

System Galaxy Technical Guide

CONFIGURATION AND OPERATION



GCS Event Log Distributor Service

Software Version 10.2 (or later)

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Table 1: Revision History

Rev. #	Date	Revision
1.0	17JUN2006	Draft: SG 8.0 Tech Spec—scope includes Business Critical Requirements: <ul style="list-style-type: none">▶ Email GCS Log Distributor Service – original functionality extracted from the SG 8.0 Addendum.
1.2	06FEB2014	Added headings to repair error in TOC
1.3	21APR2014	Revision to procedural instructions (including narrative descriptions for configuring TCP/IP Output.
1.4	14MAY2014	Expand explanation of for stopping and starting the Log Distributor Service. And added reminder to start the service after configuring it.

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1. Introduction to GCS Log Distributor

The **GCS Log Distributor Service** is distributed controller and loop/cluster events via **Email Notification** and **Event Output** (TCP/IP, RS-232). This guide provides instructions for configuring **Email Notification** and for registering and configuring the **Event Output**.

1.1. System/Software Requirements

This section covers requirements specific to registering and operating the GCS Log Distributor Service. Also see *the IT Check List, the SG System Requirements Guide, or appropriate manual for requirements that are outside the scope of this guide.*

1. The *GCS Log Distributor Service* is installed on the **Main Galaxy Communication Server** as a normal part of the software installation process (using the SG Software Install Disk).
2. The **Main Galaxy Communication server (PC) must remain running** to support uninterrupted **Email Notifications** or **Event Output/Broadcasts**.
3. The **GCS Log Distributor Service must be running** and should be configured to run automatically.

NOTICE: The *GCS Log Distributor Service* is installed to 'start/run manually'; therefore the Installer or IT Professional must change the service setting to 'start/run automatically'.

4. The **Email Notification feature** does not require SG registration, but configuration is needed.
5. For **Email Notification**, the *GCS Log Distributor Service* must be configured to identify which events will generate an email notification. Unchecked events will not trigger an email notice.
6. If using **TCP/IP Output**, the Installer or IT Professional must set the **listening port** of the *GCS Log Distributor service* to a valid/unused port number.

CAUTION: DO NOT SET the Listening Port to use 3001, 4000, 4001, 4002, 4003, 4004, etc. Consult the Galaxy IT Check List to identify all the ports that are in use by other SG components.

7. **Event Output feature (Text, network broadcast)** must be registered by an authorized Galaxy Dealer in the System Galaxy software – System Registration screen.
8. For **Event Output feature**, the *GCS Log Distributor Service* must be configured for the desired output format (i.e. text file, event broadcast RS232 or TCPIP).
9. For **Event Output**, the *GCS Log Distributor Service* must be configured to identify which events will generate an output. Unchecked events will not trigger an output or broadcast.

SG SOFTWARE VERSION NOTICE: All versions of System Galaxy 8/9/10 use the **GCS Log Distributor Service**.

IMPORTANT: You must close the **GCSLogDistributor.exe** after configuring & saving changes and **then RESTART the GCS Log Distributor Service** to resume proper operation. Failure to restart the service properly will result in lost events/notifications the next time the PC is logged off.

1.2. Overview of Event Output Features

The **Event Output feature** allows the system administrator to distribute Galaxy's **controller events** and **loop/cluster events** via **email** or **text file**, and **network broadcast (RS232 or TCP/IP)**.

- **Event Email Notifications:** user can configure which events will be sent out via SMTP Email to an individual recipient; two email groups are available for configuration.
This feature is not controlled by registration, thus it is available regardless of product level.
- **Event Output to Text File:** user can configure events to be written to a text file provided the system is registered for this option. (See the System Registration screen).
- **Event Output to RS232 or TCP/IP:** user can configure events to be broadcast over a network from the PC's **RS232 port** or **TCP/IP port**.

Note: This feature requires a valid registration/purchase agreement. Professional Product Level does not support this feature currently. Corporate and Enterprise do support this feature based on customer purchased features.


CONFIGURATION TIP: Run the Log Distributor Service as a *standalone executable* in order to configure the setup.

IMPORTANT: You must close the **GCSLogDistributor.exe** after saving changes and **then RESTART** the **GCS Log Distributor Service** to resume operation / email notification.

