



GAI-TRONICS® CORPORATION
A HUBBELL COMPANY

***Elemec3* Networked Systems Configuration Guide**

TABLE OF CONTENTS

<i>Confidentiality Notice</i>	1
<i>Introduction</i>	1
A Word of Caution	1
<i>The Programming Process</i>	2
Process Flow	3
E3 Console Network Configuration Process Flow	3
<i>Running the E3 Console Application</i>	5
Managing Network Configurations	6
NET CONFIGURATIONS (Working Directory).....	7
REMOTE NET CONFIGURATIONS (Parent Directory)	7
Creating a New Network Configuration	8
Creating a New Network Configuration Using a Template	8
Opening an Existing Network Configuration	9
System-Wide Functions	10
<i>Manage Net Assets</i>	11
Command Channel Setup	11
Adding Systems to a Network Configuration	12
System Properties	13
Linking System Configurations to a Networked System's Configuration	15
Adding Global Events	16
Adding Global Zones	17
<i>Link GLOBAL Events to LOCAL Events</i>	18
<i>Link LOCAL Events to GLOBAL Events</i>	20
<i>Map GLOBAL Zones to LOCAL Zones</i>	22
<i>Map LOCAL Zones to GLOBAL Zones</i>	24
<i>Saving the Configuration</i>	25
<i>Glossary of Terms</i>	26



GAI-TRONICS® CORPORATION
A HUBBELL COMPANY

***Elemec3* Networked Systems Configuration Guide**

Confidentiality Notice

This manual contains sensitive business and technical information that is confidential and proprietary to GAI-Tronics. GAI-Tronics retains all intellectual property and other rights in or to the information contained herein, and such information may only be used in connection with the operation of your GAI-Tronics product or system. This manual may not be disclosed in any form, in whole or in part, directly or indirectly, to any third party.

Introduction

An individual *Elemec3* system provides a high integrity standalone or redundant public address and general alarm system. A networked *Elemec3* system is a group of individually configured and operating *E3* systems connected to a common IP network for the purpose of providing cross-system messaging and alarm activation. This is accomplished by adding individual *E3* configurations to a network configuration to allow linking of events and zones between the systems.

Using the *Elemec3* (E3) Console application, a system administrator can configure multiple *Elemec3* Public Address/General Alarm (PAGA) systems to operate in concurrence. This provides scalability of the PAGA system beyond the capabilities of a single *Elemec3* system. The resulting network configuration file is transferred to each E3 Controller in the networked system using the E3 Portal application.

A network configuration is contained in a single configuration file that is loaded to all of the *Elemec3* systems to be networked. This allows events in one system to trigger events to specific zones on one or more other systems in the E3 network configuration. This is achieved by creating global events and global zones to which local events and local zones in each system are linked.

A Word of Caution... Changing an E3 system's network configuration is not a trivial matter, particularly in the case of a system used for emergency notification. Critical operating features could fail due to incorrect programming, resulting in a potentially life-threatening situation.

The use of the E3 console and portal applications should be strictly limited to individuals who have been factory trained and certified on using the software and the ramifications of uploading the configuration files to the E3 Controller.

The Programming Process

E3 Controllers store their system's operating software and the system configuration file. The contents of the configuration file define the physical and operational characteristics of the system. During system startup, each E3 Controller in a networked system loads and executes the operating system software, reading the configuration file to set the system operation to match the defined settings.

A system administrator configures and monitors an *Elemec3* networked system's operating environment using the **E3 Console** and **E3 Portal** application packages. The E3 Console application is used to create and modify a site's network configuration by configuring links between the individual systems' events and zones. When the system administrator is finished configuring the settings, the resulting file is saved as a network system configuration file.

The network configuration file is then uploaded (*transferred*) from the system administrator's PC to each E3 Controller in the networked system using the E3 Portal application. Refer to the E3 Portal application manual, Pub. 42004-485, located at <https://www.gai-tronics.com/docs/default.htm> for information on its usage. The E3 Portal can also download (*retrieve*) configuration files from the controllers, which can then be viewed and edited using the E3 Console application.

The E3 Portal application cannot be used to change a network configuration file; this is the role of the E3 Console. The portal application is simply used for configuration file transfer between the system administrator's computer and the E3 Controllers using an Ethernet network connection.

Process Flow

The steps in the following table provide an overview showing the typical steps taken to configure and program an E3 networked system.

Table 1. Overview—Networking Multiple *Elemec3* Systems

Action	Description
1. Gather information.	Collect all hardware and operational details for each system and the create/configure system's network configuration.
2. Configure the individual <i>Elemec3</i> systems to be networked.	See Pub. 42004-498 located on the GAI-Tronics Document Center webpage located at https://www.gai-tronics.com/docs/default.htm .
3. Navigate to the E3 NETWORK CONFIGURATION screen and load or create a network configuration.	Either open an existing or create a new network configuration. See the Create a Networked Configuration topic in Table 2
4. Define the local systems in the networked E3 system and add global events and global zones.	The details for completing this step are outlined in the Manage Network Assets topic in Table 2
5. Link global events to local events and local events to global events. Map global zones to local zones and local zones to global zones.	The order for linking events and mapping zones is not important. See the following topics in Table 2 : Link Global Events to Local Events , Link Local Events to Global Events , Map Global Zones to Local Zones , and Map Local Zones to Global Zones .
6. Save the configuration.	When ready, the configuration file is saved to a preset folder on the host computer named "Elemec Net Bridge". The Elemec Net Bridge location is used by the E3 Portal application to access the configuration for upload to the controllers.
7. Run E3 Portal application.	An Ethernet connection is required between the host computer and the E3 network.
8. Connect to each E3 Controller.	Enter the E3 Controller IP address or use the auto discover feature to establish a connection to the E3 Controllers.
9. Upload the configuration to each E3 Controller.	Press the UPLOAD CONFIGURATION button and then select a configuration from the Elemec Net Bridge or other storage location.
10. Restart the E3 Controllers.	A RESTART SYSTEM button is provided on the E3 Portal screen.

E3 Console Network Configuration Process Flow

[Table 2](#) lists the suggested sequence for creating a new network configuration using the E3 Console. It is important to complete the creation of the network configuration and then add the network assets to the configuration. The procedures below for linking events and mapping zones can be completed in any order.

Table 2. Sequence for Creating a New *Elemec3* Network Configuration

Create a Networked Configuration	
Action	Screen
Click the E3 Networking button and select “NEW NETWORK CONFIGURATION”, then enter a descriptive name for the configuration.	MANAGING NETWORK CONFIGURATIONS screen & NEW NETWORK CONFIGURATION screen (See Page <u>6</u> and Page <u>8</u>)
Manage Network Assets	
Action	Screen
Configure the command channel. Add and link existing E3 configured systems (Standalone, A-B, N+1) to the network configuration. Add global events and global zones.	Manage Net Assets screen (Command Channel Setup, Add System, Add Global Events, and Add Global Zones) (See Pages <u>11</u> through <u>17</u>)
Link Global Events to Local Events	
Action	Screen
Expand each configuration under each system. Select each global event in turn. Select the local event that needs to be triggered by the global event from the drop-down list.	Link Global Events to Local Events tab (See Page <u>18</u>)
Link Local Events to Global Events	
Action	Screen
Expand each configuration under each system. Select each local event that will need to trigger a global event. Select the global event that needs to be triggered by the local event from the drop-down list	Link Local Events to Global Events tab (See Page <u>20</u>)
Map Global Zones to Local Zones	
Action	Screen
Expand each configuration under each system. Select each global zone that will correspond to local zone(s) and select the check boxes for those zones in the current system.	Map Global Zones to Local Zones tab (See Page <u>22</u>)
Map Local Zones to Global Zones	
Action	Screen
Expand each configuration under each system. Select each local zone that will correspond to global zone(s) and select the check boxes for those zones in the current system.	Map Local Zones to Global Zones tab (See Page <u>24</u>)

Running the E3 Console Application

Before running the E3 Console to create a network configuration, ensure that all standalone, N+1, and A+B E3 System that will be part of the networked configuration are completely configured. Refer to Pub. 42004-498 Elemec3 Console User Manual—Version 2.0 located at <https://www.gai-tronics.com/docs/default.htm>.

