



GW3-TRBO®
Connect
Software Version 2.12
Module Book

GW3-TRBO®

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5800 Eagles Nest Blvd

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Refer to the *Troubleshooting & Support* section of the GW3-TRBO Manual Shell (Book 600-2.12.0-AA.1) for complete support and contact information.

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Goals

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

Who Should Read This Manual?



This manual is written for the intended audience of mid-level computer network 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 Connect module.
- **Connect Plus Connections:** Describes how to create and manage MOTOTRBO Connect Plus connections.
- **APM Connections:** Describes how to create and manage connections to an Advanced Power Management server.
- **SNMP Connections:** Describes how to create and manage SNMP (Simple Network Management Protocol) connections. See this section for a description of SNMP.
- **SkyView Connections:** Describes how to create and manage a connection to feed data to a SkyView mapping client.
- **SMTP Connections:** Describes how to create and manage a connection to receive SMTP mail input to be parsed and forwarded to GW3-TRBO for processing.
- **TRBO ATIA Connections:** Describes how to create and manage TRBO ATIA connections.
- **TRBO Wireline Gateway Connections:** Describes how to create and manage TRBO Wireline Gateway connections.
- **Raw Data Files:** Describes where raw data files – used by support personnel – are saved and how to change the raw data directory.

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 provides an overview of the Connect module and its function within the GW3-TRBO solution.

This chapter contains the following sections:

- **What Is Connect?:** Describes the role and function of the Connect module.
- **Connect Features:** Describes the features of the Connect graphical user interface (GUI).

What is Connect?

Connect is a module that allows you to set up connections to the following GW3-TRBO data sources:

- **Connect Plus:** Connect Plus is a MOTOTRBO radio system configuration that allows trunking of voice and data calls across multiple sites over IP. Refer to the *Connect Plus Connections* section of this manual for more information.
- **APM:** Advanced Power Management is a product by RFI that allows you to monitor various power levels of connected repeaters. Refer to the *APM Connections* section of this manual for more information.
- **SNMP:** Simple Network Management Protocol is a protocol that allows network objects, both software and hardware, to deliver SNMP traps and expose SNMP values. Refer to the *SNMP Connection* section of this manual for more information on SNMP traps and values.
- **SkyView:** This type accepts connections from SkyView mapping clients and sends them data archived from a separate Connect Plus connection.
- **SMTP:** SMTP Server connections parse SMTP mail input from SMTP clients and use the resulting data as input, which is forwarded on to GW3-TRBO for processing. Refer to the *SMTP Server Connections* section of this manual for more information.
- **TRBO ATIA:** This type processes data from MOTOTRBO Capacity MAX radio systems. Refer to the *TRBO ATIA Connections* section of this manual for more information.
- **TRBO Wireline Gateway:** This type creates a connection to a MOTOTRBO wireline voice gateway to send radio commands to its associated radio system. Refer to the *TRBO Wireline Gateway Connections* section of this manual for more information.

Connect connections translate their proprietary data into GW3-TRBO packets and send these packets to GW3-TRBO for processing. Some connections are bidirectional. This means that they receive and send data to their connection.

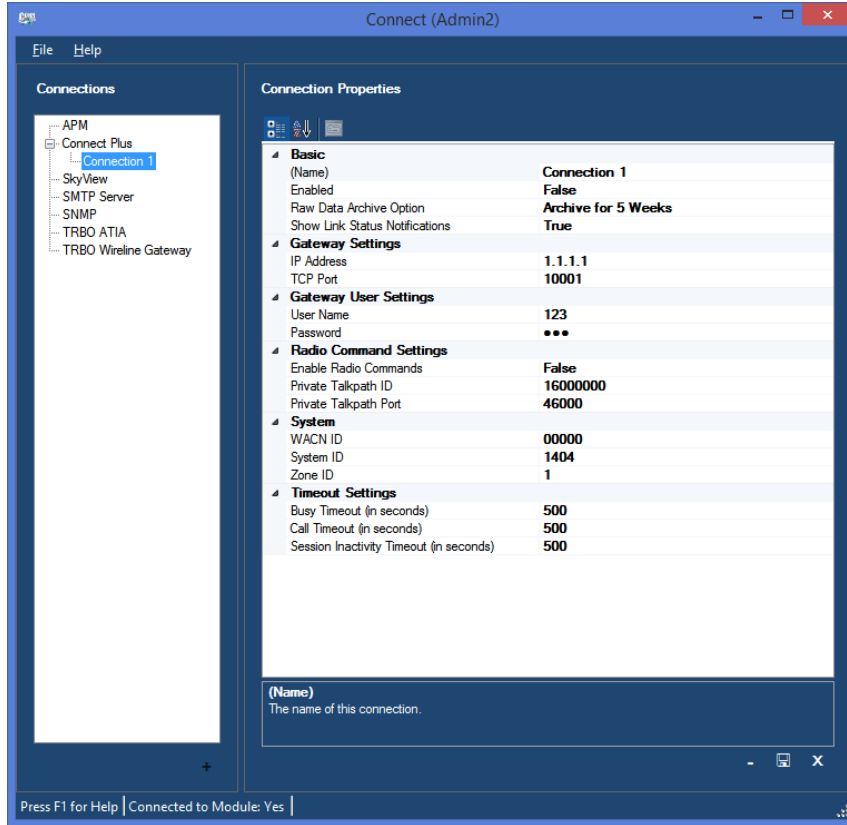


Figure 1.1 – Connect GUI

Connection Status

Each connection shown in the **Connections** list, on the left side of the Connect GUI, represents a connection to a data source. The status of each connection is represented by a radio icon that appears in the Windows system tray (the bottom right of your desktop). The icon has the following statuses:

- : Connection status unknown or encountering an error (white)
- : Connection has received packets within the past several seconds (green). The amount of time varies by connection type.
- : Connection has not received packets within the past several seconds (red). The amount of time varies by connection type.



