VTScada

Software for Monitoring & Control

Version 11.2

Instantly Intuitive.

Trihedral®

Updated: May 11, 2016

Award Winning HMI Software

VTScada

Software for Monitoring & Control

We thank the Control Engineering Magazine readers who voted for VTScada.

New Sales Peeps

Major New Features in VTScada 11.2

- Faster all around system execution
- NEW Anywhere Client – any device, anywhere, anytime
- Slippy Maps – More cool tools
- NEW transaction record logging
- Enhanced situational awareness – high performance vs high impact graphics
- More built-in database and I/O device communications drivers
- NEW multi-plant scalability
- NEW alarms management interface
- NEW alarms reports - tuning system efficiency

Faster All Around System Execution

A few stats on Historian data requests

Test	Before	After	Improvement
Sequential-1	4.26	1.2	355%
Sequential-100	4.95	1.2	413%
Sequential-1000	8.85	3.28	270%
Alternating	6.09	2.39	255%
Random-1	6.68	2.74	244%
HDV-1M	9.67	1.14	848%
BigBlob-BEST	80.33	35.29	228%
BigBlob-WORST	114.13	86.12	133%
AlarmData+	64.73	9.05	715%
AlarmData-	117.54	52.12	226%
OutOfOrder-0	0.81	0.61	133%
OutOfOrder-5	19.41	1.63	1191%
OutOfOrder-20	97.23	4.06	2395%

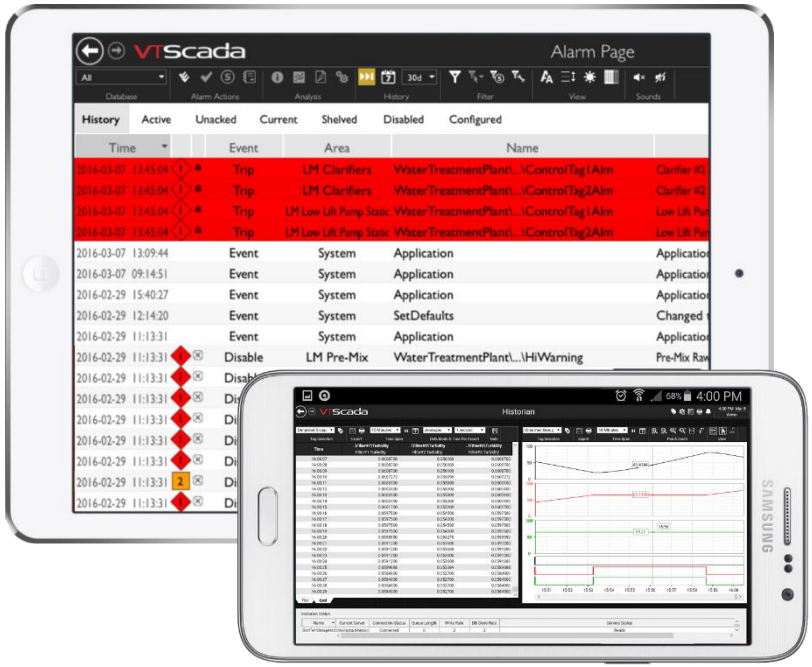
VTScada Anywhere Client

Any device, Anywhere, Any time

NEW 11.2

Why is this important?

- Common user interface regardless of operating system
- Operational use is migrating to mobile environment
- Zero-install eliminates IT concerns
- Update-on-change minimizes cellular data usage and bandwidth requirements



