



GenWatch3[®]
GW_Trigger
Software Version 2.3
Module Book

GenWatch3[®]

600-2.3.0-S.1
4/7/2011

Trademarks

The following are registered trademarks of Motorola: SmartZone, SmartNet, ASTRO®.

Any other brand or product names are trademarks or registered trademarks of their respective holders.

The Genesis Group Trademark Information

GenWatch3® is a registered trademark of GenCore Candeo, LTD., a subsidiary of Burks Gencore Co., Inc. D.B.A. The Genesis Group and Phil Burks.

Copyright

Copyright © 2011; Burks Gencore Co., Inc. D.B.A. The Genesis Group and Phil Burks. All rights are reserved. No part of this publication or the associated program may be reproduced, transmitted, transcribed, in whole or in part, in any form or by any means, whether it is mechanical, magnetic, optical, electronic, manual or otherwise, without the prior written consent of Burks Gencore Co., Inc. D.B.A:

The Genesis Group and Phil Burks
601 Shelley Dr., Suite 202
Tyler, Texas 75701.

Includes technology licensed from Motorola.

Disclaimer

The GenWatch3 Users Manual is printed in the U.S.A. Burks Gencore Co., Inc. D.B.A. The Genesis Group and Phil Burks believe that the information included in this manual is correct; however, Burks Gencore Co., Inc. D.B.A. The Genesis Group and Phil Burks reserves the right to alter, revise and make periodic changes to the manual and its contents. Burks Gencore Co., Inc. D.B.A. The Genesis Group does not assume responsibility to notify any person of such revisions or changes. While we have taken strides to carefully examine our software and documentation and believe that it is reliable, the Genesis Group and Phil Burks assume no responsibility for the use of the manual, or GenWatch3 software, nor for any patent infringements or other rights of third parties who may use the manual or the GenWatch3 software. Burks Gencore Co., Inc. D.B.A. The Genesis Group and Phil Burks make no representations or warranties with respect to the contents or fitness for a particular purpose beyond the cost of the software paid by the end-user.

The software contains valuable trade secrets and proprietary information. Unauthorized use of the manual or software can result in civil damages and criminal prosecution. As an end user, you agree to abide by and heed these statements.

License

Title to the media on which the program is recorded and to the documentation in support of the product is transferred to you, but title to the program, and all subsequent copies of the program, despite the form or media in or on license is not a sale of the original or any subsequent copy. You assume responsibility for the selection of the program to achieve your intended results, and for the installation, use, and results obtained from the program.

Refer to the GenWatch3 Manual Overview for your full license. All license information contained on pages 4-7 (Book 600-2.3.0-AA.1) are to be considered as contained herein.

Support

Customer satisfaction is our number one priority at Genesis. We are here to provide you with the best software possible, and we want to know when you have any questions, concerns or problems with GenWatch3 so that we can make it a better product for everyone.

Refer to the *Troubleshooting & Support* section of the GenWatch3 Manual Shell (Book 600-2.3.0-AA.1) for complete support and contact information.

Document History

Revision	Description	Author
2.0.2	Initial Release	JAW
2.0.3	Revision before release	JAW
2.0.4	Release Revisions	KIH
2.0.5	Release Revisions	JAW
2.0.5	Added SNMP setup information	JAW
2.0.6.6	Release Revisions	KIH
2.1	Added Email Setup	KIH
2.3	Revisions Before Release	CWF
2.3	Updated Trigger Email Settings Image	KIH

Table of Contents

<i>Trademarks</i>	4
<i>The Genesis Group Trademark Information</i>	4
<i>Copyright</i>	4
<i>Disclaimer</i>	4
<i>License</i>	4
<i>Support</i>	4
DOCUMENT HISTORY	5
TABLE OF CONTENTS	6
ABOUT THIS MANUAL	8
GOALS	8
WHO SHOULD READ THIS MANUAL?	8
HOW THIS MANUAL IS ORGANIZED	8
CHAPTER 1 OVERVIEW	10
WHAT IS GW_TRIGGER?	10
WHAT IS THE ONTRAK RELAY DEVICE?	11
<i>Disabling All Relays</i>	11
VIEWING TRIGGER ACTIVITY	11
<i>Echo To Eventlog</i>	11
CHAPTER 2 SETUP	12
SETTING UP THE ONTRAK ADU208 DEVICE	12
SETTING UP A TRIGGER	12
<i>Adding a New Trigger</i>	13
Presence / Lack of Presence	13
Periodic Evaluation	21
<i>Editing a Trigger</i>	28
<i>Enable/Disable a Trigger</i>	28
<i>Deleting a Trigger</i>	28
WHAT IS SNMP?	29
SNMP MESSAGES	29
SNMP VALUES	30
SNMP TRAPS	31
SAMPLE TRIGGERS	32
<i>Lone Patrolman</i>	32
<i>Diagnostic Notification</i>	33
<i>Unacknowledged Emergency Alarms</i>	33
<i>Busy Threshold</i>	33
<i>GenGET Reader Down</i>	34
EMAIL SETUP.....	35
CHAPTER 3 GENWATCH3 GUI NOTIFICATIONS	36
WHAT IS A GUI NOTIFICATION?.....	36

About this Manual

Goals

This manual describes the role and function of the GW_Trigger module in the GenWatch3 solution.

Who Should Read This Manual?



This manual is written for the intended audience of mid-level trunked radio system users and novice to mid-level PC users.

How This Manual Is Organized

This manual is organized as follows:

- **Overview:** Provides an overview of the GW_Trigger module.

This manual contains the following images, used to indicate that a segment of text requires special attention:

-  **Additional Information:** Additional information is used to indicate shortcuts or tips.
-  **Warning:** Warnings are used to indicate possible problem areas, such as a risk of data loss or incorrect/unexpected functionality.

Chapter 1 Overview

This chapter provides an overview of the GW_Trigger module and its function within the GenWatch3 solution.

This chapter contains the following sections:

- **What Is GW_Trigger?:** Describes the role and function of the GW_Trigger module.
- **What is the OnTrak Relay Device?:** Describes the OnTrak model ADU208 USB external relay device.
- **Viewing Trigger Activity:** Describes the **Trigger Activity** list.

What is GW_Trigger?

GW_Trigger is a module that allows you to set up real-time external relay, email, SNMP messages, Red/Amber/Green light actions or audio-visual alerts. Practical applications include:

- Enabling a relay that will sound an alarm when an emergency alarm event is received from your trunking system.
- Alerting users with a specified GenWatch3 security role when a particular status or message event is received on your trunking system.
- Enabling a relay that lights an LED labeled for a particular group when the group receives a push-to-talk on your trunking system.
- Enabling a relay that lights an LED labeled for a particular network state when the network device issue a notification via simple network management protocol (SNMP) trap.

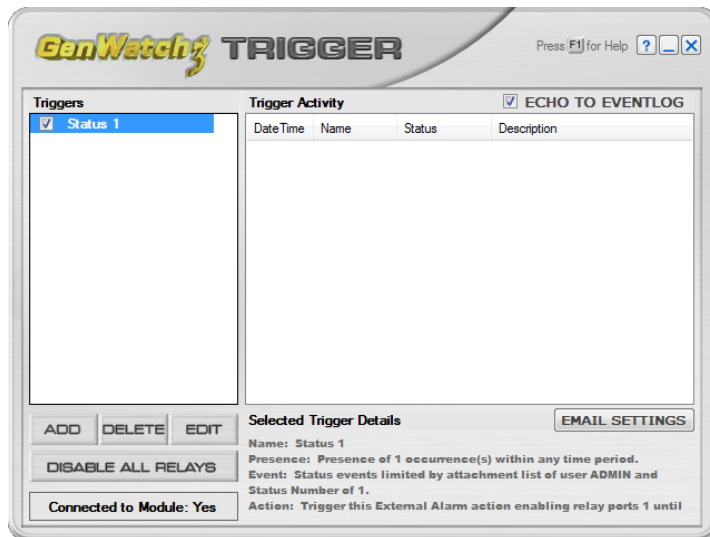


Figure 1.1 – GW_Trigger GUI

What is the OnTrak Relay Device?

