



GW3-TRBO®
Connect
Software Version 2.23.5
Module Book

GW3-TRBO®

600-2.23.5-MM.1
10/31/2023

Trademarks

The following are trademarks of Motorola: MOTOTRBO™.

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

The Genesis Group Trademark Information

GW3-TRBO® is a registered trademark of GenCore Candeo, LTD., a subsidiary of Burks GenCore Co., Inc. D.B.A. The Genesis Group and Phil Burks.

Copyright

Copyright © 2011-2023; Burks GenCore Co., Inc. D.B.A. The Genesis Group and Phil Burks. All rights are reserved. No part of this publication or the associated program may be reproduced, transmitted, transcribed, in whole or in part, in any form or by any means, whether it is mechanical, magnetic, optical, electronic, manual or otherwise, without the prior written consent of Burks GenCore Co., Inc. D.B.A:

The Genesis Group and Phil Burks

5800 Eagles Nest Blvd

Tyler, Texas 75703.

Includes technology licensed from Motorola.

Disclaimer

The GW3-TRBO User's Manual is printed in the U.S.A. Burks GenCore Co., Inc. D.B.A. The Genesis Group and Phil Burks believe that the information included in this manual is correct; however, Burks GenCore Co., Inc. D.B.A. The Genesis Group and Phil Burks reserves the right to alter, revise and make periodic changes to the manual and its contents. Burks GenCore Co., Inc. D.B.A. The Genesis Group does not assume responsibility to notify any person of such revisions or changes. While we have taken strides to carefully examine our software and documentation and believe that it is reliable, the Genesis Group and Phil Burks assume no responsibility for the use of the manual, or GW3-TRBO software, nor for any patent infringements or other rights of third parties who may use the manual or the GW3-TRBO software. Burks GenCore Co., Inc. D.B.A. The Genesis Group and Phil Burks make no representations or warranties with respect to the contents or fitness for a particular purpose beyond the cost of the software paid by the end-user.

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

License

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

Refer to the GW3-TRBO Manual Overview for your full license. All license information contained on pages 4-7 (Book 600-2.23.5-AA.1) are to be considered as contained herein.

Support

Customer satisfaction is our number one priority at Genesis. We are here to provide you with the best software possible, and we want to know when you have any questions, concerns or problems with GW3-TRBO so that we can make it a better product for everyone.

Refer to the *Troubleshooting & Support* section of the GW3-TRBO Manual Shell (Book 600-2.23.5-AA.1) for complete support and contact information.

Document History

Revision	Description	Author
2.2	Initial release	REB
2.3	Revisions Before Release	CWF
2.4	Revisions Before Release	CWF
2.5	Revisions Before Release	CWF
2.5	Added section on APM	JAW
2.5	Added information on Timeout Interval and Zone ID connection properties.	REB
2.5	Added Connection Status section; minor edits	REB
2.6	Added command-related settings	REB
2.6	Revisions Before Release	CWF
2.7	Added Busy Timeout to connection properties.	REB
2.7	Revisions Before Release	CWF
2.8	Removed Timeout Interval.	REB
2.8	Revisions Before Release	REB
2.9	Revisions Before Release	REB
2.9	Clarified raw data path.	REB
2.10	Added SNMP chapter.	REB
2.10	Added SkyView Chapter	JAW
2.10	Revisions Before Release	REB
2.11	Converted to Docx format	CWF
2.11	Changed references to “XRT 9000” to “gateway.”	REB
2.11	Added SMTP Server connection type.	JAW
2.11	Added Timeout Settings to Connect Plus	REB
2.12	Revisions Before Release	JAW
2.12	Added TRBO ATIA and TRBO Wireline Gateway chapters.	REB
2.12	Added Resource Mapping feature to SNMP.	REB
2.13	Revisions Before Release	ATG
2.14	Added chapter for SmartPTT Subscriber GPS connection	JAW
2.14	Added chapter for neoTerra Subscriber GPS connection	JAW
2.14	Added Appendix A - Subscriber GPS Event Correlation	JAW
2.14	Removed SkyView Chapter	ATG
2.15	Revisions Before Release	REB
2.15	Removed REST API connection type.	REB
2.16	Revisions Before Release	JPS
2.16	Add SMTP connections	DEW
2.16	Rename SMTP Server to XRC Diagnostics	DEW
2.17	Add TRBO Presence connections	ATG
2.17	Remove NeoTerra and SmartPTT references	DEW
2.17.10	Added database options to SNMP connection.	REB