IMPORTANT: the Log Distributor Service is installed by default on the Main Communication Server. By default the service is set to start/run 'manually'. Installer or IT Professional should change the service to start/run 'automatically'.

2. Configuring the GCS Log Distributor

2.1. About Running the Log Distributor Service

NOTICE for Windows XP: The GCS Log Distributor ICON looks like an envelope  running on the computer task tray, provided you have the service configured to 'interact with desktop'. Use the Windows® Control Panel or GCS Service Manager Utility to enable 'interact with desktop' option. The GCS Service Manager Utility program can be launched from the Program Files\System Galaxy\Utility folder (typically installed on the C: drive) for those who are running SG v8/9. NOTE: REFRESH SERVICE TO SEE CHANGES (later Windows operating systems do not allow the icon to display on the task tray).

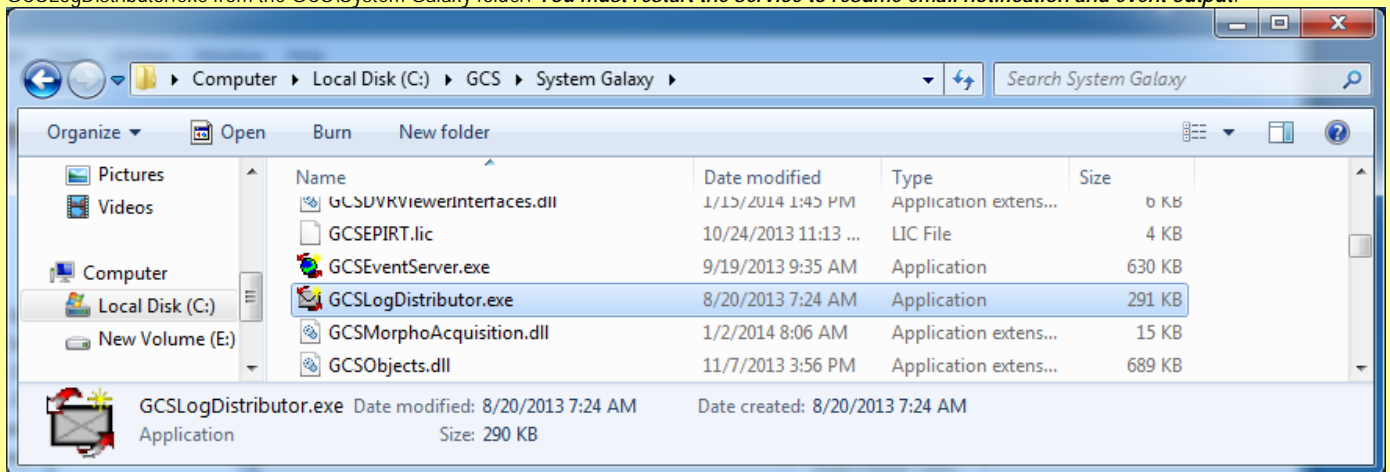
Windows 7 (and later): The GCS Log Distributor ICON will not display on the computer task tray.

NOTICE for Starting & Stopping GCS LogDistributor Service: use the *GCS Service Manager Utility (XP)* or *GCS Service Monitor Utility (Win-7)* to start and stop the GCS LogDistributor service. These utility programs are launched from the System Galaxy\Utility folder (found under Program Files in SG 8/9 and under C:\GCS in SG 10). On Windows-7 or higher you may need to run the *GCS Service Monitor Utility as an administrator*. Optionally you can start and stop services from the Windows® control panel.


IMPORTANT NOTICE for using Email Notification and other Event Output features: As stated in the Requirements, the GCS LogDistributor service must be running to support Email Notification/Event Output. Notification/output will not occur if the service is not running or the computer is shut down. As is standard operation for Windows Services, you must stop the service to configure it, and then restart it after you have saved your settings. Also noted, you must configure the LogDistributor service to start automatically. See more requirements in section 1.1.