GW_Trigger offers functionality with the OnTrak model ADU208 USB external relay device. This hardware device connects to your GenWatch3 host machine via USB. This device supports up to 8 external relay devices. The ADU208 can support a 5-amp DC load per contact. GW_Trigger is able to enable or disable from 1 to 8 of these relays when a trigger executes.

Disabling All Relays

The **Disable All Relays** button allows you to disable all relays on the OnTrak device.

Viewing Trigger Activity

The **Trigger Activity** list shows all trigger-based activity sent and received by the GW_Trigger module. This list is cleared each time you close the GW_Trigger Graphical User Interface (GUI).

Echo To Eventlog

When the **Echo To Eventlog** option is enabled, the GW_Trigger module will create an entry in the computer's event log each time a trigger is activated. The entry contains an event ID associated with the trigger.

Chapter 2 Setup

This chapter describes the process required to set up a trigger, how to install the OnTrak ADU208 hardware and how triggers interact with the GenWatch3 solution.

This chapter contains the following sections:

- **Setting Up the OnTrak ADU208 device:** Installing the OnTrak device.
- **Setting Up a Trigger:** Step-by-step setup process for creating a trigger.
- **Sample Triggers:** Examples of some real-world triggers.
- **Email Setup:** Describes the email configuration process.

Setting up the OnTrak ADU208 Device

Please refer to your OnTrak ADU208 device documentation for instructions on installing the OnTrakADU208 device.



The GenWatch3 installer copies the *AudHid.dll* file to the GenWatch3 install directory. If this file is ever removed from this directory, the OnTrak ADU208 device will not function.

Setting up a Trigger

Triggers are added, updated and deleted from the GW_Trigger GUI. The sections below provide instructions for maintaining triggers.

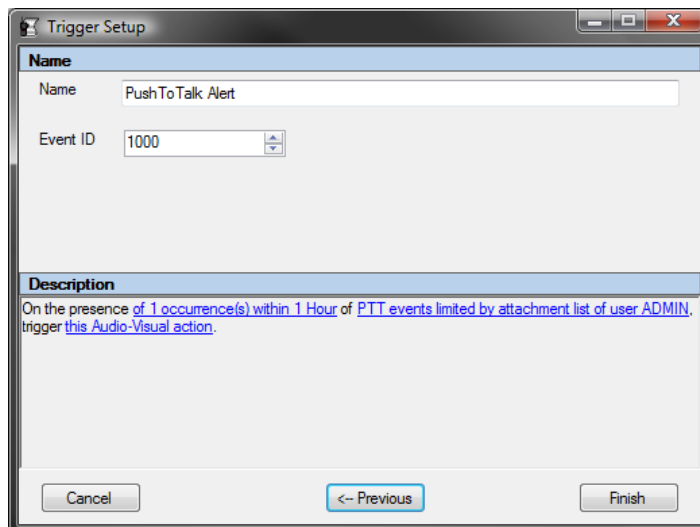


Figure 2.1 – Trigger Setup Window

Adding a New Trigger

Presence / Lack of Presence

To add a new trigger, follow the steps below:

1. Click the **Add** button: This will load the *Trigger Setup* window. (see Figure 2.2).
2. Choose the trigger condition to monitor. The choices include:
 - a. **On the lack within this time period:** Fires if the event is not received a specified number of times (or at all) within the defined time period.
 - b. **On the presence within this time period:** Fires if the event is received a specified number of times (or at all) within the given time period.
 - c. **On the periodic evaluation:** See *Periodic Evaluation* section below.

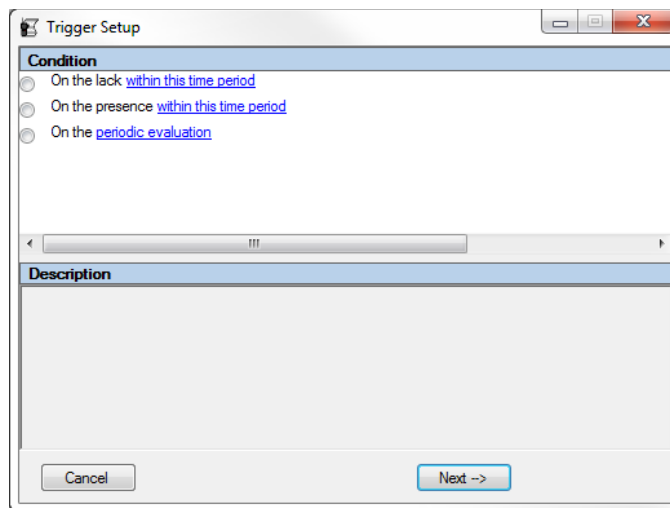


Figure 2.2 – Trigger Setup Window – Condition

3. Click the **Next** → button: this will show the event category.
4. Click on the blue **within this time period** text at the bottom of the setup window: This will load the *Setup Trigger Options* window (Figure 2.3).

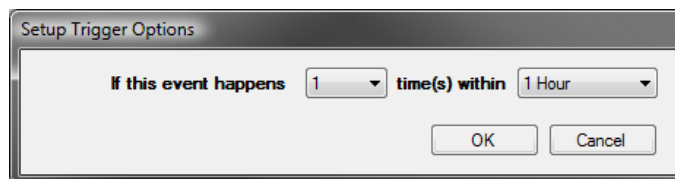


Figure 2.3 – Trigger Setup Time Period Options

5. Select the condition count in the first drop down list.
6. Select the time frame in the second drop-down list.

7. Click the **OK** button.
8. Choose the trigger event (Figure 2.4). The choices include:
 - a. **Of this Radio System Event:** Events issued from or to a radio. These include:
 - **PTT (Push-To-Talk):** Radio issues a dispatch, private or interconnect call.
 - **Emergency:** Radio issues an emergency alarm.
 - **Emergency Ack:** CADI, console or GenWatch3 acknowledges a radio's emergency alarm.
 - **Status:** Radio issues a status 1-8.
 - **Message:** Radio issues a message 1-16.
 - **Affiliation:** Radio successfully affiliates to a talkgroup
 - **Registration:** Radio successfully registers on the system.
 - **Busy:** All system resources at a site are in use.
 - **GPS Sensor:** Radio transmits collected sensor information over the system.
 - b. **Of this Radio System Diagnostic Event:** Trunking system reports a board-position based or site-based diagnostic.
 - c. **Of this GenWatch Event:** GenWatch3 events include:
 - **Unattended EA:** This is an event sent from GW_Halcyon if an emergency alarm was received on the system and not delivered to a connected CADI or RCM user. *This option is only valid for GenWatch3 installations that include the GW_Halcyon module with the Emergency Alarm feature.*
 - **Suspect Activity:** This event is sent when a new suspect is identified by the GW_CloneWatch module.
 - **Loss of Data:** This event is sent when an input module's data connection is lost.
 - d. **Of this SNMP Trap:** Events raised by software or a device on the network. See the *SNMP Traps* section below.
 - e. **Of this SNMP Message:** A message containing one or more SNMP values. These SNMP values are properties exposed by SNMP capable software or devices on the network. See the *SNMP Messages* section below.
 - f. **Of this Statistical Value Change:** Event type
 - **Affiliated Radio ID Threshold:** This event is sent when the change in the number of radio IDs affiliated exceeds the user specified threshold.