The Alert connection status icon for SkyView connections will show green when the connection is enabled and is not experiencing a network error.



A loss of connection can occur if a TCP connection receives a reset command (Firewalls and some networking hardware can send these commands); this will result in a Link Down for the connection.

This chapter describes Connect Plus connections and how they are used in GW3-TRBO.

This chapter contains the following sections:

- **Connect Plus Connection Overview:** Describes the Connect Plus connection licensing and Connect Plus connection properties.
- **Adding a Connect Plus Connection:** Describes the process of adding a Connect Plus connection.
- **Updating a Connect Plus Connection:** Describes the process of updating a Connect Plus connection.
- **Deleting a Connect Plus Connection:** Describes the process of deleting a Connect Plus Connection.

Connect Plus Connection Overview

Connect Plus License

The GW3-TRBO license determines the number of Connect Plus connections allowed in Connect. To view the number of Connect Plus connections in your license:

1. Click the **View License** button on Launch.
2. Expand the **Modules** node.
3. Expand the **GW_Connect** node.
4. Expand the **Restrictions** node.
5. See the **ConnectPlus.Connections** value.



The Connect module only monitors call activity for Connect Plus connections. To monitor repeater alarms, you must also set up a connection for each site in the Trbo module. See the GW3-TRBO Trbo book (600.2.12.0-LL.1) for more information.

Connect Plus Connection Properties

The Connect Plus connection includes the following properties:

Basic

- **(Name):** Alias of this connection.
- **Enabled:** Indicates whether this connection is enabled.
 - *True:* Connection is enabled.
 - *False:* Connection is not enabled.
- **Raw Data Archive Option:** The Connect module can log all raw data received from a connection. This option determines how long this data is stored. Options include:
 - *Do Not Archive:* Do not log raw data.
 - *Archive for 1 Week:* Keep raw data for one week.
 - *Archive for 2 Weeks:* Keep raw data for two weeks.
 - *Archive for 5 Weeks:* Keep raw data for five weeks.
- **Show Link Status Notifications:** Indicates whether the user will receive GUI notifications when the connection's link status goes up or down.
 - *True:* Send notifications.
 - *False:* Do not send notifications.

Gateway Settings

- **IP Address:** The IP address of the gateway.
- **TCP Port:** The TCP port used to connect to the gateway.

Gateway User Settings

- **User Name:** The login name for the user logging into the gateway.
- **Password:** The password for the user logging into the gateway.

Radio Command Settings

- **Enable Radio Commands:** Specifies whether the connection is able to send Selective Inhibit (Radio Disable), Cancel Selective Inhibit (Radio Enable) and Radio Check commands. Enabling commands requires the gateway user to be allotted at least one talkpath.
- **Private Talkpath ID:** The ID of the talkpath registered to the gateway user. This talkpath ID will be used to send radio commands.
- **Private Talkpath Port:** The UDP port on which radio commands will be sent from the Connect module to the gateway.

System

- **WACN ID:** The licensed WACN associated with this connection.
- **System ID:** The system associated with this connection. The system corresponds to the Connect Plus network ID provided by Motorola. If the system ID format is set to hexadecimal in the Launch GUI, this value will be presented in hexadecimal.
- **Zone ID:** The licensed Zone ID associated with this connection.

Timeout Settings

The Connect module relies upon receiving data from the gateway over the network. If Connect does not receive a notification about the end of an activity, that activity can appear to be never-ending in GW3-TRBO. To compensate for this, several optional timeout features may be configured:

- **Busy Timeout (in seconds):** Busies will be timed out after the specified number of seconds. Set this to 0 to never end busies due to a timeout.
- **Call Timeout (in seconds):** Calls will be timed out after the specified number of seconds. Set this to 0 to never end calls due to a timeout. If enabled, this field should always be set at least a few seconds higher than the **Time-Out Timer (TOT)** value in your radio or repeater programming.
- **Session Inactivity Timeout (in seconds):** Sessions will be timed out after being inactive for the specified number of seconds. Set this to 0 to never end sessions due to a timeout. The inactivity timer begins when a channel assignment or busy on that session ends, and it is reset by a new channel assignment on the session. When enabled, this field must always be set to a value greater than the highest possible hang time in your repeater programming.



Using the timeout features can result in invalid data. The timeout values should be carefully considered to ensure that normal activities are not being ended prematurely. For example, if the **Call Timeout** field is set to 30 seconds, any call longer than 30 seconds will appear to end after 30 seconds in GW3-TRBO.

Adding a Connect Plus Connection

To add a new Connect Plus connection, follow the steps below:

1. Click on the **Connect Plus** node in the **Connections** list: This will enable the **Add Connection...** button.
2. Click the **Add Connection...** button: This will show the *Connection Properties* with default Connect Plus properties.
3. Enter the Connect Plus connection properties and click the **Update** button: This will add the Connect Plus connection.



