



Proudly Presented by
VTScada[®]
Trihedral
A Delta Group Company

Make the Most of Alarms

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Sales Manager

SCADA FEST > 2025 < ACCELERATE



Who is Alan and Should I be Alarmed?

- US Sales Manager, VTScada software
- 35 years in SCADA and Automation
- System Integration, engineering, programming, communications, operations
- RTU / Telemetry / SCADA / Power System manufacturing, and “smart city” integration
- Specialized in applying proven technologies
- Electrical Engineering, Auburn University
- Mathematics, Samford University





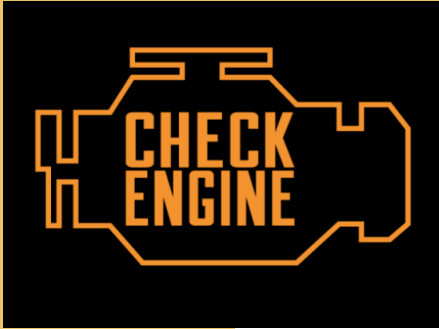
You and I have a common problem...



... the dreaded
Check Engine light!



The Solution to our Problem!



The OBD scanner / reader

Quick Poll:

- Who goes to the auto repair shop or the auto parts store to have it checked?
- Who has a scanner of their own?
- Who has more than one scanner?



My current answer to the problem

A Wireless ODB Scanner in every car!

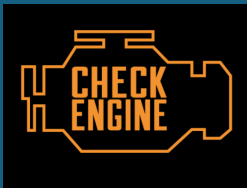


- Bluetooth
- Apps for any smart phone
- Provides real-time monitoring, diagnostics
- Gives quick info anyone can use



What does this

have to do with this?



VT Water Industry Demo

VTScada Alarm Page

System Alarm DB

Database Alarm Actions Reports & Analysis History Filter View Sounds

History	Active	Unacked	Current	Shelved	Disabled	Configured						
	Time		Event	Area	Name	Description	Value	Setpoint	Units	Workstation	Device	
2	2019-01-15 07:06:20	▲	Normal	LM Pre-Mix	...HiWar	Raw Water Tui	0.212	0.289	NTU	ALAN-PC		
2	2019-01-14 07:07:29	▲	Active	LM Pre-Mix	...HiWar	Raw Water Tui	0.295	0.289	NTU	ALAN-PC		
◆	2019-01-14 07:07:27	Ⓢ	Unshelve	LM Low Lift Pump Station	...Level	Low Lift Pump		4.9	m	ALAN-PC		
2	2019-01-10 14:05:26	▲	Normal	LM Pre-Mix	...HiWar	Raw Water Tui	0.287	0.289	NTU	ALAN-PC		
2	2019-01-10 14:04:30	▲	Active	LM Pre-Mix	...HiWar	Raw Water Tui	0.29	0.289	NTU	ALAN-PC		
◆	2019-01-10 14:04:23	▲	Normal	Default	Default	Disables Call C	0	1		ALAN-PC		
◆	2019-01-10 14:04:21	▲	Active	Default	Default	Disables Call C	1	1		ALAN-PC		
2	2019-01-10 14:02:25	▲	Normal	LM Pre-Mix	...HiWar	Raw Water Tui	0.287	0.289	NTU	ALAN-PC		
2	2019-01-10 14:02:24	▲	Active	LM Pre-Mix	...HiWar	Raw Water Tui	0.294	0.289	NTU	ALAN-PC		
2	2019-01-09 13:17:25	▲	Normal	LM Pre-Mix	...HiWar	Raw Water Tui	0.286	0.289	NTU	ALAN-PC		
2	2019-01-09 13:16:30	▲	Active	LM Pre-Mix	...HiWar	Raw Water Tui	0.291	0.289	NTU	ALAN-PC		
◆	2019-01-09 13:15:43	Ⓢ	Shelve	LM Low Lift Pump Station	...Level	Low Lift Pump		4.9	m	ALAN-PC		
2	2019-01-09 13:14:36	Ⓢ	Unshelve	LM Pre-Mix	...HiWar	Raw Water Tui		0.289	NTU	ALAN-PC		
◆	2019-01-09 13:14:19	✓	Acknowledge	LM Low Lift Pump Station	...Level	Low Lift Pump		4.9	m	ALAN-PC		

We must Make the Most of our Alarms!



Legacy Alarm Systems: Extremely Basic



Relying on Mrs. Smith's phone call to let us know the tank is full.