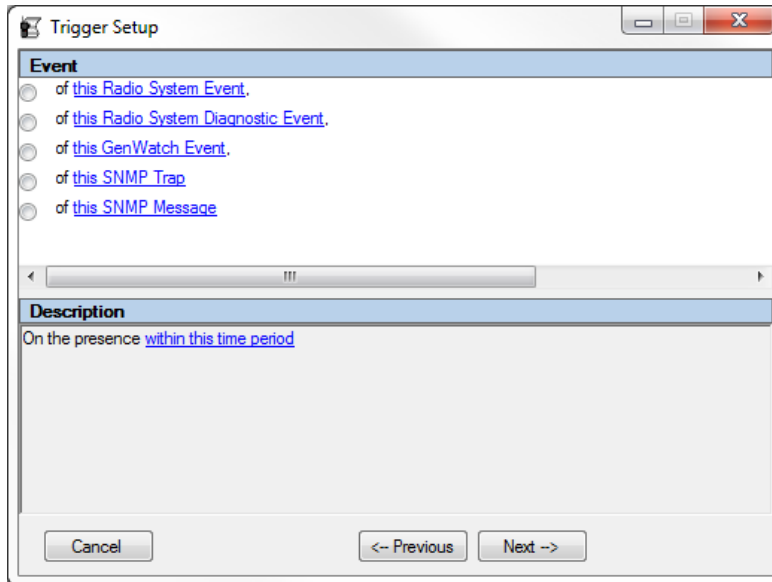


Figure 2.4 – Trigger Setup Event Category Selection

9. Click the **Next** → button: This will add the event that you chose above to the statement at the bottom of the setup window.
10. Click on the blue text of the trigger event that you chose in step 9: This will load the *Setup Trigger Event Options* window (see Figure 2.5).

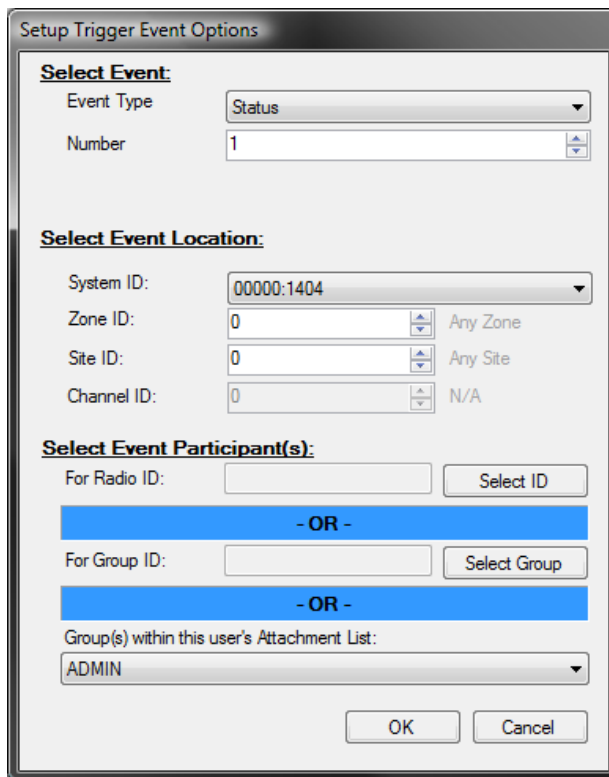


Figure 2.5 – Setup Trigger Event Options

11. Choose your event options. The *Setup Trigger Event Options* window will vary based on the selected category. This window can contain:

- a. **Event Type**
 - For *Radio System Events*, this will contain radio events described in step 8.a.
 - For *Radio System Diagnostic Events*, this will contain a list of all known diagnostic events.
 - For *GenWatch Events*, this will contain *Unattended EA*, *Suspect Activity*, and *Loss of Data*.
- b. **Number:** For **Event Type** of *Status*, this will contain numbers 1-8. For **Event Type** of *Message*, this will contain numbers 1-16. If you chose an **Event Type** of *Status* or *Message*, you must choose a value for **Number**.
- c. **Affiliation Count:** The number of affiliations allowed within the user defined timeframe.
- d. **Affiliation Timeout:** The amount of time before an affiliation state is no longer considered in the **affiliation count**.
- e. **System ID:** The system ID to monitor for this event (required).
- f. **Zone ID:** The Zone ID to monitor for this event (if non-zero).
- g. **Site ID:** The site ID to monitor for this event (if non-zero).
- h. **Channel ID:** The channel ID to monitor for this event (if non-zero).
- i. ***For Group ID:** The specific group ID on which to monitor this event.
- j. ***For Radio ID:** The specific radio ID on which to monitor this event.
- k. ***Groups within this User's Attachment List:** All radio IDs with a default talkgroup included in the selected user's attachment list are monitored for the event.

12. Click the **OK** button.



The **Select Units** grid is filtered based on your GenWatch3 user's attachment list, unless your user has a role with the *ViewAllGroups* privilege for GW_Alias. These options are available in GW_Security.



To clear the **For Radio ID** value, click the **Select ID** button. Clear any selected radio IDs in the *Select Units* window and click the **OK** button.



If the user selected for **Groups within this User's Attachment List** has a role that contains the *ViewAllGroups* privilege for GW_Alias, all radio IDs are included for this event.



* – At least one of these selections must be made.

13. Choose the Trigger action. Options include:
- This Audio Visual Action:** This option sends a predefined message to each GenWatch3 user logged in with the selected role.
 - This Email Action:** This option sends a predefined message to one or more specified email address(es). This option requires the Trigger license restriction *Email Action*.
 - This External Alarm Action:** This option interacts with the OnTrak ADU208 device. It enables or disables relays permanently, for a given amount of time or until a user with the selected role acknowledges the event.
 - This Red/Amber/Green Light Action:** This option sends a message with the description of the trigger to GUIs with threshold indication lights which will flash to get the user's attention.
 - This SNMP Action:** This option broadcasts an SNMP trap containing a pre-defined message. This option requires the Trigger license restriction *SNMP Action*.

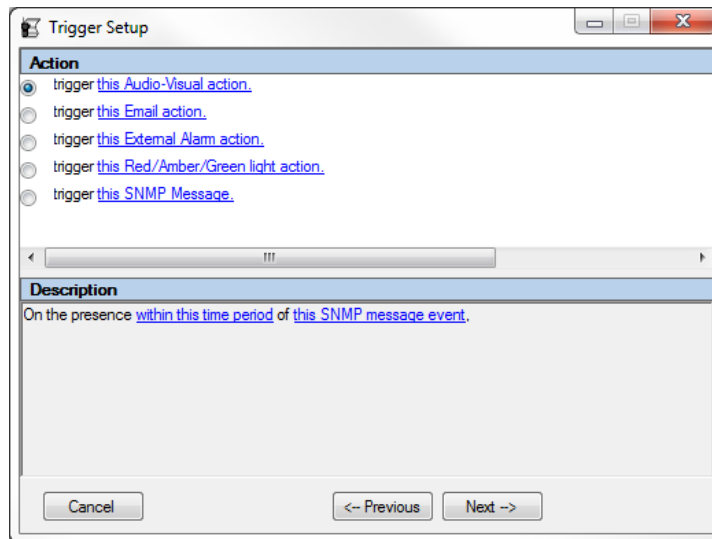


Figure 2.6 – Trigger Setup Action Type

- Click the **Next** → button: This will add the text for the option selected below to the statement at the bottom of the setup window.
- Click on the blue text of the trigger action you chose in step 13: This will load the *Setup Trigger Action Options* window.