To start the E3 Console application, click the *Start Menu*. Go to *Programs* → *GAI-Tronics Corporation* and click on *ElemecConsole2*. Optionally, if a desktop shortcut icon was created during the installation process, simply double click the desktop icon.

When the E3 Console application is launched, the program initially displays the E3 SYSTEM CONFIGURATION screen. This screen contains the E3 NETWORKING CONFIGURATION button that appears as a globe with a network jack as seen in Figure 1. Once a network configuration file is loaded the *Elemec3* networked system is configured using a series of screens accessed using five tabs located across the top of the window.

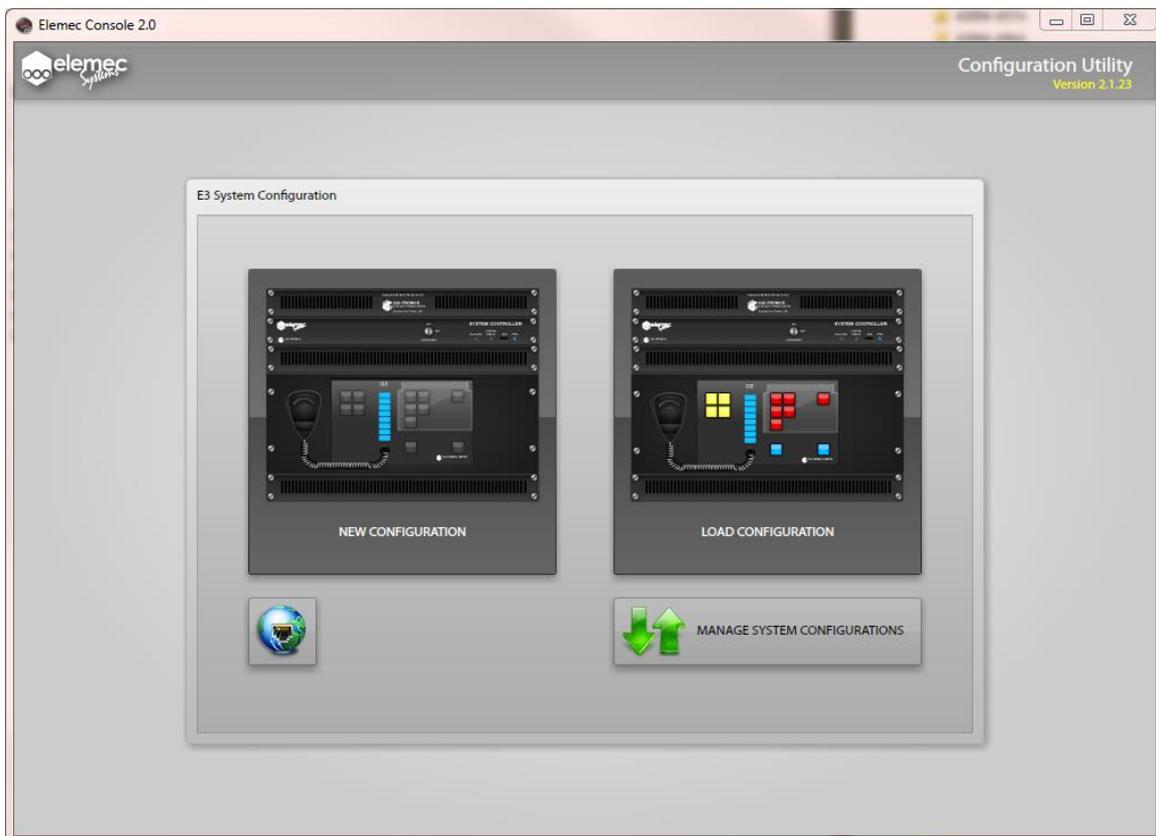


Figure 1. Create New or Load Existing Configuration screen

Select the E3 NETWORKING button  to access the E3 NETWORK CONFIGURATION screen to create or manage a networked *Elemec3* configuration. The E3 NETWORK CONFIGURATION screen, shown in Figure 2, works similarly to the E3 SYSTEM CONFIGURATION screen from where it is accessed. Here, a networked E3 system is created by loading the individual standalone, redundant N+1, and/or redundant A+B systems that will become part of the entire networked configuration.

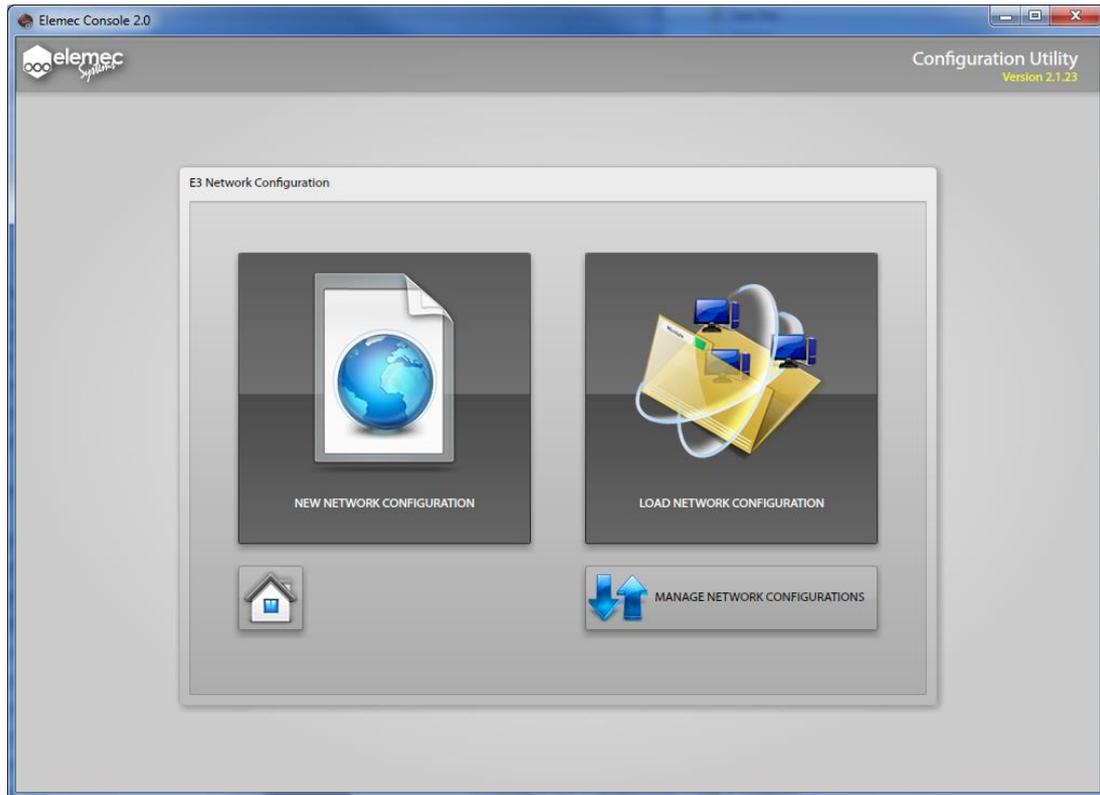


Figure 2. E3 Network Configuration screen

Select the **NEW NETWORK CONFIGURATION** button to create a new configuration or select the **LOAD NETWORK CONFIGURATION** button to open an existing configuration. Pressing the **MANAGE NETWORK CONFIGURATIONS** button accesses the **MANAGE NETWORK CONFIGURATIONS** screen, allowing configurations to be imported and exported to the working directory on the local computer.