Name must be alphanumeric to pass validation.

Updating a Connect Plus Connection

To update an existing Connect Plus connection, follow the steps below:

1. Click on the Connect Plus connection you wish to update: This will show the properties of the selected connection.
2. Change the desired Connect Plus connection properties and click the **Update** button: This will update the Connect Plus connection.

Deleting a Connect Plus Connection

To delete an existing Connect Plus connection, follow the steps below:

1. Click on the Connect Plus connection you wish to delete: This will show the properties of the selected connection.
2. Click the **Delete** button: This will delete the selected Connect Plus connection.

This chapter describes the APM (Advanced Power Management) by RFI and how it is used in GW3-TRBO.

This chapter contains the following sections:

- **APM Connection Overview:** Describes the APM connection licensing and APM connection properties.
- **Adding an APM Connection:** Describes the process of adding an APM connection.
- **Updating an APM Connection:** Describes the process of updating an APM connection.
- **Deleting an APM Connection:** Describes the process of deleting an APM Connection.

APM Connection Overview

An APM connection is a connection to a GET APM Reader or 2SQL. The GET APM Reader or 2SQL receives APM UDP Traffic packets from an APM device, archives them (in the case of the GET APM 2SQL) and forwards them on to the APM connection.

APM License

The GW3-TRBO license determines the number of APM connections allowed in Connect. To view the number of APM connections in your license:

1. Click the **View License** button on Launch.
2. Expand the **Modules** node.
3. Expand the **GW_Connect** node.
4. Expand the **Restrictions** node.
5. See the **APM.Connections** value.

APM Connection Properties

The APM connection includes the following properties:

- **(Name):** Alias of this connection.
- **Enabled:** Indicates whether this connection is enabled.
 - *True:* Connection is enabled.
 - *False:* Connection is not enabled.
- **GET APM Host Name:** IP Address or DNS name of the machine hosting the GET APM 2SQL or Reader.
- **GET APM Pipe Name:** Pipe Name on the machine hosting the GET APM 2SQL or Reader.
- **Raw Data Archive Option:** The Connect module can log all raw data received from a connection. This option determines how long this data is stored. Options include:
 - *Do Not Archive:* Do not log raw data.
 - *Archive for 1 Week:* Keep raw data for one week.
 - *Archive for 2 Weeks:* Keep raw data for two weeks.
 - *Archive for 5 Weeks:* Keep raw data for five weeks.
- **Show Link Status Notification:** Indicates whether you will receive a GW3-TRBO GUI Notification when the link transitions from up to down or down to up.
 - *True:* Send notifications.
 - *False:* Do not send notifications.
- **Connection Timeout (sec):** The number of seconds to allow after the last packet is received before considering the connection to be down.
- **WACN ID:** The WACN ID for the channels on this APM.
- **System ID:** The system ID for the channels on this APM.
- **Zone ID:** The zone ID for the channels on this APM.
- **Site ID:** The site ID for the channels on this APM.
- **Subsite ID:** The subsite ID for the channels on this APM.

Adding an APM Connection

To add a new APM connection, follow the steps below:

1. Click on the **APM** node in the **Connections** list: This will enable the **Add Connection...** button.
2. Click the **Add Connection...** button: This will show the *Connection Properties* with default APM properties.
3. Enter the APM connection properties and click the **Update** button: This will add the APM connection.



Name must be alphanumeric to pass validation.

Updating an APM Connection

To update an existing APM connection, follow the steps below:

1. Click on the APM connection you wish to update: This will show the properties of the selected connection.
2. Change the desired APM connection properties and click the **Update** button: This will update the APM connection.

Deleting an APM Connection

To delete an existing APM connection, follow the steps below:

1. Click on the APM connection you wish to delete: This will show the properties of the selected connection.
2. Click the **Delete** button: This will delete the selected APM connection.





APM Channel Overrides

In some cases, a single APM device is setup to monitor frequencies on multiple sites. The APM Frequency Override feature allows you to assign a WACN, System, Zone, Site and Subsite to specific frequencies, overriding the WACN, System, Zone, Site and Subsite selected in the APM Connection Properties.





APM Channel Override options include:

- **Frequency:** The frequency to override.
- **WACN ID:** The WACN ID to report when APM activity is received on this frequency.
- **System ID:** The System ID to report when APM activity is received on this frequency.
- **Zone ID:** The Zone ID to report when APM activity is received on this frequency.
- **Site ID:** The Site ID to report when APM activity is received on this frequency.
- **Subsite ID:** The Subsite ID to report when APM activity is received on this frequency.
- **TX RSSI Mode:** Indicates that this frequency is a TX frequency that may be reported at an RX frequency in APM RSSI packets. Checking this option will prevent notifications that APM is reporting activity on frequencies that do not exist in the Alias database.





Adding an APM Frequency Override

1. Click on the Frequency Override button ()
2. Click on the Add... button ().
3. Enter the APM Channel Override Options.
4. Click the OK button.
5. Click the Save button () on the APM Frequency Override screen.
6. Click the Save button () on the GW_Connect screen.

Deleting an APM Frequency Override

1. Click on the Frequency Override button ()
2. Select (click on) the frequency to delete in the APM Frequency Overrides list.
3. Click the Delete button ()
4. Click the Save button () on the APM Frequency Override screen.
5. Click the Save button () on the GW_Connect screen.