16. For **Audio Visual Action:**

- a. Choose a role.
- b. Optionally provide a file name (remember that the file must be reachable by all GenWatch3 clients, so a name *C:\myalarm.wav* may not work, when *\\MYPC\C\$\MyAlarm.wav* might).
- c. Type the message that you wish to display to the users with the target role.

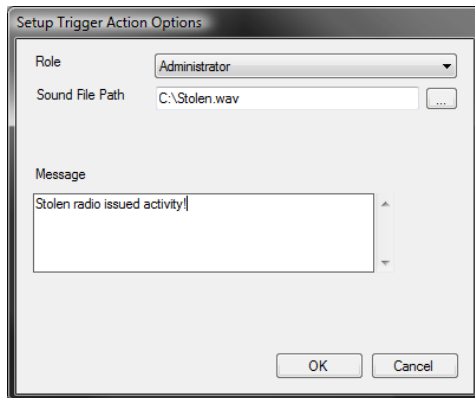


Figure 2.7 –Setup Trigger Audio-Visual Action

17. For **Email Action:**

- a. Enter an email address.
- b. Type the message that you wish to display in the body of the email notification.

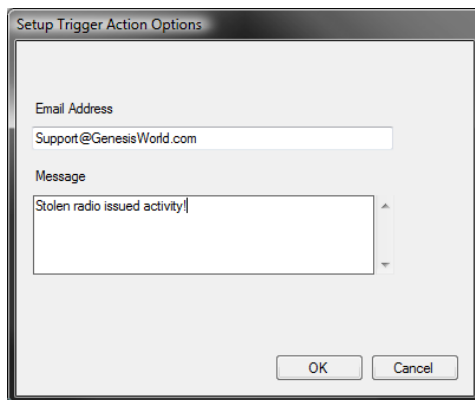


Figure 2.8 –Setup Trigger Email Action

18. For **External Alarm Action**:

- a. Choose a role.
- b. Select one or more relay positions to enable or disable.
- c. Select duration. If you choose “N/A”, the relay will remain disabled or enabled. If you choose “until alert is acknowledged”, this will result in an audio-visual action as well as an external alarm action.

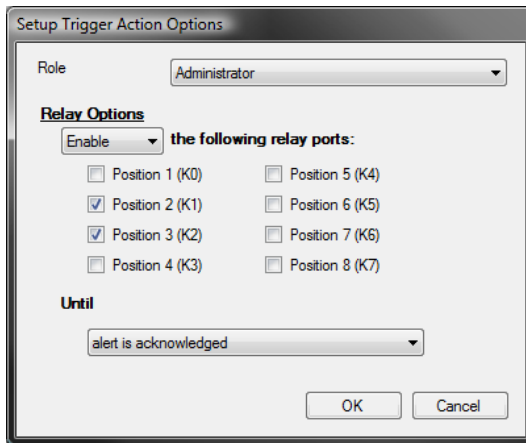


Figure 2.9 –Setup Trigger External Alarm Action

19. For **Red/Amber/Green Light Action**:

- a. Choose which light to associate with this threshold.

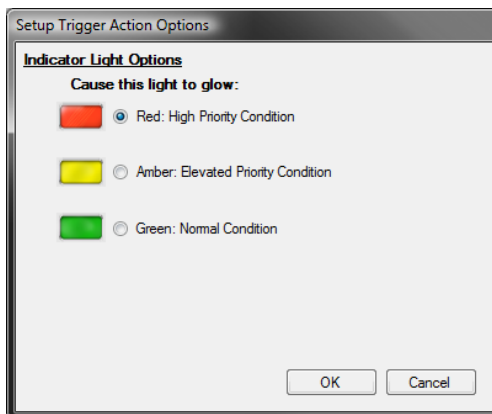


Figure 2.10 –Setup Trigger Red/Amber/Green Light Action

20. For **SNMP Message Action**:

- a. Type the message that you wish to display in the body of the SNMP notification.

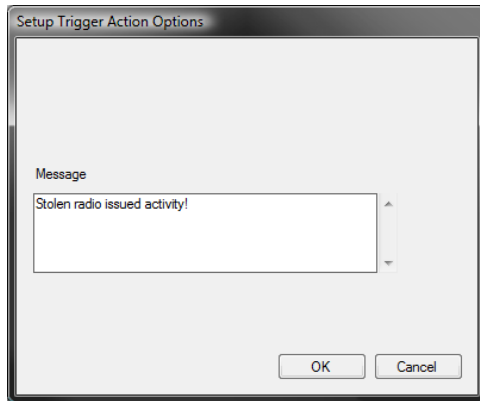


Figure 2.11 –Setup Trigger SNMP Action

21. Click **OK**.

22. Type a name into the Name textbox.

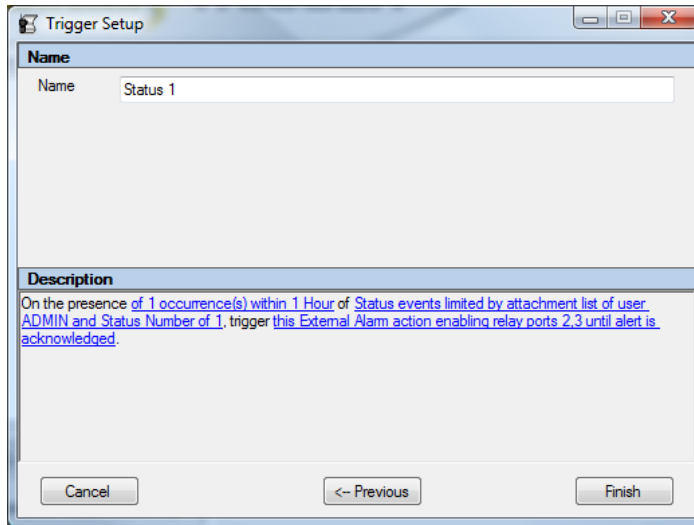


Figure 2.12 –Setup Trigger Name

23. If **Echo To Eventlog** is enabled, set the desired Event ID.

(This field is only displayed when **Echo To Eventlog** is enabled)

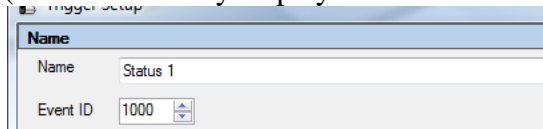


Figure 2.13 –Setup Trigger Event ID

24. Click **Finish** to save the new trigger.

Periodic Evaluation

To add a new trigger, follow the steps below:

1. Click the **Add** button: This will load the *Trigger Setup* window. (see Figure 2.14).
2. Choose the trigger condition to monitor. The choices include:
 - a. **On the periodic evaluation:** Fires whenever trigger performs a periodic check (defined by user) that meets the specified trigger conditions (specified by the user).

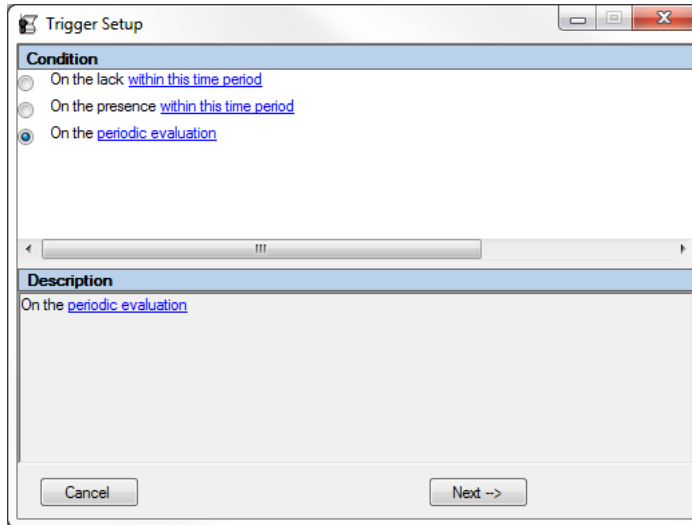


Figure 2.14 – Trigger Setup Window – Condition

3. Click the **Next** → button: this will show the event category.
4. Click on the blue **periodic evaluation** text at the bottom of the setup window: This will load the *Setup Trigger Options* window (Figure 2.15).

