



GW3-TRBO™

600-2.0.5-S.1
07/15/2009

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

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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 GW3-TRBO so that we can make it a better product for everyone.

Refer to the Troubleshooting & Support section of this manual 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 | Updated TRBO screenshots | REB |

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About this Manual

Goals

This manual describes the role and function of the Trigger module in the GW3-TRBO 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 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 function.

Important Note

The MOTOTRBO ‘backbone’ that GW3-TRBO uses is a powerful stream of data that, as time goes by, will be revealing much more of its power. You may notice GW3-TRBO terms, setup options or real-time activity properties that may not make sense in the current MOTOTRBO world. If you see terms, options or properties that are not adequately explained in your GW3-TRBO documentation, please contact support, look in the Glossary section of the GW3-TRBO Manual Shell, or on our GW3-TRBO web site. If you see terms, options or properties that you understand, but do not pertain to MOTOTRBO, please disregard them for the time being. As new MOTOTRBO features are added over time, you will begin to understand that your GW3-TRBO is ready for those MOTOTRBO enhancements!

Chapter 1

Overview

This chapter provides an overview of the Trigger module and its function within the GW3-TRBO solution.

This chapter contains the following sections:

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

What is Trigger?

Trigger is a module that allows you to set up real-time external relay or audio-visual alerts. Practical applications include:

- Closing a relay that will sound an alarm when an emergency alarm event is received from your trunking system.
- Closing a relay that lights an LED labeled for a particular group when the group receives a push-to-talk on your trunking system.



Figure 1.1 – Trigger Configuration Screen

What is the optional OnTrak Relay Device?

Trigger offers functionality with the OnTrak model ADU208 USB external relay device. This optional hardware device connects to your GW3-TRBO host machine via USB. This device supports up to 8 external relay devices. The ADU208 can support a 5-amp DC load per contact. Trigger is able to close from 1 to 8 of these relays when a trigger executes.

Closing All Relays

The **Close All Relays** button allows you to close all relays on the OnTrak device.

Viewing Trigger Activity

The Trigger Activity list shows all trigger-based activity sent and received by the Trigger module. This list is cleared each time you close the Trigger screen.

This chapter describes the process required to set up a trigger, how to install the OnTrak ADU208 hardware and how triggers interact with the GW3-TRBO 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.

Setting up the optional OnTrak ADU208 Device

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

device.



The GW3-TRBO installer copies the AudHid.dll file to the GW3-TRBO 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 Trigger configuration screen. The sections below provide instructions for maintaining triggers.

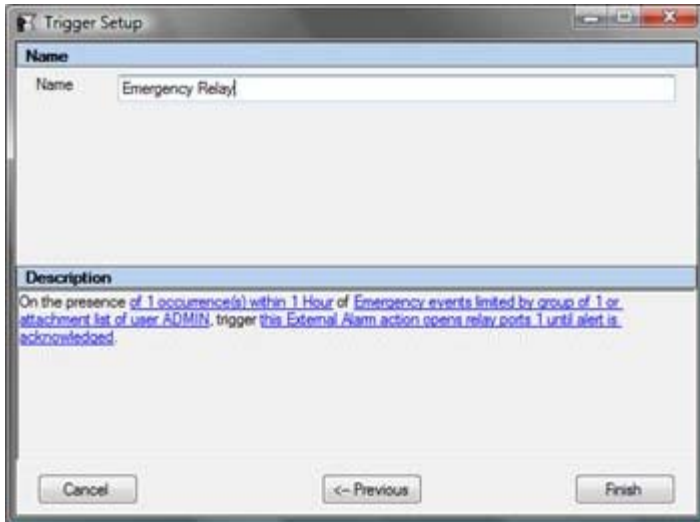


Figure 2.1 – Trigger Setup Screen

Adding a New Trigger

To add a new trigger, follow the steps below:

1. Click the **Add** button: This will load the Trigger Setup screen. (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.

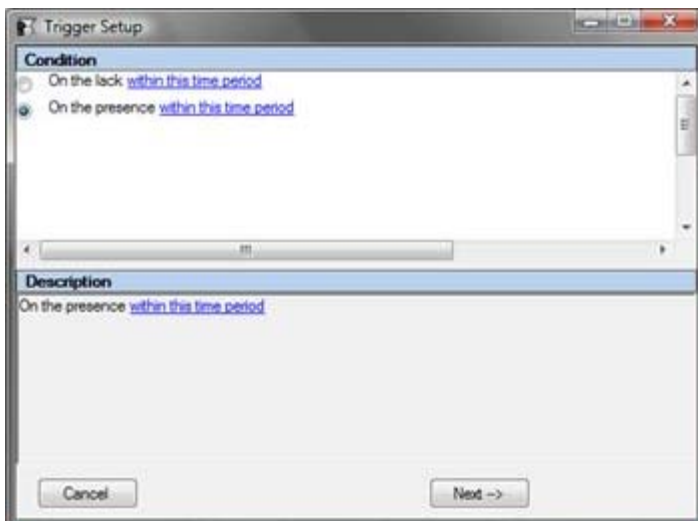


Figure 2.2 – Trigger Setup Screen

3. Click the **Next** → button: this will show the event category.

- Click on the blue **within this time period** text at the bottom of the setup screen: This will load the **Setup Trigger Options** window.