Editing an APM Frequency Override

1. Click on the Frequency Override button ()
2. Select (click on) the frequency to edit in the APM Frequency Overrides list.
3. Click the Edit... button ()
4. Edit the APM Channel Override Options.
5. Click the Save button () on the APM Frequency Override screen.
6. Click the Save button () on the GW_Connect screen.

This chapter describes SNMP (Simple Network Management Protocol) and how it is used in GW3-TRBO.

This chapter contains the following sections:

- **SNMP Values and Traps:** Defines SNMP values and SNMP traps.
- **GET:** Describes the Global Enterprise Tool product and its role in the GW3-TRBO SNMP solution.
- **SNMP Connection Overview:** Describes the SNMP connection licensing and SNMP connection properties.
- **Adding an SNMP Connection:** Describes the process of adding an SNMP connection.
- **Updating an SNMP Connection:** Describes the process of updating an SNMP connection.
- **Deleting an SNMP Connection:** Describes the process of deleting an SNMP Connection.

SNMP Values and Traps

SNMP values are values that are exposed by SNMP devices. The SNMP Manager allows you to setup a time-based, recurring query on one or more SNMP values. The SNMP Manager gathers the query results and delivers these SNMP values in a single SNMP message. An example of an SNMP value is a USB hub reporting a value of *Available Ports*.

SNMP traps (also known as SNMP notifications) are SNMP packets that originate from an SNMP device when a threshold or condition is met within the device. SNMP traps may contain one or more SNMP values. SNMP traps may contain SNMP values that are not otherwise exposed.

GET

Global Enterprise Tool is a software product offered by Genesis that allows you to:

- Setup time-based, recurring queries on SNMP values. The GET SNMP Manager then broadcasts these values in a single SNMP message.
- Allows one or more GET clients (such as the SNMP Connect) to connect and receive SNMP messages and traps.
- SNMP message forwarding to GET clients.
- SNMP trap forwarding to GET clients.

Please refer to the GET documentation for more information on the GET product.

SNMP Connection Overview

SNMP License

The GW3-TRBO license determines the number of SNMP connections allowed in Connect. To view the number of SNMP connections in your license:

1. Click the **View License** button on Launch.
2. Expand the **Modules** node.
3. Expand the **Connect** node.
4. Expand the **Restrictions** node.
5. See the **SNMP.Connections** value.

SNMP Connection Properties

The SNMP connection includes the following properties:

- **(Name):** Alias of this connection.
- **Enabled:** Indicates if this connection is enabled.
 - *True:* Connection is enabled.
 - *False:* Connection is not enabled.
- **Raw Data Archive Option:** The Connect module can log all raw data received from a connection. This option determines how long this data is stored. Options include:
 - *Do Not Archive:* Do not log raw data.
 - *Archive for 1 Week:* Keep raw data for one week.
 - *Archive for 2 Weeks:* Keep raw data for two weeks.
 - *Archive for 5 Weeks:* Keep raw data for five weeks.
- **Show Link Status Notifications:** Indicates whether the user will receive GUI notifications when the connection's link status goes up or down.
 - *True:* Send notifications.
 - *False:* Do not send notifications.
- **Filter Pipe Name:** Name of the filter pipe used by the GET product.
- **Source IP Address:** IP address of the machine hosting the GET product.

Adding an SNMP Connection

To add a new SNMP connection, follow the steps below:

1. Click on the **SNMP** node in the **Connection** list: This will enable the **Add Connection...** button.
2. Click the **Add Connection...** button: This will show the *Connection Properties* with default SNMP properties.
3. Enter the SNMP connection properties and click the **Update** button: This will add the SNMP connection.



Name must be alphanumeric to pass validation.

Updating an SNMP Connection

To update an existing SNMP connection, follow the steps below:

1. Click on the SNMP connection you wish to update: This will show the properties of the selected connection.
2. Change the desired SNMP connection properties and click the **Update** button: This will update the SNMP connection.

Deleting an SNMP Connection

To delete an existing SNMP connection, follow the steps below:

1. Click on the SNMP connection you wish to delete: This will show the properties of the selected connection.
2. Click the **Delete** button: This will delete the selected SNMP connection.


Custom SNMP Values

SNMP values are the result of polling a value exposed via standard SNMP practices (See SNMP Values and Traps section above). Each network has a wide variety of pollable SNMP values. By default, these polled values are shown in GW3-TRBO as an OID with a value. GW3-TRBO provides a way to assign an alias and a value type to these polled values. To add custom entries to these tables, please contact Genesis Support.

Resource Mapping

An SNMP connection can receive messages about repeater alarms from the Unified Event Manager (UEM). However, these SNMP messages do not contain information that can identify the WACN, System, Zone, Site, Channel or Slot on which the alarm occurred. To correlate these alarms with the system infrastructure in your Alias database, Connect allows you to map each device name in the SNMP message with a resource on your system.

To be processed by the Resource Map, the SNMP message must have an *nbiSourceDevice* OID ending with “:Repeater.” If the *nbiSourceDevice* OID in the SNMP message matches a Resource Name in the Resource Map, Connect will generate a Diagnostic packet using the infrastructure details specified in the map.