2.17.17	Added port option to APM connection.	REB
2.17.18	Added APM connection import.	REB

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	7
ABOUT THIS MANUAL	11
GOALS	11
WHO SHOULD READ THIS MANUAL?	11
HOW THIS MANUAL IS ORGANIZED	11
CHAPTER 1 OVERVIEW	13
WHAT IS CONNECT?	13
CONNECTION STATUS	15
CHAPTER 2 CONNECT PLUS CONNECTIONS	17
CONNECT PLUS CONNECTION OVERVIEW	17
<i>Connect Plus License</i>	17
<i>Connect Plus Connection Properties</i>	17
Basic	17
Gateway Settings.....	18
Gateway User Settings	18
Radio Command Settings.....	18
System.....	18
Timeout Settings	18
ADDING A CONNECT PLUS CONNECTION.....	19
UPDATING A CONNECT PLUS CONNECTION	19
DELETING A CONNECT PLUS CONNECTION	19
CHAPTER 3 APM CONNECTIONS	21
APM CONNECTION OVERVIEW	21
<i>APM License</i>	21
<i>APM Connection Properties</i>	21
ADDING AN APM CONNECTION	22
UPDATING AN APM CONNECTION.....	22
DELETING AN APM CONNECTION	22
IMPORTING APM CONNECTIONS	23
APM CHANNEL OVERRIDES.....	24
<i>Adding an APM Frequency Override</i>	24
<i>Deleting an APM Frequency Override</i>	24
<i>Editing an APM Frequency Override</i>	25
CHAPTER 4 SNMP CONNECTIONS	27
SNMP VALUES AND TRAPS.....	27
GET	27
SNMP CONNECTION OVERVIEW	28
<i>SNMP License</i>	28
<i>SNMP Connection Properties</i>	28
ADDING AN SNMP CONNECTION	29
UPDATING AN SNMP CONNECTION	29

DELETING AN SNMP CONNECTION	29
CUSTOM SNMP VALUES	29
RESOURCE MAPPING	29
<i>Importing Resources</i>	30
<i>Exporting Resources or Generating a Template</i>	30
<i>Removing Resources</i>	30
CHAPTER 5 XRC DIAGNOSTICS CONNECTIONS	31
XRC DIAGNOSTICS CONNECTION OVERVIEW	31
<i>XRC Diagnostics License</i>	31
<i>XRC Diagnostics Connection Properties</i>	31
ADDING AN XRC DIAGNOSTICS CONNECTION	32
UPDATING AN XRC DIAGNOSTICS CONNECTION	32
DELETING AN XRC DIAGNOSTICS CONNECTION	32
CHAPTER 6 TRBO ATIA CONNECTIONS	33
TRBO ATIA CONNECTION OVERVIEW	33
<i>TRBO ATIA License</i>	33
<i>TRBO ATIA Connection Properties</i>	33
Basic	33
Data Source Settings	34
System	34
Timeout Settings	35
ADDING A TRBO ATIA CONNECTION	35
UPDATING A TRBO ATIA CONNECTION	35
DELETING A TRBO ATIA CONNECTION	36
CALL PREEMPTION	36
CHAPTER 7 TRBO WIRELINE GATEWAY CONNECTIONS	37
TRBO WIRELINE GATEWAY CONNECTION OVERVIEW	37
<i>TRBO Wireline Gateway License</i>	37
<i>TRBO Wireline Gateway Connection Properties</i>	38
Basic	38
System	38
Wireline Voice Gateway Settings	38
ADDING A TRBO WIRELINE GATEWAY CONNECTION	39
UPDATING A TRBO WIRELINE GATEWAY CONNECTION	39
DELETING A TRBO WIRELINE GATEWAY CONNECTION	39
CHAPTER 8 CONNECT PLUS CONFIGURATION SERVICES CONNECTIONS	41
CPCS CONNECTION OVERVIEW	41
<i>CPCS License</i>	41
<i>CPCS Connection State</i>	41
<i>CPCS Logging</i>	42
<i>CPCS Connection Properties</i>	42
Sync... ..	42
Manage Gateways	42
ADDING A CPCS CONNECTION	43
UPDATING A CPCS CONNECTION	44
DELETING A CPCS CONNECTION	44
DELETING A GATEWAY	44
CHAPTER 9 SMTP CONNECTIONS	45
SMTP CONNECTION OVERVIEW	45
<i>SMTP License</i>	45
<i>SMTP Connection Properties</i>	45
<i>SMTP Connection Usage</i>	46

