



GenWatch3[®]
GW_Affiliation
Software Version 2.12
Module Book

GenWatch₃

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Table of Contents

| | |
|---|-----------|
| <i>Trademarks</i> | 3 |
| <i>The Genesis Group Trademark Information</i> | 3 |
| <i>Copyright</i> | 3 |
| <i>Disclaimer</i> | 3 |
| <i>License</i> | 3 |
| <i>Support</i> | 3 |
| DOCUMENT HISTORY | 4 |
| TABLE OF CONTENTS | 5 |
| ABOUT THIS MANUAL | 7 |
| GOALS | 7 |
| WHO SHOULD READ THIS MANUAL? | 7 |
| HOW THIS MANUAL IS ORGANIZED | 7 |
| CHAPTER 1 OVERVIEW | 9 |
| WHAT IS GW_AFFILIATION?..... | 9 |
| <i>Terms</i> | 9 |
| <i>Function</i> | 10 |
| <i>Event Delivery and User Validation</i> | 11 |
| USING THE GROUPS TREE..... | 12 |
| <i>Terms</i> | 12 |
| <i>Function</i> | 12 |
| System..... | 12 |
| RFSS | 12 |
| Site | 12 |
| Group (Talkgroup/Multigroup) | 12 |
| <i>Adding and Removing Resources</i> | 13 |
| RFSSs..... | 14 |
| Sites..... | 15 |
| Multigroups..... | 16 |
| Talkgroups | 17 |
| RESOURCE WINDOWS..... | 18 |
| <i>Using Resource Windows</i> | 19 |
| <i>Active Multigroup and Talkgroup Indication</i> | 20 |
| <i>Late Entry</i> | 20 |
| <i>Customizing Resource Windows</i> | 21 |
| List Options..... | 21 |
| USING STATISTICS WINDOWS..... | 24 |
| WINDOW MENU..... | 26 |
| <i>Resource Window Options</i> | 27 |
| <i>Module Options</i> | 28 |
| CHAPTER 2 ADVANCED FEATURES | 29 |
| SEARCHING FOR AFFILIATED RADIO IDS..... | 30 |
| <i>Viewing Unit History</i> | 31 |
| Printing the Unit History Activity List..... | 32 |
| APPENDIX A | 33 |
| RADIO PRESENCE ACTIVITY | 33 |
| RADIO ABSENCE ACTIVITY | 34 |

Goals

This manual describes the function and role of the GW_Affiliation module in the GenWatch3 solution and provides instructions on using the GW_Affiliation graphical user interface (GUI).

Who Should Read This Manual?

This manual is written with an expected audience of novice to 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:** Describes the GW_Affiliation module, the GW_Affiliation GUI and the organization of the affiliation information within the GW_Affiliation GUI.
- **Advanced Features:** Describes how to search for and view the history of affiliated radio IDs.

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.

This chapter describes the GW_Affiliation module, the GW_Affiliation GUI and the organization of the affiliation information within the GW_Affiliation GUI.

This chapter contains the following sections:

- **What is GW_Affiliation?:** Defines the function and role of the GW_Affiliation module in the GenWatch3 solution.
- **Using the Groups Tree:** Describes how to use the GW_Affiliation Groups Tree.
- **Using Resource Windows:** Describes how to use the GW_Affiliation resource windows.

What is GW_Affiliation?

Terms

- **Affiliation:** When a radio reports affiliated group information to the system. This occurs when a radio is powered on, changes groups, becomes uninhibited, etc. In addition to normal affiliation activity, GW_Affiliation processes any group-based activity originated by the radio as an indication of presence. See *Appendix A – Radio Presence Activity* for a list of packet types.
- **Deaffiliation:** Issued by a radio when it is powered off.
- **Resource:** This term is used to describe systems, RFSSs, sites, multigroups and talkgroups. (i.e., trunking system resources.)
- **Connection Activity:** Affiliations, associations, registrations and radio-originated activity such as PTT. This activity indicates that the radio is connected.
- **Disconnection Activity:** Deaffiliations, disassociations and deregistrations. This activity indicates that the radio is disconnected.
- **Late Entry:** When a unit affiliates to a group during an ongoing call or PTT.

Function

The GW_Affiliation GUI shows the real-time connection state of a radio. You may view *connection activity* at the system level or add resources (such as RFSSs, sites, or groups) and view affiliation activity at the resource level.

When a radio performs *connection activity*, the GW_Affiliation module adds the radio to a list of connected radios. This list entry contains the radio's current system, RFSS, site, group (if any) and last activity details. When the radio issues additional activity, the GW_Affiliation module updates the radio's current system, RFSS, site, talkgroup (if any) and last activity.

If the GW_Affiliation GUI is open when a radio issues *connection activity*, the GW_Affiliation module passes this activity on to the GW_Affiliation GUI. The GW_Affiliation GUI adds the originating radio to all resource windows involved in the activity.

When a radio issues a *disconnection activity*, the GW_Affiliation module removes the radio from the list of connected radios.

If the GW_Affiliation screen is open when a radio issues *disconnection activity* or a radio's affiliation expires, the GW_Affiliation module passes this notification on to the GW_Affiliation GUI. The GW_Affiliation GUI removes the originating radio from all resource windows.

When the GenWatch3 service is started, GW_Affiliation loads the last known affiliation information for each radio in the alias database. GW_Alias will only keep affiliation information current if the System's **Dynamically Add Radio IDs** option is checked in the GW_Alias GUI.

Each time a user opens the GW_Affiliation GUI, it queries the GW_Affiliation module for a list of currently affiliated radios. The GW_Affiliation GUI uses this list to populate the resource windows. This means that you can keep the GW_Affiliation GUI closed and its module will continue to gather affiliation information.