To open the *SNMP Resource Map* window, click the **Resource Map...** () button at the bottom left of the *Connection Properties* panel. This will bring up a list of all currently mapped resources.

Importing Resources

To import resources from a comma-separated value (CSV) file, follow the steps below:



1. Click the **Import...** button.
2. Choose a CSV file to import and click **Open**. The resources in the file will be added to the list. If a resource in the import file has the same Resource Name as an item in the list, the list's item will be updated with the details in the import file.
3. A summary of the results of the import will be displayed in a new window. If any resources failed to import, the reason for the failure will be displayed. Click **OK** to close the results window.

Exporting Resources or Generating a Template

To export your resource list into a CSV file, follow the steps below. If there are no resources in the list, the Export feature will generate a CSV template with the column headers required for a successful import.

1. Click the **Export...** button.
2. Choose a file path to create or an existing CSV file to overwrite and click **Save**.

Removing Resources

To remove resources from the list, highlight one or more resources in the list and click the **Delete** () button. To remove all resources from the list, click the **Clear** () button.

This chapter describes the SkyView connection and how it is used in GW3-TRBO.

This chapter contains the following sections:

- **SkyView Connection Overview:** Describes the SkyView connection licensing and SkyView connection properties.
- **Adding a SkyView Connection:** Describes the process of adding a SkyView connection.
- **Updating a SkyView Connection:** Describes the process of updating a SkyView connection.
- **Deleting a SkyView Connection:** Describes the process of deleting a SkyView Connection.

SkyView Connection Overview

SkyView connections are a per WACN and System portal to cached archived Connect Plus activity. SkyView clients are typically map-based displays of real-time call, diagnostic and busy queue information provided by one or more SkyView connections. Only activity occurring on Zone 1 of the chosen System will be passed along through the SkyView connection.

SkyView License

The GW3-TRBO license determines the number of SkyView connections allowed in Connect. To view the number of SkyView connections in your license:

1. Click the **View License** button on Launch.
2. Expand the **Modules** node.
3. Expand the **GW_Connect** node.
4. Expand the **Restrictions** node.
5. See the **SkyView.Connections** value.

SkyView Connection Properties

The SkyView connection includes the following properties:

- **(Name):** Alias of this connection.
- **Enabled:** Indicates whether this connection is enabled.
 - *True:* Connection is enabled.
 - *False:* Connection is not enabled.
- **Show Link Status Notification:** Indicates whether you will receive a GW3-TRBO GUI Notification when the link transitions from up to down or down to up.
 - *True:* Send notifications.
 - *False:* Do not send notifications.
- **WACN ID:** The WACN ID for the channels on this APM.
- **System ID:** The system ID for the channels on this APM.
- **TCP Port:** The TCP port used to accept client connections.

Hovering the mouse over the SkyView connection icon while it is green will display the following popup messages:

1. Host Available: The connection has started, but no clients have connected.
2. Host Available with Clients: Clients have connected to the host.



Each client connection attempt to a SkyView connection is validated against Windows security. To pass validation, the client connection must originate from a machine running a Windows session under a user known to the GW3-TRBO host machine. See the GenWatch event log on the GW3-TRBO machine if you suspect that the client is failing validation.



In order for a client to receive live data from a SkyView connection, archiving must be enabled for the WACN and System specified in the SkyView connection. Specifically Calls, Busies, Sessions and Diagnostics must be archived for this WACN and System. Additionally, only activity occurring on Zone 1 of the chosen WACN and System will be sent to clients.

Adding a SkyView Connection

To add a new SkyView connection, follow the steps below:

1. Click on the **SkyView** node in the **Connections** list: This will enable the **Add Connection...** button.
2. Click the **Add Connection...** button: This will show the *Connection Properties* with default SkyView properties.
3. Enter the SkyView connection properties and click the **Update** button: This will add the SkyView connection.



(Name) must be alphanumeric to pass validation.

Updating a SkyView Connection

To update an existing SkyView connection, follow the steps below:

1. Click on the SkyView connection you wish to update: This will show the properties of the selected connection.
2. Change the desired SkyView connection properties and click the **Update** button: This will update the SkyView connection.

Deleting a SkyView Connection

To delete an existing SkyView connection, follow the steps below:

1. Click on the SkyView connection you wish to delete: This will show the properties of the selected connection.
2. Click the **Delete** button: This will delete the selected SkyView connection.

This chapter describes the SMTP Server connection and how it is used in GW3-TRBO.

This chapter contains the following sections:

- **SMTP Server Connection Overview:** Describes the SMTP Server connection licensing and SMTP Server connection properties.
- **Adding a SMTP Server Connection:** Describes the process of adding a SMTP Server connection.
- **Updating a SMTP Server Connection:** Describes the process of updating a SMTP Server connection.
- **Deleting a SMTP Server Connection:** Describes the process of deleting a SMTP Server Connection.

SMTP Server Connection Overview

SMTP Server connections accept SMTP mail input from SMTP clients. The SMTP Server connection parses mail messages and uses the resulting data as input, which is forwarded on to GW3-TRBO for processing.

The following SMTP Protocol is supported in this version:

- **ConnectPlusSiteController:** Send emails regarding diagnostic events.

SMTP Server License

The GW3-TRBO license determines the number of SMTP Server connections allowed in Connect. To view the number of SMTP Server connections in your license:

1. Click the **View License** button on Launch.
2. Expand the **Modules** node.
3. Expand the **GW_Connect** node.
4. Expand the **Restrictions** node.
5. See the **SmtServer.Connections** value.