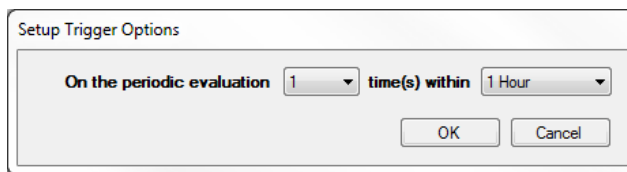


Figure 2.15 – Trigger Setup Time Period Options (periodic evaluation)

5. Select the number of evaluations in the first drop down list.
6. Select the time frame in the second drop-down list.
7. Click the **OK** button.
8. Choose the trigger event (Figure 2.16) The choices include:
 - a. **Of this Statistical Value Change:** Event type
 - **Affiliated Radio ID Threshold:** This event is sent when the change in the number of radio IDs affiliated exceeds the user specified threshold.

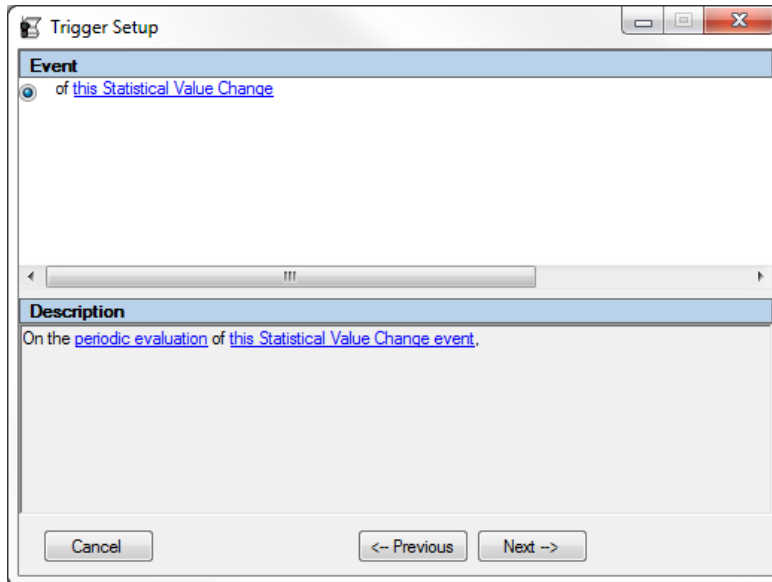


Figure 2.16 – Trigger Setup Event Category Selection

9. Click the **Next** → button: This will add the event that you chose above to the statement at the bottom of the setup window.
10. Click on the blue text of the trigger event that you chose in step 9: This will load the *Setup Trigger Event Options* window (see Figure 2.17).

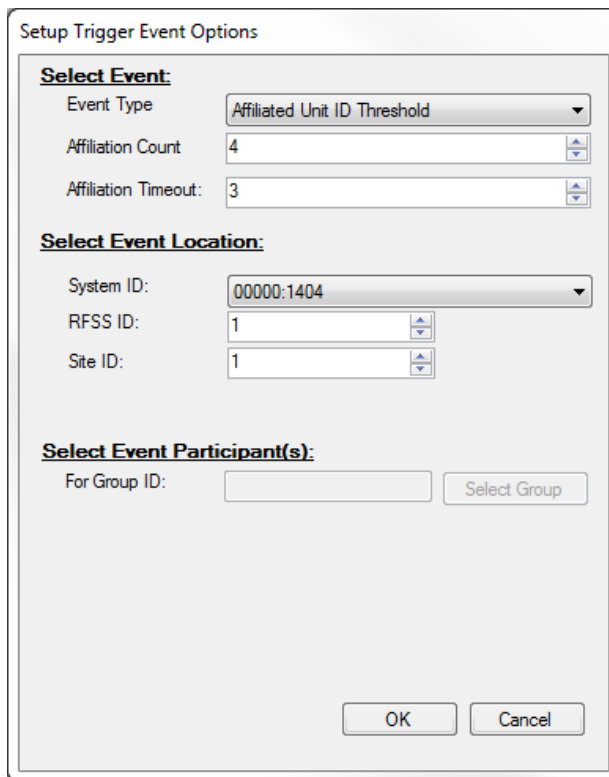


Figure 2.17 – Setup Trigger Event Options

11. Choose your event options. The *Setup Trigger Event Options* window will vary based on the selected category. This window can contain:
 - a. **Event Type**
 - For *Statistical Value Change*, this will contain event(s) described in step 8.a.
 - b. **Affiliation Count:** The number of affiliations allowed within the user defined timeframe.
 - c. **Affiliation Timeout:** The amount of time before an affiliation state is no longer considered in the **affiliation count**.
 - d. **System ID:** The system ID to monitor for this event (required).
 - e. **Zone ID:** The Zone ID to monitor for this event (if non-zero).
 - f. **Site ID:** The site ID to monitor for this event (if non-zero).
 - g. **For Group ID:** The specific group ID on which to monitor this event.
12. Click the **OK** button.
13. Choose the Trigger action (Figure 2.18). Options include:
 - a. **This Audio Visual Action:** This option sends a predefined message to each GenWatch3 user logged in with the selected role.
 - b. **This Email Action:** This option sends a predefined message to one or more specified email address(es). This option requires the Trigger license restriction *Email Action*.
 - c. **This External Alarm Action:** This option interacts with the OnTrak ADU208 device. It enables or disables relays permanently, for a given amount of time or until a user with the selected role acknowledges the event.
 - d. **This Red/Amber/Green Light Action:** This option sends a message with the description of the trigger to GUIs with threshold indication lights which will flash to get the user's attention.
 - e. **This SNMP Action:** This option broadcasts an SNMP trap containing a pre-defined message. This option requires the Trigger license restriction *SNMP Action*.

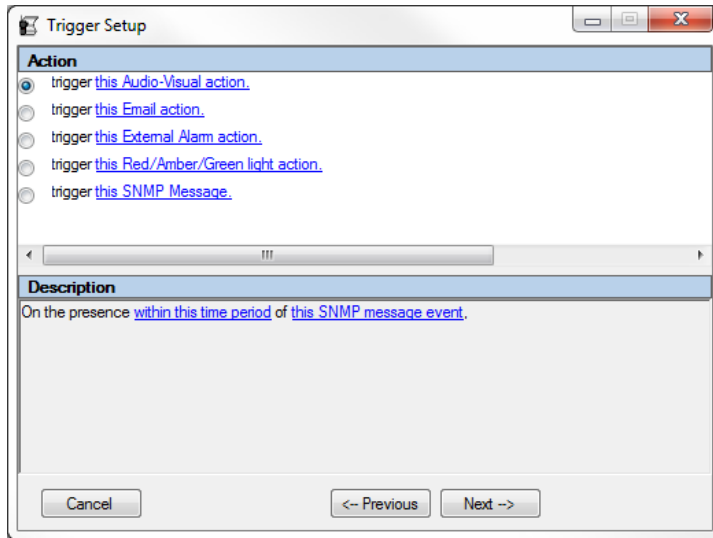


Figure 2.18 – Trigger Setup Action Type

14. Click the **Next** → button: This will add the text for the option selected below to the statement at the bottom of the setup window.
15. Click on the blue text of the trigger action you chose in step 13: This will load the *Setup Trigger Action Options* window.
16. For **Audio Visual Action** (Figure 2.19):
 - a. Choose a role.
 - b. Optionally provide a file name (remember that the file must be reachable by all GenWatch3 clients, so a name *C:\myalarm.wav* may not work, when *\\MYPC\C\$\MyAlarm.wav* might).
 - c. Type the message that you wish to display to the users with the target role.