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VTScada Anywhere Client

Any device, Anywhere, Any time

NEW 11.2

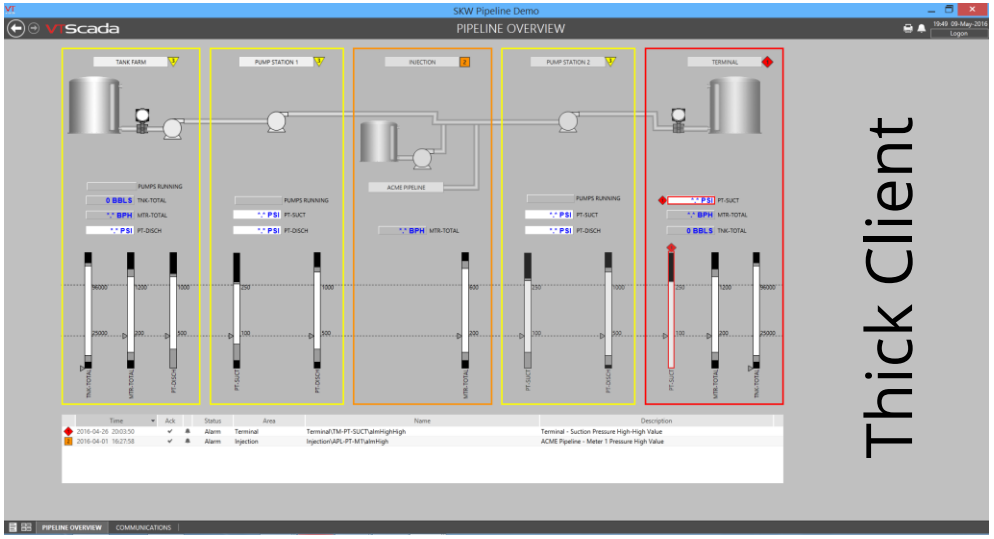
Features at a glance

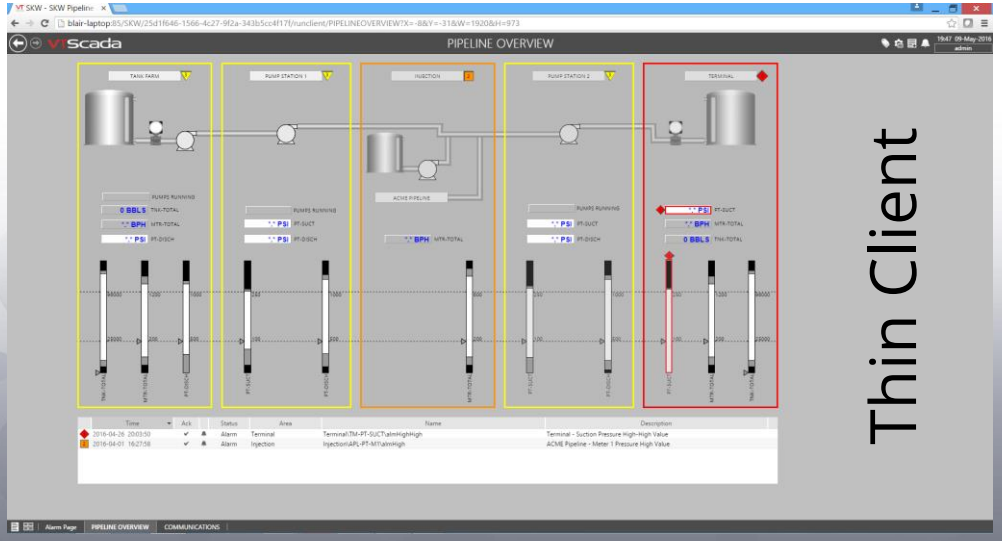
- Use on any HTML5 compatible browser
- Fast updates due to browser graphics cache
- Automatic screen resolution
- Same interface as a fully installed (Thick) client
- Event-driven updates. Push rather than pull
- Automatic configuration change deployment.

Note!!!

- Simplified Mobile Interface Client still supported

Find 5 differences between these screens. Bet you can't!





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Slippy Maps – More Cool Tools

Why is this important?

- Summary view of distributed assets
- Spatial relationship between co-dependent subsystems
- Pattern identification based on geographic distribution
- Useful for identifying operational pathways (pipelines, wires, travel routes)

