vrscada

Software for Monitoring & Control

Version 11.2 Instantly Intuitive.



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Award Winning HMI Software



Soltware for Monitoling o contro



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

NEW 11.2

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 11.2 -VTScada Anywhere Client Any device, Anywhere, Any time

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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	Event Area		
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	Trip LM Clarifiers	WaterTreatmentPlant\\ControlTag1Alm	Clarifier #2
2016-03-07 13:45:04 () *	Trip LM Clarifiers	WaterTreatmentPlant\\ControlTag2Alm	Clarifier #2
2016-03-07 13:45:04	Trip LM Low Lift Pump St	atic WaterTreatmentPlant\\ControlTag1Alm	Low Lift Pun
2016-03-07 13:45:04	Trip LM Low Lift Pump St	atic WaterTreatmentPlant\\ControlTag2Alm	Low Life Pun
2016-03-07 13:09:44	Event System	Application	Application
2016-03-07 09:14:51	Event System	Application	Application
2016-02-29 15:40:27	Event System	Application	Application
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2016-02-29 11:13:31	Event System	Application	Application
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	16.00.18		
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- VTScada 11.2 -VTScada Anywhere Client Any device, Anywhere, Any time

Features at a glance

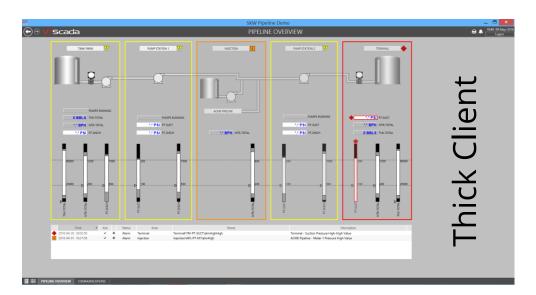
NEW 11.2

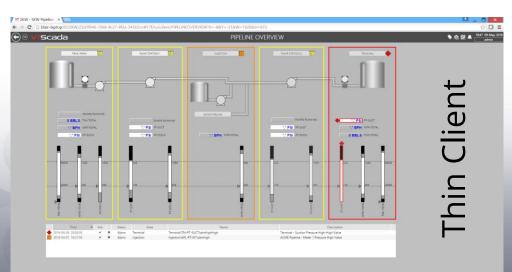
- Use on any HTML5 compatible browser
- Fast updates due to browser graphics cache
- Automatic screen resolution
- Same interface as a fully installed (Thick) client
- Event-driven updates. Push rather than pull
- Automatic configuration change deployment.

Note!!!

Simplified Mobile Interface Client still supported

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





- VTScada 11.2 -Slippy Maps – More Cool Tools

Why is this important?

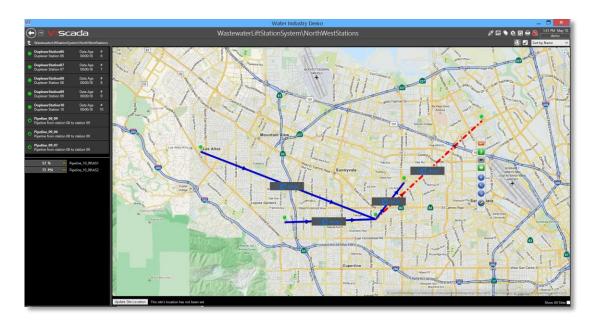
- Summary view of distributed assets
- Spatial relationship between co-dependent subsystems
- Pattern identification based on geographic distribution
- Useful for identifying operational pathways (pipelines, wires, travel routes)



- VTScada 11.2 -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



- VTScada 11.2 -NEW Transaction Record Logging

Why is this important?

NEW 11.2

- 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



- VTScada 11.2 -NEW Transaction Record Logging

Features at a glance

NEW

- 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

ID	I/O	Historian
I/O Device		
[MyControlLogixPL0]	× 1: 4
Trigger Condition —		
[TransactionTrigger]	× 🔓 🗣
O Constant	Expression	● Tag
Acknowlege Output [[TransactionResult]	Destination Error code written back to PLC	× 2 9
Value to Write to Ack	nowledge	
1		🔿 Tag

- VTScada 11.2 -NEW Even More Integrated Drivers

Why is this important?

More connectivity options

NEW 11.2

- 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



- VTScada 11.2 -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

NEW

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

- VTScada 11.2 - **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.

- VTScada 11.2 - **NEW Situational Awareness** High Performance vs High Impact Graphics

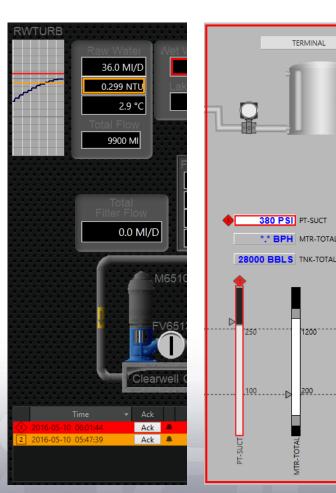
Features at a glance

NEW 11.2

- 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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- VTScada 11.2 - **NEW Distributed Alarms System** for Multi-Plant And Sub-system Support

Why is this important?