GW_Affiliation also provides radio search options as well as easy access to radio history archived by the GW_Archiver module.

Event Delivery and User Validation

Before the GW_Affiliation module delivers affiliation activity to a GW_Affiliation GUI, it verifies that the GenWatch3 user's attachment list contains the default group or agency of the originating radio ID or if the activity occurred on a site in the users attachment list. To view or change a user's attachment list, see the **Group Filter, Agency Filter and Site Filter** settings in GW_Security. To view or change a radio's *Default Group* or *Agency*, see the **Radio Id Options** in the GW_Alias GUI.

If the user's role contains one of the *ViewAllGroups*, *ViewAllAgencies* or *ViewAllSites* privileges under the GW_Affiliation module, the event is delivered regardless of the user's attachment list. To view or change a user's role privileges, see the **Role Privileges** section in GW_Security.



GenWatch3 reports activity as it is received. Radio models report affiliation and deaffiliation based on their software programming and their hardware design. In our testing we have seen some radio models refuse to report deaffiliation, regardless of programming.

The screenshot shows the GW_Affiliation GUI with a table of affiliation data for system 00000:1404. The table has the following columns: Group, Call Type, ID, ID Alias, Tag, Location, Agency, Serial No., Address, and Last Co. The data rows are:

| Group | Call Type | ID | ID Alias | Tag | Location | Agency | Serial No. | Address | Last Co |
|---------|--------------|----|----------|-----|----------|--------|------------|---------|---------|
| 1 (FDT) | Initial Load | 1 | GW\$1 | | | | 7 | | 8/27/2 |
| 1 (FDT) | Initial Load | 2 | GW\$2 | | | | | | 8/27/2 |
| 1 (FDT) | Initial Load | 5 | GW\$5 | | | | | | 8/27/2 |
| 1 (FDT) | Initial Load | 7 | GW\$7 | | | | | | 8/13/2 |

Figure 1.1 – GW_Affiliation GUI

Using the Groups Tree

Terms



Node: An entry or item in a tree.



Attachment List: The groups assigned to a GenWatch3 user in the GW_Security module.

Function

The **Groups** Tree contains a node for each known resource added to the GW_Affiliation **Groups** Tree by a user. These resources are organized under systems. Each system also contains a node for RFSSs, multigroups and talkgroups.

Activity can be viewed at multiple levels.

System

System resource windows allow you to view a system's affiliation activity with one convenient window. Check a **System** node to open a system resource window and view affiliation activity for all radios on the system.

RFSS

RFSS resource windows allow you to view a RFSS's affiliation activity with one convenient window. Check a **RFSS** node to open a RFSS resource window and view affiliation activity for all radios on the RFSS.

Site

Site resource windows allow you to view a site's affiliation activity with one convenient window. Check a **Site** node to open a site resource window and view affiliation activity for all radios on the site.

Group (Talkgroup/Multigroup)

Group resource windows allow you to view a group's affiliation activity with one convenient window. Check a **Talkgroup** or **Multigroup** node to open a group resource window and view affiliation activity for all radios on the group.

Adding and Removing Resources

The System window shows affiliation activity at the system level. If you wish to view affiliation activity for a specific resource, you must add the resource to the **Groups Tree**.



Things to remember about searching for resources:

- The search results will not contain resources that are already in your **Groups Tree**.
- The search results will only contain groups/multigroups that are valid for your attachment list.

Resources have some common items on their menus.

- Right-clicking a node will show a menu with options to add resource of that type and to remove all items of that type. See Figure 1.2 for an example.
- Right-clicking on a resource will show a menu with options to delete that resource and display statistics for that resource. See Figure 1.3 for an example.



Figure 1.2 – RFSSs Options menu

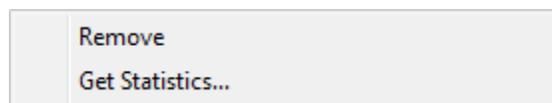


Figure 1.3 – Single Resource Options menu



Removing a resource from the **Groups Tree** does not delete this resource from your alias database. It only affects the GW_Affiliation **Groups Tree**, and only for your user. The next time you load the GW_Affiliation screen, it will load the resources that were in your **Groups Tree** at the time it was last closed.

RFSSs

To add one or more RFSSs, take the following steps:

1. Right-click on the **RFSSs** node under the system you wish to add RFSSs under. This will show the RFSS options menu.
2. Click the **Add...** option. This will load the *Select RFSSs* window.

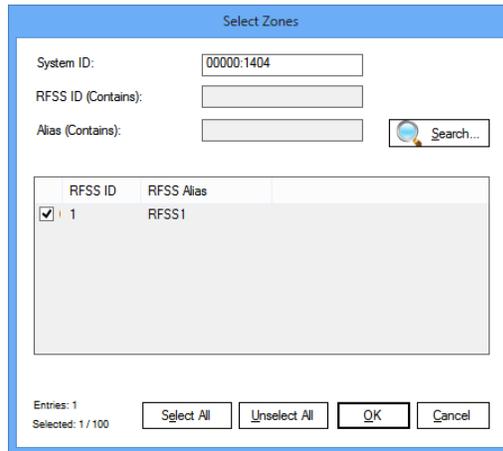


Figure 1.4 – Select RFSSs Window

3. Enter search criteria and click the **Search** button. This will show each RFSS that meets your search criteria in the RFSS list.
4. Check each RFSS that you wish to add to your **Groups** Tree by double-clicking the RFSS in the list or checking the checkbox in the **RFSS ID** column.
5. When finished selecting RFSSs, Click the **OK** button. This will close the *Select RFSSs* window and add the selected RFSSs under the **RFSSs** node.

