



GenWatch3[®]
GW_Halcyon
Software Version 2.3
Module Book

GenWatch3[®]

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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

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2.0.4	Added Require Delivery Before Acking Status/Message option description	JAW
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About this Manual

Goals

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

Who Should Read This Manual?



This manual is written for the intended audience of novice to mid-level trunked radio system users and novice to mid-level PC users. If your GenWatch3 installation is licensed for CAD, RCM or RPC connections and you are responsible for setting up these connections, you should read this manual.

How This Manual Is Organized

This manual is organized as follows:

- **Overview:** Defines the GW_Halcyon module and GW_Halcyon Graphical User Interface (GUI) and gives instructions on configuring RCM, CAD and RPC connections.
- **Additional Setup:** Describes the GenWatch3 setup outside of GW_Halcyon required for GW_Halcyon to perform its CAD, RCM and RPC-based functions.
- **Delivery and Validation:** Describes how GW_Halcyon makes decisions when delivering and acknowledging radio events and when processing radio command requests.

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 defines the GW_Halcyon module and the GW_Halcyon GUI and gives instructions on configuring RCM and CAD connections.

This chapter contains the following sections:

- **Terms:** Defines terms used in this document.
- **What is GW_Halcyon?:** Defines the GW_Halcyon module and GW_Halcyon GUI.
- **RCM Connection:** Describes the RCM connection and its configuration.
- **CAD Connections:** Describes CAD connections and their configuration.
- **Notes on GW_Halcyon Connections:** Provides some additional information on these connections.
- **Other Connection Functions and Options:** Describes the Cancel, Update and Delete functions and the **Halcyon handles statuses and messages** option.
- **Reference Documents:** Describes the Motorola document that defines the CAD interface used by GW_Halcyon to communicate with CAD consoles.

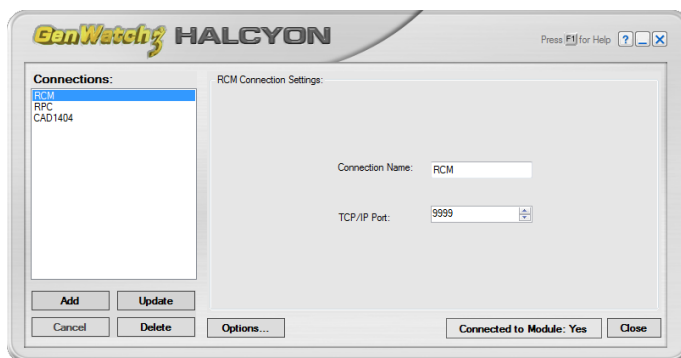






Figure 1.1 – GW_Halcyon GUI

Terms

-  **RCM Connection:** This is a TCP/IP (internet protocol) connection that allows GW_RCM users to connect to the GW_Halcyon module. The GW_RCM GUI is described in detail in the *GW_RCM module book*.
-  **CAD Connection:** This is a serial connection that allows a Computer Aided Dispatch Interface (CADI) compatible console to connect to the GW_Halcyon module.
-  **RPC Connection:** This is a TCP/IP connection using the CAD protocol over RPC.
-  **Client:** A user connected to GW_Halcyon via an RCM or CAD connection.

What is GW_Halcyon?

The GenWatch3 GW_Halcyon module manages RCM, CAD and RPC connections. Managing these connections includes:

- Accepting connection requests from GW_RCM GUIs and CAD-compatible and RPC-capable consoles.
- Processing radio commands (such as Call Alert, Selective Inhibit, etc.) issued by GW_RCM, CAD and RPC clients.
- Relaying system events (such as Emergency Alarms, Statuses and Messages) to GW_RCM, CAD and RPC clients.
- Throttling redundant events received over the air down to a single event. Some systems send statuses, messages, emergency alarms and change me requests in bursts of four to ensure delivery through interference or corruption. GW_Halcyon ensures that only one occurrence of each event is delivered to a connected client (GenWatch3 user).

These are just a few of the functions of the GW_Halcyon module. Most of its functions are transparent to (not seen by) the GW_RCM, CAD or RPC clients (GenWatch3 users).