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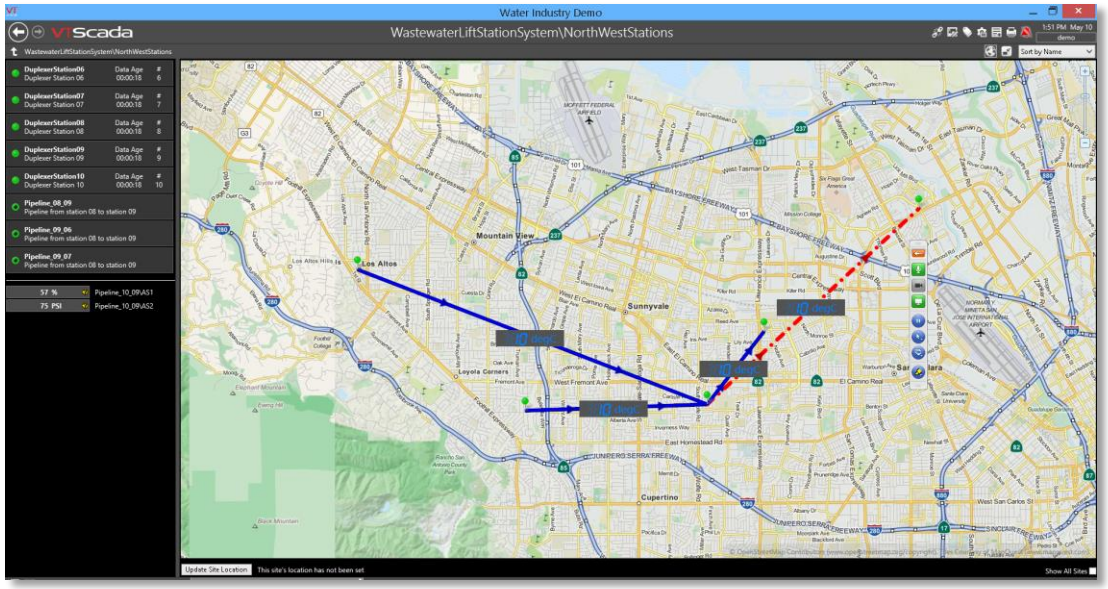
Slippy Maps – More Cool Tools

Features at a glance

- Context tag supports point-to-point Connector options
  - Color change on connector status
  - Custom details page
  - Custom map icons
  - Connector styles and arrows
- Drill down zoom level selection
- Zoom level visibility
- Enhanced asset (site/connector) list display options



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NEW Transaction Record Logging

Why is this important?

- Used in oil and gas industry for regulatory and operational reporting
- A transaction record represents summary data from a process or timeframe
- Dataset is summarized by the field device and stored by VTScada Historian

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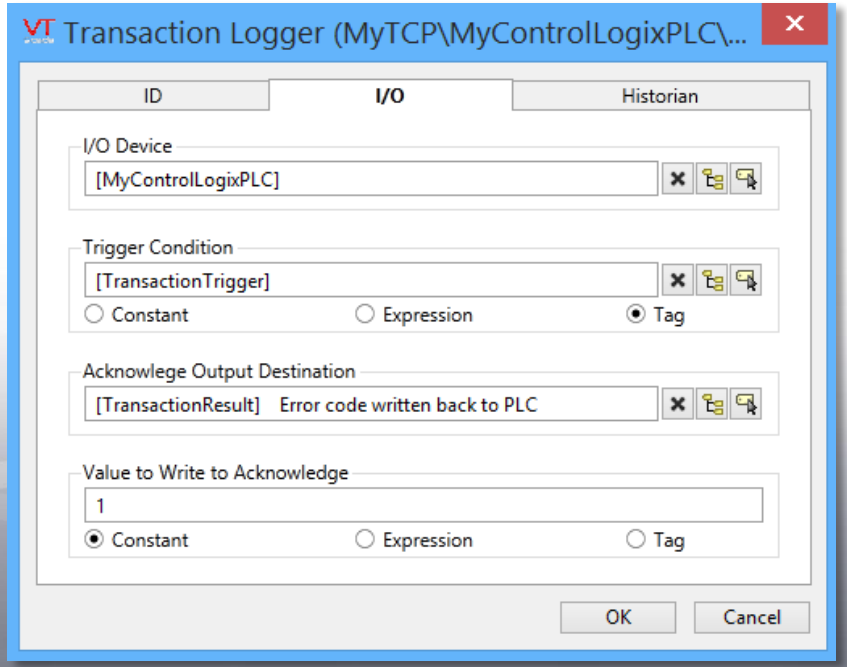
NEW Transaction Record Logging

NEW 11.2

Features at a glance

- Can be triggered by tag change, event or scheduled trigger tag
- Reads a pre-defined timestamped set of values from any field device
- Includes transaction acknowledgement for guaranteed delivery
- Data is stored in 'Transaction Log' historian data table
- Historian can be queried (SQL) for use in external reporting



NEW Even More Integrated Drivers

Why is this important?