To remove all RFSSs under a system, take the following steps:

1. Right-click on the **RFSSs** node. This will show the RFSSs Options menu.
2. Click the **Remove All RFSSs** option. This will show a confirmation dialog.
3. Click **Yes**. This will remove all RFSSs from the **RFSSs** node.

To remove a single RFSS from a **RFSSs** node, take the following steps:

1. Right-click on the RFSS that you wish to remove. This will show the Single Selection Options menu.
2. Click the **Remove** option. This will show a confirmation dialog.
3. Click **Yes**. This will remove the RFSS and all sites under the RFSS from the **Groups** Tree.

Sites

To add one or more sites, take the following steps:

1. Right-click on the **Sites** node under the RFSS you wish to add sites under. This will show the Sites options menu.
2. Click the **Add...** option. This will load the *Select Sites* window.

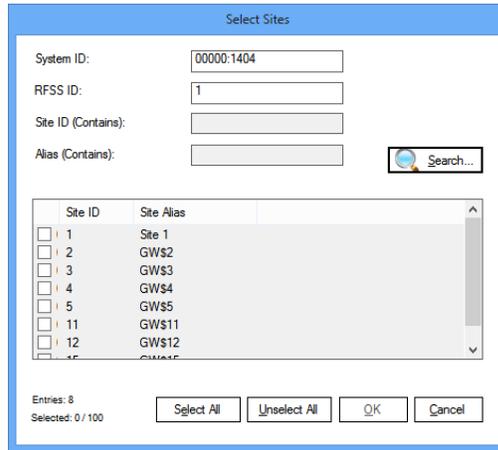


Figure 1.5 – Select Sites Window

3. Enter search criteria and click the **Search** button. This will show each site that meets your search criteria in the site list.
4. Check each site that you wish to add to your **Groups** Tree by double-clicking the site in the list or checking the checkbox in the **Site ID** column.
5. When finished selecting sites, Click the **OK** button. This will close the *Select Sites* window and add the selected sites under the **Sites** node.

To remove all sites under a system, take the following steps:

1. Right-click on the **Sites** node. This will show the Sites Options menu.
2. Click the **Remove All Sites** option. This will show a confirmation dialog.
3. Click **Yes**. This will remove all RFSSs from the **Sites** node.

To remove a single site from a **Sites** node, take the following steps:

1. Right-click on the site that you wish to remove. This will show the Single Selection Options menu.
2. Click the **Remove** option. This will show a confirmation dialog.
3. Click **Yes**. This will remove the site from the **Groups** Tree.

Multigroups

To add one or more multigroups, take the following steps:

1. Right-click on the **Multigroups** node under the system you wish to add multigroups under. This will show the Multigroups options menu.
2. Click the **Add...** option. This will load the *Select Multigroups* window.

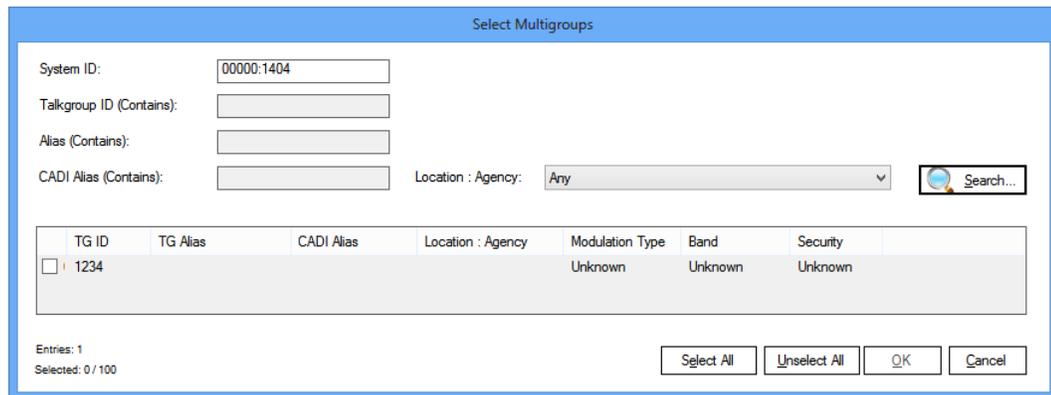


Figure 1.6 – Select Multigroups Window

3. Enter search criteria and click the **Search** button. This will show each multigroup that meets your search criteria in the group list.
4. Check each multigroup that you wish to add to your **Groups** Tree by double-clicking the multigroup in the list or checking the checkbox in the **TG ID** column.
5. When finished selecting multigroups, Click the **OK** button. This will close the *Select Multigroups* window and add the selected multigroups under the **Multigroups** node.

To remove all multigroups under a system, take the following steps:

1. Right-click on the **Multigroups** node. This will show the Multigroups Options menu.
2. Click the **Remove All Multigroups** option. This will show a confirmation dialog.
3. Click **Yes**. This will remove all multigroups from the **Multigroups** node.

To remove a single multigroup from the **Multigroups** node, take the following steps:

1. Right-click on the multigroup that you wish to remove. This will show the Multigroup Options menu.
2. Click the **Remove** option. This will show a confirmation dialog.
3. Click **Yes**. This will remove the multigroup from the **Groups** Tree.

Talkgroups

To add one or more groups, take the following steps:

1. Right-click on the **Talkgroups** node under the system you wish to add groups under. This will show the Talkgroups options menu.
2. Click the **Add...** option. This will load the *Select Talkgroups* window.