The GW_Halcyon GUI (Figure 1.1 above) allows you to configure RCM, CAD or RPC connections. These connections interact with the GW_Halcyon module to provide radio system interaction (sending commands and monitoring for events) to end users. Through this GUI you can:

- Configure an RCM connection.
- Configure CAD connections.
- Configure an RPC connection.



For GenWatch3 Commander Series installs, the RCM connection and one or more CAD connections may come pre-installed. Please use this book's instructions to verify the settings for these pre-installed connections.

Options Button

GW_Halcyon has options that are common among all connections. Click on the **Options...** button to view these options.

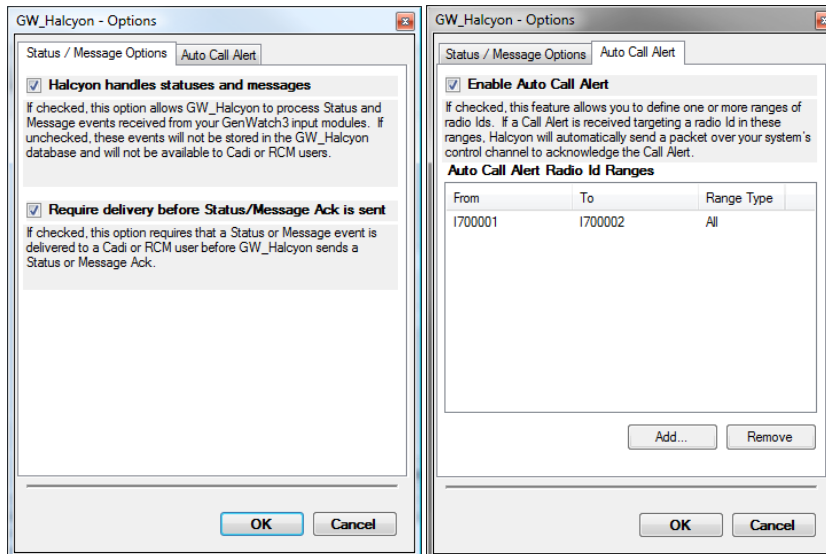


Figure 1.2 – Options Window

The **Status / Message Options** tab contains the following options:

- **Halcyon handles statuses and messages:** If checked, this option allows GW_Halcyon to process status and message events received from your GenWatch3 input modules. If unchecked, these events will not be stored in the GW_Halcyon database and will not be available to CAD, RCM or RPC users.
- **Require Delivery before Status/Message Ack is sent:** If checked, GW_Halcyon will not acknowledge status and message events unless they are delivered to a CAD, RCM or RPC user.

Auto Call Alert is a feature that allows you to define one or more ranges of radio IDs. If a call alert is received, targeting a radio ID in these ranges, GW_Halcyon will automatically send a packet over your system's control channel to acknowledge the call alert.

Additionally, a packet is sent out of the GenSPOut *System WatchII* custom output stream in the form of:

CA7xxxxx7yyyyy

where xxxxx is the originator and yyyy is the target of the call alert.

The **Auto Call Alert** tab contains the following options:

- **Enable Auto Call Alert:** Enables the Auto Call Alert feature.
- **Auto Call Alert Radio Id Ranges:** Ranges of radio IDs that will result in an automatic call alert acknowledgement, if targeted by a call alert.
 - **Add:** Add an Auto Call Alert range. This button loads the *Add Radio Id Range* window, shown below in Figure 1.3.

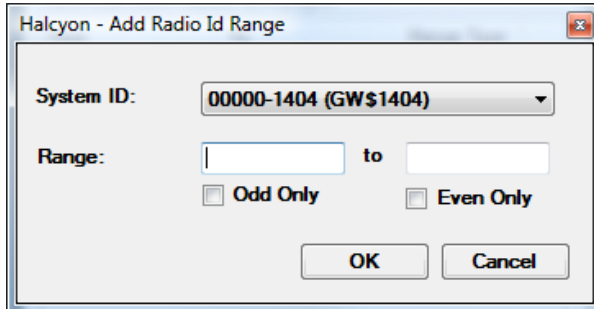


Figure 1.3 – Add Radio Id Range window

- **Remove:** Remove all selected ranges from the Auto Call Alert Radio Id Ranges list.
- **OK:** Close *Options* window and save changes.
- **Cancel:** Close *Options* window and cancel changes.