IMPORTANT: You must close the **GCSLogDistributor.exe** after saving changes and **then RESTART the GCS Log Distributor Service to resume operation / email notification.**

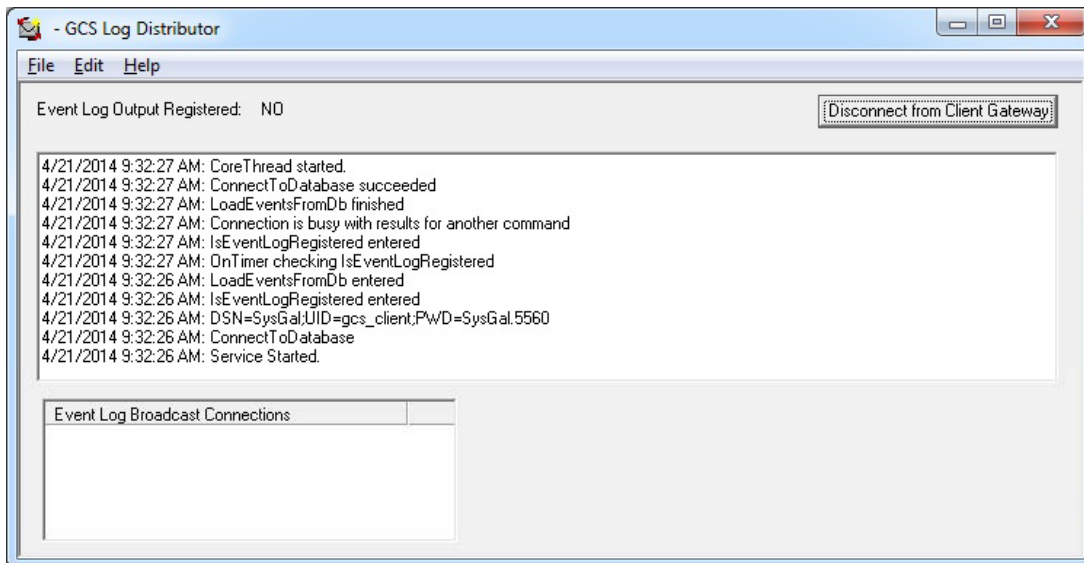
NOTICE for programming Email Notification and Event Output features: As stated, the GCS LogDistributor service must be configured to support Email Notification/Event Output.. Windows-7(or higher) users must temporarily stop the GCS LogDistributor service and then launch the from the GCSLogDistributor.exe from the GCS\System Galaxy folder. *You must restart the service to resume email notification and event output.*



2.2. Opening the Log Distributor Service to Change Configuration

1. The user manually can stop this service from the **Window® Control Panel** or the **GCS Service Manager Utility**. (The service must be configured to **run automatically**. When the service is running the Icon will display on the toolbar (XP) or can be pinned to the Windows-7 Task Bar if desired.
2. For XP users, double-click the  ICON to open the Log Distributor's connection status and access the programming screens.
3. For Windows-7 (or higher) navigate to the GCS\System Galaxy folder and double-click the GCSLogDistributor.exe file to open it.

The following screen displays:



4. The Main screen shows the connection status, and indicates whether the site is registered for Output distribution of events (text and TCPIP).
 - a) When **connection messages or errors** occur, they are displayed in the upper window box.
 - b) Connections made for the **Log Broadcasts** are displayed in the bottom window box.
 - c) The **[Disconnect from Client Gateway] button** will cause a temporary disconnect to the Client Gateway service, however the connection attempt will be reestablished based on the service's heartbeat signal.
5. From the **Edit menu**, the user can set the Client Gateway parameters, configure the Email Notification settings and configure the Event Broadcast/Text File settings.