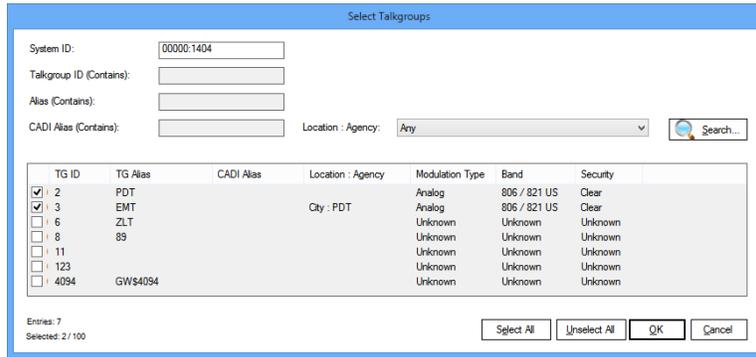


Figure 1.7 – Select Talkgroups Window

3. Enter search criteria and click the **Search** button. This will show each group that meets your search criteria in the group list.
4. Check each group that you wish to add to your **Groups** Tree by double-clicking the group in the list or checking the checkbox in the **TG ID** column.
5. When finished selecting groups, Click the **OK** button. This will close the *Select Talkgroups* window and add the selected groups under the **Talkgroups** node.

To remove all groups under a system, take the following steps:

4. Right-click on the **Talkgroups** node. This will show the Talkgroups Options menu.
5. Click the **Remove All Talkgroups** option. This will show a confirmation dialog.
6. Click **Yes**. This will remove all groups from the **Talkgroups** node.

To remove a single group from the **Talkgroups** node, take the following steps:

1. Right-click on the group that you wish to remove. This will show the Talkgroup Options menu.
2. Click the **Remove** option. This will show a confirmation dialog.
3. Click **Yes**. This will remove the talkgroup from the **Groups** Tree.

Resource Windows

Notice that each node in the Groups Tree contains a check box. For systems, multigroups, RFSSs, sites and groups, the check box indicates if the window for this resource is loaded. Resource windows reside in the space to the right of the Groups Tree. You may have up to 10 resource windows open at one time. Having all windows open is not necessary as the affiliation activity is gathered in the GW_Affiliation module, even if the GW_Affiliation screen is not open.

Checking the check box of a resource node will show the resource's window. Unchecking the check box of a resource node will hide the resource's window.

If the resource window for a node is visible, the right click menu for that node will contain a **Minimize Window** or **Restore Window** option.

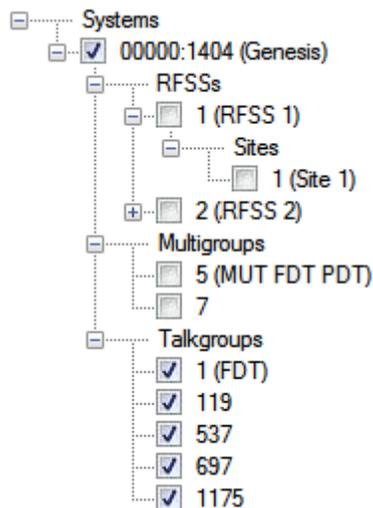


Figure 1.8 – GW_Affiliation Groups Tree

Using Resource Windows

Each resource in the **Groups** Tree has its own window. These windows show the affiliation activity that has occurred in the resource since the GW_Affiliation module was started. Each window contains the following information:

- **Type:** The resource type is shown in the title bar of the **Resource** window. Types include:
 - System
 - RFSS
 - Site
 - Talkgroup
 - Multigroup
- **ID:** The RFSS, site, group, or system ID is shown in the white bar below the title bar along with the Type.
- **Activity:** Group activity. The group activity list can contain any of the following columns:
 - **Group:** The talkgroup/multigroup ID (and alias) of the group included in the activity.
 - **Call Type:** This is the last activity type received for this radio ID. This can be any group-based activity.
 - **ID:** Radio ID included in the activity.
 - **ID Alias:** Alias of the radio ID.
 - **Tag:** Tag assigned to the originating radio ID.
 - **Location:** Location of the radio ID.
 - **Agency:** Agency of the radio ID.
 - **Serial Number:** Serial number of the radio ID.
 - **Address:** Address of the radio ID.
 - **Last Contact:** The last date and time GW_Affiliation received activity for this radio ID.
 - **System:** The system ID the activity was received on.
 - **RFSS:** The RFSS ID the activity was received on.
 - **Site:** The site ID the activity was received on.
 - **Last Status:** The last status issued by this radio. If this radio has a Status Set selected in Alias, the status' description will show in parenthesis.
 - **Last Status DT:** The date and time the status was received.
 - **Last Msg:** The last message issued by this radio. If this radio has a Message Set selected in Alias, the message's description will show in parenthesis.
 - **Last Msg DT:** The date and time the message was received.

| Group | Call Type | ID | ID Alias | Tag | Location | Agency | Serial No. | Address | Last Co |
|---------|--------------|-----------------|-------------|-----|----------|--------|------------|---------|---------|
| 1 (FDT) | Initial Load | 1 (Radio Alias) | Radio Alias | | | | 7 | | 8/27/2 |
| 1 (FDT) | Initial Load | 2 (Two) | Two | | | | | | 8/27/2 |
| 1 (FDT) | Initial Load | 5 (Unit 5) | Unit 5 | | | | | | 8/27/2 |
| 1 (FDT) | Initial Load | 7 | 7 | | | | | | 8/13/2 |
| 119 | Initial Load | 4153 | GW\$4153 | | | | | | 2/29/2 |
| 1175 | Initial Load | 8243 | GW\$8243 | | | | | | 2/29/2 |
| 697 | Initial Load | 8917 | GW\$8917 | | | | | | 2/29/2 |
| 4093 | Initial Load | 16530 | GW\$16530 | | | | | | 8/27/2 |
| 537 | Initial Load | 21433 | GW\$21433 | | | | | | 2/29/2 |

Figure 1.9 – GW_Affiliation Resource Window



GW_Affiliation will allow a maximum of 10 open Resource Windows and 10 Statistics Windows. All resources are constantly monitored by the GW_Affiliation module, but only up to 10 of each window can be opened for viewing within the GW_Affiliation GUI.