RCM Connection

If you are licensed for an RCM connection, you will need to configure it via the GW_Halcyon GUI. See the *GenWatch3 Core Manual* for more information on viewing your license.

To configure an RCM connection, take the following steps:

1. Load the GW_Halcyon GUI.
2. Click on the **Add** button (If you have no connections configured, the **Add** button will be flashing): This will bring up the *Connection Type* window shown in Figure 1.4.

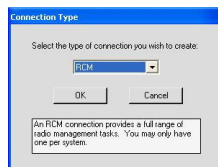


Figure 1.4 – Connection Type window

3. Select *RCM* from the drop down list.
4. Click **OK**: This will close the *Connection Type* window and show the **RCM Connection Settings** panel as shown in Figure 1.5.

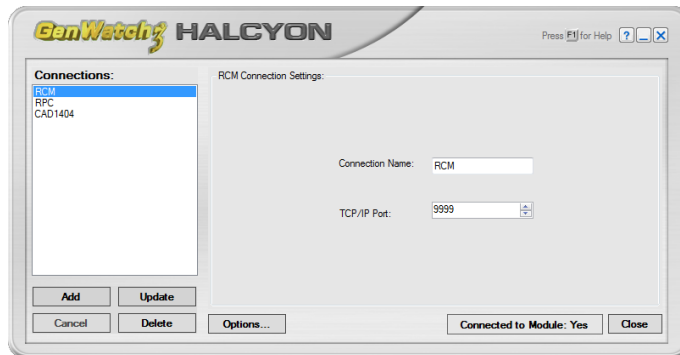


Figure 1.5 – RCM Connection Settings panel

5. Enter a **Connection Name**: This is for reference only; it is not used by GenWatch3. This connection name is only displayed in the GW_Halcyon **Connections** list.
6. Enter a **TCP/IP Port**: In most cases the default port of 9999 will work. If this port interferes with another application on your GenWatch3 machine, you may need to change this port number.

7. Click the **Update** button: This will save your changes and inform the GW_Halcyon module of the new connection. If you wish to cancel adding this connection, click the **Cancel** button.



NOTE: You can only configure one RCM connection. All RCM clients are handled by a single RCM connection.

CAD Connections

If you are licensed for CAD connections, you will need to configure them via the GW_Halcyon GUI. To configure a CAD connection, take the following steps:

1. Load the GW_Halcyon GUI.
2. Click the **Add** button (if you have no connections configured, the **Add** button will be flashing): This will bring up the *Connection Type* window shown in Figure 1.4.
3. Select *CAD* from the drop down list.
4. Click **OK**: This will close the *Connection Type* window and show the **CAD Connection Settings** panel as shown in Figure 1.6.
5. Enter a **Connection Name**: This is the name by which you wish to refer to this connection. This is for reference only; it is not used by GenWatch3.
6. Select a **User Filter**: Attachment lists are applied to CAD connections via GenWatch3 users. By assigning a GenWatch3 user to a CAD connection, the CAD connection gains access to any talkgroups/radios that the user has permissions for. Refer to the *GenWatch3 Core Manual* for information on creating GenWatch3 users.
7. Select an **Encoding** option: Data passed between CAD hosts and the GenWatch3 CAD port can be in either ASCII or EBCDIC format.
8. Enter a **COM Port**: This is the number of the serial communications port on the GenWatch3 server machine to which this CAD is physically connected.
9. Select the **Site Information**: This is the site to which this CAD will be communicating. This communication may include both sending and receiving control channel data. The **Site Information** dropdown only shows sites that exist in GW_Alias database under licensed systems. If this list is empty, check to make sure that your sites are properly configured in GW_Alias under licensed systems.
10. Consider the **View all CADI command responses** option: Checking this box enables the CAD connection to receive ALL responses to commands that the CAD interface generates, regardless of whether this connection issued the original command.
11. Consider the **Start this CAD connection** option: Checking this box causes the CAD connection to start and run. Unchecking the box causes the connection to stop and become disabled. If this CAD station is currently offline (not running), then you may wish to uncheck this option until the CAD station is back online (running).