- More connectivity options
- Guaranteed SCADA component compatibility during upgrades
- Eliminates integration time with 3rd party drivers
- Integrated diagnostics
- Real-time polling/scanning frequency tuning in the SCADA development environment

NEW Even More Integrated Drivers

Features at a glance

- Continued expansion of the existing native driver library

  PLCs – GE Series 90, Koyo, Omron Fins, IEC-60850-104 (coming soon!)

  Oil and Gas – Enron Modbus, ROC, SCADAPack RealFlo, Tbox TFlo

  Marine NMEA

  Scientific - Campbell Scientific Pakbus

  3rd party software – SQL Data Query, WaterTrax

- Rockwell CIP Ethernet/IP driver enhancements
  - 7 times faster communications speed
  - Hierarchical tag name lookup
  - Disconnect control for reduced data use on cellular connections
- Guaranteed software component compatibility

NEW Situational Awareness

High Performance vs High Impact Graphics

Why is this important? You decide.

High Impact	High Performance
High resolution graphics (2D images, 3D images, digital photographs, video feeds) assist visual recognition.	Low resolution indicators minimize graphical distractions.
Overviews include key process indicators with graphical context representing process flow.	Overviews provide key process indicators in easy to read format without graphical context.
Select equipment to see details, trends, etc.	Select equipment to see details, trends, etc.
Alarm conditions displayed in easy to read summary lists on overview pages. May also be shown via equipment colour changes.	Alarm conditions integrated with indicators. Indicators organized for alarm and anomaly recognition.
Alarm colour and text descriptions provide context.	Alarm indicator colour, shape and numeric value provide context.

Our Recommendations:

- Pick the best option for your situation. Each approach has merit. A mixture of both methods may be applied.
- Too many changes can lead to confusion and a lack of acceptance among users.

NEW Situational Awareness

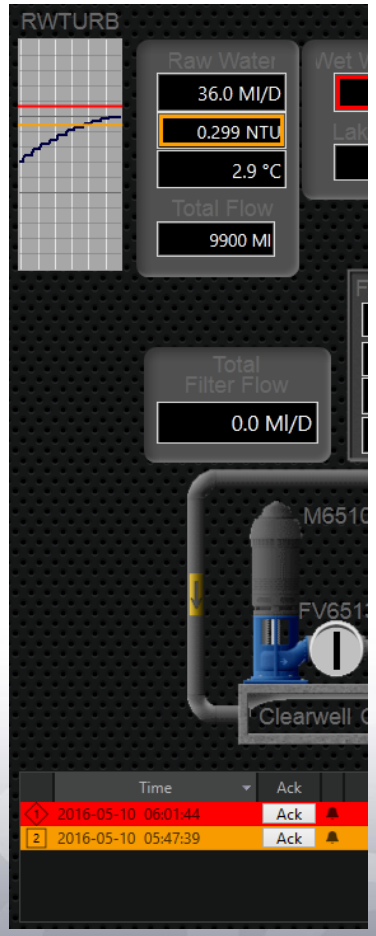
High Performance vs High Impact Graphics

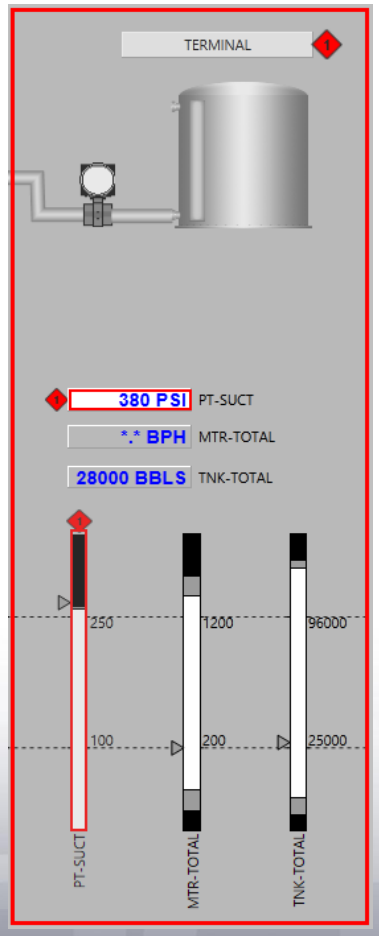
NEW 11.2

Features at a glance

- High impact widgets and graphics
  - Enhanced Alarms lists
  - Grey scale equipment status graphic widgets
  - More photorealistic meters
  - Enhanced meter parts to build custom widgets

- High performance
  - Alarm priority configuration (standard colour, shape, label, sound)
  - Alarm priority icons and hotboxes
  - Style tags for application-wide colour standardization
  - Simple on-screen trends (existing)
  - 5000 graphics tools, widgets and images to build any indicator required





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NEW Distributed Alarms System

for Multi-Plant And Sub-system Support

Why is this important?