Active Multigroup and Talkgroup Indication

While a call is active on a multigroup or talkgroup, the Affiliation GUI will indicate this multigroup or talkgroup as active by:

- Showing the multigroup or talkgroup’s node in the **Groups** Tree as green unless it is the selected node.
- Showing the group type at the top of the multigroup or talkgroup’s resource window as green.

Figure 1.10 shows an active talkgroup.

Late Entry

When a radio affiliates to a talkgroup or multigroup while that talkgroup or multigroup is in conversation, this radio is considered *Late Entry*. Late Entry radios are prepended with (Late Entry) while the conversation they entered remains active. Figure 1.10 shows a late entry radio ID.

| Group | Call Type | ID | ID Alias | Tag |
|---------|-------------------|-----------------|-------------|-----|
| 1 (FDT) | Initial Load | 1 (Radio Alias) | Radio Alias | |
| 1 (FDT) | Initial Load | 2 (Two) | Two | |
| 1 (FDT) | (Late Entry) A... | 4 | GW\$4 | |
| 1 (FDT) | Channel Assi... | 5 (Unit 5) | Unit 5 | |
| 1 (FDT) | Initial Load | 7 | GW\$7 | |

Figure 1.10 – Active Talkgroup with a Late Entry Radio ID

Customizing Resource Windows

Resource windows allow you to customize their appearance. You can modify the following properties of each resource window:

- **Window Size:** To resize a window:
 1. Move your mouse pointer over the edge of the window.
 2. When the mouse pointer changes to one of the resize pointers, hold down the left mouse button to resize the window.
- **Column Size:** To change a column's size:
 1. In the column header section of the *Activity List*, move your mouse pointer to the right side of the column to resize.
 2. When the mouse pointer changes to the resize pointers, hold down the left mouse button to resize the window.

List Options

This menu provides options to customize resource windows and view information related to the resource window.

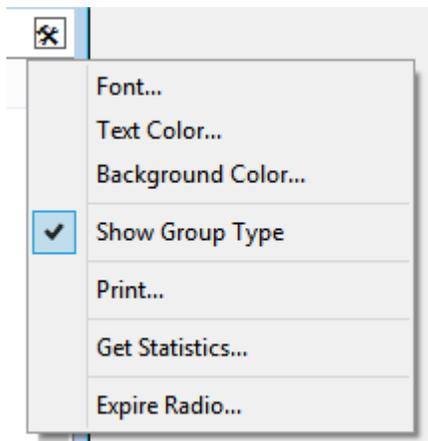


Figure 1.11 – List Options

The list below describes the options present in List Options.

- **Font:** To change the font:
 1. Click the **List Options** menu toward the top of the window. This will result in a menu of options, including **Font...**
 2. Click the **Font...** option. This will result in a font window. (see Figure 1.12)
 3. Choose the desired font options.
 4. Click the **OK** button.

- **Text Color:** To change the text color:
 1. Click the **List Options** menu toward the top of the window. This will result in a menu of options, including **Text Color...**
 2. Click the **Text Color...** option. This will result in a color window. (see Figure 1.13)
 3. Choose the desired color.
 4. Click the **OK** button.
- **Background color:** To change the background color of the *Activity List*:
 1. Click on the **List Options** menu toward the top of the window. This will result in a menu of options, including **Background Color**.
 2. Click the **Background Color...** option. This will result in a color window. (see Figure 1.13)
 3. Click the desired color.
 4. Click the **OK** button.
- **Show Group Type:**
 1. Click on the **List Options** menu toward the top of the window. This will result in a menu of options, including **Show Group Type**.
 2. Click the **Show Group Type** option. This will show/hide the Resource Type header at the top of the window. This header includes <WACN:System ID> -> <RFSS>, <WACN:System ID> -> <Group> etc.
- **Print:**
 1. Select the activity in the *activity list* that you wish to print. Select a range by clicking on the first activity and holding **Shift** while clicking on the last activity in the desired range. If you wish to print all of the activity in the activity list, skip this step.
 2. Click on the **List Options** menu toward the top of the window. This will result in a menu of options, including **Print...**
 3. Click on the **Print ...** option. This will show the printer options screen specific to your default printer.
 4. Select the options for your printer. It is usually best to choose to print in landscape mode (not portrait).
 5. Click **OK** once you are satisfied with your printer options. This will result in a dialog, asking if you want to print the selected items or all items.

- **Get Statistics...:** Opens a *Statistics* window with two panels. (see figure 1.14)
 - **Resource Statistics panel:** Shows a total of distinct resources related to the window's resource.
 - System windows show RFSSs, sites, groups and radios.
 - RFSS windows show sites, groups and radios.
 - Site windows show groups and radios.
 - Group windows show RFSSs, sites and radios.
 - **Group Statistics panel:** Shows a list of all groups related to the window's resource and the number of radios affiliated to each group.
- **Expire Radio...:** Manually expires a radio's affiliation entry in the GW_Affiliation module. The radio is removed from all resource windows. This action only affects GW_Affiliation.