2.3. Configuring Email Notification

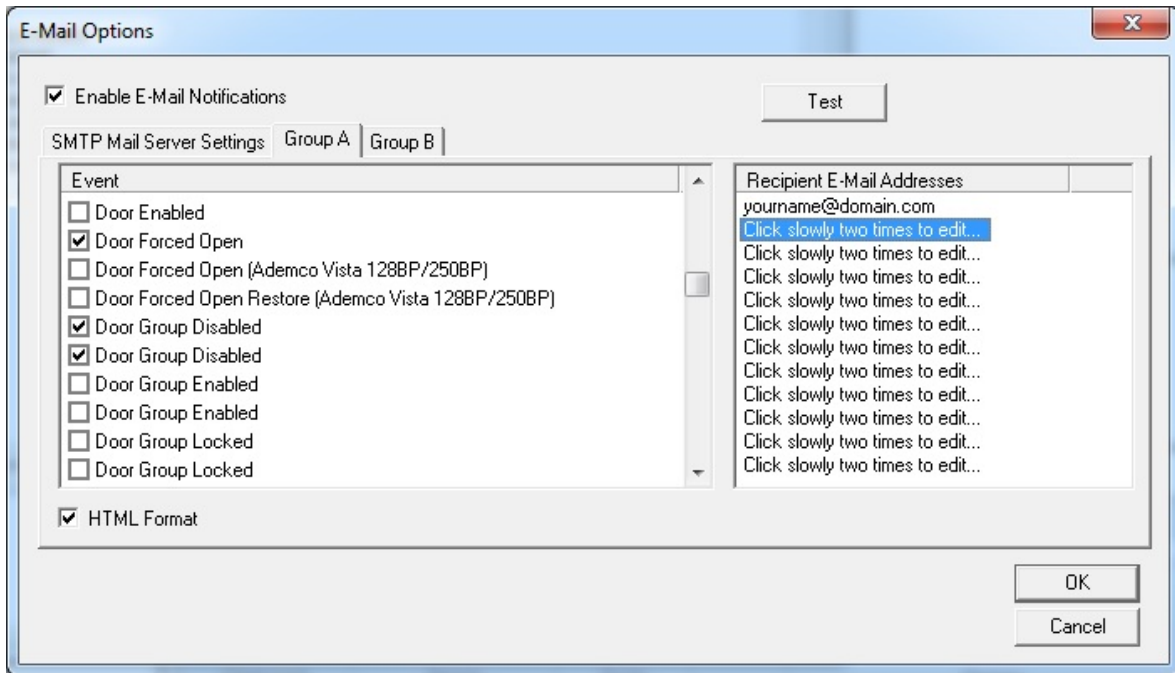
1. To set the IP settings choose **Edit > Email Settings**: this screen allows the user to configure the email settings and choose which events will be sent in email. When the event occurs, System Galaxy will use this service to manage the emailing parameters.

Notice: Two groups of Events (Group-A and Group-B) are available incase you need to send email notifications to more that one recipient.

The screenshot shows the 'E-Mail Options' dialog box. It features a title bar with a close button. The main area contains a checked checkbox labeled 'Enable E-Mail Notifications' and a 'Test' button. Below this, there are two tabs: 'SMTP Mail Server Settings' (which is selected) and 'Group A | Group B'. Under the 'SMTP Mail Server Settings' tab, there are several input fields: 'SMTP Mail Server:', 'Mail Server Requires Authentication' (unchecked), 'User Name:', 'Password:', 'Verify Password:', 'Sender E-Mail Address:', and 'Sender Name:'. At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

2. Enable (check) the [Enable E-Mail Notifications] option to begin configuring the email parameters.
 - a) Enter the [SMTP Mail Server] identity (see the customer IT professional for this information). Note this computer must be a member of the domain.
 - b) Enable (check) the [Mail Server Requires Authentication] option if email authentication is required.
 - c) Enter the [User Name], [Password] of the Mail Server.
 - d) Enter the [Sender Email Address] (this is who the email is from).
 - e) Enter the [Sender Name] (this is who the email is from).

3. Select (click) the [Group-A] tab to configure which events will be emailed.



- a) In the Event List (left window box), use the scrollbar to view/find the specific events you wish to send. Then place a checkmark in the checkbox of the event to be emailed. Unchecked events will not be emailed.
- b) Slowly click two times on the [Recipient Email] field for every selected event – and type the email address (name@domain.com).

You must provide the recipient email for each and every event to be sent. Checked events that have no email address will not be sent.

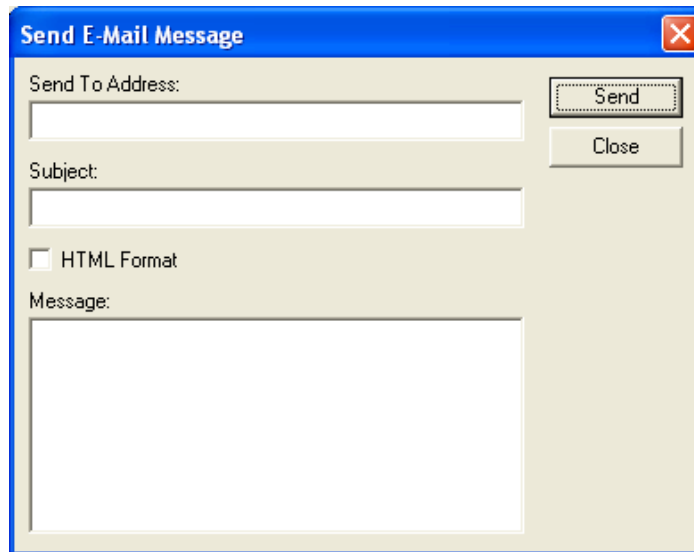
Unchecked Emails will not be sent even if they have an address.