Managing Network Configurations

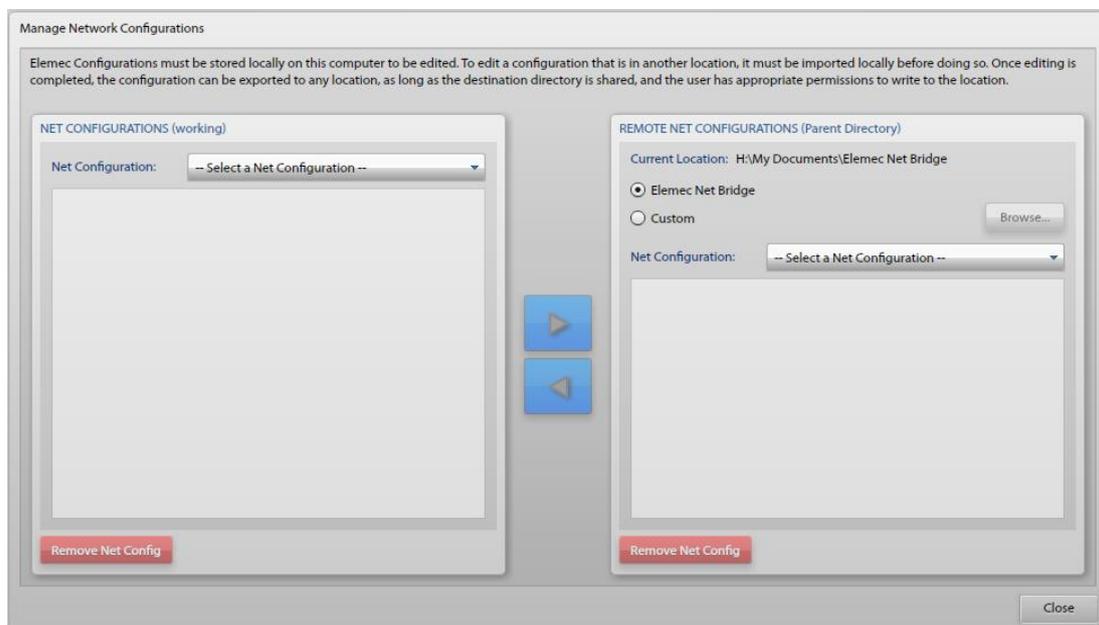


Figure 3. Manage Network Configurations screen

NET CONFIGURATIONS (Working Directory)

Elemec3 configurations must be stored in the working directory on the local computer to permit opening them in the console for editing. To edit a configuration file saved in a remote storage location, the file must first be imported to the local working directory. When editing is complete, the configuration file can then be exported back to the Elemec Net Bridge folder to be uploaded to an E3 controller using the E3 Portal application or to a remote custom storage location.

NOTE: Use of the CUSTOM BRIDGE configuration storage location should be limited to archival and diagnostic purposes only.

The MANAGE NET CONFIGURATIONS screen shown above is used for transporting network configuration files between the working directory on the user's host computer and a remote storage location. The local working directory configurations are shown in the left pane labeled NET CONFIGURATIONS (WORKING). Remotely stored configurations are shown in the right pane labeled REMOTE NET CONFIGURATIONS (PARENT DIRECTORY). All configurations are sorted by their modified date and are listed from newest to oldest.

Highlight a desired network configuration in the remote storage list and click on the left arrow key to import the selected configuration to the working directory. To export a configuration to the remote directory, highlight the desired configuration file in the working directory list and click on the right arrow key. The import/export operation copies the selected configuration file to the local or remote folder respectively.

When a network configuration with the current name already exists in the destination directory, a CONFIRM NET CONFIGURATION IMPORT/EXPORT dialog box is displayed as shown in Figure 4. Click the **IMPORT**, **EXPORT**, or **CANCEL** button as necessary to continue or cancel the operation. If a configuration file located in either location is no longer needed, it can be removed by selecting the desired configuration and clicking the **REMOVE** button. A CONFIRM CONFIGURATION DELETE window is then displayed for confirmation.

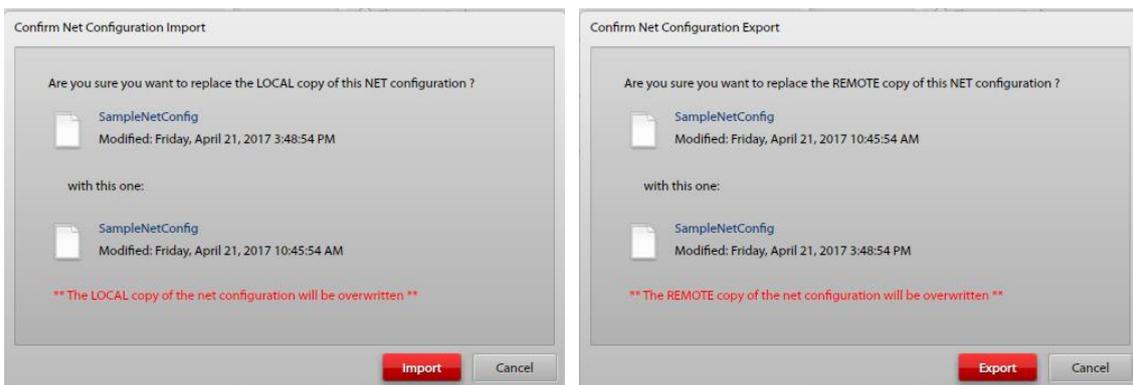


Figure 4. Import/Export Confirmations

REMOTE NET CONFIGURATIONS (Parent Directory)

Select the remote net configuration directory using the ELEMEC NET BRIDGE or CUSTOM radio buttons:

Elemec Net Bridge—is a storage location on the local computer that is shared with the *Elemec3* Portal application. Using the Elemec Net Bridge is useful when operating the E3 Console application and the E3 Portal application on the same computer. Using the Elemec Net Bridge allows the configuration file to be easily shared between the two programs.

Custom—Allows the selection of any folder location that is accessible from the PC. Use the **BROWSE...** button to select any local or remote storage location accessible from the host computer.

Creating a New Network Configuration

When a new Elemec3 Networked System needs to be created, click the New Network Configuration button from the E3 Network Configuration screen. Enter a description for the new network configuration in the dialog box and select the **CREATE CONFIGURATION** button on the CREATE NEW CONFIGURATION screen shown in [Figure 5](#) below.