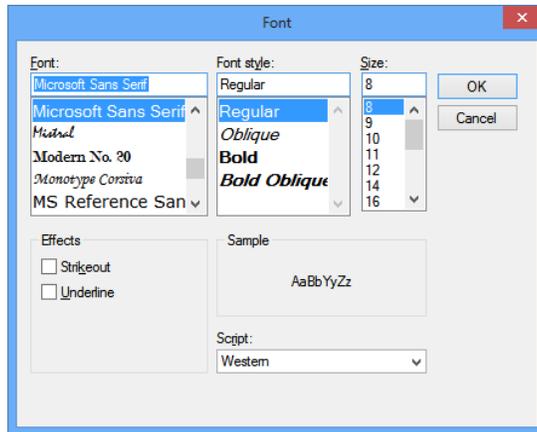


Figure 1.12 – Font Window



Figure 1.13 – Color Window



The number of Sites in the Statistics window is determined by the number of unique Site IDs per RFSS.



Groups and radio IDs that are assigned non-default background or foreground colors in GW_Alias will retain the color(s) even if the background or foreground color of the group screen is changed.



The GW_Affiliation GUI reflects the changes that you make to resources in the GW_Alias GUI. If you change the alias of a resource or delete a resource, the **Groups** Tree will reflect this change. Here are a few exceptions that require special actions to see the changes in the GW_Affiliation **Groups** Tree:

- If a new system is added or deleted in GW_Alias, you must click the **Refresh** button to have the **Groups** Tree reflect the change.
- If groups or multigroups are imported in the GW_Alias GUI, you must click the **Refresh** button to have the **Groups** Tree reflect the results of the import.

Using Statistics Windows

Each resource in the **Group** tree has its own window. Each of these windows has the **Get Statistics...** option under the **List Options** menu. The Statistics windows will display real-time information that pertains to the resource window it was selected from. Each of these windows will contain resource information and Group Statistics (talkgroup and multigroup statistics windows will not have **Group Statistics**). Each window contains some or all of the following information:

- **Type:** The resource type is shown in the title bar of the *Statistics* window. Types include:
 - System
 - RFSS
 - Site
 - Multigroup
 - Talkgroup
- **ID:** The RFSS, site, group, or system ID is shown in the white bar below the title bar along with the Type.
- **Resource Statistics:** Resource usage. The Resource Statistics list will contain the following columns:
 - **Resource:** The type of resource the resource window is using. These can contain RFSSs, Sites, Radios and/or Groups depending on the Statistics window type (System, Site, etc...).
 - **Count:** This is the distinct count of **Resources** of the resource window.
 - **Help:** Text that gives context to the **Resource** and **Count** column.

- **Group Statistics:** The Group Statistics list will contain the following columns (not all statistics windows have Group Statistics):
 - **Group:** The Group ID of groups with activity. There are two default groups that will always display in the list even if there are no Radios present on them:
 - Group '0' (zero) is for Radios that are registered on a system and were registered to a group then deaffiliated from the group.
 - Group '<none>' is for radios that have registered to the system and have not yet affiliated to a group.
 - **Alias:** Alias of the group.
 - **Affiliated Unit Count:** The number of radios currently on a group.
 - **Help:** Text that gives context to the group. Currently only used for the two default groups.



The **RFSSs** row in the *Resource Statistics* window is volatile; Console SG Registration activity will increment the RFSSs count. However if the service is stopped and Affiliation reloaded the Console SG Registration will not appear in Affiliation and the RFSSs count will reflect it is no longer present.



If an affiliation request is denied the Unit will appear in Group '0' of the statistics window.

| STATISTICS SYSTEM 00000:1404 (Genesis) | | | |
|--|-------------|--|--|
| WACN: System: 00000:1404 | | | |
| Resource | Count | Help | |
| RFSSs | 1 | Distinct number of RFSSs | |
| Sites | 1 | Distinct number of Sites | |
| Radios | 10 | Distinct number of Radios | |
| Groups | 7 | Distinct number of groups, excluding Groups 0 and <None> | |
| Group Statistics | | | |
| Group | Alias | Affiliated Radio Count | Help |
| 1 | FDT | 5 | |
| 119 | | 1 | |
| 1175 | GW\$1175 | 1 | |
| 697 | GW\$697 | 1 | |
| 4093 | | 1 | |
| 537 | GW\$537 | 1 | |
| 5 | MUT FDT PDT | 5 | |
| 0 | | 0 | Radios that are registered and are no longer affiliated with a group |
| <None> | | 0 | Radios that have registered but not yet affiliated |

Figure 1.14 – System Statistics Window

Window Menu

The Window menu contains the following options:

- **Cascade:** Cascade arranges all windows that are not minimized.
- **Tile Horizontal:** Horizontally tiles all windows that are not minimized.
- **Tile Vertical:** Vertically tiles all windows that are not minimized.
- **Minimize All:** Minimizes all windows.
- **Restore All:** Restores all minimized windows.
- **Resource Window Options...:** Loads the *Resource Window Options* window.
- **Options...:** Loads the *Module Options* window.
- **Group Tree:** Shows/hides the **Groups** Tree. You can also double-click the divider between the **Groups** Tree and group windows to toggle this option.

Resource Window Options

The *Resource Window Options* window allows you to customize multiple resource windows at once as well as define the defaults for any resource windows you may open later. The options selected in this window will affect all open resource windows. If you had a resource window open and closed it (unchecked it) before making changes in the *Resource Window Options* window, the closed resource window will retain its previous settings and be unchanged by the *Resource Window Options* changes.