- Centralized applications for distributed sub-systems have become commonplace
- Central management provides a single point for administrative functions
  - Alarms configuration
  - Security management
  - Single interface for report data
  - Network and computer resource monitoring
  - System-wide data, alarms and configuration backup
- Distributed systems must function autonomously when disconnected from the Central management network

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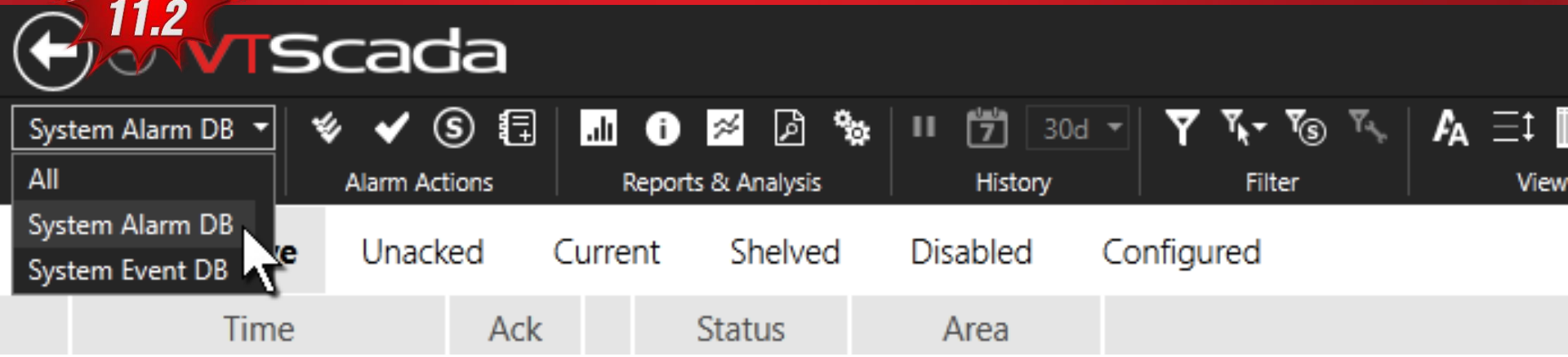
NEW Distributed Alarms System

for Multi-Plant And Sub-system Support



Features at a glance

- Alarms and Events managed in separate databases for higher access speed
- Each sub-system can have dedicated alarms and events databases
- Each database can be replicated on any number of server nodes
- Each database can have a unique server list

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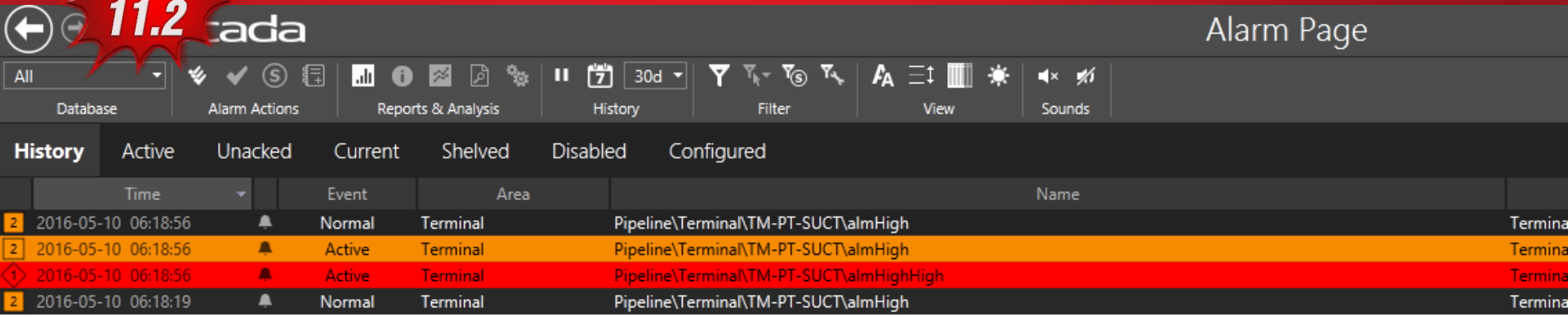
NEW Alarms Management Interface



Why is this important?