12. Consider the **Messages to send** options: This is a list of each type of activity that can be passed by the CAD connection. Select all activity types that you desire the CAD host to receive.
13. Click the **Update** button: This will save your changes and inform the GW_Halcyon module of the new connection. If you wish to cancel adding this connection, click the **Cancel** button.

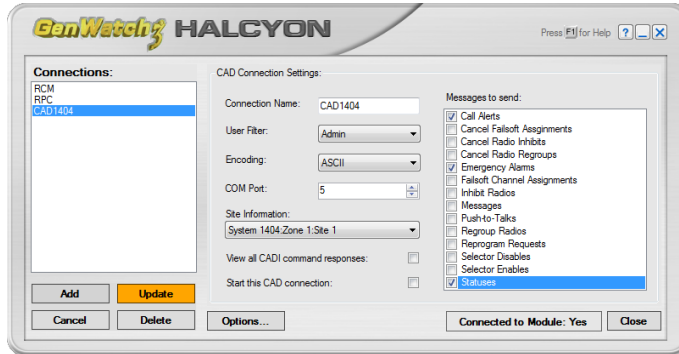


Figure 1.6 – CAD Connection Settings panel

RPC Connection

If you are licensed for an RPC connection, you will need to configure it via the GW_Halcyon GUI. See the *GenWatch3 Core Manual* for more information on viewing your license.

RPC Overview

The GW_Halcyon RPC connection accepts and manages sessions with SiteLens CADI-compliant clients via remote procedure call (RPC). These clients are generally consoles and management applications.

RPC requires *port mapper* software to run on the GenWatch3 machine. This software coordinates communication between RPC clients and RPC-compliant programs.

Installing the Port Mapper Software

To install the port mapper software during the GenWatch3 installation, check the **Install NobleNet Port Mapper for TCP** option.

If you did not check the **Install NobleNet Port Mapper for TCP** option when installing GenWatch3, follow the steps below to manually install the port mapper:


1. Insert the GenWatch3 installation CD.
2. Explore the GenWatch3 installation CD (right-click on the CD drive and choose *Explore*).

3. Copy the *NobleNet* folder under the *GenWatch3* folder to your GenWatch3 installation folder (by default *C:\Program Files\Genesis\GenWatch3*)
4. Browse to the *NobleNet* folder under the GenWatch3 installation folder (by default *C:\Program Files\Genesis\GenWatch3\ NobleNet*).
5. Run the *portinst.exe* application.

Configuring an RPC Connection

To configure an RPC connection, take the following steps:

1. Load the GW_Security GUI.
2. Add a new user per the instructions in the *GenWatch3 Core Manual*. This new user must have the same user name and password as the CAD device that will be connecting to the RPC CADI port.
3. For this new user click **Add Groups...** to create a filter list of groups whose event information will be sent to the CAD device connecting with this user.

 **NOTE:** If the *View All Groups* privilege is checked for this user's role, then all groups' events will be sent to the CAD device regardless of the group filter.

4. For each group added also check/uncheck the event types to be handled by the RPC CADI connection.
5. When finished click **Update** to save the user.
6. Repeat steps 1-5 until all CAD users are set up.
7. Load the GW_Halcyon GUI.
8. Click on the **Add** button (If you have no connections configured, the **Add** button will be flashing): This will bring up the *Connection Type* window shown in Figure 1.4.
9. Select *RPC* from the drop down list.
10. Click **OK**: This will close the *Connection Type* window and show the RPC Connection Settings panel as shown in Figure 1.6.