The *Resource Window Options* window allows you to select the following:

- **Resource Window Columns:** Uncheck the column(s) that you do not wish to display in the resource windows.
- **Resource Window Size:** Select the width and height that you wish to set for each resource window.
- **Resource Window Font:** Select the font that you wish to set for the resource window's activity list.
- **Resource Window Background Color:** Select the color that you wish to set for the resource window's activity list.
- **Resource Window Text Color:** Select the color that you wish to set for the resource window's activity list text.
- **Show Resource Type header:** Shows the resource type (talkgroup, site, etc.).
- **Bring Active Group Window to Front:** When a talkgroup or multigroup resource window receives activity, it will be restored (if minimized) and brought to the front of all resource windows.

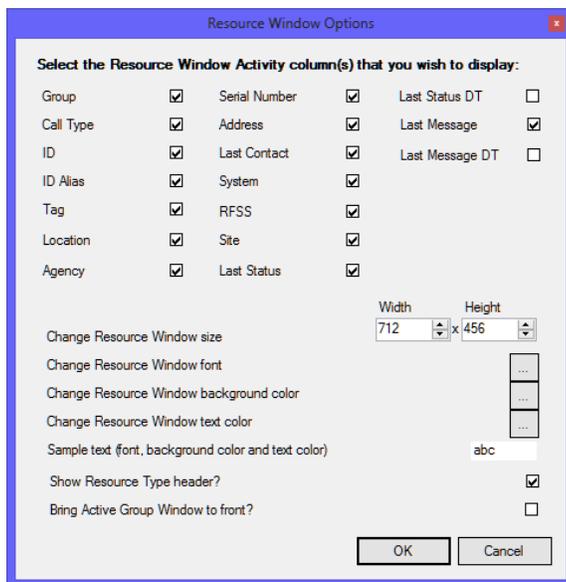


Figure 1.15 – Resource Window Options

Module Options

The *Module Options* window allows you to customize the module-level options for the GW_Affiliation module. These options affect all users. Module options include:

- **Affiliation Expiration Option:** This option determines when to automatically deaffiliate a radio due to inactivity. If a radio goes longer than this duration without activity, it will be removed from the affiliation list and therefore removed from any resource window in the GW_Affiliation screen. Once a radio is deaffiliated via affiliation expiration, it is considered deaffiliated until it issues activity. Affiliation expiration is limited to the GW_Affiliation module. It will not show on the GW_Activity screen or any other module/screen in GenWatch3.

Options include:

- *Never
- One Hour
- Two Hours
- Four Hours
- Twelve Hours
- One Day
- Two Days
- One Week
- Two Weeks
- One Month
- Three Months
- Six Months
- One Year

* - If Never is selected, then radios are not automatically deaffiliated due to inactivity.

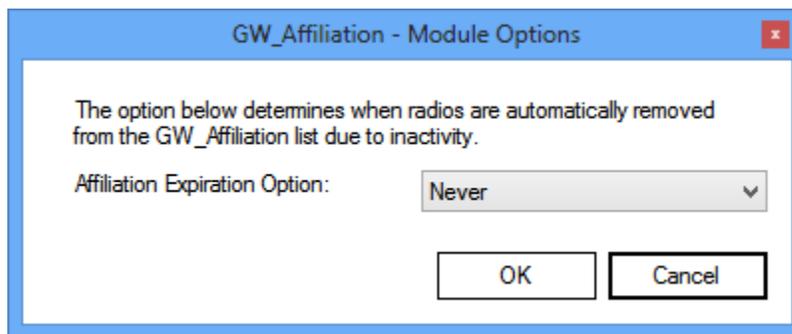


Figure 1.16 – Module Options

This chapter describes how to search for and view the history of affiliated radio IDs.

This chapter contains the following sections:

- **Searching for Affiliated Radio IDs:** Describes how to search for affiliated radio IDs.
- **Viewing Radio ID History:** Describes how to view an affiliated radio ID's history.

Searching for Affiliated Radio IDs

The GW_Affiliation search option allows you to quickly determine the current group of a specific radio ID. The **Search** menu contains the following item:

- **For Affiliated Unit...:** Shows the *Affiliated Radio Search* window to allow you to search for an affiliated radio ID across all groups and multigroups within all systems. To search for an affiliated unit:
 1. Type a radio ID into the **Radio ID** number box or a radio ID alias in the **Radio ID Alias** box, or you may specify both a radio ID and a radio ID alias to search for. If the **Radio ID** is left blank, it is not considered. If the **Radio ID Alias** is left blank, it is not considered. Both radio IDs and alias are partial searches. This means that if you type 10 for the radio ID, the search will return all radio IDs beginning with 10, such as 10, 100, 108, etc. (see Figure 2.1).
 2. To return only activities matching both the **Radio ID** and the **Radio ID Alias**, check the **Match Both ID and Alias** box.
 3. If you wish to only search for units who received activity within a given amount of time, click the **Show only activity within the last** checkbox. Choose a value and duration.
 4. Press **Enter** or click the Search button. The search grid will send this request to the GW_Affiliation module and will show a row for each affiliated radio that satisfied the search criteria. If no affiliated radios were found, a dialog will appear asking if you wish to search again or exit the search window.

| System ID | RFSS ID | Site ID | Talkgroup | Radio ID | Alias | Tag | Activity Type | Last Contact |
|------------|---------|---------|-----------|----------|-------------|--------|---------------|--------------|
| 00000:1404 | 1 | 1 | 1 | 1 | Radio Alias | Stolen | Initial Load | 8/27/2012 |
| 00000:1404 | 1 | 1 | 5 | 1 | Radio Alias | Stolen | Initial Load | 8/27/2012 |
| 00000:1404 | 1 | 1 | 4093 | 16530 | GW\$16530 | | Initial Load | 8/27/2012 |
| 00000:1404 | 1 | 1 | 537 | 21433 | GW\$21433 | | Initial Load | 2/29/2012 |
| 00000:1404 | 1 | 1 | 119 | 4153 | GW\$4153 | | Initial Load | 2/29/2012 |
| 00000:1404 | 1 | 1 | 697 | 8917 | GW\$8917 | | Initial Load | 2/29/2012 |

Figure 2.1 – Affiliated Radio Search Window



The Radio ID and Radio ID Alias drop-down lists contain the 10 most recent search values issued by the current user.