SMTP Server Connection Properties

The SMTP Server connection includes the following properties:

- **(Name):** Alias of this connection.
- **Enabled:** Indicates whether this connection is enabled.
 - *True:* Connection is enabled.
 - *False:* Connection is not enabled.
- **Raw Data Archive Option:** The Connect module can log all raw data received from a connection. This option determines how long this data is stored. Options include:
 - *Do Not Archive:* Do not log raw data.
 - *Archive for 1 Week:* Keep raw data for one week.
 - *Archive for 2 Weeks:* Keep raw data for two weeks.
 - *Archive for 5 Weeks:* Keep raw data for five weeks.
- **Port:** The TCP port used to accept client connections.
- **SMTP Protocol:** The expected format of the SMTP mail messages received from the client.
- **WACN ID:** The WACN ID for this SMTP Server.
- **System ID:** The system ID for this SMTP Server.
- **Zone ID:** The zone ID for this SMTP Server.

Adding a SMTP Server Connection

To add a new SMTP Server connection, follow the steps below:

1. Click on the **SMTP Server** node in the **Connections** list: This will enable the **Add Connection...** button.
2. Click the **Add Connection...** button: This will show the *Connection Properties* with default SMTP Server properties.
3. Enter the SMTP Server connection properties and click the **Update** button: This will add the SMTP Server connection.



(Name) must be alphanumeric to pass validation.

Updating a SMTP Server Connection

To update an existing SMTP Server connection, follow the steps below:

1. Click on the SMTP Server connection you wish to update: This will show the properties of the selected connection.
2. Change the desired SMTP Server connection properties and click the **Update** button: This will update the SMTP Server connection.

Deleting a SMTP Server Connection

To delete an existing SMTP Server connection, follow the steps below:

1. Click on the SMTP Server connection you wish to delete: This will show the properties of the selected connection.
2. Click the **Delete** button: This will delete the selected SMTP Server connection.

This chapter describes TRBO ATIA connections and how they are used in GW3-TRBO.

This chapter contains the following sections:

- **TRBO ATIA Connection Overview:** Describes the TRBO ATIA connection licensing and TRBO ATIA connection properties.
- **Adding a TRBO ATIA Connection:** Describes the process of adding a TRBO ATIA connection.
- **Updating a TRBO ATIA Connection:** Describes the process of updating a TRBO ATIA connection.
- **Deleting a TRBO ATIA Connection:** Describes the process of deleting a TRBO ATIA Connection.

TRBO ATIA Connection Overview

TRBO ATIA License

The GW3-TRBO license determines the number of TRBO ATIA connections and sites allowed in Connect. To view the number of TRBO ATIA connections and sites in your license:

1. Click the **View License** button on Launch.
2. Expand the **Modules** node.
3. Expand the **GW_Connect** node.
4. Expand the **Restrictions** node.
5. See the **TrboAtia.Connections** value. This is the number of connections you can create.
6. See the **TrboAtia.SiteLicenses** value. This is the number of sites you are licensed to allocate to your connections.

TRBO ATIA Connection Properties

The TRBO ATIA connection includes the following properties:

Basic

- **(Name):** Alias of this connection.
- **Enabled:** Indicates whether this connection is enabled.
 - *True:* Connection is enabled.
 - *False:* Connection is not enabled.
- **Raw Data Archive Option:** The Connect module can log all raw data received from a connection. This option determines how long this data is stored. Options include:
 - *Do Not Archive:* Do not log raw data.
 - *Archive for 1 Week:* Keep raw data for one week.
 - *Archive for 2 Weeks:* Keep raw data for two weeks.
 - *Archive for 5 Weeks:* Keep raw data for five weeks.
- **Show Link Status Notifications:** Indicates whether the user will receive GUI notifications when the connection's link status goes up or down.
 - *True:* Send notifications.
 - *False:* Do not send notifications.

Data Source Settings

- **UDP Port:** The UDP port on which Connect will receive data from the data source.

System

- **WACN ID:** The licensed WACN associated with this connection.
- **System ID:** The system associated with this connection. The system ID will be displayed in decimal or hexadecimal format based on the System ID Format setting in the Global Settings menu in Launch.
- **Zone ID:** The Zone ID the connection will use for organization.
- **Licensed Sites:** The GW3-TRBO license restricts the number of sites that may be monitored by TRBO ATIA connections. When creating a connection, you must assign site IDs to the connection using your available site licenses. Clicking the drop-down will open a panel where you can allocate sites to the connection.
 - To add a range of sites, enter the starting number in the **From** box and the ending number in the **To** box, then click the **Add** button. This will add every site in that range to the **Licensed Site List**.
 - For example, to add site 1 to the list, enter 1 in both the **From** and **To** boxes. To add sites 5, 6, 7 and 8 to the list, enter 5 in the **From** box and 8 in the **To** box.
 - To remove a site from the list, click the site in the **Licensed Site List** to highlight it, then click the **Delete** button. You may select more than one site at a time using the Shift or Ctrl keys when clicking.

- To remove all sites from the list, click the **Clear** button below the **Licensed Site List**.