1980s - The Next Evolution: Alarm Annunciators

Lights, a horn, and some buttons

Think Star Trek, Star Wars and MacGyver





1990s: The Digital Age began!

Alarm Printers!

- The printer recorded every alarm.
- Some systems printed the Acknowledge.
- The printed paper folded into a box.
- The box was stacked in a closet.
- Often, the paper was out or the printer ribbon was used up.
- And since space was “unlimited,” the quantity of alarm points was often excessive!





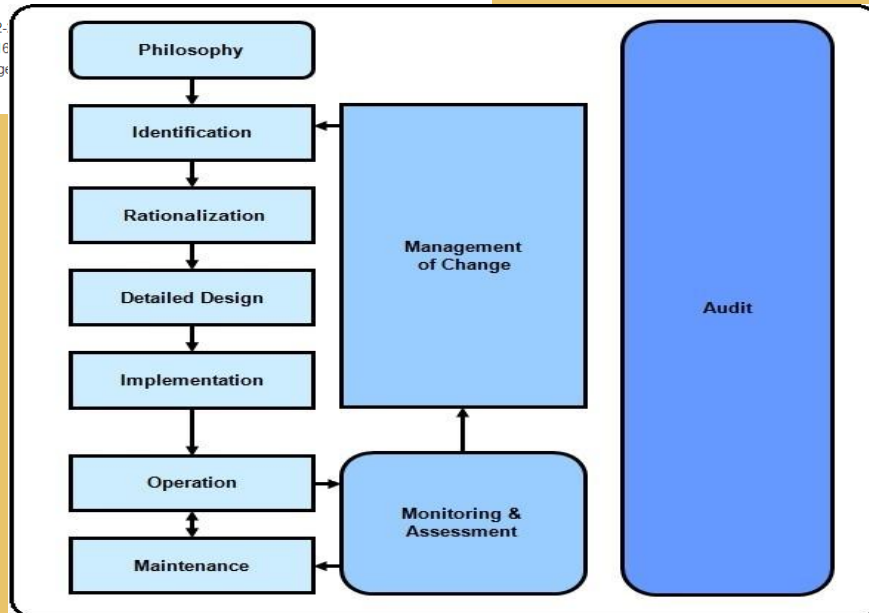
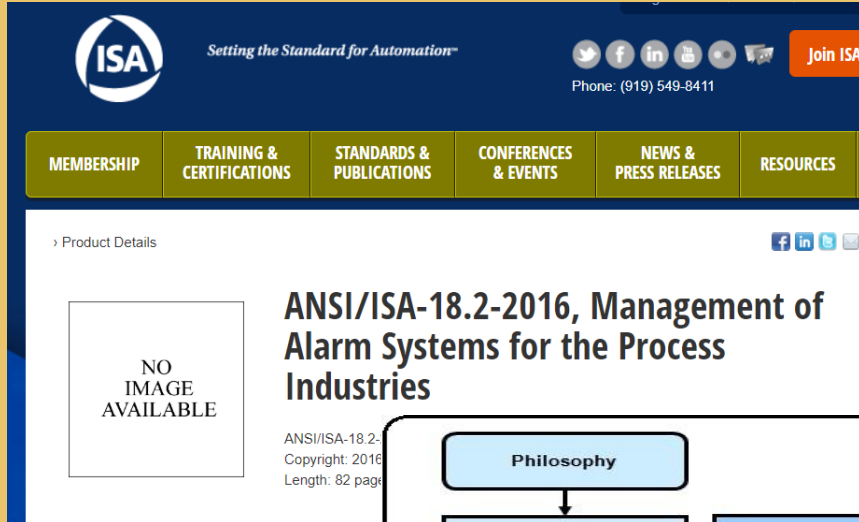
Now: Making alarms easy, useful, intuitive