- Compliant with strategies defined in ISA 18.2-2009 and API 1167 alarms management best practices
- Fast switching between real-time status displays (context) and alarm history
- Improved diagnostics through enhanced historical information access
- Simple tools to minimize distractions

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NEW Alarms Management Interface

Display Enhancement Tools

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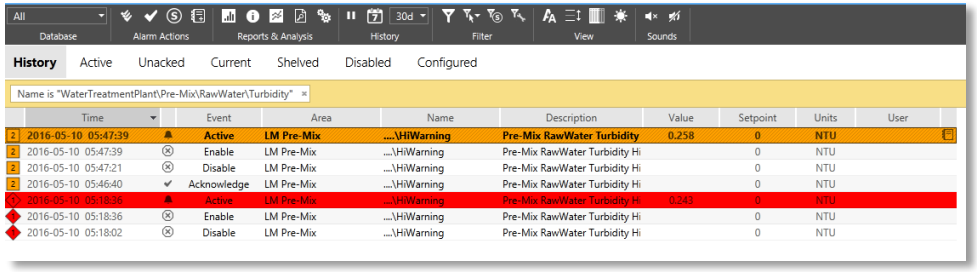
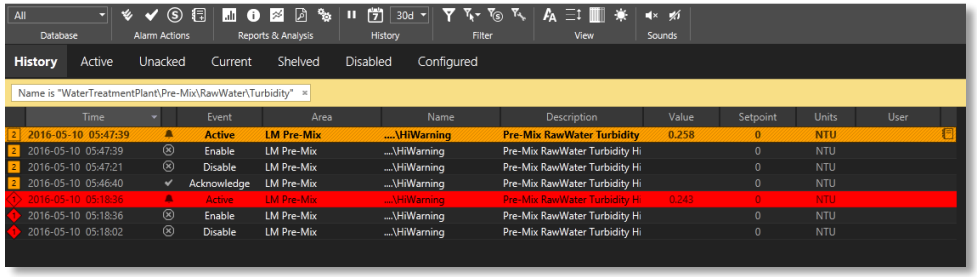
Features at a glance

- Alarm priority icons matching process views
- Acknowledge buttons and status indicators
- Day/night view toggle
- On-demand addition of columns with current values and comparative setpoints
- Notes indicator
- New historical events for alarm ‘commission’ and ‘modification’ actions



Day



Night

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NEW Alarms Management Interface

Troubleshooting Assist Tools

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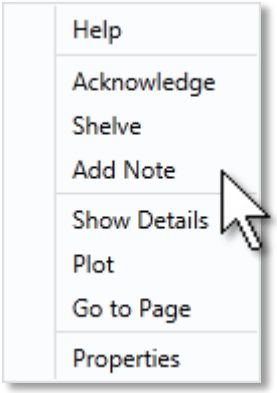
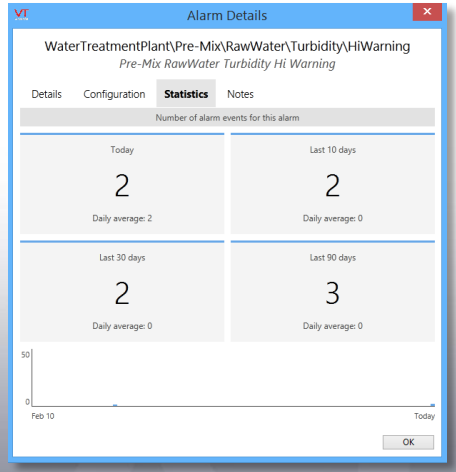
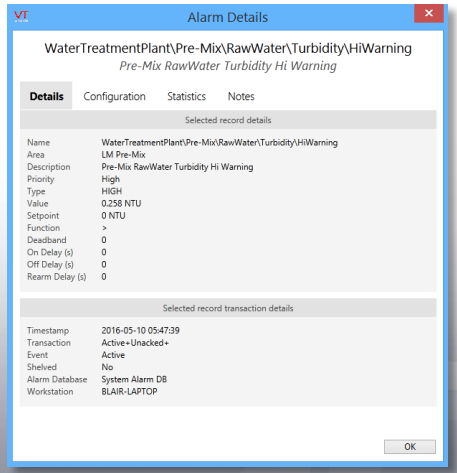
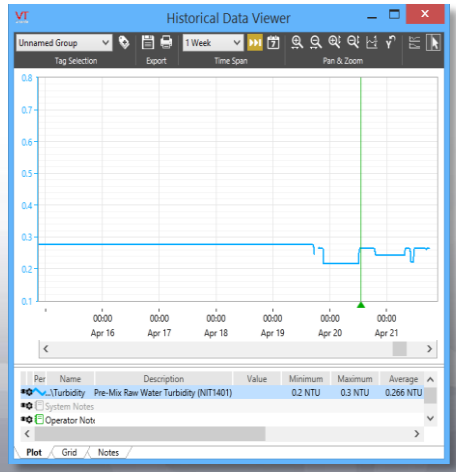
Features at a glance