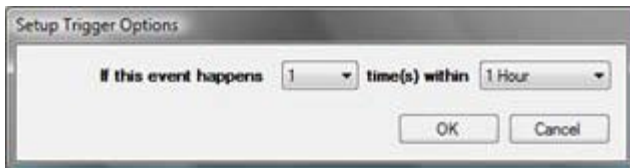


Figure 2.3 – Trigger Setup Time Period Options

- Select the condition count in the first drop down list.
- Select the time frame in the second drop-down list.
- Click the **OK** button.
- Choose the trigger event. The choices include:
 - Of this Radio System Event:** Events issued from or to a radio. These include:
 - **PTT (Push-To-Talk):** Radio issues a group or private call.
 - **Emergency Alarm:** Radio issues an emergency alarm.
 - **Emergency Alarm Ack:** Console or GW3-TRBO acknowledges a radio's emergency alarm.
 - Of this Radio System Diagnostic Event:** Trunking system reports a board-position based or site-based diagnostic.
 - Of this GenWatch Event:** Currently the only option in this category is Unattended EA. This is an event sent from Halcyon if an emergency alarm was received on the system and not delivered to a connected CADI or RC user. *This option is only valid for GW3-TRBO installations that include the Halcyon module with the Emergency Alarm feature.*
 - Of this Threshold Event**
 - **PTT (Push-To-Talk):** Radio issues a group or private call.
 - **Busies:** All available voice paths are occupied.

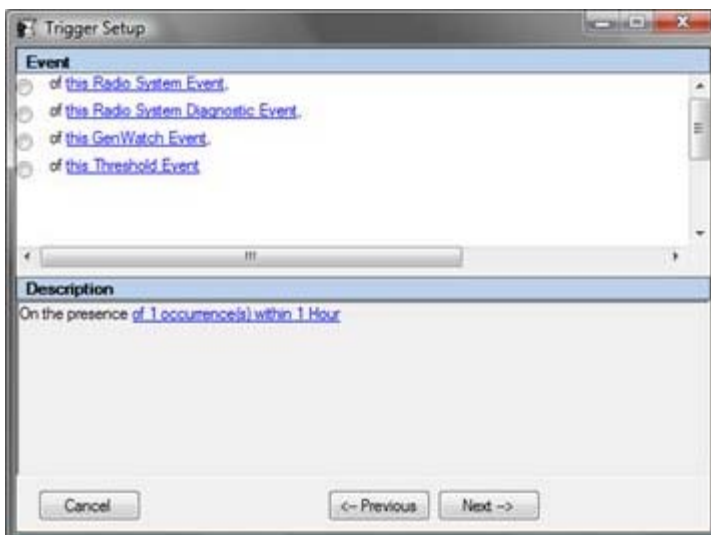


Figure 2.4 – Trigger Setup Event Category Selection

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



Figure 2.5 – Trigger Setup Event Options

11. Choose your event options. The **Setup Trigger Event Options** screen will vary based on the selected category. This screen 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 only *Unattended EA*.
 - b. **System ID:** The system ID to monitor for this event. For *Radio System Events*, this system ID is only used to fully qualify the radio ID and/or group ID. For *Threshold Events*, this system ID is only used to qualify the zone ID, site ID and group ID.
 - c. **For Group ID:** The specific group ID on which to monitor this event.
 - d. **For Radio ID:** The specific radio ID on which to monitor this event.
 - e. **Zone ID:** The zone ID to monitor for this event.
 - f. **Site ID:** The site ID to monitor for this event.
 - g. **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.



The **Select Units** grid is filtered based on your GW3-TRBO user's attachment list, unless your user has a role with the *ViewAllGroups* privilege for Alias. These options are available in the Security module.



To clear the **For Radio ID** value, click the **Select ID** button. Clear any selected radio IDs in the **Select Units** screen 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 Alias, all radio IDs are included for this event.



Events that include any selected value for 11.c, 11.d or 11.g are included in this event.

12. Click the **OK** button.
13. Choose the Trigger action. Options include:
 - a. **This Audio Visual Action:** This option sends a predefined message to each GW3-TRBO GUI user logged in with the selected role.
 - b. **This External Alarm Action:** This option interacts with the OnTrak ADU208 device. It closes

- relays for a given amount of time or until a user with the selected role acknowledges the event.
- c. **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.