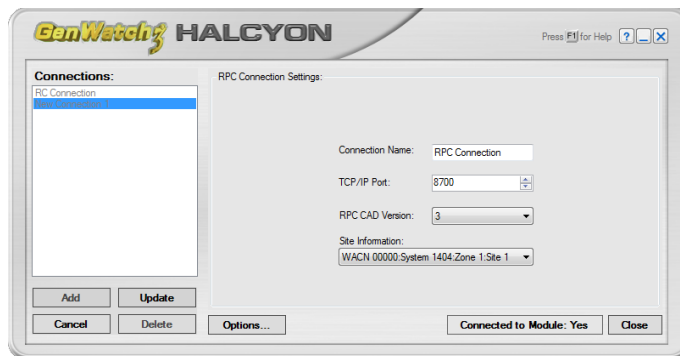


Figure 1.6 – RPC Connection Settings

11. Enter a **Connection Name**: This is for reference only; it is not used by GenWatch3. This connection name is only displayed in the GW_Halcyon **Connections** list.
12. Enter a **TCP/IP Port**: In most cases the default port of 8700 will work. This is the listening port for most CADI listening servers.
13. Select a value for **RPC CAD Version**. This is the latest version of RPC CAD supported by your CAD clients.
14. Select a value for **Site Information**. This list contains each site (qualified by its zone and system) in the GW_Alias database. The selected site is used as the target site for any radio commands (such as selective inhibit) sent by RPC clients.
15. Click the **Update** button: This will save your changes and inform the GW_Halcyon module of the new connection. If you wish to cancel adding this connection, click the **Cancel** button.



NOTE: You can only configure one RPC connection. All RPC clients are handled by a single RPC connection.

Other Connection Functions and Options

Updating an Existing Connection

When you create a connection, the properties of that connection are static (do not change). If for any reason you need to change the properties of a connection (RCM TCP/IP port needs to be changed, the CAD connection name has a typo, etc.) take the following steps:

1. Select the connection that you wish to update from the **Connections** list: This will show the properties of this connection in the **Connection Settings** panel.
2. Change the settings that you wish to change.
3. Click the **Update** button: This will save your changes and inform the GW_Halcyon module of the changes. If you wish to cancel this update, click the **Cancel** button.

Deleting an Existing Connection

If you ever need to delete an existing connection (in case a CAD connection is no longer valid, etc.), take the following steps:

1. Select the connection that you wish to delete from the **Connections** list: This will show the properties of this connection in the connection settings panel.
2. Click the **Delete** button: This will show the dialog shown in Figure 1.7.

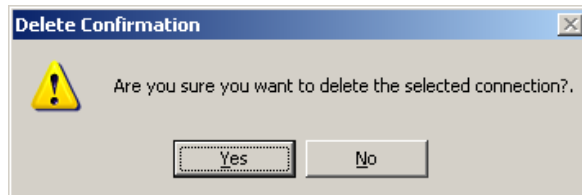


Figure 1.7 – Delete Confirmation Dialog

3. Click **Yes** to delete the connection. Click **No** to cancel the delete.

Notes on GW_Halcyon Connections

Commander Licensing

If you purchased the Commander Host bundle of GenWatch3, then you are licensed for up to:

- **25 RCM connections:** Up to 25 GW_RCM windows can connect to your GenWatch3 server machine.
- **4 CAD connections:** Up to 4 CAD stations can connect to your GenWatch3 server machine.

CAD Connections

You must create a CAD connection for each CAD station. If you have 3 CAD stations, then you must create a CAD connection, using a different COM port for each connection. CAD connections deliver radio and talkgroup IDs based on the following formula:

- If the GW_Alias entry for the radio ID or talkgroup has a non-blank CAD Alias value, the CAD alias value is used.
- Otherwise, radio IDs/Talkgroups are delivered as 7xxxxx/8xxxxx if the system type is Type II, Type I or Hybrid and the ID Format Option is I7xxxxx/ T8xxxxx or 7xxxxx/8xxxxx. However if the System Type is not Type II, Type I or Hybrid and the ID Format Option is I7xxxxx/T8xxxxx or 7xxxxx/8xxxxx then the Radio IDs/Talkgroups are delivered as 7xxxxxxx/8xxxxxxx.

Reference Documents

For detailed information on the protocol that CAD connections use to communicate with third-party CAD vendors, please refer to the following Motorola document:

Title: SIMSII-CADI User's Guide
Document Number: 68P81086E25

Your CAD connection implements the same packet-based communication and modem protocol defined in this document, with the following exceptions:

- Does not allow host (CAD connection) acknowledgements for Emergency Alarms. For more information on this note, please contact GenWatch3 support and request to speak with a CAD specialist.
- Does provide ChangeMe functionality.
- Does not use filter files (this is all configured through the GW_Halycon CAD configuration described earlier in this document).