Time	Event	Area	Name
2016-03-07 13:45:04	Trip	LM Clarifiers	WaterTreatmentPlant\...\ControlTag1Alm
2016-03-07 13:45:04	Trip	LM Clarifiers	WaterTreatmentPlant\...\ControlTag2Alm
2016-03-07 13:45:04	Trip	LM Low Lift Pump Static	WaterTreatmentPlant\...\ControlTag1Alm
2016-03-07 13:45:04	Trip	LM Low Lift Pump Static	WaterTreatmentPlant\...\ControlTag2Alm
2016-03-07 13:09:44	Event	System	Application
2016-03-07 09:14:51	Event	System	Application
2016-02-29 15:40:27	Event	System	Application
2016-02-29 12:14:20	Event	System	SetDefaults
2016-02-29 11:13:31	Event	System	Application
2016-02-29 11:13:31	Disable	LM Pre-Mix	WaterTreatmentPlant\...\HiWarning
2016-02-29 11:13:31	Disable	NetworkInformation	NetworkInformation\PrimaryAlmDialer
2016-02-29 11:13:31	Disable	LM Low Lift Pump Static	...\SurgeValveOpen1451
2016-02-29 11:13:31	Disable	LM Low Lift Pump Static	...\SurgeValveOpen1453
2016-02-29 11:13:31	Disable	LM Pre-Mix	WaterTreatmentPlant\RawWater\Turbidity
2016-02-29 11:13:31	Disable	LM Pre-Mix	WaterTreatmentPlant\MixTank\Level
2016-02-29 11:13:31	Disable	LM Pre-Mix	...\pH_HighSPFeedback
2016-02-29 11:13:31	Disable	System	WaterTreatmentPlant\Level

- For Operations
- For Maintenance
- For Operational Adjustments
- For Planned Procedures
- For Management Decisions
- ...and many other uses.



Adoption of Guidelines like ISA 18.2 Standards



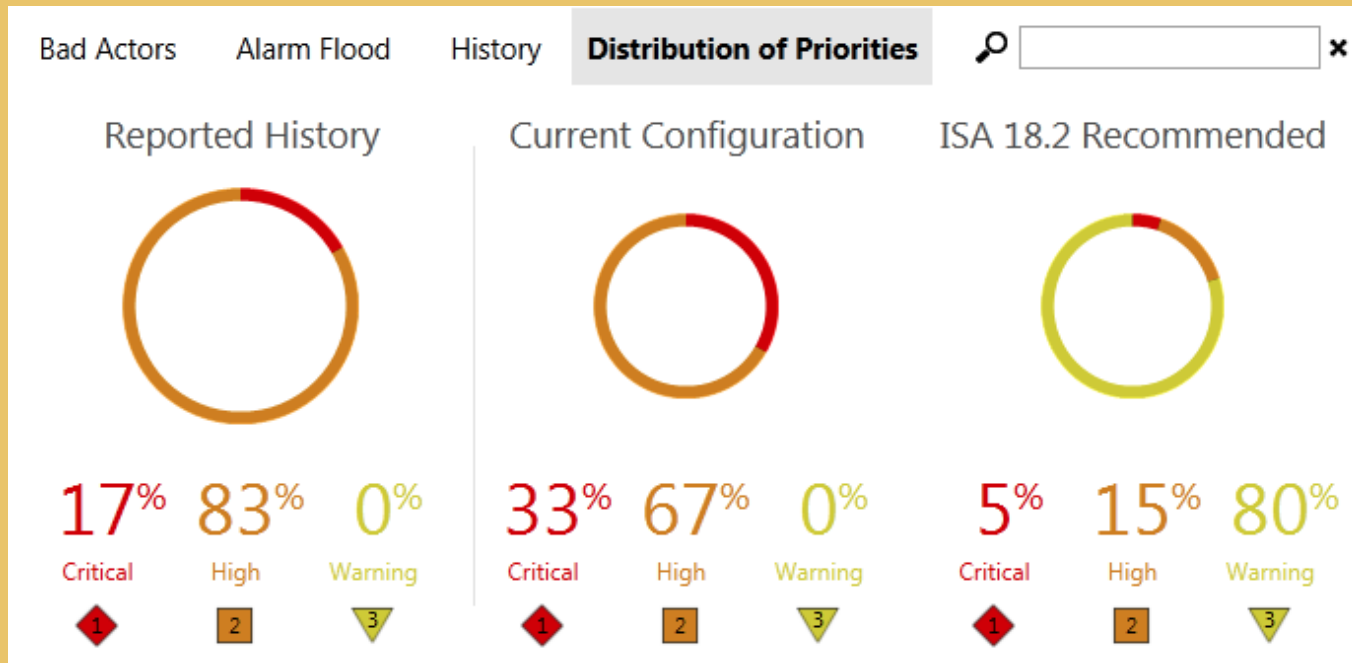
ISA 18.2: Management of Alarm Systems

- Definitions
- Requirements
- Class
- Roles
- Rationalizations
- Priority definitions
- Shelving / Suppression