Note: Spaces are not allowed in the description. Use an underscore character to separate words if needed. Example: *My_Configuration_File*

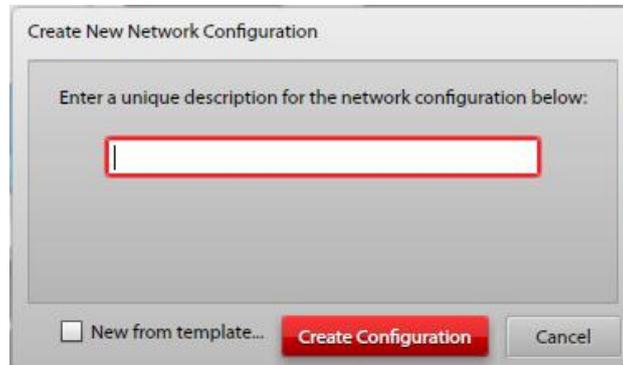


Figure 5. Create New Network Configuration dialog box

Creating a New Network Configuration Using a Template

Select the NEW FROM TEMPLATE checkbox as shown in [Figure 6](#) to create a new network configuration file based on an existing network configuration. When this check box is selected, a pull down list is displayed showing all existing local configurations.

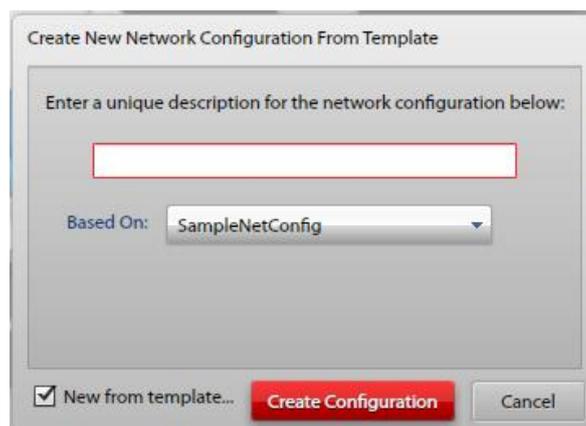


Figure 6. Create New Configuration from Template dialog box

Select the desired configuration file from the list and then click the **CREATE CONFIGURATION** button.

NOTE: If the selected file was created in an earlier version of the E3 Console application, the warning screen shown in [Figure 7](#) will be displayed. If necessary, the E3 Console will automatically upgrade the configuration database to the correct version.

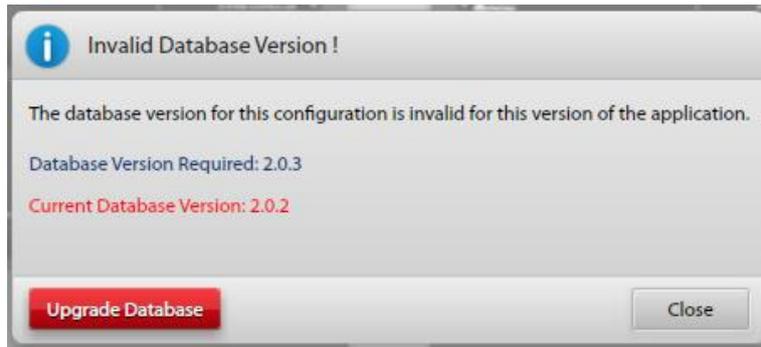


Figure 7. Invalid Database Version dialog box

Select the **UPGRADE DATABASE** button to proceed with the configuration version upgrade; otherwise, select the **CLOSE** button.

Opening an Existing Network Configuration

Pressing the LOAD NETWORK CONFIGURATION button displays a list of all existing configurations that are saved in the LOCAL CONFIGURATIONS (WORKING) directory on the computer. All configurations are sorted by the modified date and are listed from newest to oldest. An example is shown in [Figure 8](#) below.

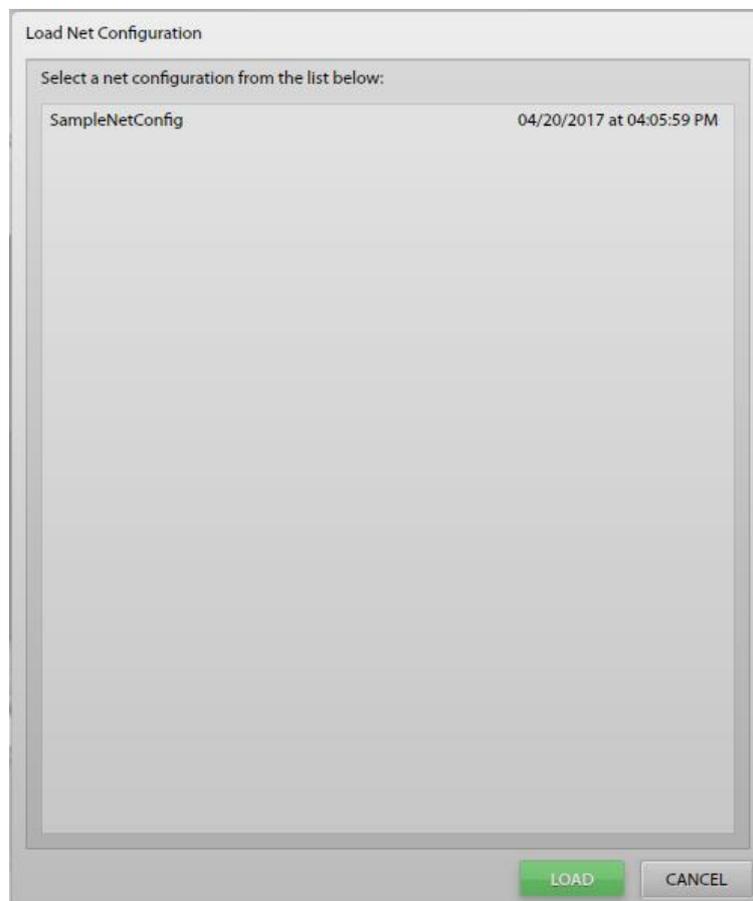


Figure 8. Load Net Configuration screen

Select the desired network configuration from the list and click the **LOAD** button.

System-Wide Functions

Once a configuration is loaded, the E3 Configuration Utility displays the SYSTEM PROPERTIES screen. At the top of this screen are six system wide functions that can be accessed while on any of primary screens. These functions are accessed by clicking the toolbar icon for the desired action.

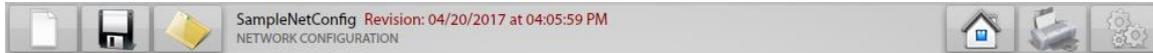


Figure 9. System Wide Functions

New—Creates a new network configuration and loads it into the console. If changes were made to the currently loaded configuration then a prompt to save those changes is displayed. Choose **SAVE CHANGES** or **DISCARD CHANGES** as desired to continue to the CREATE NEW CONFIGURATION screen. See the [Creating a New Network Configuration](#) section.

Save—Immediately saves the currently loaded configuration.

Open—Opens the LOAD NET CONFIGURATION screen where an existing network configuration can be loaded. This option is helpful when changes have been made that need to be discarded at which time the existing configuration can be reloaded without saving the changes first. A prompt to save changes will be displayed if changes were made to the currently loaded configuration.

Home—Prompts the user to save changes then exits the currently loaded network configuration screens and displays the E3 NET SYSTEM CONFIGURATION screen that opens when the network configuration button is clicked from the E3 SYSTEM CONFIGURATION screen displayed when the program is first launched.

Reports—This button is disabled in network configurations.

Settings—The SETTINGS screen shown in below provides application and database version information and facilitates setting several options in the console software.