- c) Enable (check) the [HTML Format] option: Checked means the event emails will be in HTML format. Unchecked means the emails will be in plain text format.
- d) Click OK to save settings and close this screen.
- e) Repeat steps 3a – 3b for Group B only if there is a second recipient.

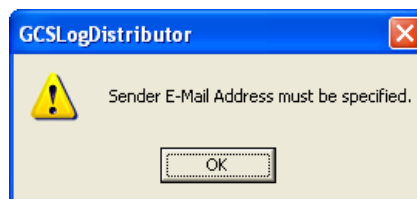
IMPORTANT: You must close the **GCSLogDistributor.exe** after saving changes and then **RESTART** the **GCS Log Distributor Service** to resume operation / email notification.

2.4. Testing Email Notification

1. To send a test email, fill out the mail server identity and sender identity, then click **TEST**: this screen allows user to test the email IP settings.



- a) ENTER A 'SEND TO' valid email address
 - b) ENTER A 'SUBJECT'
 - c) ENTER A TEXT MESSAGE
 - d) SET THE HTML FORMAT CHECKBOX: checked means an HTML format email will be sent, unchecked means a text format email will be sent
 - e) CLICK [SEND] TO TEST
- ▶ The ability to send and receive the email can be tested by clicking the [TEST] Button. A sender must be identified error message will display if the sender field is blank.



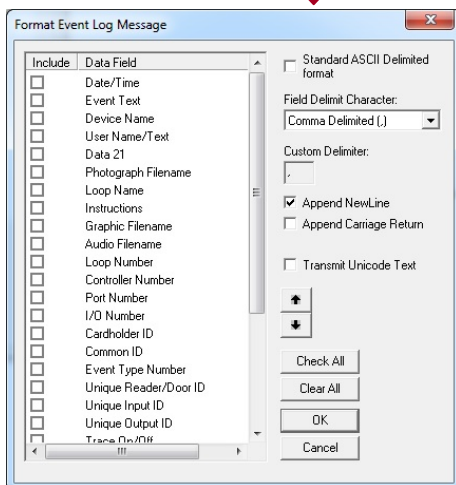
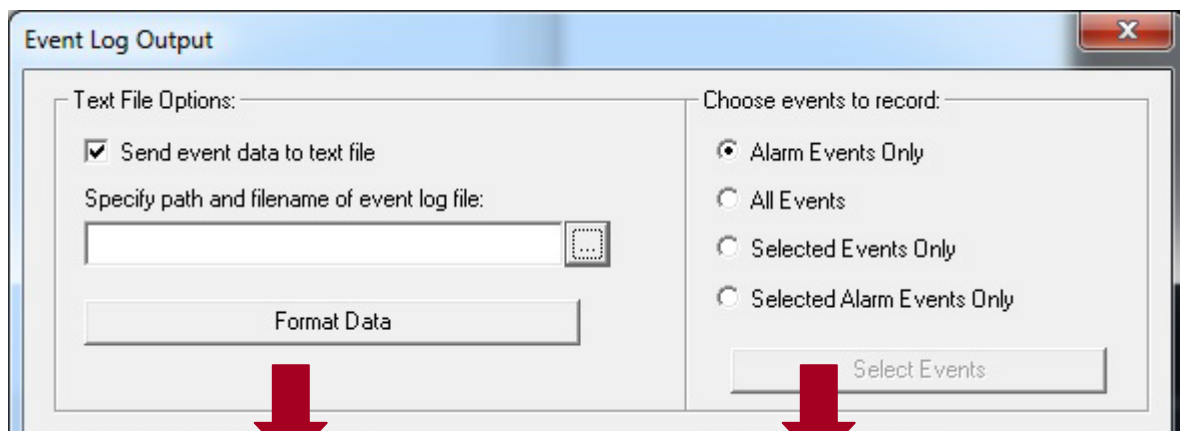
THE TEST message will use the text in the Message field. If this is successful then the real events will include the event message.