Applying the ISA 18.2 Alarm Standards

Classification of Alarm Priorities



Five Levels of Alarms

- Critical
- High
- Warning
- Notice
- Event



Alarm Management and Action Logging

Tools Based on ISA 18.2 Alarms Management Standard

Separate Databases for Alarms and Events

Use color, symbols, and sound to meet visual needs

The screenshot shows the VTScada Alarm Page interface. At the top, there are navigation buttons and a dropdown menu for 'System Alarm DB'. Below this is a toolbar with icons for Alarm Actions, Reports & Analysis, History, Filter, View, and Sounds. The main area is a table of alarms with columns for Time, Event, Area, and Name. The table contains several rows of data, with some rows highlighted in red and others in yellow. A red arrow points to the 'System Alarm DB' dropdown, and another red arrow points to the 'Filter' button.

Time	Event	Area	Name
2016-12-22 11:19:07	Acknowledge	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAl
2016-12-22 11:18:29	Normal	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAl
2016-12-22 11:18:24	Active	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\
2016-12-22 10:22:49	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\Pur
2016-12-22 10:22:43	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\Tan
2016-12-22 10:14:21	Unshelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\Tan
2016-12-22 10:14:19	Unshelve	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPla
2016-12-22 10:14:08	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPla
2016-12-22 10:14:00	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\Tan
2016-12-22 10:04:16	Unshelve	IT	ITResources\Workstation_Barry\PercentCPUUsed
2016-12-22 09:59:16	Shelve	IT	ITResources\Workstation_Barry\PercentCPUUsed
2016-12-14 16:26:41	Acknowledge	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPla
2016-12-14 16:26:37	Normal	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPla
2016-12-14 16:26:32	Active	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPla
2016-12-14 15:54:13	Unshelve	IT	ITResources\Workstation_Dave\BatteryLevel
2016-12-14 15:53:49	Shelve	IT	ITResources\Workstation_Dave\BatteryLevel
2016-12-06 12:00:06	Acknowledge	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPla
2016-12-06 12:00:00	Normal	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPla
2016-12-06 11:59:55	Active	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\testA

Easily filter down to only the Alarms you need.

The screenshot shows the 'Advanced Filtering' dialog box. It has a title bar with 'VT' and 'Advanced Filtering'. The main area is titled 'Find Alarms and Events' and contains several search criteria with input fields and dropdown menus. The criteria include: 'with this description:', 'with this name:', 'in this area:', 'with this priority:', 'by this user:', 'as this event:', 'in this month:', and 'in this date range:'. There are also checkboxes for 'Case sensitive' and 'Include children'. At the bottom, there are 'OK', 'Cancel', and 'Apply' buttons.



Let's look at some VTScada ISA 18.2 Tools

Tools Based on ISA 18.2 Alarms Management Standard

Use color, symbols, and sound to meet visual needs



VTScada Alarm Page

System Alarm DB | Alarm Actions | Reports & Analysis | History | Filter | View | Sounds

All | System Alarm DB | System Event DB | Unacked | Current | Shelved | Disabled | Configured

Time	Event	Area	Name
2016-12-22 11:19:07	Acknowledge	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAl
2016-12-22 11:18:29	Normal	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAl
2016-12-22 11:18:24	Active	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\
2016-12-22 10:22:49	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\Pumps\Pump0\
2016-12-22 10:22:43	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\tanks\tank3\tar
2016-12-22 10:14:21	Unshelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\tanks\tank1\tar
2016-12-22 10:14:19	Unshelve	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\tanks\
2016-12-22 10:14:08	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\tanks\
2016-12-22 10:14:00	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\tanks\tank1\tar
2016-12-22 10:04:16	Unshelve	IT	ITResources\Workstation_Barry\PercentCPUUsed

AlarmPriority0	Event	Alarm Priority
AlarmPriority1	Critical Alarm	Alarm Priority
AlarmPriority2	High Alarm	Alarm Priority
AlarmPriority3	Warning Alarm	Alarm Priority
AlarmPriority4	Notice	Alarm Priority