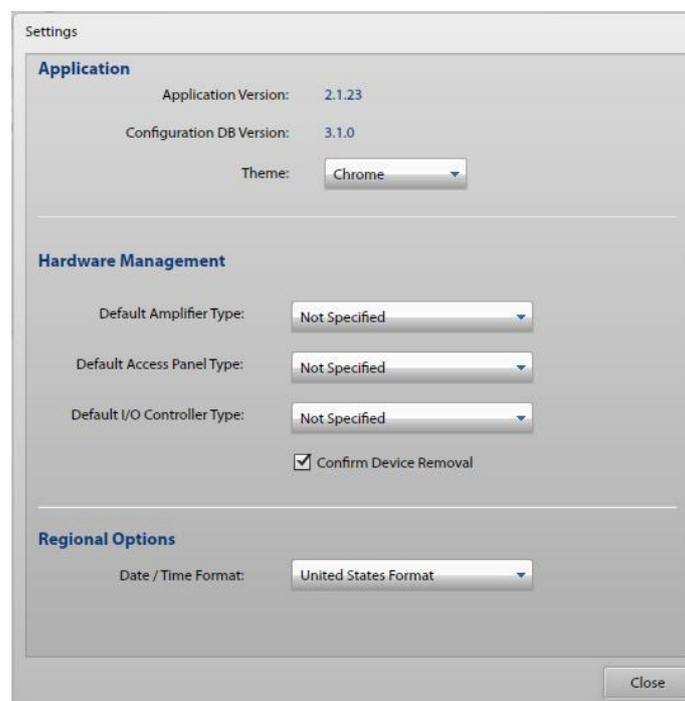


Figure 10. Application Options

Manage Net Assets

The MANAGE NET ASSETS screen shown in [Figure 11](#) is displayed when a new or existing network configuration is loaded from the E3 NETWORK CONFIGURATION screen. This screen is used to configure the command channel, add and link existing, preconfigured E3 standalone, redundant N+1, and/or A+B systems to the network configuration, and create global events and global zones.

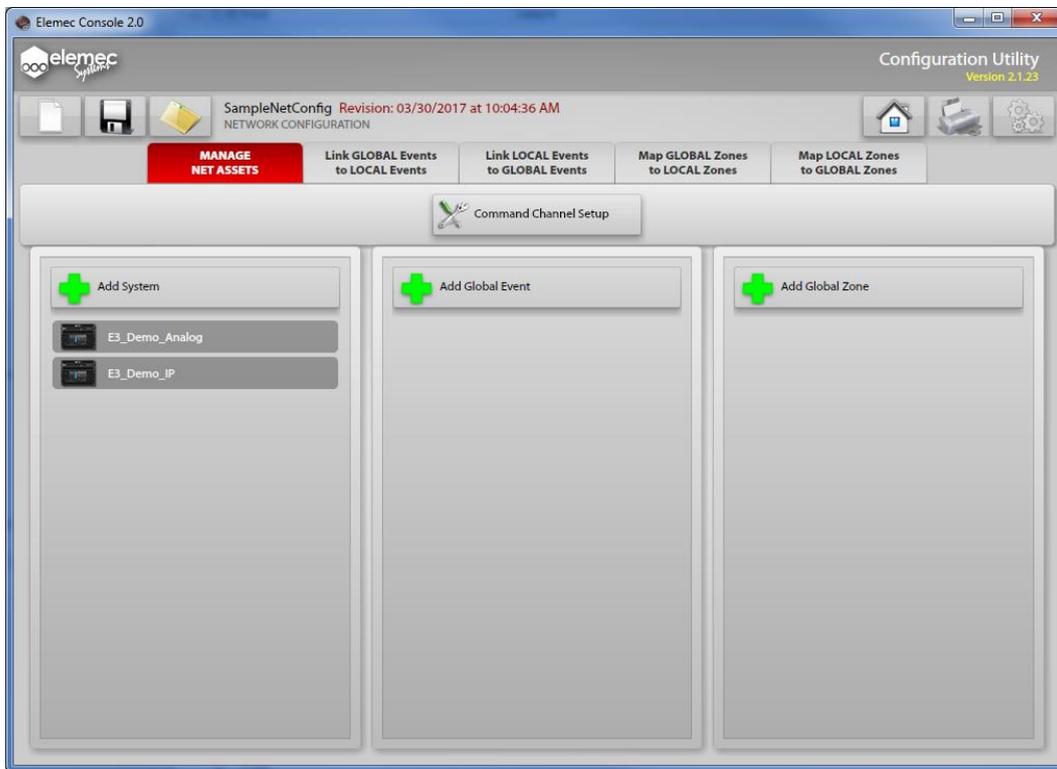


Figure 11. Network Asset Management screen

Command Channel Setup

Clicking the COMMAND CHANNEL SETUP button from the MANAGE NET ASSETS tab opens the COMMAND CHANNEL SETUP dialog box shown in [Figure 12](#).

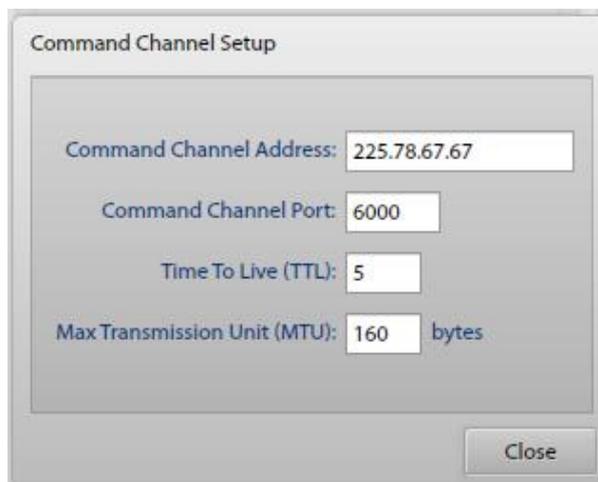


Figure 12. Command Channel Setup dialog box

Command Channel Address—This is the multicast IP address for the command channel that is used by the systems to communicate command and control information between the controllers in a networked E3 system.

Command Channel Port—This is the port address for the multicast socket used to communicate command and control information between the controllers in a networked E3 System.

Time to Live (TTL)—This value sets the maximum number of hops that packets will traverse before being discarded.

Max Transmission Unit (MTU)—The maximum transmission unit sets the largest packet size that can be sent over the command channel. This attribute should not be adjusted.

Adding Systems to a Network Configuration

Existing, configured *Elemec3* systems are added and linked in the currently loaded network configuration using the ADD SYSTEM panel of the MANAGE NET ASSETS screen. Each standalone or redundant system is added by clicking the **+ ADD SYSTEM** button. The ADD SYSTEM dialog box shown in [Figure 13](#) is used to create each system that will be part of the networked *Elemec3* system. Enter a description of the existing E3 system and define the system type as a Standalone, A-B, or N+1 system. Next, select the priority for the existing configuration. The NETWORK AUDIO CHANNEL SETTINGS are multicast sockets used by the system to transfer information using the global events that will be created.

The screenshot shows the 'Add System' dialog box with the following fields and values:

- System Description: E3_Demo_IP
- System Type: Standalone (selected)
- System Priority: 0 (Highest)
- Network Audio Channel Settings:
 - Multicast Address: 225.65.67.2, Multicast Port: 6000
 - Multicast Address: 225.65.67.2, Multicast Port: 6002
 - Multicast Address: 225.65.67.2, Multicast Port: 6004
 - Multicast Address: 225.65.67.2, Multicast Port: 6006

Figure 13. Add System Dialog Box

Descriptive Name—A recognizable name for the system being added to this system’s network configuration.