IMPORTANT: You must close the **GCSLogDistributor.exe** after saving changes and **then RESTART the GCS Log Distributor Service to resume operation / email notification.**

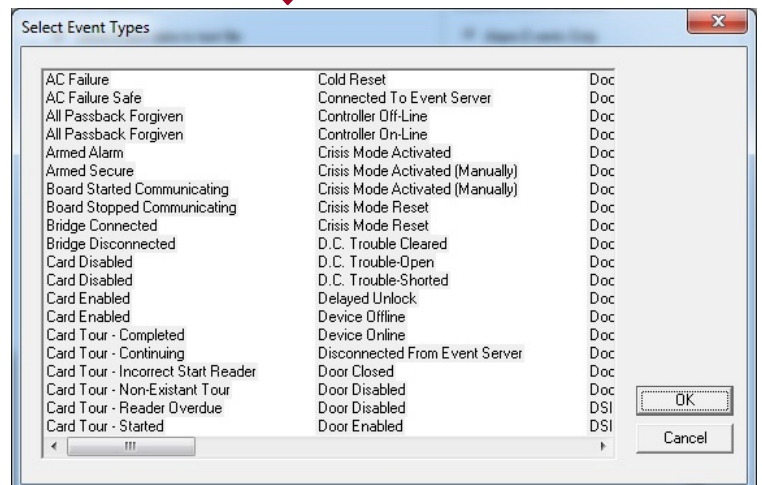
2.5. Configuring Text File Output Settings

Note: Saving events to a file is a System Registration (purchased) feature.

1. Choose Edit menu > Broadcast & File Settings: to set up the Text File output.
 - a) Check the [Send Event to Text] option
 - b) Specify a path and filename. Use the browse button to locate the desired path.
 - c) Click the [Format Data] button to configure the data message formatting.
 - d) Under the Choose Events to Record group – select the desired option (only alarm events, all events, selected events, selected alarm events)
 - e) If you choose Selected Events or Selected Alarms, you must click the [Select Events] button and then “check” enable each individual event that you want saved to file.



Click OK to SAVE.



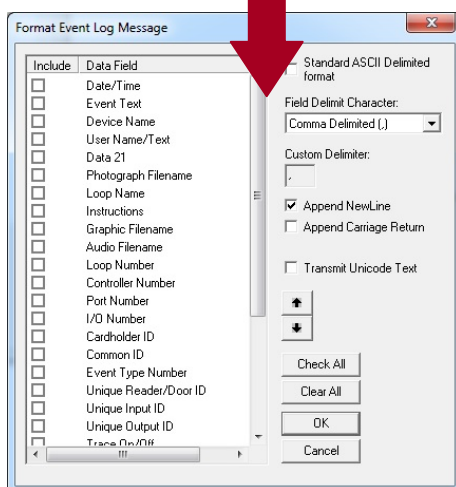
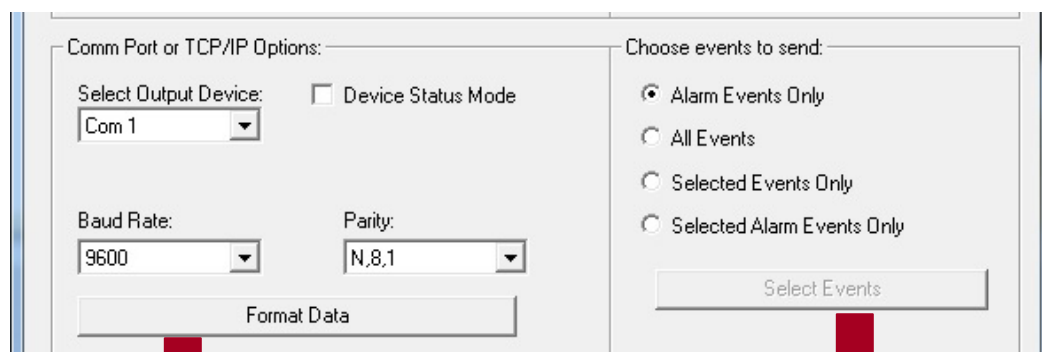
Click OK to SAVE

IMPORTANT: You must close the GCSLogDistributor.exe after saving changes and then RESTART the GCS Log Distributor Service to resume operation / text output.