My Favorite...Alarm Shelving

Tools Based on ISA 18.2 Alarms Management Standard

VT Scada Selected

Shelve the selected alarm

for 5 minutes

until 31 2016-05-04 12:00

indefinitely

OK Cancel



VTScada Alarm Page

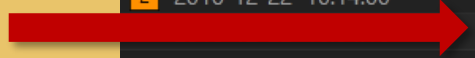
System Alarm DB

Alarm Actions Reports & Analysis History Filter View Sounds

System Alarm DB System Event DB

Unacked Current Shelved Disabled Configured

	Time	Event	Area	Name
1	2016-12-22 11:19:07	Acknowledge	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAI
1	2016-12-22 11:18:29	Normal	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAI
1	2016-12-22 11:18:24	Active	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\
2	2016-12-22 10:22:49	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\Pumps\Pump0\
2	2016-12-22 10:22:43	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\tanks\tank3\tar
2	2016-12-22 10:14:21	Unshelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\tanks\tank1\tar
3	2016-12-22 10:14:19	Unshelve	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\tanks\
3	2016-12-22 10:14:08	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\tanks\
2	2016-12-22 10:14:00	Shelve	Water Treatment Plant	WaterTreatmentPlantDemo\WaterTreatPlantSim\tanks\tank1\tar
		Unshelve	IT	ITResources\Workstation_Barry\PercentCPUUsed
	2016-12-22 09:59:16	Shelve	IT	ITResources\Workstation_Barry\PercentCPUUsed
1	2016-12-14 16:26:41	Acknowledge	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAI
1	2016-12-14 16:26:37	Normal	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAI
1	2016-12-14 16:26:32	Active	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAI
1	2016-12-14 15:54:13	Unshelve	IT	ITResources\Workstation_Dave\BatteryLevel
1	2016-12-14 15:53:49	Shelve	IT	ITResources\Workstation_Dave\BatteryLevel
1	2016-12-06 12:00:06	Acknowledge	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAI
1	2016-12-06 12:00:00	Normal	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAI
1	2016-12-06 11:59:55	Active	Water Treatment Plant	WaterTreatmentPlantDemo\TCPIP Port\WaterTreatPlantSim\TestAI



Shelved Alarms won't distract operators but are recorded in the Alarm historian.

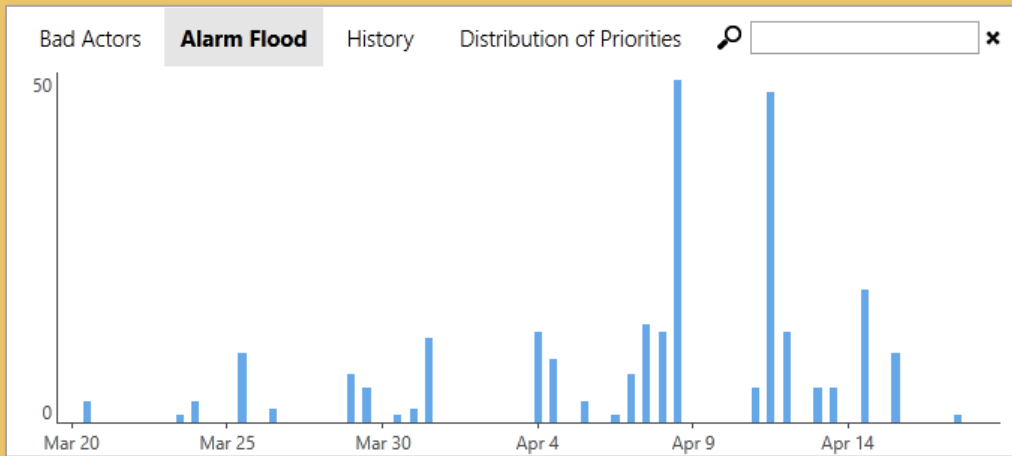


Alarm Tuning for Maximum Effectiveness

Bad Actors Report

Summary of alarm occurrences within a specific period, sorted by the number of activations.

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



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.

	Date Time	Event	Area	Name Description	User
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	Active	Zone 1	Local TCP Port\PLCSim\Tank 1\Tank Level Monitor tank level HIGH	
1	2016-04-07 10:55:36	Active	Zone 2	Local TCP Port\PLCSim\Tank 2\Tank Level Monitor tank level HIGH	
2	2016-04-07 10:54:05	Active	Zone 1	Local TCP Port\PLCSim\Tank 1\Tank Level Monitor tank level HIGH	



Remote Alarm Notification and Management

Critical Alarms Find You Anywhere!