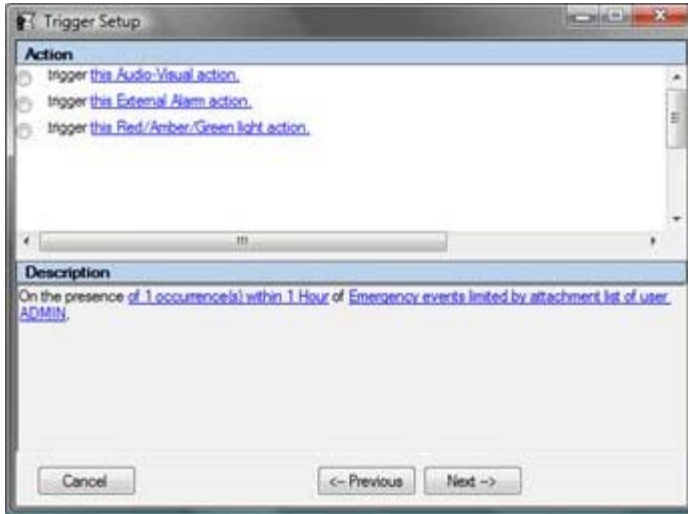


Figure 2.6 – Trigger Setup Action Type

14. Click the **Next** → button: This will add the text for the option selected below to the statement at the bottom of the setup screen.
15. Click on the blue text of the trigger action you chose in step 13: This will load the **Setup Trigger Action Options** screen.
16. For **Audio Visual Action:**
 - a. Choose a role.
 - b. Optionally provide a file name (remember that the file must be reachable by all GW3-TRBO 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.

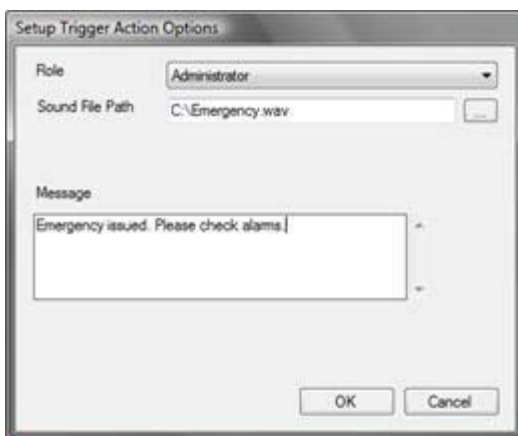


Figure 2.7 – Trigger Setup Audio-Visual Action

17. For **External Alarm Action:**
 - a. Choose a role.
 - b. Select one or more relay positions to close.
 - c. Select duration. If you choose “until alert is acknowledged, this will result in an audio-visual action as well as an external alarm action.



Figure 2.8 – Trigger Setup External Alarm Action

18. For **Red/Amber/Green Light** Action
 - a. Choose which light to associate with this threshold.



Figure 2.9 – Trigger Setup Red/Amber/Green Light Action

19. Click **OK**.
20. Type a name into the Name textbox.

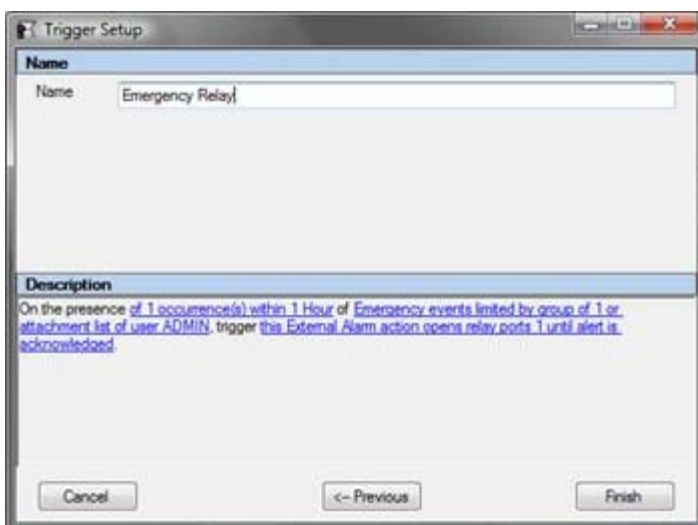


Figure 2.10 – Trigger Setup Name

21. 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 trigger list.
2. Click the **Edit** button. You can also double-click on a trigger in the trigger 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 trigger list. All triggers are initially enabled.

To enable a trigger:

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

Sample Triggers

This section describes a couple of sample triggers.

PTT Notification

In this scenario, the system administrator GW3-TRBO user would like to be notified when a stolen radio keys up (radio ID 1301). This notification will target the *Administrator* role and will show each user with this role a GW3-TRBO Notification message.

Name: Radio PTT 1301

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

Event: PTT events limited by radio ID of 1301.

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

Unacknowledged Emergency Alarms

In this scenario, the system administrator GW3-TRBO 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 GW3-TRBO 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 GW3-TRBO user would like to be notified when the number of acceptable busies in an hour is exceeded. This notification will displayed using the Red light from the Red/Amber/Green notification on Channel.

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.

Chapter 3

GW3-TRBO GUI Notifications

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 Trigger module and is sent to all of the GW3-TRBO modules. Each GUIN originates as a result of a defined trigger being “triggered”.

Trigger GUINs target a specific GW3-TRBO user role (roles are defined in the Security configuration screen). Each GW3-TRBO client machine with a GW3-TRBO user logged in that is registered to the target role, will show a GW3-TRBO 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 – GW3-TRBO Notification Window



When you first receive a GUIN, the GW3-TRBO 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 closed until the event is acknowledged by a user.



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