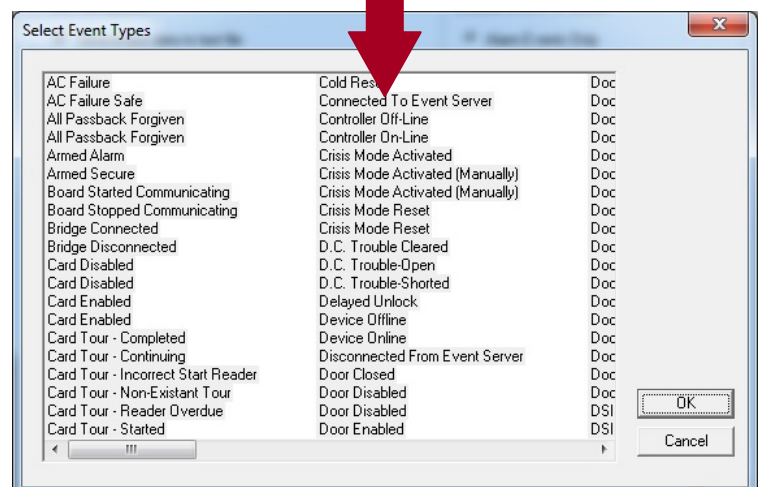
2.6. Configuring RS-232 Broadcast Output Settings

Note: Broadcasting events via RS-232 is a System Registration feature.

1. Choose the Edit menu > Broadcast & File Settings: to set up broadcast via RS232.
2. To configure RS232 OUTPUT and click OK to save settings:
 - a) Set the **Output Device** (i.e. Com 1, 2, 3, 4;). Also set the **Baud** and **Parity** as approp.
 - b) Set the **[Device Status Mode]** option as desired (Checked will include the device status of the device that the event is for (i.e. armed, unarmed, unlocked)).
 - c) Click the **[Format Data]** button to configure the data message formatting.
 - d) Under the **Choose Events to Record** group – select the desired option (only alarm events, all events, selected events, selected alarm events)
 - e) If you choose **Selected Events** or **Selected Alarms**, you must click the **[Select Events]** button and then “check” enable each individual event that you want saved to file.



Click OK to SAVE.



Click OK to SAVE

IMPORTANT: You must close the GCSLogDistributor.exe after saving changes and then RESTART the GCS Log Distributor Service to resume operation / event output.

2.7. Configuring TCP/IP Broadcast Output Settings

Note: Broadcasting events via TCP/IP is a System Registration feature.

1. **Choose the Edit menu > Broadcast & File Settings:** to set up broadcast via TCP/IP.
2. **To configure TCP/IP output and click OK to save settings:**
 - f) Set the **Output Device** (i.e. Client or Server;). If the Log Distributor is set as the Client, it will initiate the connection to the 3rd Party application. If the Log Distributor is set to Server, the 3rd Party app must initiate the connection to the Log Distributor.
 - g) About setting the **[Transient Connection] option:** if you are choosing the **'Server'** as the Output Device Type, you can choose whether you will persist/maintain a constant connection/broadcast.
 - Enable (check) this option when the nature of the TCP/IP connection is not persisted/not constantly connected.
 - h) Enter the **[IP Address]** of the PC/Server running the 3rd Party application.
 - i) Enter a valid and unused port number into the **[Remote Port]** field – this port number must be compatible with the 3rd Party application. **Do NOT use 3001, 4000, 4001, 4002, 4003, 4004, 5010 or any port that is reserved by Galaxy. See the IT Check List for a list of reserved ports.**

CAUTION: Events will not be rebroadcasted that occur when the connection is off/down. Offline events are available via System Galaxy History Reports.