- Integrated to enhance the system
- Create rosters for shift cycling, vacations, etc.
- Numerous rosters based on staff rotations
- Alarm actions put back into the Alarm Historian
- Should support Voice Dial, SMS Text, and email... through traditional phone lines and VOIP

Diagnostics Page for VoIP Callout Status

VT Roster (GreeleyApplicationSettings\Rosters\TestRoster) Properties

ID		Contacts		Settings		
Method	Name	Phone Number / Email Address	Username	Time Zone	Enabled	
▶ Start of roster						
Text Message	Alan	2056126665	alan	Server Time Zone	<input checked="" type="checkbox"/>	✕
Voice	Tim	6178776660	Tim	Server Time Zone	<input type="checkbox"/>	✕
Repeat 2 times with 1 minute delays						
Email	Alan	walanhudson@gmail.com	alan	Server Time Zone	<input checked="" type="checkbox"/>	✕
Delay for 10 minutes						
Email	Dan Naughton	dan.naughton@trihedral.com	dan	Server Time Zone	<input type="checkbox"/>	✕
Voice	Dan Naughton	2313607309	dan	Server Time Zone	<input type="checkbox"/>	✕
Text Message	Bryan	4074033785	bryan	Server Time Zone	<input type="checkbox"/>	✕
● End of roster						



Remote Alarm Notification and Management

Critical Alarms Find You Anywhere!

Diagnostics Page for VoIP Callout Status

VT Roster (GreeleyApplicationSettings\Rosters\TestRoster) Properties

ID		Contacts		Settings		
Method	Name	Phone Number / Email Address	Username	Time Zone	Enabled	
▶ Start of roster						
Text Message	Alan	2056126665	alan	Server Time Zone	<input checked="" type="checkbox"/>	✕
Voice	Tim	6178776660	Tim	Server Time Zone	<input type="checkbox"/>	✕
Repeat 2 times with 1 minute delays						✕
Email	Alan	walanhudson@gmail.com	alan	Server Time Zone	<input checked="" type="checkbox"/>	✕
Delay for 10 minutes						✕
Email	Dan Naughton	dan.naughton@trihedral.com	dan	Server Time Zone	<input type="checkbox"/>	✕
Voice	Dan Naughton	2313607309	dan	Server Time Zone	<input type="checkbox"/>	✕
Text Message	Bryan	4074033785	bryan	Server Time Zone	<input type="checkbox"/>	✕
✕ End of roster						



Remote Access from Anywhere

SCADA Application
With *SECURE* Internet Service Enabled



SCADA HTML-5 Client
HTML-5 compliant devices.
Consistent across all devices.
No reporting or file export.



PC / Laptop Clients
Full workstation experience.
Full reporting and file export.



Mobile Client
HTML5-compliant devices.
Smaller screens, data plans.
Full monitoring and control.





ISA 19.2 Alarm Notification Parameters

Application Configuration: Greeley CO

Modify the properties of your application

Make changes to your application settings here. Some settings are not enabled unless the application is running. The "Apply" button is enabled when there are outstanding changes. Clicking the "Apply" button applies your changes to the application.

Display	Alarms	Historical Data Viewer	Other
<input type="checkbox"/> Require note when unshelving alarm	0 Minimum length of unshelve note		

Alarm Notification

Notification priority:

- Do not notify on alarms
- Notify on Critical (priority 1) alarms only
- Notify on Critical (priority 1) or High (priority 2) alarms

Delay before notifying Critical (priority 1) alarms: 5 seconds

Delay before notifying High (priority 2) alarms: 5 seconds

Delay between contact notifications: 5 seconds

Spoken name in phone greeting: Greeley Demo Application

Initial section: Main Menu

- Echo phone through speaker
- Answer inbound calls
- Notify when alarm triggers
- Notify when alarm clears
- Cancel notification when alarm is acknowledged
- Cancel notification when alarm clears
- Speak digit on phone key press

Time format in notifications: 12 hrs (11:00 PM)

Date format in notifications: 2013-01-31

Outgoing Alarm Emails

Advanced Mode Apply

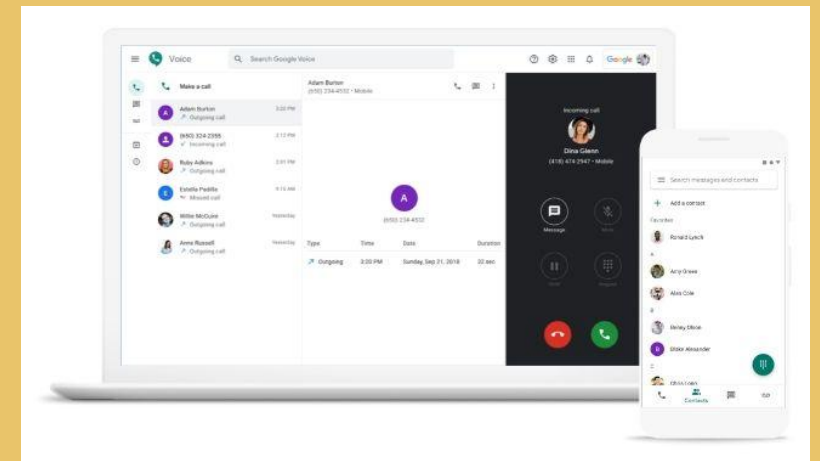
Notify on Critical and High Alarm ONLY!