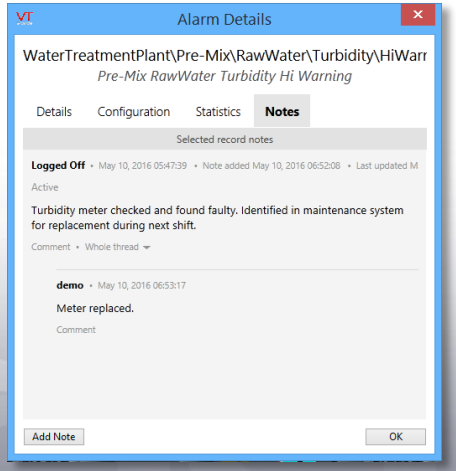
- View a specific alarm's occurrence details
- View occurrence statistics per alarm
- Plot a historical trend for the contributing tag
- Go to the process page for the contributing tag
- Add blog-style notes











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NEW Alarms Filtering

Decluttering

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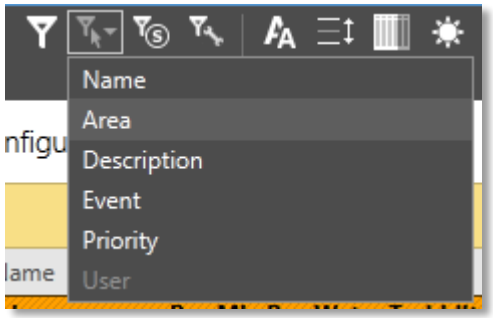
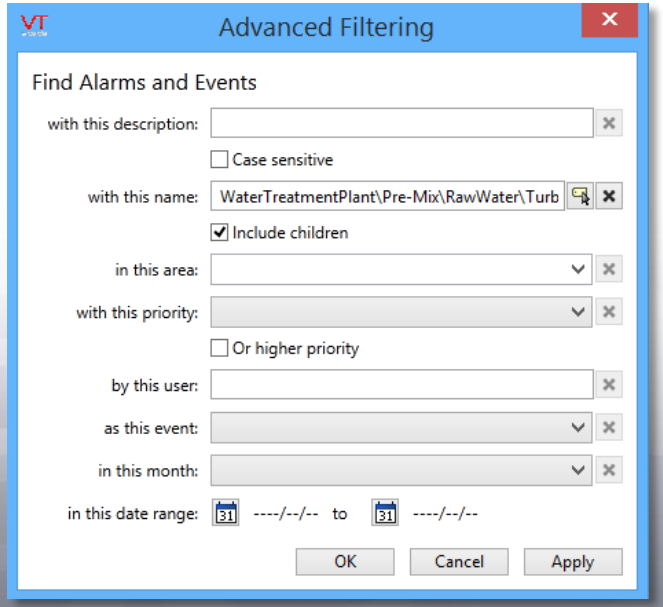
Features at a glance



- Shelve a selected alarm for a period, until a specific time, or indefinitely
- Select any alarm and filter the view based on any the alarm's attributes
- Hide/show Shelved alarms from the list (decluttering)
- Hide/show alarm commissioning and configuration events
- Select all alarms or filter to show a single alarms or events database

Set advanced filter criteria by;

- Description
- Name
- Area
- Priority
- User
- Date/range
- Event type



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NEW Alarms Reports

for Alarms System Tuning

NEW 11.2

Bad Actors | Alarm Flood | History | Distribution of Priorities

		Area	Name	Description	Count	Percent
1	2	Zone 1	Local TCP Port\PLCSim\Tank 1\Tank Level	Monitor tank level HIGH	14	66.7 %
2	1	Zone 2	Local TCP Port\PLCSim\Tank 2\Tank Level	Monitor tank level HIGH	5	23.8 %
3	2	Zone 3	Local TCP Port\PLCSim\Tank 3\Tank Level	Monitor tank level HIGH	2	9.5 %

Why is this important?