Viewing Unit History

The *Affiliated Radio Search* window allows you to view radio activity history on the units shown in the search results grid. To view radio history:

1. Perform a search that results in activity in the search results grid.
2. Select the radio that you wish to display history for, by clicking on the radio in the search results grid. This will enable the History button.
3. Click the History button. This will load the *GW_Affiliation Radio ID History* window, showing activity for the selected radio over the last 24 hours.

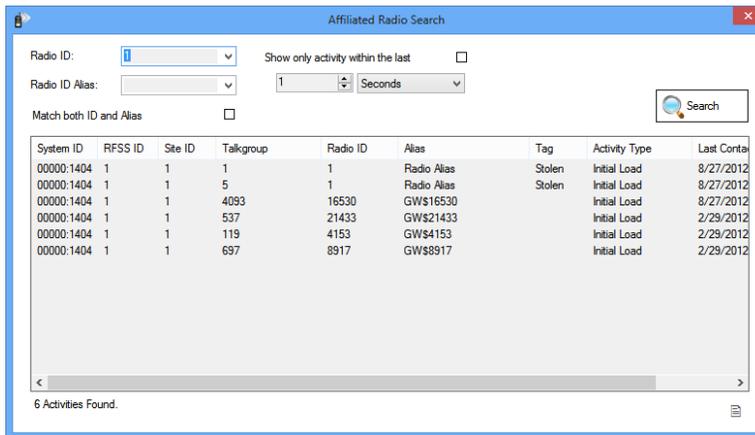


Figure 2.2 – Affiliated Radio Search Window



You may change the **From** and **To** time and click the Search button to view activity for this radio for a different time frame.



GenWatch3 only stores radio history if the GW_Archiver module is set to archive activity from your system.

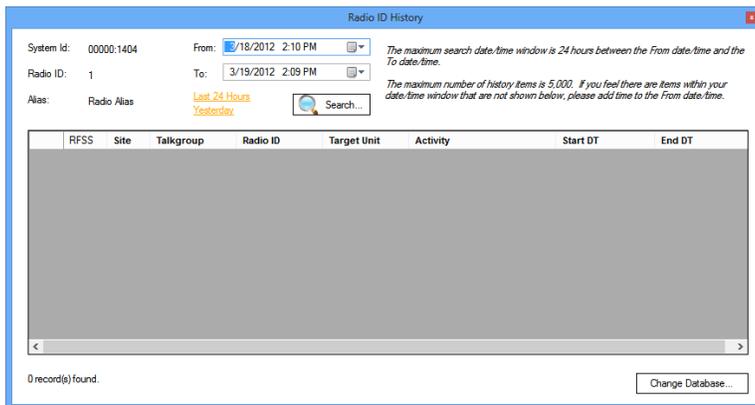


Figure 2.3 – Radio ID History Window

Printing the Unit History Activity List

You may wish to print the contents of the *Unit History* activity list. To print this list:

1. Select the activity in the activity list that you wish to print. Select a range by clicking on the first activity and holding **Shift** while clicking on the last activity in the desired range. If you wish to print all of the activity in the activity list, skip this step.
2. Right-click on the activity list. This will show the activity list options.
3. Click on the **Print ...** option. This will show the printer options window specific to your default printer.
4. Select the options for your printer. It is usually best to choose to print in landscape mode (not portrait).
5. Click **OK** once you are satisfied with your printer options. This will result in a dialog, asking if you want to print the selected items or all items.
6. Make your selection from the dialog. Clicking **Yes** or **No** will print. **Cancel** will cancel this print request.

Radio Presence Activity

This section shows each packet type (activity) that is considered “radio presence” by the logic in GW_Affiliation. These packets will result in GW_Affiliation adding a radio to the resources referenced in the activity. These “radio presence” packet types may differ from other GenWatch3 modules. GW_Affiliation uses the Packet Type, Extended Function and Affiliation Function fields to determine packet type.

| Packet Type |
|------------------------|
| Affiliation |
| Association |
| Busy |
| ChangeMe Request |
| Channel Assignment |
| Dynamic Regrouping ACK |
| Emergency Alarm |
| Message |
| Registration |
| Status |
| RM/RT Command ACK |
| Call Update |

Radio Absence Activity

This section shows each packet type (activity) that is considered “radio absence” by the logic in GW_Affiliation. These packets will result in GW_Affiliation removing a radio from the resources referenced in the activity. These “radio absence” packet types may differ from other GenWatch3 modules. GW_Affiliation uses the Packet Type, Extended Function and Affiliation Function fields to determine packet type.

| Packet Type |
|-----------------------------|
| Deaffiliation * |
| Deregistration |
| Disassociation |
| Radio Detach |
| Registration Refused/Denied |
| Request Unit Registration |
| Selective Inhibit ACK |
| Selective Inhibit * |



Packet types followed by ‘*’ are packet types that remove a radio from Group windows only. (Talkgroup and Multigroup)



Deaffiliation packets for system types of P25, SmartZone or Dimetra are group specific. However, for all other systems Deaffiliation packets remove the radio from all windows.