System Type—Three radio buttons are provide to select the type of E3 system being added to this system network configuration.

- **Standalone**—A standalone system has a single *Elemec3* Controller.
- **A-B System**—A-B systems contain two complete *Elemec3* systems that can control each other’s amplifiers in the event that the other controller fails.
- **N + 1 System**—N + 1 Systems contain two *Elemec3* controllers with a single set of amplifiers, one acting as primary and the other as a hot standby controller.

System Priority—System priority is only used in larger, tiered networked systems to provide precedence for global events that supply audio. This gives one system priority in the event that two local systems concurrently trigger the same global event.

Network Audio Channel Settings—These fields contain the multicast IP addresses and ports that define the multicast sockets.

System Properties

After adding each *Elemec3* system to the network configuration, double click each one to open their SYSTEM PROPERTIES dialog box shown in [Figure 14](#). Here, previously created E3 system configurations are linked to the individual systems. More than one system configuration can be linked to each E3 system being added to the network configuration. Multiple configurations for an individual system within a networked E3 system provides for changing operating characteristics.

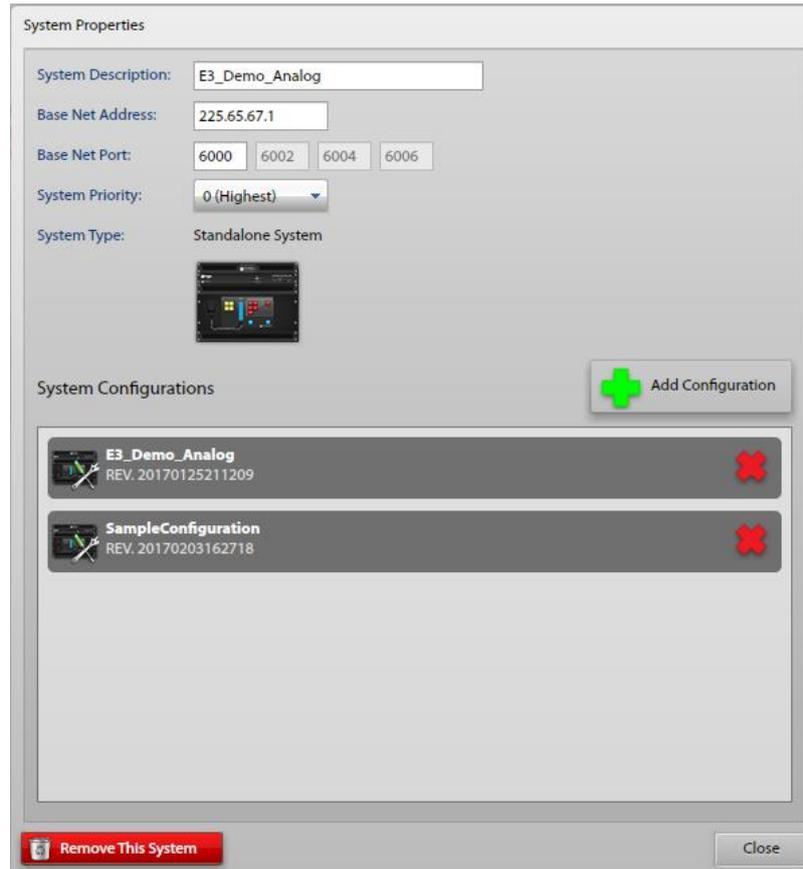


Figure 14. E3 System Properties

System Description—Enter a descriptive name for the local system.

Base Net Address—Base Multicast IP address used for communications between E3 systems in a network configuration.

Base Net Port—Port address used with the Base Net Address to create the IP Socket for multicast communication between systems.

System Priority—Each E3 system in a networked E3 configuration should be given a priority

System Type—Shows the E3 system type that was chosen when the system was added to the network configuration; stand alone, A + B, or N + 1.

Add Configuration—Click this button to link a configured local E3 system to this system in the networked E3 configuration. This pulls the local system configuration from the E3 configuration working directory and adds/links it to the current local system in the network configuration.

NOTE: When adding system configurations to a system defined as part of a network configuration, the original system configuration is removed from the location from which it was linked to the networked system configuration. For this reason, it is important to make backup copies of the local system configuration databases before linking them into a networked system configuration.

System Configurations—This provides a list of the individual system configurations that have been added to this system in the network configuration.

Remove This System—The **REMOVE THIS SYSTEM** button will permanently delete the current system from the network configuration. Any system configurations added to this network configuration are also removed.

Individual system configurations added to this system in the network configuration can be removed by clicking the **X** next to the system to be removed.

Close—The **CLOSE** button exits the **SYSTEM PROPERTIES** dialog box

Linking System Configurations to a Networked System's Configuration

Clicking the **+** ADD CONFIGURATION button opens the MANAGE NETWORK SYSTEM CONFIGURATIONS dialog box shown in [Figure 15](#). Here, the *Elemec3* system configurations created in the console are added to each E3 system. Multiple configurations can be added to each system's network configuration so that different operating parameters can be utilized depending upon the current state of the system as a whole.

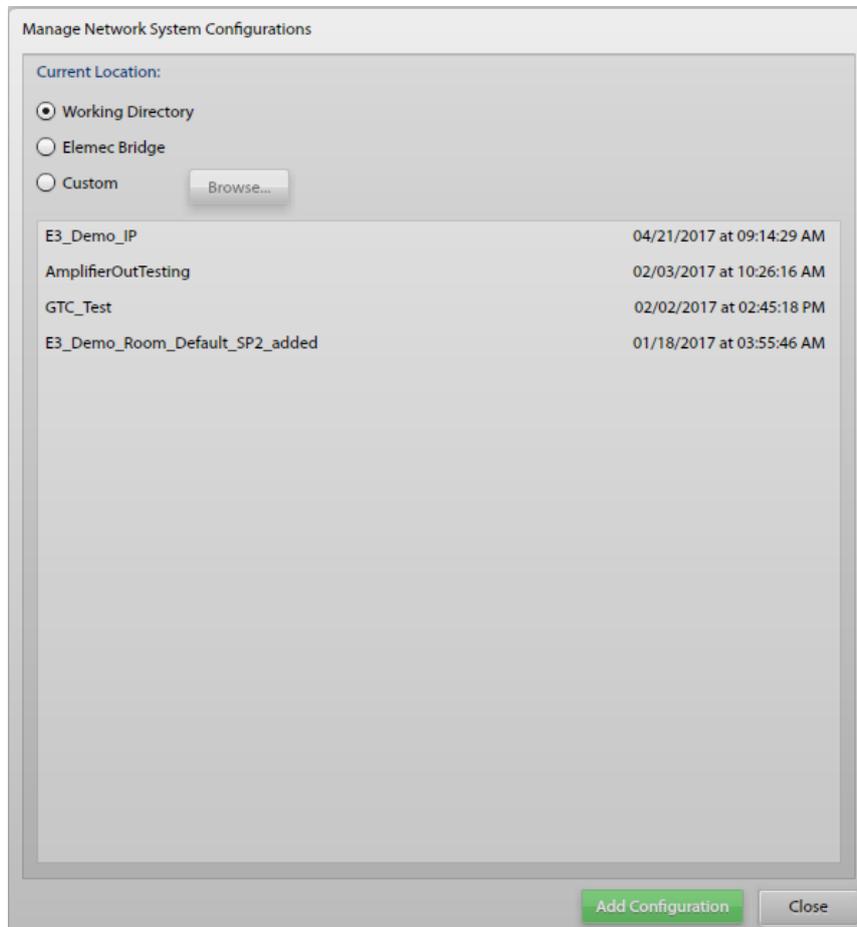


Figure 15. Manage Network System Configurations

Current Location—These radio buttons are used to select the location from which individual system configurations are added to the networked system configuration. The box lists the systems that currently have configuration databases located in that repository.