This document is located in the Documentation directory of your GenWatch3 installation directory. By default:

C:\Program Files\Genesis\GenWatch3\Help\CADI

The file name in this directory is:

69P81086E25-E-SIMSII-CADI-UserGuide.pdf

In addition to creating the GW_Halcyon connections (described above), the following setup must be performed in order for GW_Halcyon to perform its various CAD and RCM based functions:

GW_Alias Setup

In the GW_Alias GUI, take the following actions:

- **Specify a Default Group for each radio ID:** *Default Group* has had many pseudonyms over the years, such as Home Talkgroup. This is the preferred group of the agency responsible for this radio ID.
- **Assign CAD Aliases (for CAD users only):** Supply CAD aliases to each radio ID and group. The GW_Alias GUI provides two aliases for radio IDs and groups, *Alias* and *CAD Alias*. The *CAD Alias* is important because it follows the restrictions of only 12 alpha-numeric characters. GenWatch3 only references a group or radio ID by *CAD Alias* in CAD connections within GW_Halcyon. If *CAD Alias* is the only alias you know for your radio IDs and groups, you may also want to assign the *CAD Alias* to the *Alias* property of each radio ID and group in *GW_Alias*. This way you will recognize your radio IDs and groups when they are shown in our other windows that show radio IDs and groups.



CAD Users: Make sure that the CAD Aliases you supply here are the same aliases that your CAD system uses for your radio IDs and groups. If they differ, your CAD terminal and GW_Halcyon cannot effectively communicate.

- **Assign Event Acknowledgement Responsibility:** Each group shown in GW_Alias provides the following acknowledgement options:
 - **Status/Message Acked By:** This setting indicates if GW_Halcyon should send acknowledgements to radios when it receives a status or message event from a radio ID that has this group assigned as its *Default Group*. These options include:
 - **Console:** GW_Halcyon *is not* responsible for sending status or message acknowledgements for this group.
 - **RCM/CADI:** GW_Halcyon *is* responsible for sending status or message acknowledgements for this group. These are only sent if the status or message event is successfully archived to the GW_Halcyon database.
 - **Emergencies Acked By:** This setting indicates if GW_Halcyon should send acknowledgements to radios when it receives an

emergency alarm from a radio that is **currently affiliated** to this group. These options include:

- **Console:** GW_Halcyon is not responsible for sending emergency alarm acknowledgements.
- **RCM:** GW_Halcyon will send an emergency alarm acknowledgement if the emergency alarm is delivered to a GW_RCM user and archived to the GW_Halcyon database. (event delivery is described in the Event Delivery and Acknowledgement section below)
- **CADI:** GW_Halcyon will send an emergency alarm acknowledgement if the emergency alarm is delivered to a CAD user and archived to the GW_Halcyon database (event delivery is described in the Event Delivery and Acknowledgement section below).
- **Channels:** Set a distinct *Channel Position* for each Channel under each site. This value indicates the channel's position in your channel rack. Also mark each Failsoft channel by checking the *Failsoft* option. This value is used by CAD and GW_RCM users to issue Failsoft assignments to radios.

GW_RIMII Setup

In the GW_RIMII GUI, take the following actions:

- **Create Connections:** Ensure that you have two (2) GW_RIMII connections for each site processed by GW_Halcyon. The settings will be identical for each connection, except one will have the *Primary Central Talkback (ISW)* option selected. This connection will send ISW (radio commands such as selective inhibit or status ACK, etc.) to the central controller. The other connection will monitor the control channel for OSW data (such as PTTs, statuses, etc.). If one connection becomes disconnected from the control channel, the remaining connection will assume both roles.
- **Assign a Gateway ID:** If you intend to send Gateway radio commands, you must specify a Gateway ID. This must be a radio ID that is enabled in your system's Subscriber Access Control (SAC) list. Gateway radio commands include:
 - **Selective Inhibit / Cancel Selective Inhibit**
 - **Regroup / Cancel Regroup**
 - **Failsoft Assign / Cancel Failsoft Assign**
 - **Selector Lock / Cancel Selector Lock**