ADDING AN SMTP CONNECTION	46
UPDATING AN SMTP CONNECTION	46
DELETING AN SMTP CONNECTION	46
CHAPTER 10 TRBO PRESENCE CONNECTIONS.....	47
TRBO PRESENCE OVERVIEW	47
<i>TRBO Presence License</i>	47
<i>TRBO Presence Connection Properties</i>	47
Basic	47
Data Source Settings	48
System.....	48
ADDING A TRBO PRESENCE CONNECTION	48
UPDATING A TRBO PRESENCE CONNECTION	48
DELETING A TRBO PRESENCE CONNECTION	49
CHAPTER 11 RAW DATA FILES	51
<i>Information on Raw Data Files</i>	51
Changing the Raw Data File Directory	51

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.
- **XRC Diagnostics Connections:** Describes how to create and manage a connection to receive Connect Plus site controller diagnostics 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.
- **Connect Plus Configuration Services Connections:** Describes how to create and manage Connect Plus Configuration Services connections.
- **SMTP Connections:** Describes how to create and manage SMTP connections.
- **TRBO Presence Connections:** Describes how to create and manage TRBO Presence 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:

- **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.
- **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.
- **Connect Plus Configuration Services:** This type allows GW3-TRBO to sync its radio and group information with the user registry on a Connect Plus gateway. Refer to the *Connect Plus Configuration Services Connections* section of this manual for more information.
- **XRC Diagnostics:** This type parses data sent via SMTP by Connect Plus site controllers into diagnostics, which is forwarded on to GW3-TRBO for processing. Refer to the *XRC Diagnostics 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.

- **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 the proprietary data they receive 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.