- **Working Directory**—The working directory is the *Elemec3* Console program's working folder. This is the only location from which a networked E3 system can be edited.
- **Elemec Bridge**—This directory is used by the E3 Portal to load and save configurations to and from the *Elemec3* systems controllers.
- **Custom**—This can be any user accessible folder that can be access using the **BROWSE** button.

Add Configuration—Clicking the **ADD CONFIGURATION** button removes the selected configuration from current location and adds it to the network system being defined in the networked configuration. Once a system's database is added to a networked configuration, it is no longer accessible as a single *Elemec3* system database. Multiple configurations can be added to a single E3 system in a networked environment.

Close—This button closes the MANAGE NETWORK SYSTEM CONFIGURATIONS dialog box.

Adding Global Events

Global events are created to define events that will trigger local events in a particular system in the networked *Elemec3* system. To add a global event, click the **+** ADD GLOBAL EVENT button at the top of the center pane of the MANAGE NET ASSETS tab. [Figure 16](#) below shows the Manage Net Assets tab with two global events added.

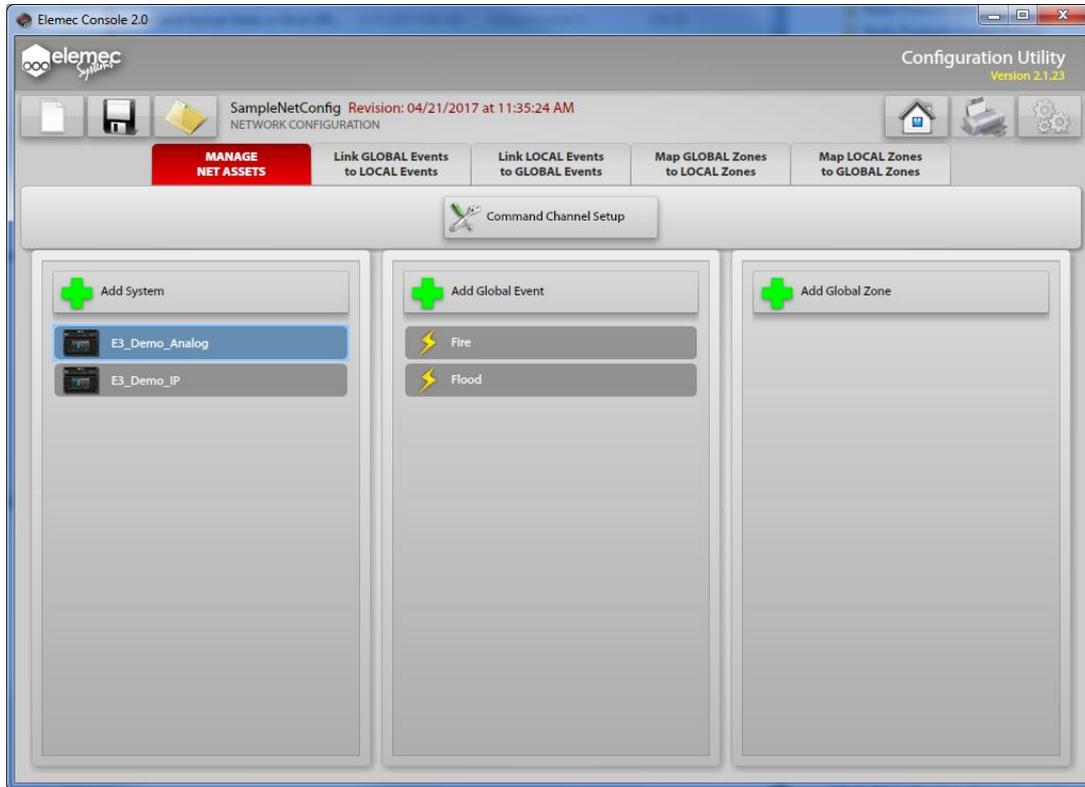


Figure 16. Adding Global Events

Clicking the **+** ADD GLOBAL EVENT button opens the ADD GLOBAL EVENT dialog box.

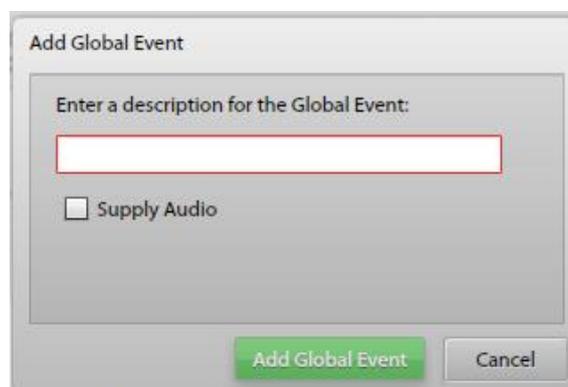


Figure 17. Add Global Event Dialog Box

Enter a description for the Global Event—A unique meaningful description should be entered.

Supply Audio—Selecting this checkbox indicates to the system that the audio stream will be supplied to the global event by the system that triggers the event.

Add Global Event—Click the **ADD GLOBAL EVENT** button to add the new event to the list and close the dialog box.

Cancel—Closes the dialog box without adding a global event.

Adding Global Zones

Global zones are created to include zones from other *Elemec3* systems in a networked configuration that may not be included in the local system’s configured zones. This provides the ability for one E3 system to broadcast into the zones of other *Elemec3* systems in the network configuration. [Figure 18](#) shows the MANAGE NET ASSETS tab with two global zones added.