GW_Security Setup

CAD and RPC connections and the GW_RCM tool rely on a GenWatch3 user and that user's role to determine:

- **Radio Event Delivery:** This includes status, message, emergency alarm (EA), change me (reprogram requests) and PTTs. GW_Halcyon validates the event's group or radio ID (by way of the radio ID's Default Group) before sending the event to a CAD or RPC connection or a connected GW_RCM tool. (see *Event Delivery Validation* section below for more information). RPC connections also use Group Rights (selected in the Group Filter section of GW_Security) to determine if an event should be delivered to an RPC connection.
- **Valid Radio Command Request Types:** These are requested from CAD or RPC connections or GW_RCM tools for GW_Halcyon to issue a radio command such as selective inhibit. GW_Halcyon validates command request types selected under the GW_Halcyon section of the user's role before sending the command.

In the GW_Security GUI, take the following actions:

- **Select Role Privileges:** In all CAD or GW_RCM roles, ensure that the appropriate privileges are selected under the GW_Halcyon section. Reference the *GenWatch3 Core Manual*, Chapter 8 for descriptions of the GW_Halcyon role privileges.
- **Establish User Group Filters:** For all CAD or GW_RCM users, ensure that all valid groups are selected in the **Group Filter** section. If you want your users to have access to all groups, select the *ViewAllGroups* privilege on the user's role. This privilege overrides the *Group Filter* selection made at the user level and allows all users with this role access to all groups and all radio IDs.

This section describes some of the decisions that GW_Halcyon has to make when delivering and acknowledging radio events and processing radio command requests.

Event Delivery and Acknowledgement

This section describes the validation path(s) that GW_Halcyon uses when determining if it should send an event to a particular CAD, RPC or RCM user and if it should acknowledge a radio event.

Event Delivery Validation

The following validation methods are used to determine if a particular CAD or RPC connection or connected GW_RCM tool should receive an event:

- **Statuses, Messages and Emergency Alarms:** The following must be true in order for a user to receive a status, message or emergency alarm event:
 - The user's **Group Filter** (in GW_Security) must contain the group the radio ID was **affiliated to** at the time of the event. Additionally for RPC, the corresponding **Group Filter** option must be checked (*Status*, *Message* or *Emergency Alarm*). Or the user's role must contain the *ViewAllGroups* privilege under the GW_Halcyon section. This privilege bypasses **Group Filter** validation.
 - The user's role must include the *Status Message* privilege to receive statuses or messages.
 - For CAD connections, the CAD connection must include the *Messages* option to receive messages, the *Statuses* option to receive statuses and the *Emergency Alarms* option to receive emergency alarms.

- **Radio Ack, Call Alert and ChangeMes (reprogram request):** The following must be true for a user to receive a radio ack or Change Me event:
 - The user's Group Filter (in GW_Security) must contain the **Default Group** assigned to the radio ID that issued the radio ack, call alert or change me. Additionally for RPC, the corresponding **Group Filter** option must be checked (*Radio Ack, Call Alert or ChangeMe*). Or the user's role contains the *ViewAllGroups* privilege under the GW_Halcyon section.
 - The user's role must include the *ChangeMe* privilege to receive ChangeMe events. This privilege bypasses **Group Filter** validation.
 - For CAD connections, the CAD connection must include the *Reprogram Requests* option to receive change me events.
- **Affiliations and PTTs:** The following must be true for a user to receive an affiliation or PTT event:
 - The user's Group Filter (in GW_Security) must contain either the **Default Group** assigned to the radio ID that issued the affiliation or PTT or the group the radio was affiliated to at the time of the event. Additionally for RPC, the corresponding **Group Filter** option must be checked (*Affiliation or PTT Display*). Or the user's role contains the *ViewAllGroups* privilege under the GW_Halcyon section.
- For CAD connections, the CAD connection must include the *Push-to-Talks* option to receive PTT events.