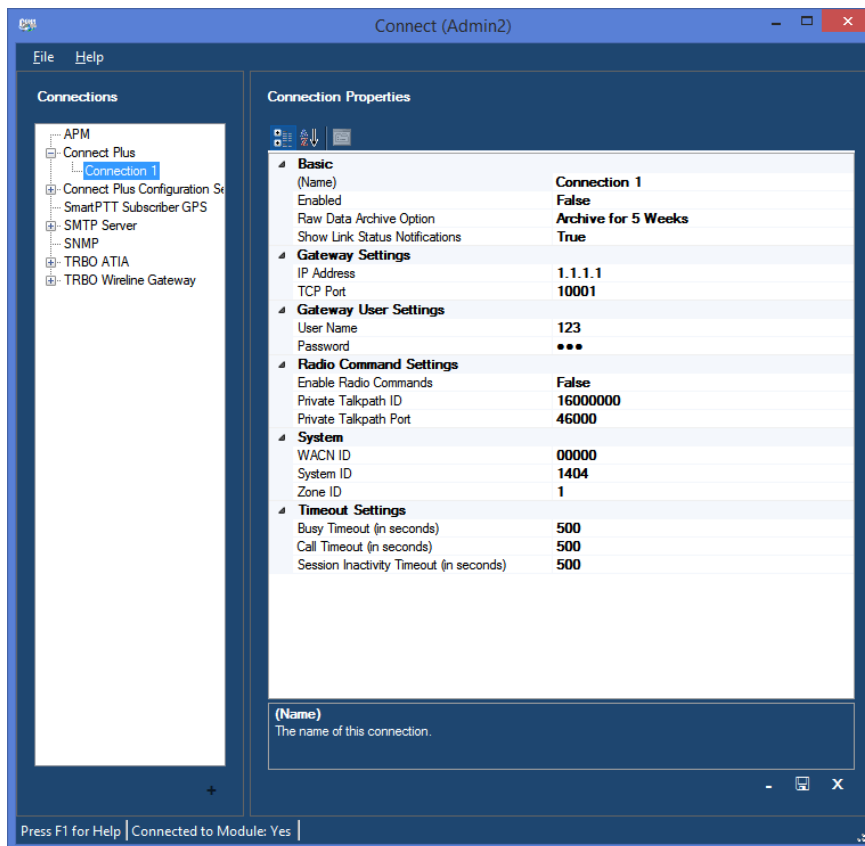









Figure 1.1 – Connect GUI

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 is encountering an error.
-  : Connection with a connected client is encountering an error.
-  : Connection has received packets within the past several seconds. The amount of time varies by connection type.
-  : Connection with a connected client has received packets within the past several seconds. The amount of time varies by connection type.
-  : Connection has not received packets within the past several seconds. The amount of time varies by connection type. (Blinks between red and white background.)
-  : Connection with a connected client has not received packets within the past several seconds. The amount of time varies by connection type. (Blinks between red and white background.)
-  : Connection that manages multiple data sources is receiving data from at least one source, but at least one other source is either not receiving data or has a connectivity issue.



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 **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 Manual* 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.
- **Use Legacy User Authentication:** Select this option to connect to a gateway using a firmware release prior to 1.5.

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 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 Channel Overrides:** Describes APM Channel Overrides and the process to configure them.

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.
- **GET APM Port:** TCP port used to connect to 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.

Importing APM Connections

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



Warning: Importing connections will first delete all the existing APM connections before the new connections are added.

1. In a spreadsheet or text-editing application, create a CSV file containing the necessary connection properties. Each row of the CSV will represent a single connection, while each column represents one of the properties of that connection. The allowed properties are detailed in the table below.
2. Click on the APM root node on the **Connections** list.
3. Click on the **Import from CSV file** button.
4. Click on the **Browse** button and select the CSV file. This will parse the file and display a list of the connection properties loaded from the file.
5. If there are any problems with the CSV file, they will be highlighted on the list. Review the marked errors and make any changes needed in the CSV file. Then repeat step 4 to try again.
6. If there are no errors in the file, the **Import** button will flash. Click it to perform the import. Connect will delete all existing APM connections, then add each connection defined in the CSV file.

Name	Corresponding Property	Required	Notes
ConnectionName	Name	Yes	
ConnectionEnabled	Enabled	No	Defaults to true.
RawDataOption	Raw Data Archive Option	No	0 = Do not archive 1 = One week 2 = Three weeks 3 = Five weeks Defaults to 3.
LinkNotifications	Show Link Status Notifications	No	Defaults to true.
WacnId	WACN ID	Yes	
SystemId	System ID	Yes	
ZoneId	Zone ID	Yes	
SiteId	Site ID	Yes	
SubsiteId	Subsite ID	No	Defaults to 0.
ApmHostName	GET APM Host Name	Yes	
ApmPipeName	GET APM Pipe Name	Yes	
ApmPort	GET APM Port	Yes	

ApmTimeout	Connection Timeout (sec)	No	Defaults to 30.
------------	--------------------------	----	-----------------

Table 3.1 – Import fields





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* window.
6. Click the **Save** button () on the Connect window.

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* window.
5. Click the **Save** button () on the Connect window.

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* window.
6. Click the **Save** button () on the *Connect* window.

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.
- **Use GET Database:** Toggles whether to use the database from the GenGET SNMP 2SQL product to provide additional information in the decoded SNMP messages. This information is used to better associate SNMP messages with the relevant radio system infrastructure.
- **Database Server:** The SQL Server that hosts the database used by GenGET SNMP 2SQL. This must include the instance name if it is not the default instance.
- **Database Name:** The name of the database used by GenGET SNMP 2SQL.
- **Filter Pipe Name:** Name of the filter pipe used by GenGET SNMP 2SQL.
- **Source IP Address:** IP address of the machine hosting GenGET SNMP 2SQL.
- **Port:** Port used by GenGET SNMP 2SQL.