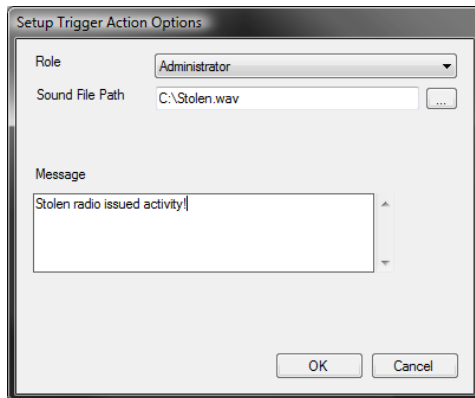


Figure 2.19 –Setup Trigger Audio-Visual Action

17. For **Email Action** (Figure 2.20):
 - a. Enter an email address.
 - b. Type the message that you wish to display in the body of the email notification.

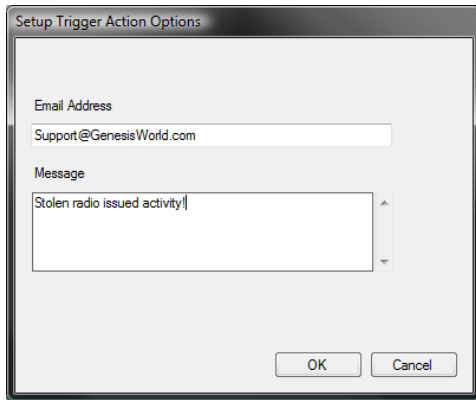


Figure 2.20 –Setup Trigger Email Action

18. For **External Alarm Action** (Figure 2.21):
- a. Choose a role.
 - b. Select one or more relay positions to enable or disable.
 - c. Select duration. If you choose “N/A”, the relay will remain disabled or enabled. If you choose “until alert is acknowledged”, this will result in an audio-visual action as well as an external alarm action.

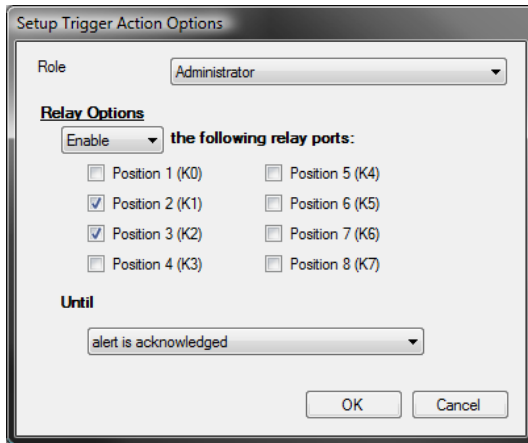


Figure 2.21 –Setup Trigger External Alarm Action

19. For **Red/Amber/Green Light Action** (Figure 2.22):
- a. Choose which light to associate with this threshold.

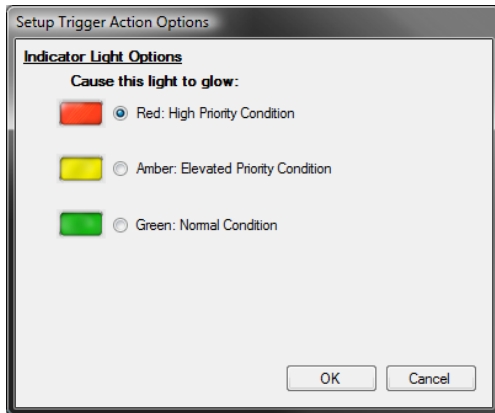


Figure 2.22 –Setup Trigger Red/Amber/Green Light Action

20. For **SNMP Message Action** (Figure 2.23):
 - a. Type the message that you wish to display in the body of the SNMP notification.

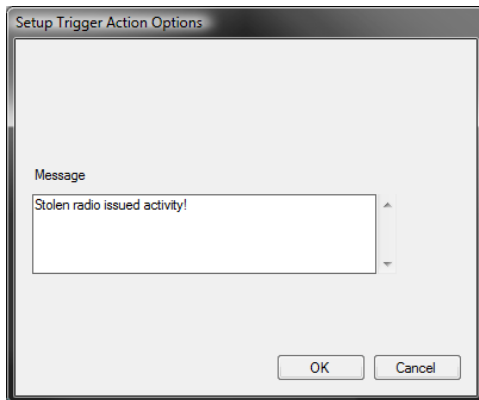


Figure 2.23 –Setup Trigger SNMP Action

21. Click **OK**.
22. Type a name into the Name textbox (Figure 2.24).

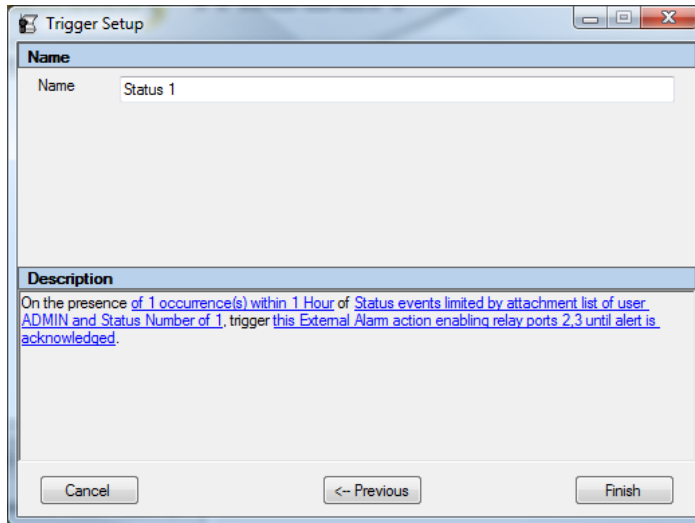


Figure 2.24 –Setup Trigger Name

23. If **Echo To Eventlog** is enabled, set the desired Event ID.
 (This field is only displayed when **Echo To Eventlog** is enabled)

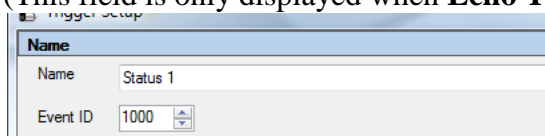


Figure 2.25 –Setup Trigger Event ID

24. Click **Finish** to save the new trigger.

Editing a Trigger

To edit an existing trigger, follow the steps below:

1. Select the trigger that you wish to edit in the **Triggers** list.
2. Click the **Edit** button. You can also double-click on a trigger in the **Triggers** list.
3. Click on the blue underlined text at the bottom of the setup screen of the trigger property that you wish to change.
4. If you wish to change the trigger condition, event or action, click the **← Previous** button to access these options.
5. Click the **Next →** button until the **Finished** button appears.
6. Click **Finished** when done.

Enable/Disable a Trigger

Each trigger can be enabled or disabled using the checkbox next to the trigger name in the **Triggers** list. All triggers are initially enabled.

To enable a trigger:

1. Select the trigger that you wish to enable in the **Triggers** list.
2. Check the checkbox beside the trigger: This will result in a confirmation dialog box.
3. Click **Yes** to enable the trigger.

To disable a trigger:

1. Select the trigger that you wish to disable in the **Triggers** list.
2. Uncheck the checkbox beside the trigger: This will result in a confirmation dialog box.
3. Click **Yes** to disable the trigger.