NEW

- 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



- VTScada 11.2 -**NEW Distributed Alarms System** for Multi-Plant And Sub-system Support NEW TScada 20 System Alarm DB S 目 ["ד"] ш Ys .dt × آفرا 30d FA (i) All Alarm Actions Reports & Analysis History Filter System Alarm DB Unacked Current Shelved Disabled Configured System Event DB Time Ack Status Area

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

- VTScada 11.2 -NEW Alarms Management Interface

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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

NEW Alarms Management Interface Display Enhancement Tools

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 11.2

 New historical events for alarm 'commission' and 'modification' actions

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	Time	Ŧ	Event	Area	Name	Description	Value	Setpoint	Units	User
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2016 05 1	0 05:47:39	8	Enable	LM Pre-Mix	\HiWarning	Pre-Mix RawWater Turbidity Hi		0	NTU	
2010-03-1										
	0 05:47:21	×	Disable	LM Pre-Mix	\HiWarning	Pre-Mix RawWater Turbidity Hi		0	NTU	
		*	Disable Acknowledge	LM Pre-Mix LM Pre-Mix						
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2016-05-1 2016-05-1	0 05:46:40 0 05:18:36	~	Acknowledge	LM Pre-Mix	\HiWarning \HiWarning	Pre-Mix RawWater Turbidity Hi Pre-Mix RawWater Turbidity Hi	0.243	0	NTU NTU	_

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2016-05-10	05:18:02		Disable	LM Pre-Mix		Varning	Pre-Mix	RawWater Turb	idity Hi				

Night

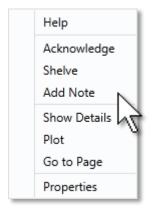
- VTScada 11.2 -

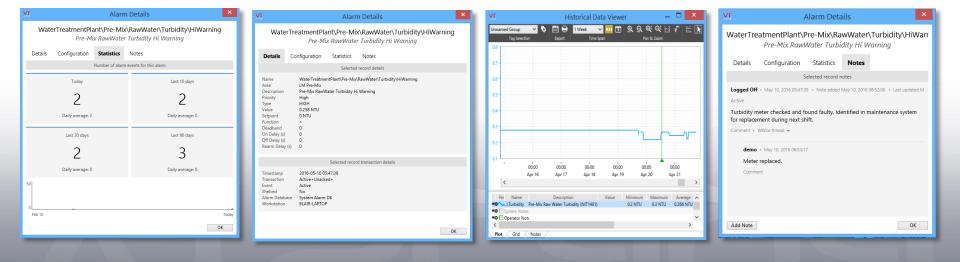
NEW Alarms Management Interface Troubleshooting Assist Tools

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

NEW 11.2





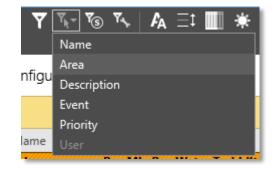
- VTScada 11.2 -NEW Alarms Filtering Decluttering

Features at a glance

NEW 11.2

- 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;	Find Alarms and Ev	Vent
 Description 	with this description:	
 Name 	with this name:	C C
 Area 		✔ Ir
 Priority 	in this area:	
 User 	with this priority:	
 Date/range 	by this user:	
Event type	as this event:	
	in this month:	
	in this date range:	31



<u>VT</u>	Advanced Filtering	×								
Find Alarms and E	vents									
with this description:	with this description:									
	Case sensitive									
with this name:	WaterTreatmentPlant\Pre-Mix\RawWater\Turb	×								
	✓ Include children									
in this area:	v	×								
with this priority:	~	×								
	Or higher priority									
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as this event:	×	×								
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2	٠	Zone 2	2	Local TCP P	ort\PLCSim	n\Tank 2\Tank Lev	el Mor	nitor tank level HIGH		5		23.8 %
3	2	Zone 3	3	Local TCP P	ort\PLCSim	h\Tank 3\Tank Lev	el Mor	nitor tank level HIGH	2			9.5 %

Why is this important?

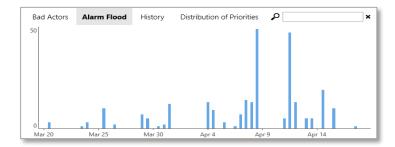
- Quickly identifies nuisance alarms
- Identifies periods of alarm flood occurrences and durations
- Provides guidance for priority management based on industry best practices
 - During initial system commissioning
 - Historical analysis for continuous improvement
- Reports work together to make detailed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

- VTScada 11.2 -NEW Alarms Reports for Alarms System Tuning

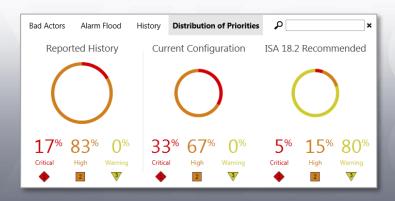
Features at a glance

NEW 11.2

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



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



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	Data	base		Analysis			Filter		View				
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			Area			N	ame		Descrip	otion	Count		Percent
1	2	Zone 1	L	Local TCP P	ort\PLC	Sim\Ta	ank 1\Tank Leve	Mor	itor tank level H	IGH		14	66.7 %
2	•	Zone 2	2	Local TCP P	ort\PLC	:Sim\Ta	ank 2\Tank Leve	Mor	itor tank level H	IGH	5		23.8 %
3	2	Zone 3	3	Local TCP P	ort\PLC	Sim\Ta	ank 3\Tank Leve	Mor	itor tank level H	IGH	2		9.5 %

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

All	Database	•	i 💉 🌶 Analysis	°# [7]	10d ▼ ▼	
Ba	ad Actors	AI	arm Flood	History	Distribution of Priorities	×
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2	2016-04-07 12:03:29	•	Active	Zone 1	Local TCP Port\PLCSim\Tank 1\Tank Level Monitor tank level HIGH	
2	2016-04-07 11:00:50	۰	Active	Zone 1	Local TCP Port\PLCSim\Tank 1\Tank Level Monitor tank level HIGH	
	2016-04-07 10:55:36	۰	Active	Zone 2	Local TCP Port\PLCSim\Tank 2\Tank Level Monitor tank level HIGH	
2	2016-04-07 10:54:05	٠	Active	Zone 1	Local TCP Port\PLCSim\Tank 1\Tank Level Monitor tank level HIGH	

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.