Event Acknowledgement Validation

The following validation methods are used to determine if GW_Halcyon should acknowledge a non-PTT event:

- **Statuses and Messages:** The *Halcyon Handles Statuses and Messages* option (described in Chapter 1) on the GW_Halcyon GUI must be checked. For these events, GW_Halcyon considers the **Status/Message Acked By** option of the **Default Group** of the radio ID that issued the event: If this option is:
 - **Console:** GW_Halcyon will not issue an acknowledgement.
 - **RCM/CADI:** GW_Halcyon will acknowledge the event if the event is archived to the GW_Halcyon database.
- **Emergency Alarms:** For these events, GW_Halcyon considers the **Emergencies Acked By** option of the group the radio ID is **affiliated to** at the time of the event. If this options is:
 - **Console:** GW_Halcyon will not send the acknowledgement.
 - **RCM:** GW_Halcyon will send the acknowledgement if the event is delivered to a connected GW_RCM user and the event is archived to the GW_Halcyon database.

- **CADI:** GW_Halcyon will send the acknowledgement if the event is delivered to a connected CAD or RPC user and the event is archived to the GW_Halcyon database.
- **ChangeMes (reprogram requests):** GW_Halcyon sends a ChangeMe acknowledgement if the event is archived to the GW_Halcyon database and the event is delivered to a connected CAD, RPC or GW_RCM user.

Radio Command Validation

When GW_Halcyon validates a radio command (such as selective inhibit), it validates the command on two levels:

- **Command Type Validation:** Compares the command type to the command types defined as a privilege on a user's role. This is defined in the GW_Security GUI.
- **Group Filter Validation:** Ensures that the user's **Group Filter** (in GW_Security) contains the group (if any) and the default group of the radio ID included in the radio command. The radio ID's default group is assigned in GW_Alias.

Command Type Validation

CAD and RPC connections and GW_RCM tools can only issue radio command types that are included as privileges in their user's role under the GW_Halcyon section of **Role Privileges** in GW_Security. Each radio command is listed below with its required privilege(s):

Radio Command	Required Privilege(s) in the GW_Halcyon Section of GW_Security
Call Alert	Call Alert
Database Snapshot	Database Snapshot
Regroup Cancel Regroup	Dynamic Regrouping
Failsoft Assign Cancel Failsoft Assign	Dynamic Regrouping Failsoft Assignment
Selector Lock Cancel Selector Lock	Selector Lock or Unlock
Radio Check	Radio Check
Remote Monitor Radio Trace	RMRT
Selective Inhibit Cancel Selective Inhibit	Selective Inhibit
Storm Plans	*Storm Plans

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* The user must also be included as a user in each Storm Plan you wish them to have access to. Storm Plan Users are assigned in the Storm Plans section of GW_Alias.

Group Filter Validation

In addition to radio command specific role privileges, the user must have **Group Filter** (in GW_Security) access to each radio ID and group in the command, or the user's role must have the *ViewAllGroups* privilege under the GW_Halcyon section of **Role Privileges** (set up in GW_Security at the Role level).

Validation Examples

To issue a Regroup command for radio ID 32226 on group 8093, your user's **Group Filter** must include the **Default Group** of radio ID 32226 and group 8093.

To issue a Radio Check command on radio ID 32226, your user's **Group Filter** must include the **Default Group** of radio ID 32226. Because no group is included in this radio command, only the **Default Group** of the radio ID is validated in the group filter validation.

In either of these above examples, if your user's role includes the *ViewAllGroups* privilege under the GW_Halcyon section of the **Role Privileges** section in GW_Security, your **Group Filter** list is not considered and the command will pass **Group Filter** validation.

Validation Rejection

Rejection occurs when a command is requested of GW_Halcyon and the user issuing the command fails command type or group filter validation. When GW_Halcyon rejects a CAD-sourced command, a CADI interface error response is passed back to the CAD connection. This response contains an error number which corresponds to an error number in the *CAD User's Guide* referenced in this document.

For GW_RCM users, radio command rejection is a bit more subtle. GW_RCM users cannot access commands, radio IDs and groups that do not pass command type and group filter validation. Because all of these things are selected in GW_RCM (as opposed to typed), the user's invalid commands are proactively rejected.