historian)
- ✓ Single or multiple tag selections
- ✓ View tag name
- ✓ View tag attributes (details)
- ✓ Filtering tag names
- ✓ Auto Formatting on Add
 - Autoscale and Autoband
- ✓ Supports Manual entry of Trend ID

Charts

- ✓ Naming and Saving Chart configuration (standard save dialog)
- ✓ Open & Load existing charts (standard Open dialog)
- ✓ Quick chart selection from last 10 charts that were accessed
- ✓ New chart
- ✓ MDI app – supports multiple open charts within single application
- ✓ Windows: Cascade, Tile horizontally, Tile vertically, Arrange icons, Select window
- ✓ Automatic conversion of chart format from previous versions of Trend Link

Printing

- ✓ Print Preview
- ✓ Standard Print Setup dialog
- ✓ Print
- ✓ Reformats the chart so that the data is printed at the resolution of the print device (better quality)

Exporting

- ✓ Export of data to CSV file
- ✓ Data selection via chart
- ✓ Select one of 2 different export formats
 - Time Average
 - Update By Exception(UBE)
- ✓ Specify File name, description
- ✓ Sample Rate
- ✓ Format and Open in Excel

Features Sets

- ✓ Selectable feature set
- ✓ Individual features can be enabled / disabled
- ✓ Can be configured to disable features for operators

Helps

- ✓ On-line helps
 - Contents
 - Index
 - Search facilities
- ✓ Context sensitive helps (F1 key)
- ✓ Dialog box helps
- ✓ Error Log Facilities
- ✓ Automation Interfaces Documentation

Version Information

- ✓ Current version is 9.0.1
- ✓ Original Trend Link product was released in 1992
- ✓ New updated releases of the product have occurred at least once a year incorporating improvements and technology upgrades

Operating Systems Recommendation

- ✓ Runs on Windows 2000, Windows XP or greater
- ✓ 2 Ghz CPU or greater
- ✓ 2 GB memory