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 SNMP values that can be polled. By default, these polled values are shown in GW3-TRBO as SNMP Object Identifiers (OIDs) 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 XRC Diagnostics connection and how it is used in GW3-TRBO.

This chapter contains the following sections:

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

XRC Diagnostics Connection Overview

XRC Diagnostics connections accept SMTP mail messages from Connect Plus site controllers. The XRC Diagnostics connection parses the mail messages and uses the resulting data as diagnostic input, which is forwarded on to GW3-TRBO for processing.

The following SMTP Protocol is supported in this version:

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

XRC Diagnostics License

The GW3-TRBO license determines the number of XRC Diagnostics connections allowed in Connect. To view the number of XRC Diagnostics 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 **XrcDiagnostics.Connections** value.

XRC Diagnostics Connection Properties

The XRC Diagnostics 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.
- **WACN ID:** The WACN ID for this XRC Diagnostics connection.
- **System ID:** The system ID for this XRC Diagnostics connection.
- **Zone ID:** The zone ID for this XRC Diagnostics connection.

Adding an XRC Diagnostics Connection

To add a new XRC Diagnostics connection, follow the steps below:

1. Click on the **XRC Diagnostics** 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 XRC Diagnostics properties.
3. Enter the XRC Diagnostics connection properties and click the **Update** button: This will add the XRC Diagnostics connection.



(Name) must be alphanumeric to pass validation.

Updating an XRC Diagnostics Connection

To update an existing XRC Diagnostics connection, follow the steps below:

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

Deleting an XRC Diagnostics Connection

To delete an existing XRC Diagnostics connection, follow the steps below:

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



Important Note Regarding Buses: Due to limitations in the TRBO ATIA protocol, a Bus is limited to reporting only one busy site. Even if the Bus is due to a lack of resources on more than one site, only one of these busy sites is reported.

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.

Call Preemption

Calls on TRBO ATIA are subject to preemption. When a call with a higher priority than other active calls would encounter a busy, the lower priority calls are interrupted on each site in which this conflict occurs. When some sites are removed from a call for this reason, GW3-TRBO will issue Update Session and Call Update activities to reflect the new list of sites on the preempted session and call. When all sites are removed from a call for this reason, GW3-TRBO will issue End of Call and End Session activities to reflect that the preempted session has ended.

Due to the timing of delivery from the TRBO ATIA system, preemption events may result in activity marked as corrupt in the *Activity* window. This is expected behavior.

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.

Chapter 8 Connect Plus Configuration Services Connections

This chapter describes the Connect Plus Configuration Services (CPCS) connection and how it is used in GW3-TRBO.

This chapter contains the following sections:

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

CPCS Connection Overview

The CPCS connection is used by GW3-TRBO to sync its radio and group information with the user registry on a Connect Plus gateway.

CPCS License

The GW3-TRBO license determines the number of CPCS connections allowed in Connect. To view the number of CPCS 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 **ConnectPlusConfigurationServicesCollection.Connections** value.

CPCS Connection State

The link status for this connection is the aggregate of link statuses for this connection's gateways. (See the *Manage Gateways* section)

- **Comm Error:** Indicates that one or more gateways is experiencing a communication error.
- **No Data Received:** Indicates that one or more enabled controllers has lost its connection to its gateway or has not received data from the gateway in the last 10 second. This can also indicate that there are no enabled gateways.
- **Data Received:** Indicates that all enabled gateways are connected to their gateway and have received data within the last 10 seconds.

Link status changes (Link Up and Link Down) are sent from each gateway. These statuses are shown in the Alerts window.

CPCS Logging

Communication to and from the Gateways is captured in the CPCS log files. The files are in JSON (JavaScript Object Notation) format and are stored in *ProgramData\Genesis\GenWatch3\Logs\GW_Connect.ConfigurationServices.Sync*. Log files are kept for five weeks.