Comm Port or TCP/IP Options:

Select Output Device: Device Status Mode
TCP/IP (Client) Transient Connection

IP Address: 192.168.18.5 Remote Port

Format Data

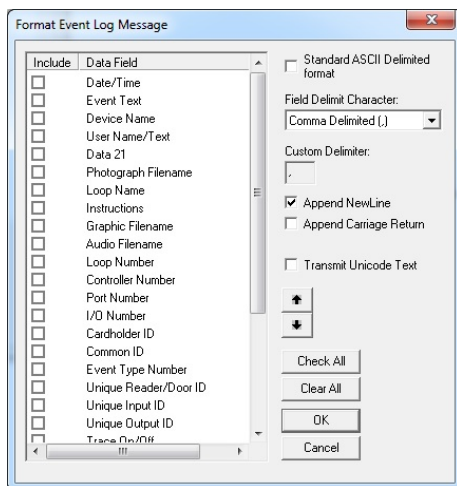
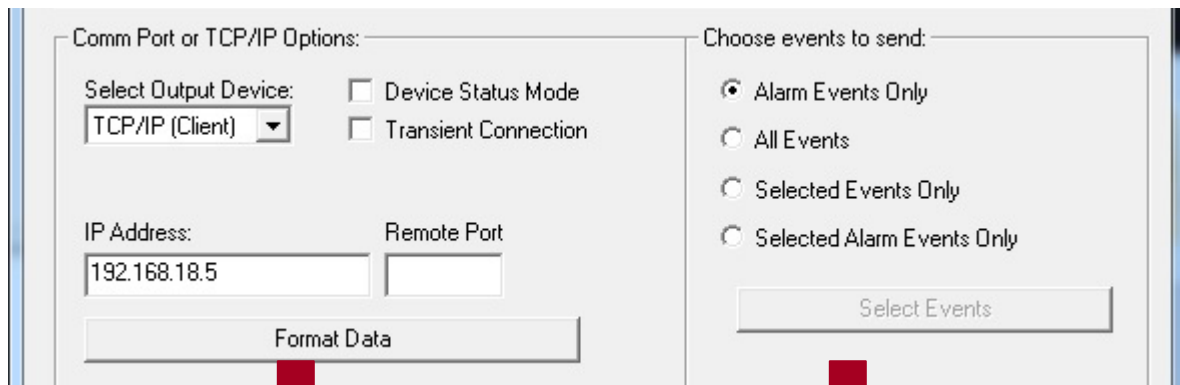
Choose events to send:

Alarm Events Only
 All Events
 Selected Events Only
 Selected Alarm Events Only

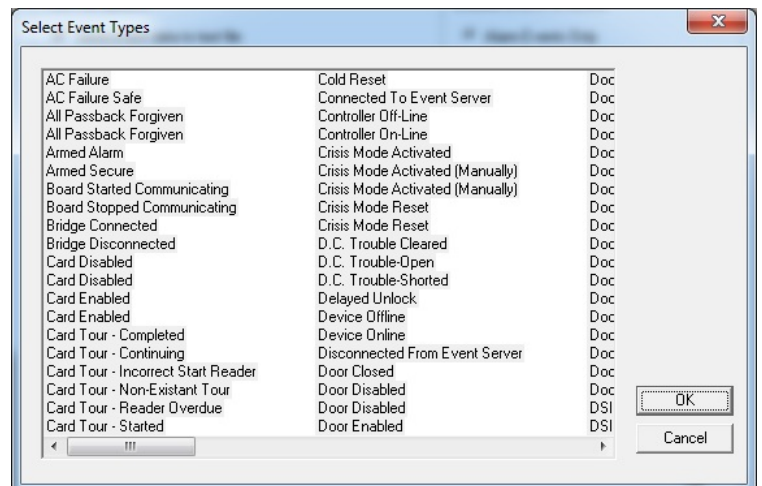
Select Events

-- continued on next page --

- j) Set the **[Device Status Mode]** option as desired (Checked will include the device status of the device that the event is for (i.e. armed, unarmed, unknown, open, locked, etc.)).
- k) Click the **[Format Data]** button to configure the data message formatting.
- l) Under the **Choose Events to Record** group – select the desired option (only alarm events, all events, selected events, selected alarm events)
- m) If you choose **Selected Events** or **Selected Alarms**, you must click the **[Select Events]** button and then “check” enable each individual event that you want saved to file.



Click OK to SAVE.



Click OK to SAVE

IMPORTANT: Remember to RESTART the GCS Log Distributor Service to resume operation / email notification. NOTE: the service should be set to ‘start automatically’.