Timeout Settings

The Connect module relies upon receiving data over the network. If Connect does not receive a notification about the end of an activity, that activity can appear to be never-ending in GW3-TRBO. To compensate for this, several optional timeout features may be configured:

- **Busy Timeout (in seconds):** Busies will be timed out after the specified number of seconds. Set this to 0 to never end busies due to a timeout.
- **Call Timeout (in seconds):** Calls will be timed out after the specified number of seconds. Set this to 0 to never end calls due to a timeout. If enabled, this field should always be set at least a few seconds higher than the **Time-Out Timer (TOT)** value in your radio or repeater programming.
- **Session Inactivity Timeout (in seconds):** Sessions will be timed out after being inactive for the specified number of seconds. Set this to 0 to never end sessions due to a timeout. The inactivity timer begins when a channel assignment or busy on that session ends, and it is reset by a new channel assignment on the session. When enabled, this field must always be set to a value greater than the highest possible hang time in your repeater programming.



Using the timeout features can result in invalid data. The timeout values should be carefully considered to ensure that normal activities are not being ended prematurely. For example, if the **Call Timeout** field is set to 30 seconds, any call longer than 30 seconds will appear to end after 30 seconds in GW3-TRBO.



Emergency Alarm events received from TRBO ATIA will result in two packets: an emergency alarm and an emergency alarm ack. The emergency alarm ack packet indicates that the alarm was acknowledged by the controller, not a person.

Adding a TRBO ATIA Connection

To add a new TRBO ATIA connection, follow the steps below:

1. Click on the **TRBO ATIA** node in the **Connections** list: This will enable the **Add Connection...** button.
2. Click the **Add Connection...** button: This will show the *Connection Properties* with default TRBO ATIA properties.
3. Enter the TRBO ATIA connection properties and click the **Update** button: This will add the TRBO ATIA connection.



Name must be alphanumeric to pass validation.

Updating a TRBO ATIA Connection

To update an existing TRBO ATIA connection, follow the steps below:

1. Click on the TRBO ATIA connection you wish to update: This will show the properties of the selected connection.
2. Change the desired TRBO ATIA connection properties and click the **Update** button: This will update the TRBO ATIA connection.

Deleting a TRBO ATIA Connection

To delete an existing TRBO ATIA connection, follow the steps below:

1. Click on the TRBO ATIA connection you wish to delete: This will show the properties of the selected connection.
2. Click the **Delete** button: This will delete the selected TRBO ATIA connection.

This chapter describes TRBO Wireline Gateway connections and how they are used in GW3-TRBO.

This chapter contains the following sections:

- **TRBO Wireline Gateway Connection Overview:** Describes the TRBO Wireline Gateway connection licensing and TRBO Wireline Gateway connection properties.
- **Adding a TRBO Wireline Gateway Connection:** Describes the process of adding a TRBO Wireline Gateway connection.
- **Updating a TRBO Wireline Gateway Connection:** Describes the process of updating a TRBO Wireline Gateway connection.
- **Deleting a TRBO Wireline Gateway Connection:** Describes the process of deleting a TRBO Wireline Gateway Connection.

TRBO Wireline Gateway Connection Overview

The TRBO Wireline Gateway connection is used to send commands to radios on the Capacity MAX system. In GW3-TRBO, these commands include Radio Check, Selective Inhibit and Cancel Selective Inhibit.



The TRBO Wireline Gateway supports up to three in-progress radio commands. When a radio command would result in a more than three in-progress radio commands, GW3-TRBO reports this as a “Pending Request Limit Reached” message in the event log of the GW3-TRBO host, waits 1 second and then tries again.

TRBO Wireline Gateway License

The GW3-TRBO license determines the number of TRBO Wireline Gateway connections allowed in Connect. To view the number of TRBO Wireline Gateway connections in your license:

1. Click the **View License** button on Launch.
2. Expand the **Modules** node.
3. Expand the **GW_Connect** node.
4. Expand the **Restrictions** node.
5. See the **TrboWirelineGateway.Connections** value. This is the number of connections you can create.

TRBO Wireline Gateway Connection Properties

The TRBO Wireline Gateway connection includes the following properties:

Basic

- **(Name):** Alias of this connection.
- **Enabled:** Indicates whether this connection is enabled.
 - *True:* Connection is enabled.
 - *False:* Connection is not enabled.
- **Raw Data Archive Option:** The Connect module can log all raw data received from a connection. This option determines how long this data is stored. Options include:
 - *Do Not Archive:* Do not log raw data.
 - *Archive for 1 Week:* Keep raw data for one week.
 - *Archive for 2 Weeks:* Keep raw data for two weeks.
 - *Archive for 5 Weeks:* Keep raw data for five weeks.
- **Show Link Status Notifications:** Indicates whether the user will receive GUI notifications when the connection's link status goes up or down.
 - *True:* Send notifications.
 - *False:* Do not send notifications.

System

- **WACN ID:** The licensed WACN associated with this connection.
- **System ID:** The system associated with this connection. The system ID will be displayed in decimal or hexadecimal format based on the System ID Format setting in the Global Settings menu in Launch.
- **Zone ID:** The Zone ID the connection will use for organization.