CPCS Connection Properties

The CPCS connection includes the following properties:

- **(Name):** Alias of this connection.
- **Automatic Sync Hour:** The daily automatic sync process will start at the top of the selected hour.
 - **Never:** Automatic syncing is disabled.
 - **00:00 – 00:23:** Automatic syncing occurs at the top of the selected hour. These hours represent the hour of the time local to the GW3-TRBO host machine. To prevent issues with daylight savings, behind the scenes, GW3-TRBO converts this hour and the local GW3-TRBO host time to UTC time when check if it is time to sync.
- **Enabled:** Indicates whether this connection is enabled.
 - *True:* Connection is enabled.
 - *False:* Connection is not enabled.
- **Historical Purge Option:** The Connect module keeps a historical record of Configuration Services Group and Subscriber changes. This option determines how long until the data is purged. Options include:
 - *After 5 Weeks:* Keep data for five weeks.
 - *After 1 Year:* Keep data for one year.

Sync...

Via the automatic syncing feature, daily, user and group records are downloaded from each enabled Gateway and synced with the local GW3-TRBO database. Click the **Sync...** button to kick off an automatic sync operation. During the short period of time that a sync is in progress, requests made via REST API clients such as iVista will be delayed and other sync requests will be refused.

Manage Gateways

A CPCS connection can have multiple gateways associated with it. Click the **Manage Gateways** button to open the *Manage Gateways* window.

The properties for these gateways are the following:

- **(Name):** Alias of this gateway.
- **Enabled:** Indicates whether this gateway is enabled.
 - *True:* Gateway is enabled.
 - *False:* Gateway is not enabled.
- **Show Link Status Notifications:** Indicates whether the user will receive GUI and event log notifications when the connection's link status goes up

or down. The link goes up when data is received from a gateway. The link goes down when a period of 10 seconds expires with no data from the gateway.

- *True*: Send notifications.
 - *False*: Do not send notifications.
- **Gateway Site ID**: Site ID of the gateway (usually 255).
- **IP Address**: IP Address of the gateway.
- **TCP Port**: TCP port of the gateway.
- **User Name**: User name use to log into the gateway.
- **Password**: Password use to log into the gateway.
- **Automatic Sync Option**: Determines which direction(s) data will be sent during the sync operation. Also determines if changes made to Subscribers and Groups in Alias or via the REST API are stored locally and provisioned onto the Gateway.
 - **None**: No syncing will occur. Changes made to Subscribers and Groups in Alias or via the REST API are not stored locally and are not provisioned onto the Gateway.
 - **Bidirectional**: Syncing will occur between GW3-TRBO and the Gateway using the most current timestamp to determine the source. Changes made to Subscribers and Groups in Alias or via the REST API are stored locally and are provisioned onto the Gateway.
 - **Gateway to GW3**: Syncing will occur between GW3-TRBO and the gateway using the gateway as the source. Changes made to Subscribers and Groups in Alias or via the REST API are not stored locally and are not provisioned onto the Gateway.
 - **GW3 to Gateway**: Syncing will occur between GW3-TRBO and the gateway using GW3-TRBO as the source. Changes made to Subscribers and Groups in Alias or via the REST API are stored locally and are provisioned onto the gateway.
- **WACN ID**: WACN ID of this connection in hexadecimal format.
- **System ID**: System ID of this connection in hexadecimal format.



Selecting the wrong System ID and sending a request will cause the Gateway to reject further requests until it is rebooted.

Adding a CPCS Connection

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

1. Click on the **Connect Plus Configuration Services** node in the **Connection** list: This will enable the + button.
2. Click the + button: This will show the *Connection Properties* with default CPCS properties.
3. Enter the CPCS connection properties.
4. Click **Manage Gateways** to open the *Manage Gateways* window.
5. Click **Add Gateway....** This will show the setting options for a gateway.
6. Fill in the information for the gateway and click the **Save** button.

7. Repeat steps 5 & 6 for each gateway.
8. Click the **Save and Close** button to return to the CPCS connection properties.
9. Click the **Save** button on the CPCS Connection: This will add the CPCS connection and associated gateway(s).



Name must be alphanumeric to pass validation.