Deleting a Trigger

To delete an existing trigger, follow the steps below:

1. Select the trigger that you wish to delete in the **Triggers** list.
2. Click the **Delete** button: This will result in a confirmation dialog box.
3. Click **Yes** to delete the trigger.

What is SNMP?

SNMP (simple network management protocol) provides a common status and event language for network software and devices. Using the GW_Connect GUI, you can create an SNMP connection to a Genesis SNMP Remote Manager. The Remote Manager monitors network events (SNMP traps) and reported SNMP values (SNMP messages). SNMP messages are the result of the Remote Manager polling (querying) one or more values exposed by an SNMP-capable device or software.

The Genesis SNMP Remote Manager is part of the GET (Genesis Enterprise Trunking) product line. For more information on this product, please refer to the GET documentation or contact your GenWatch3 support provider.

SNMP Messages

SNMP messages are sent out by SNMP-capable software or devices as a result of a poll (query) on one or more values exposed by the software or device. For example, you may want to monitor the status of a GenGET data reader. In this case, you would create an SNMP Message trigger with the event options shown in Figure 2.26 below.

Specify Message Value Conditions (required):			
<input type="checkbox"/>	Client Index		
<input type="checkbox"/>	Client Ip Address		
<input type="checkbox"/>	Client Name		
<input type="checkbox"/>	Client Radio Id		
<input type="checkbox"/>	Client Status		
<input type="checkbox"/>	Console Clients Connected Count		
<input type="checkbox"/>	Is Primary		
<input type="checkbox"/>	Linked Server Ip Address		
<input checked="" type="checkbox"/>	Linked Server Status	Contains	down
<input type="checkbox"/>	Name		
<input type="checkbox"/>	Reader Index		
<input type="checkbox"/>	Reader Ip Address		
<input type="checkbox"/>	Reader Name		

Figure 2.26 –Setup Trigger SNMP Message Event Options window

SNMP messages will contain one or more SNMP values (described below). The *Setup Trigger Event Options* window allows you to choose one or more specific message values to monitor. In order to fire the trigger, the SNMP message must:

- Pass the condition defined for Source Address, if the Source Address condition is set to anything other than *N/A*.
- Contain all selected (checked) values.
- Pass the condition defined for each selected value.

SNMP Values

SNMP values are name and value pairs included in SNMP messages and some SNMP traps. GenWatch3 monitors the following SNMP values:

- **Client Index:** Numeric index uniquely identifying the queried client.
- **Client IP Address:** Configured IP Address of the queried client.
- **Client Name:** Configured name for the queried client.
- **Client Radio Id:** Numeric radio ID of the console associated with the queried client.
- **Client Status:** Current status of the queried client. This can be one of the following values:
 - Null
 - Unavailable
 - Down
 - Up
 - unknown
- **Console Clients Connected Count:** Number of console clients currently connected to the queried server.
- **Is Primary:** Indicates if the queried server is acting as the primary server. This can be one of the following values:
 - Null
 - Unavailable
 - false
 - true
- **Linked Server Ip Address:** Configured IP Address of the queried linked server.
- **Linked Server Status:** Current status of the queried linked server. This can be one of the following values:
 - Null
 - Unavailable
 - down
 - secondary
 - primary
 - unknown
- **Name:** Name associated with the queried GADI server.
- **Reader Index:** Index uniquely identifying the queried GenGET reader.
- **Reader Ip Address:** Configured IP Address of the queried GenGET reader.
- **Reader Name:** Configured name for the queried GenGET reader.
- **Reader Packet Count:** Number of ATIA packets received since the queried GenGET reader came online.

- **Reader Status:** Current status of the queried reader. This can be one of the following values:
 - Null
 - Unavailable
 - down
 - up
 - unknown
- **Version:** Version of queried GADI.

If the target of the SNMP message query has never been set, the message value will contain *Null*. For example, if you attempt to query the *Linked Server Status* of a GenGET reader has never been set, you will receive a *Linked Server Status* of *Null*.

If the target of the SNMP message query is unavailable, the message value will contain *Unavailable*. For example, if you attempt to query the *Reader Packet Count* of a GenGET reader that is offline, you will receive a *Reader Packet Count* of *Unavailable*.

SNMP Traps

SNMP traps are events sent out on the network by SNMP-capable software or devices. SNMP traps may contain one or more SNMP values (described below).

You can choose to monitor the following SNMP traps in GenWatch3:

- **GADI ATIA Reader Offline:** GenGET ATIA reader monitored by GADI is now offline.
- **GADI ATIA Reader Online:** GenGET ATIA reader monitored by GADI is now online.
- **No GADI Readers connected - no ATIA source:** All GenGET ATIA readers monitored by GADI are now offline.
- **First ATIA packet received after reader connection:** GADI has received the first packet from a GenGET ATIA reader.
- **GADI Client Offline:** GADI has lost its connection to a connected client.
- **GADI Client Online:** GADI has recovered its connection to a disconnected client.
- **GADI Server Settings Updated:** GADI user has updated its settings.
- **All GADI Clients Online:** All known GADI clients are online.
- **EMS to Registered NMS:** An event originating in the Motorola hardware network and propagated through the Unified Event Manager (UEM)
- **NBI Management Event:** SNMP event raised by the North Bound Interface.
- **Other Known Motorola SNMP Traps:** See your Motorola Landmobile ASTRO FM North Bound Interface documentation for more information on these SNMP Traps

- NMS-Agent moEnrol to Domain Notification
- NMS-Agent moDeenrol from Domain Notification
- NMS-Agent moAttr Change Notification
- NMS-Agent Alert Clear Notification
- NMS-Agent Alert Warning Notification
- NMS-Agent Alert Minor Notification
- NMS-Agent Alert Major Notification
- NMS-Agent Alert Critical Notification

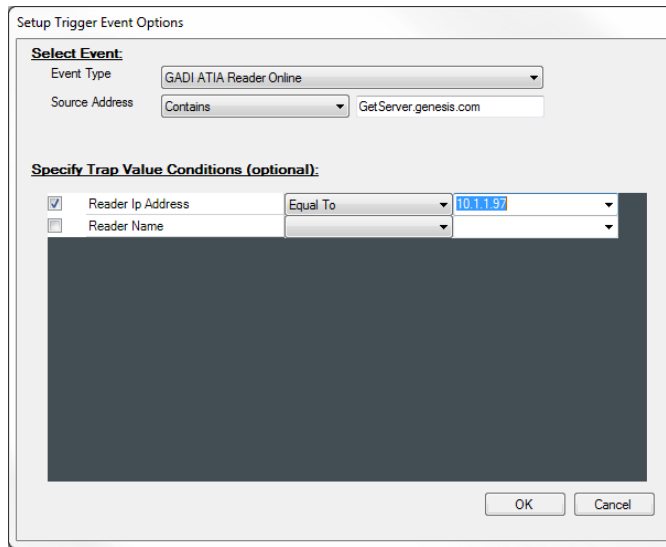


Figure 2.27 – Trigger Setup Event Options

SNMP traps may contain one or more SNMP values (described above). The *Setup Trigger Event Options* window allows you to choose one or more specific trap values to monitor. In order to fire the trigger, the SNMP trap must:

- Be the trap specified in **Event Type**.
- Pass the condition defined for Source Address, if the Source Address condition is set to anything other than *N/A*.
- Contain all selected (checked) values.
- Pass the condition defined for each selected value.

If the trap does not contain SNMP values, SNMP value validation does not occur.

Sample Triggers

This section describes a couple of sample triggers.