Wireline Voice Gateway Settings

- **IP Address:** The IP address of the wireline voice gateway.
- **TCP Port:** The TCP port of the wireline voice gateway.
- **Keep-Alive Interval (in seconds):** The time (in seconds) between keep-alive packets sent by the connection to the wireline gateway. Suggested value is 5.
- **Source ID:** Commands will be sent on behalf of this Radio ID. The Radio ID must be active on the system.
- **Use TLS:** Controls the use of Transport Layer Security for authentication and communication with the wireline voice gateway. This option is read-only and set to True.
 - *True:* Use TLS.
 - *False:* Do not use TLS.
- **Wireline Gateway Version:** Protocol Version of the wireline voice gateway.

Adding a TRBO Wireline Gateway Connection

To add a new TRBO Wireline Gateway connection, follow the steps below:

1. Click on the **TRBO Wireline Gateway** node in the **Connections** list: This will enable the **Add Connection...** button.
2. Click the **Add Connection...** button: This will show the *Connection Properties* with default TRBO Wireline Gateway properties.
3. Enter the TRBO Wireline Gateway connection properties and click the **Update** button: This will add the TRBO Wireline Gateway connection.



Name must be alphanumeric to pass validation.

Updating a TRBO Wireline Gateway Connection

To update an existing TRBO Wireline Gateway connection, follow the steps below:

1. Click on the TRBO Wireline Gateway connection you wish to update: This will show the properties of the selected connection.
2. Change the desired TRBO Wireline Gateway connection properties and click the **Update** button: This will update the TRBO Wireline Gateway connection.

Deleting a TRBO Wireline Gateway Connection

To delete an existing TRBO Wireline Gateway connection, follow the steps below:

1. Click on the TRBO Wireline Gateway connection you wish to delete: This will show the properties of the selected connection.
2. Click the **Delete** button: This will delete the selected TRBO Wireline Gateway connection.

Information on Raw Data Files

GW3-TRBO stores raw data files on your GW3-TRBO computer. Genesis and Motorola support personnel use these files to help diagnose issues you may have with GW3-TRBO.

By default, GW3-TRBO will keep five weeks (approximately 2 GB) worth of raw data files. You may wish to conserve hard drive space by choosing to keep only one week's worth of raw data files. We suggest you keep the full five weeks, just in case it takes you awhile to notice an issue.

These raw data files are stored in the following directory:

ProgramData\Genesis\GenWatch3\RawData\<Connection Type>

Depending on the connection type, one or more additional subfolders may be used to partition the raw data by connection or system hierarchy.

The files in this directory are in the following format:

GW3_<year><month><day>_<hour>.RAW

For example, the raw data file for the 3 p.m. hour on 10/12/2010 would be:

GW3_20101012_15.RAW

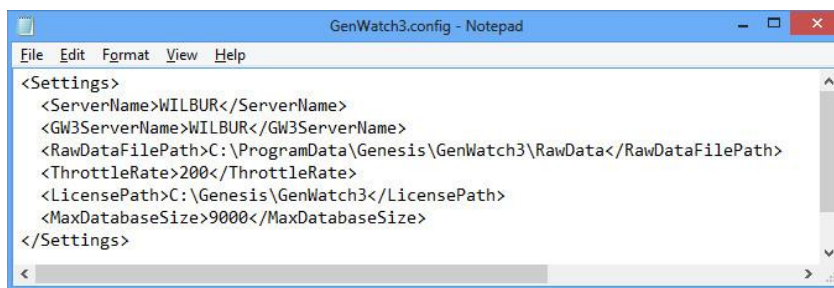


In the above directory paths, *<Connection Type>* should be replaced with the name of the connection type (e.g., *ConnectPlus* or *APM*.)

Changing the Raw Data File Directory

Changing the GW3-TRBO raw data directory is usually a bad idea. Support personnel will find it convenient if these files are always in the same place. However, if you have a small partition (small disk space) on drive C, you may wish to move this archive operation to another drive. To change the raw data file directory, take the following steps:

1. Browse to the GW3-TRBO installation directory. By default this folder is *C:\ProgramData\Genesis\GenWatch3*.
2. Double-click on the following file: *GenWatch3.config*: This may result in a dialog asking you to choose an application to use to open this file. In this case, choose Microsoft Notepad.



```
GenWatch3.config - Notepad
File Edit Format View Help
<Settings>
<ServerName>WILBUR</ServerName>
<GW3ServerName>WILBUR</GW3ServerName>
<RawDataFilePath>C:\ProgramData\Genesis\GenWatch3\RawData</RawDataFilePath>
<ThrottleRate>200</ThrottleRate>
<LicensePath>C:\Genesis\GenWatch3</LicensePath>
<MaxDatabaseSize>9000</MaxDatabaseSize>
</Settings>
```

Figure 7.1 – GenWatch3.config File

3. Change the value in the `<RawDataFilePath></RawDataFilePath>` tag to the desired raw data file path. (i.e. *E:\RawData* or *D:\RawData*). Make sure the path you choose is a valid hard drive, not a CD-ROM or DVD drive)
4. Click **File**→**Save** to save your changes.
5. GenWatch3 may take up to one hour to recognize this change.
6. If you wish to expedite this change, you can do so by updating an existing ConnectPlus connection in the Connect GUI. (i.e. selecting a ConnectPlus connection in the Connect GUI's **Connections** List and clicking the **Update** button)



Warning: Make sure you only change the `RawDataFilePath` tag. Changing *GenWatch3.config* tags in other areas can cause your computer to become unstable or even unusable. When in doubt, ask for assistance from your IT department or Genesis support.