Updating a CPCS Connection

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

1. Click on the CPCS connection you wish to update: This will show the properties of the selected connection.
2. Change the desired CPCS connection properties.
10. To update gateways, click **Manage Gateways** to open the *Manage Gateways* window.
3. Edit/Add a gateway as desired and click the **Save** button.
4. Repeat step 3 for each gateway you want to edit or add.
5. Click the **Save and Close** button to return to the CPCS connection properties.
6. Click the **Update** button on the CPCS connection: This will update the CPCS connection.

Deleting a CPCS Connection

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

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

Deleting a Gateway

To delete an existing Gateway associated with a CPCS connection, follow the steps below:

1. Click on the CPCS connection you wish to delete the gateway(s) from and click on the **Manage Gateways** button: this will bring up the *Manage Gateways* window.
2. Select the gateway you wish to remove and click the **Delete** button: This will delete the selected Gateway.
3. Click the **Save and Close** button on the *Manage Gateways* form
4. Click the **Update** button on the CPCS Connection: This will save your changes.

This chapter describes how GenWatch3 allows connections to an SMTP server and how they are used in GenWatch3.

This chapter contains the following sections:

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

SMTP Connection Overview

SMTP License

The GenWatch3 license determines the number of SMTP connections allowed in Connect. To view the number of SMTP 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 **Smtplib.Connections** value.

SMTP Connection Properties

The SMTP 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.
- **Host:** The host name or IP address of the SMTP server.
- **Port:** The port number on which the SMTP server is listening.
- **Use SSL:** Indicates whether SSL should be used when connecting to the SMTP server.
- **Sender Address:** The email address from which emails will be sent. This must be unique across all SMTP connections. Email addresses with special international characters (UTF-8) are not supported.
- **Sender Name:** The name of the sender from which emails will be sent.
- **User:** The username to use to authenticate with SMTP server.
- **Password:** The password to use to authenticate with the SMTP server.
- **Verbose Logging:** Indicates whether all communication with the SMTP server should be logged.

SMTP Connection Usage

SMTP connections are used to send notifications in Trigger.

Adding an SMTP Connection

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

1. Click on the **SMTP** 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 SMTP properties.
3. Enter the SMTP connection properties and click the **Update** button: This will add the SMTP connection.



Name must be alphanumeric to pass validation.



Sender Address must be unique across all SMTP connections to pass validation.



Email addresses with special international characters (UTF-8) are not supported.

Updating an SMTP Connection

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

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

Deleting an SMTP Connection

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

1. Click on the SMTP 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 connection.

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

This chapter contains the following sections:

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

TRBO Presence Overview

TRBO Presence License

The GenWatch3 license determines the number of TRBO Presence connections allowed in Connect. To view the number of TRBO Presence 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 **TrboPresence.Connections** value.

TRBO Presence Connection Properties

The TRBO Presence connection includes the following properties:

Basic

- **(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.

Data Source Settings

- **TRBO Presence Type:** The type of connection. This option is read-only and set to CMSS.
 - *CMSS:* Capacity Max System Server.
- **Watcher Interface IP Address:** The IP address of the server. In a Capacity Max system, the Watcher Interface IP Address will be the base CMSS IP address plus 1. For example, if the base CMSS IP address is 172.21.0.0, this value should be 172.21.0.1.
- **Watcher Interface TCP Port:** The port number on which the server is listening. In a Capacity Max system, the Watcher Interface TCP Port will be the base CMSS UDP Port plus 15. For example, if the base CMSS UDP port is 65000, this value should be 65015.

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.

Adding a TRBO Presence Connection

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

1. Click on the **TRBO Presence** 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 TRBO Presence properties.
3. Enter the TRBO Presence connection properties and click the **Update** button: This will add the TRBO Presence connection.



Name must be alphanumeric to pass validation.

Updating a TRBO Presence Connection

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

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

Deleting a TRBO Presence Connection

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

1. Click on the TRBO Presence 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 Presence 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 not recommended. However, if the default location might not have enough disk space to store the raw data, you may wish to move this archive operation to another drive. For instructions on how to change the raw data file directory, see the *GW3-TRBO Config Files* section of *Chapter 3: GW3-TRBO Service* in the *GW3-TRBO Core Manual*.



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