What is VoIP (Voice over IP)?

It's making calls over the internet

- “Land lines” are basically obsolete
- SMS Text and emails are easy
- Voice dial can be tougher and may require 3rd party service providers
- Security becomes even more important
- Recipient actions are logged in the Alarm/Event Historian





VoIP will require some different parameters

Application Configuration: Greeley CO

Modify the properties of your application

Make changes to your application settings here. Some settings are not enabled unless the application is running. The "Apply" button is enabled when there are outstanding changes. Clicking the "Apply" button applies your changes to the application.

Display	Alarms	Historical Data Viewer	Other
Registered Number	<input type="text"/>		
VOIP Settings			
Workstation	<input type="text" value="Default"/>		
<input type="checkbox"/> Enable VOIP Calls			
<input type="checkbox"/> Enable VOIP SMS			
SIP identity	<input type="text" value="Dan <sip:172350@chicago1.voip.ms>"/>		
SIP server	<input type="text" value="chicago1.voip.ms"/>		
SIP proxy	<input type="text"/>		
SIP domain	<input type="text" value="chicago1.voip.ms"/>		
SIP login user ID	<input type="text" value="172350"/>		
SIP password	<input type="password" value="....."/>		
Prefix for phone numbers	<input type="text"/>		
	<i>To dial an external line or extension insert a comma to indicate a pause. E.g. "9," to dial 9 followed by a pause.</i>		
Dial pause length	<input type="text"/>		
	<i>Sets the length of a pause, in seconds, added by a comma character when dialing.</i>		
	<input checked="" type="checkbox"/> Use SIPS		
	<input checked="" type="checkbox"/> Enable IP address rewrite		

Advanced Mode



And may require email setup

Application Configuration: Greeley CO

Modify the properties of your application

Make changes to your application settings here. Some settings are not enabled unless the application is running. The "Apply" button is enabled when there are outstanding changes. Clicking the "Apply" button applies your changes to the application.

Display	Alarms	Historical Data Viewer	Other
---------	--------	------------------------	-------

Outgoing Alarm Emails

Protocol: SMTP

Email server (name or IP): smtp.gmail.com

Email server port number: 587

Email encryption method: Use SSL/TLS if available

Email "From" address: vtscadademo@gmail.com

Username (if required): vtscadademo

Password (if required): ●●●●●●

Use OAuth 2.0

OAuth 2.0 Grant Selection

Grant: No Grant selected

Grant Status: Unknown

Incoming Alarm Email Acknowledgments

Protocol: POP3

Email server (name or IP): pop.gmail.com

Email server port number: 995

Email encryption method: Use SSL/TLS

Username (if required): vtscadademo

Password (if required): ●●●●●●



Let's Try Alarm Notification over VoIP



Anywhere Client

username / password
demo / demo

VT Greeley CO

VTScada VoIP

Roster Alarm Test Please check the contacts list before you start calling people

Diagnostics Page for VoIP Callout Status

Call Manager Status

Name	Workstation	Type	Status	Call Attempts	Incoming Calls	Failures	Working
VOIP_WWW	WWW	VOIP	Registered	0	0	0	Configured

System Event DB

Database Alarm Actions Reports & Analysis History Filtering View Sounds

History

Time	Area	Name	Description	Workstation	Device	User
2025-01-26 21:20:37	Security	Security Manager	Signed in	ALAN-PC2		alan
2025-01-26 21:17:42	Security	Security Manager	Signed in	WWW	174.209.99.213	alan
2025-01-26 21:14:59	System	Application	Application Started (1 min 56 sec)	ALAN-PC2		
2025-01-24 14:41:11	Report	GreeleyApplicationSettings\BoydLake15MinuteTurbidityYesterday	The definition file for this report cannot be opened.	WWW	155.190.8.4	
2025-01-24 14:41:11	Report	GreeleyApplicationSettings\Bellevue15MinuteTurbidityYesterday	The definition file for this report cannot be opened.	WWW	155.190.8.4	
2025-01-24 14:40:19	Security	Security Manager	Signed in	WWW	155.190.8.4	demo
2025-01-24 14:39:58	Security	Security Manager	Signed in	WWW	155.190.8.4	demo
2025-01-24 14:29:20	Security	Security Manager	Signed in	WWW	155.190.8.4	demo

History: 472 records. History has been limited to the last 30 days.