Lone Patrolman

In this scenario we have a security guard who is patrolling on his/her own. Every hour, this patrolman is to check in via a Status 1, indicating, “I am OK.” If this patrolman fails to issue this status every hour, then the dispatcher must be

notified. This notification will enable external relay 1, until the dispatcher acknowledges a GenWatch3 Notification message. For this scenario, we would set up the following trigger:

Name: LP 123.

Presence: On the lack of 1 occurrence(s) within 1 Hour.

Event: of Status events limited by radio ID of 123 and Status Number of 1.

Action: Trigger this External Alarm action. Enables relay port(s) 1 until alert is acknowledged.

Diagnostic Notification

In this scenario, the system administrator GenWatch3 user would like to be notified when a Transmitter Interface Board malfunction event occurs. This notification will target the *Administrator* role and will show each user with this role a GenWatch3 Notification message.

Name: TIB Malfunction.

Presence: On the presence of 1 occurrence(s) within 1 Hour.

Event: of Transmitter Interface Board malfunction events.

Action: Trigger this Audio-Visual action (targeting the role of Administrator).

Unacknowledged Emergency Alarms

In this scenario, the system administrator GenWatch3 user would like to be notified when any radio issues an emergency alarm that is not acknowledged within 1 minute. This notification will target the *Administrator* role and will show each user with this role a GenWatch3 Notification message.

Name: No Emergency Ack.

Presence: On the lack of 1 occurrence(s) within 1 Minute.

Event: of Emergency Ack events limited by attachment list of user ADMIN.

Action: Trigger this Audio-Visual action (targeting the role of Administrator).

Busy Threshold

In this scenario, the system administrator GenWatch3 user would like to be notified when the number of acceptable busies in an hour is exceeded. This notification will be displayed using the Red light from the Red/Amber/Green notification displayed on the Channel module.

Name: Busy Threshold.

Presence: On the presence of 5 occurrence(s) within 1 hour.

Event: Busy events limited by attachment list of user ADMIN.

Action: Trigger a flashing Red threshold light.

GenGET Reader Down

In this scenario, the system administrator GenWatch3 user would like to be notified when the GenGET reader with a *Reader Name* of *Reader 1* has a reported *Reader Status* of *down*. This notification will be in the form of enabling relay position 1 on the OnTrak device.

Name: Reader 1 Down.

Presence: On the presence of 1 occurrence(s) within any time period.

Event: Genesis GADI SNMP messages when Reader Name equal to Reader 1 and Reader Status equal to down.

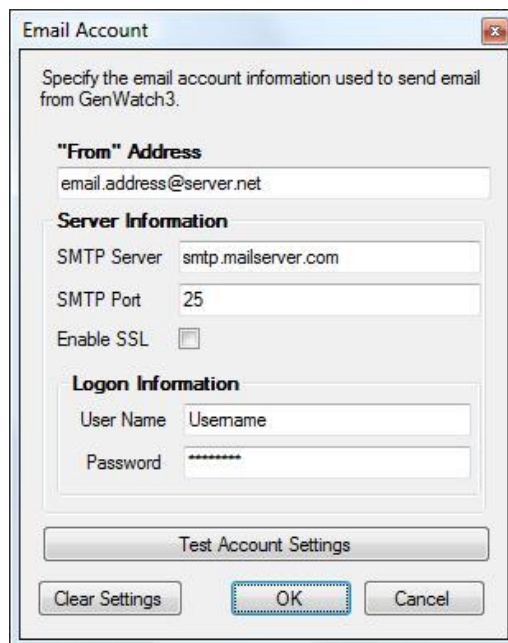
Action: Trigger this External Alarm action enabling relay ports 1.

Email Setup

Describes the email configuration process. This section must be completed before an email action can be configured.

To configure email settings, follow the steps below:

1. Click the **Email Settings** button: This will load the *Email Account* window (see Figure 2.28).
2. Enter the required SMTP information.
 - a. **“From” Address:** Emails sent from GenWatch3 will come from this account.
 - b. **SMTP Server:** Enter the SMTP server for this account. This information can be obtained from your mail provider.
 - c. **SMTP Port:** Enter the SMTP Port for this account. The default is port 25. Your provider may use a different port.
 - d. **Enable SSL:** Check to use secure socket layer when sending mail.
 - e. **User Name:** Enter the account user name. This is the same user name used to access the account.
 - f. **Password:** Enter the account password. (This field is encrypted for storage.)
3. Click **Test Account Settings** to generate a test message using the settings provided. The email will be sent to the same address entered in the **From Address** field. Verify that the email was received
4. Click **OK** to save these settings.



The screenshot shows a dialog box titled "Email Account" with a close button in the top right corner. The main text reads: "Specify the email account information used to send email from GenWatch3." Below this, there are three sections of input fields:

- "From" Address:** A text field containing "email.address@server.net".
- Server Information:** Three fields: "SMTP Server" with "smtp.mailserver.com", "SMTP Port" with "25", and "Enable SSL" with an unchecked checkbox.
- Logon Information:** Two fields: "User Name" with "Username" and "Password" with "*****".

At the bottom of the dialog, there is a "Test Account Settings" button, and below that, three buttons: "Clear Settings", "OK" (which is highlighted with a blue border), and "Cancel".

Figure 2.28 – Email Account Setup

This chapter describes the GUI notification process.

This chapter contains the following sections:

- **What is a GUI Notification?:** Defines the GUI Notification.

What is a GUI Notification?

A GUI Notification (GUIN) is a packet that originates from the GW_Trigger module and is sent to all of the GenWatch3 modules. Each GUIN originates as a result of a defined trigger being “triggered”.

GW_Trigger GUINs target a specific GenWatch3 user role (roles are defined in the GW_Security GUD). Each GenWatch3 client machine with a GenWatch3 user logged in that is registered to the target role, will show a *GenWatch Notification* window (see Figure 3.1 below) describing the trigger event. Once a user clicks on the event in the list, the event is acknowledged, and is shown as acknowledged for all users that received the GUIN.

For example, let’s say you have user “Bob” and user “Jake”, who are both assigned the *Dispatcher* role. If you set up a trigger that issues a GUIN whenever radio ID 123 issues a PTT (Push-To-Talk), both of these users would receive the GUIN.

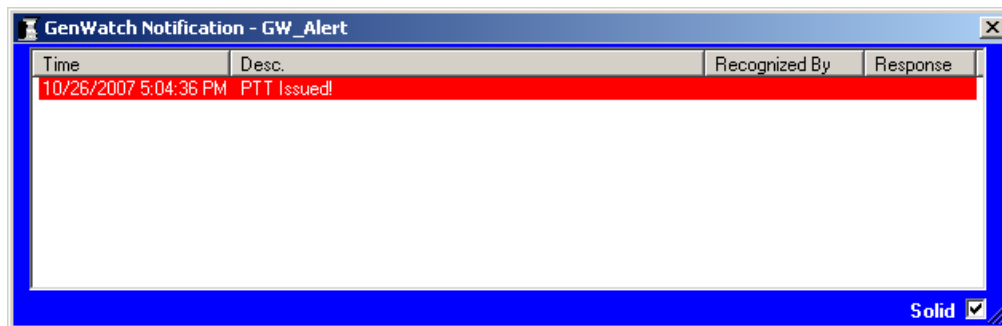


Figure 3.1 – GenWatch3 Notification Window



When you first receive a GUIN, the *GenWatch Notification* window will be translucent. Click on the Solid checkbox in the bottom-right-hand corner of the window to make the window solid.

You must set up a trigger in one of the following ways to receive a trigger GUIN:

1. Create a trigger with an Audio-Visual action.
2. Create an External Alarm trigger that keeps the relays disabled until the event is acknowledged by a user.



If you close the Notification Window without acknowledging all events, the window will reappear within 5 seconds.