- Quickly identifies nuisance alarms
- Identifies periods of alarm flood occurrences and durations
- Provides guidance for priority management based on industry best practices
  - During initial system commissioning
  - Historical analysis for continuous improvement
- Reports work together to make detailed analysis more user friendly

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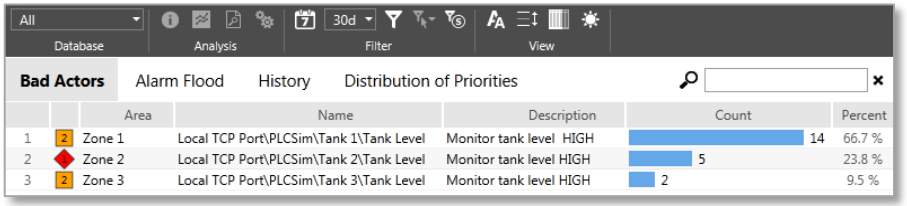
NEW Alarms Reports

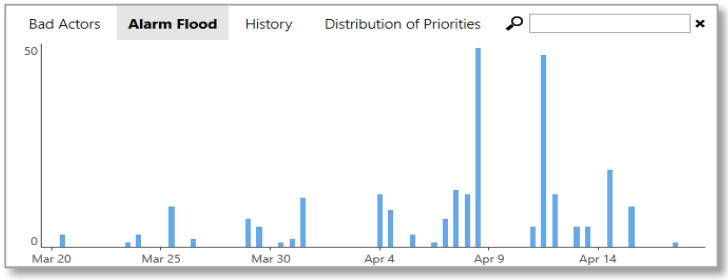
for Alarms System Tuning

NEW 11.2

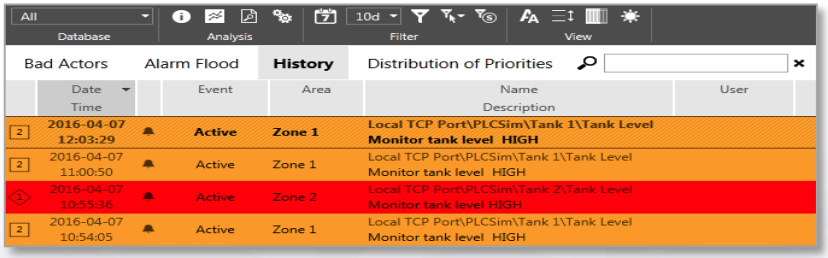
Features at a glance



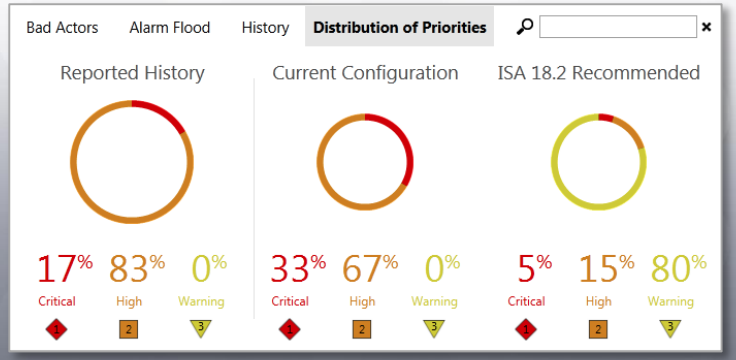
Bad Actors Report – Summary of alarm occurrences within a specific period, sorted by the number of activations.



Alarm Flood Report – Count of alarms tripped within equal time slices. Click a bar to zoom into that period.



History Report– All active and trip alarm events within a specific period.



Priority Distribution Report – Compares priority of configured alarms and actual alarm occurrences against recommended best practices.

Try VTScada 11.2

Try the New Features in VTScada 11.2

https://www.trihedral.com/trial

Note: This download and 90-day software key are a trail only and should not be used on a production system.