System Alarm DB

Database Alarm Actions Reports & Analysis History Filtering View Sounds

History Active Unacked **Current** Shelved Disabled Suppressed Configured

Time	Ack	Status	Area	Name	Description
2025-01-26 21:18:31	Ack	Normal	System	GreeleyApplicationSettings\Rosters\TestRoster	



Let's Try Alarm Notification over VoIP



Anywhere Client

username / password
demo / demo

Diagnostics Page for VoIP Callout Status

Please check the contacts list you start calling people

VT Roster (GreeleyApplicationSettings\Rosters\TestRoster) Properties

ID		Contacts		Settings		
Method	Name	Phone Number / Email Address	Username	Time Zone	Enabled	
Start of roster						
Voice	Tim	6178776660	Tim	Server Time Zone	<input type="checkbox"/>	✕
Repeat 2 times with 1 minute delays						
Text Message	Alan	2056126665	alan	Server Time Zone	<input checked="" type="checkbox"/>	✕
Email	Alan	walanhudson@gmail.com	alan	Server Time Zone	<input checked="" type="checkbox"/>	✕
Delay for 10 minutes						
Email	Dan Naughton	dan.naughton@trihebral.com	dan	Server Time Zone	<input type="checkbox"/>	✕
Voice	Dan Naughton	2244098221	dan	Server Time Zone	<input type="checkbox"/>	✕
Text Message	Bryan	4074033785	bryan	Server Time Zone	<input type="checkbox"/>	✕
End of roster						

System Event DB Database History

System Alarm DB Database History Active Unac

2025-01-26 21:24:54

OK Cancel Apply

↓ ↑ + Add contact + Add delay/repeat



BUT Always Address the Security Concerns

Zeljka Zorz, Editor-in-Chief, Help Net Security
May 23, 2017

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SCADA systems plagued by insecure development and slow patching

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The importance of focusing on cybersecurity for SI projects

Industrial control system (ICS) cybersecurity is increasingly important. From the start, involve the right people from operational technology (OT) and information technology (IT) to collaborate on OT cybersecurity needs.

BY DAN MALYSZKO DECEMBER 13, 2022



Try to Follow the Security Standards

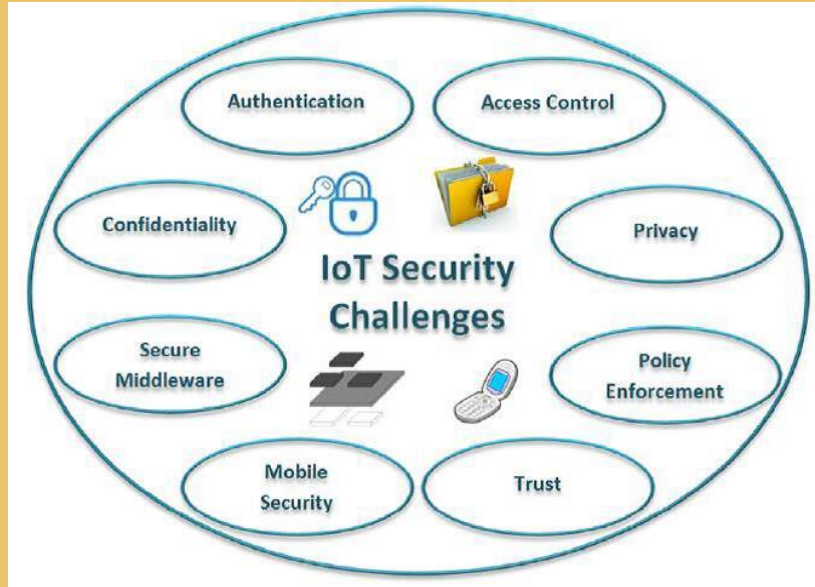


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Patrick Gouhin, Executive Director & CEO, International Society of Automation, speaks about ISA Cybersecurity expertise in the following short video:

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In Conclusion

So what can you do?

Make sure your alarms are:

- **Meaningful**
- **Relevant**
- **Searchable**





Thank you!

• Questions ?

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