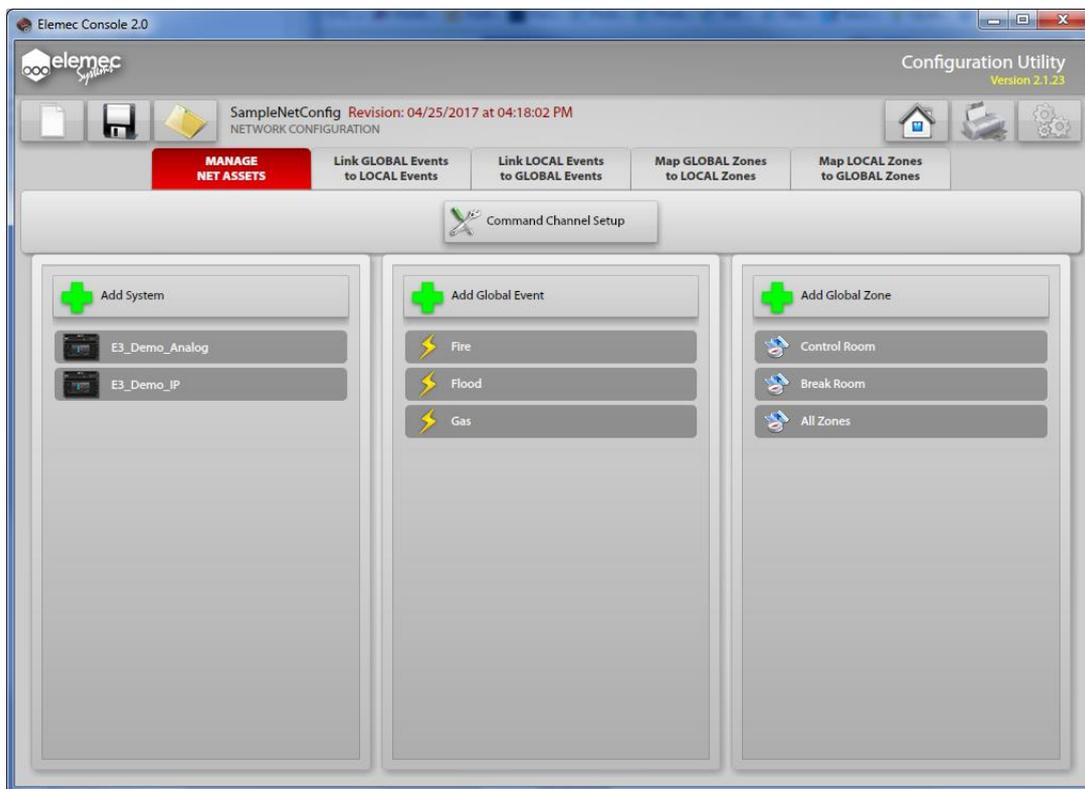


Figure 18. Adding Global Zones

Click the **+ ADD GLOBAL ZONE** button to open the **ADD GLOBAL ZONE** dialog box shown in [Figure 19](#) to add global zones.

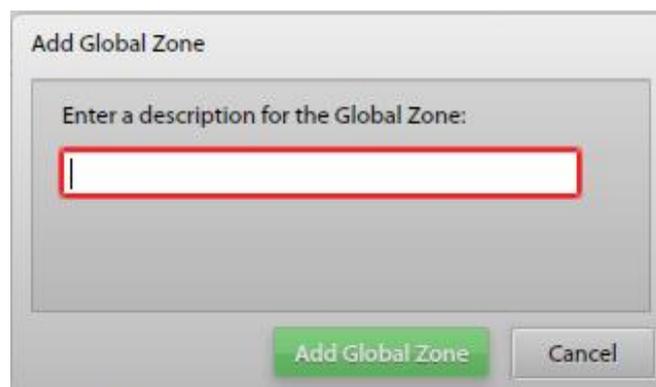


Figure 19. Add Global Zone dialog box

Enter a description for the Global Zone—A unique meaningful description should be entered.

Add Global Zone—Click the **ADD GLOBAL ZONE** button to add the new event to the list and close the dialog box.

Cancel—Closes the dialog box without adding a global zone.

Link GLOBAL Events to LOCAL Events

Global events are linked to local events to define what local event will be triggered on each local system when each global event is triggered from another system in the network configuration. [Figure 20](#) shows the LINK GLOBAL EVENTS TO LOCAL EVENTS screen. Links need to be created in each system that needs to trigger a local event for any particular global event. A global event can only trigger one local event in each local system. It is only necessary to create global to local event links in the systems that are affected by the particular global event.

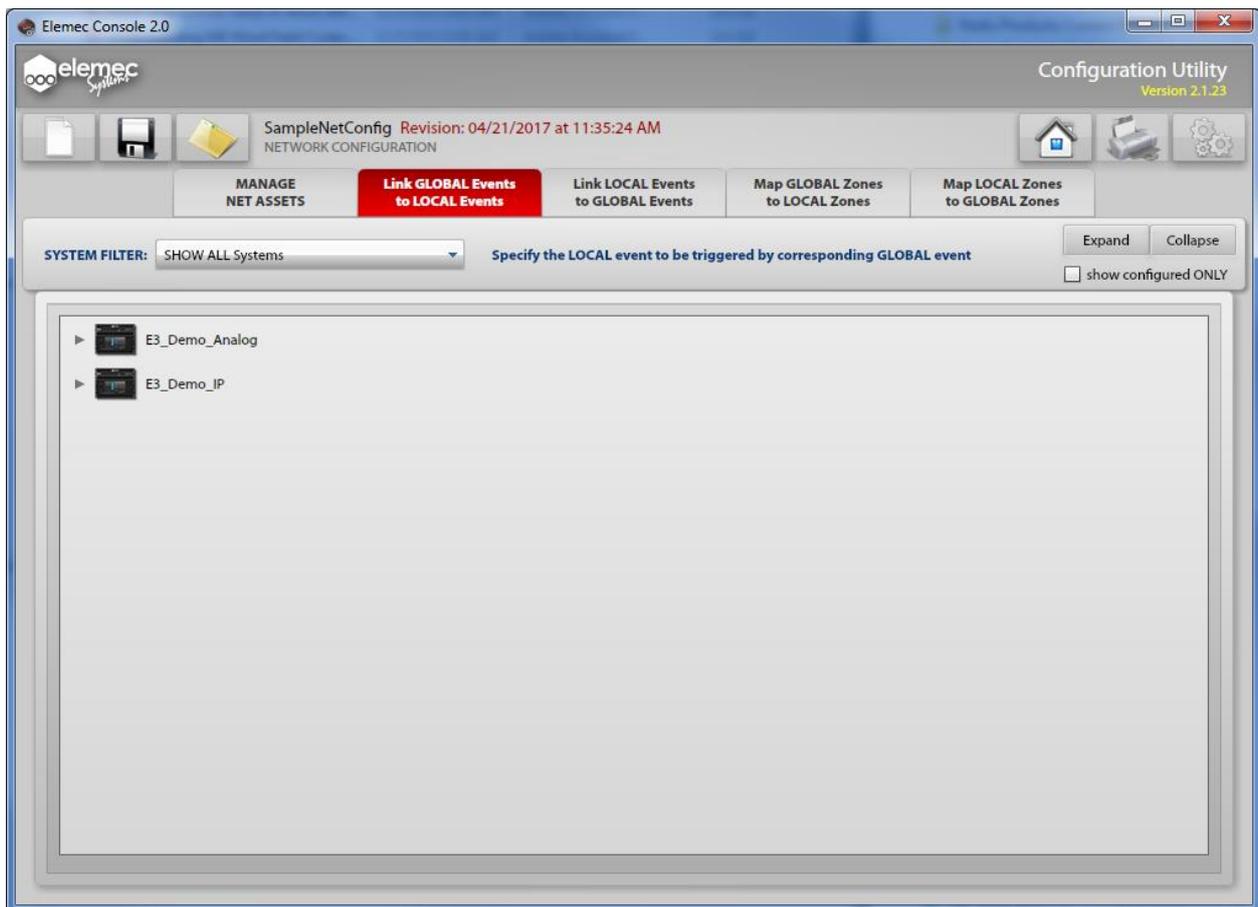


Figure 20. Linking GLOBAL Events to LOCAL Events

System Filter—The system filter drop down list is used to limit the amount of information displayed in the list of linked global events. The options provided allow for displaying each standalone system in the network configuration or to display all of the systems in the network configuration.

Expand/Collapse—The **EXPAND** and **COLLAPSE** buttons provide for expansion and contraction of the listing of linked global events in each system.

Show Configured Only—This check box filters the listing of linked global events to only those that have been configured.

Figure 21 shows the LINK GLOBAL EVENTS TO LOCAL EVENTS screen with example links to local events in each system configured.

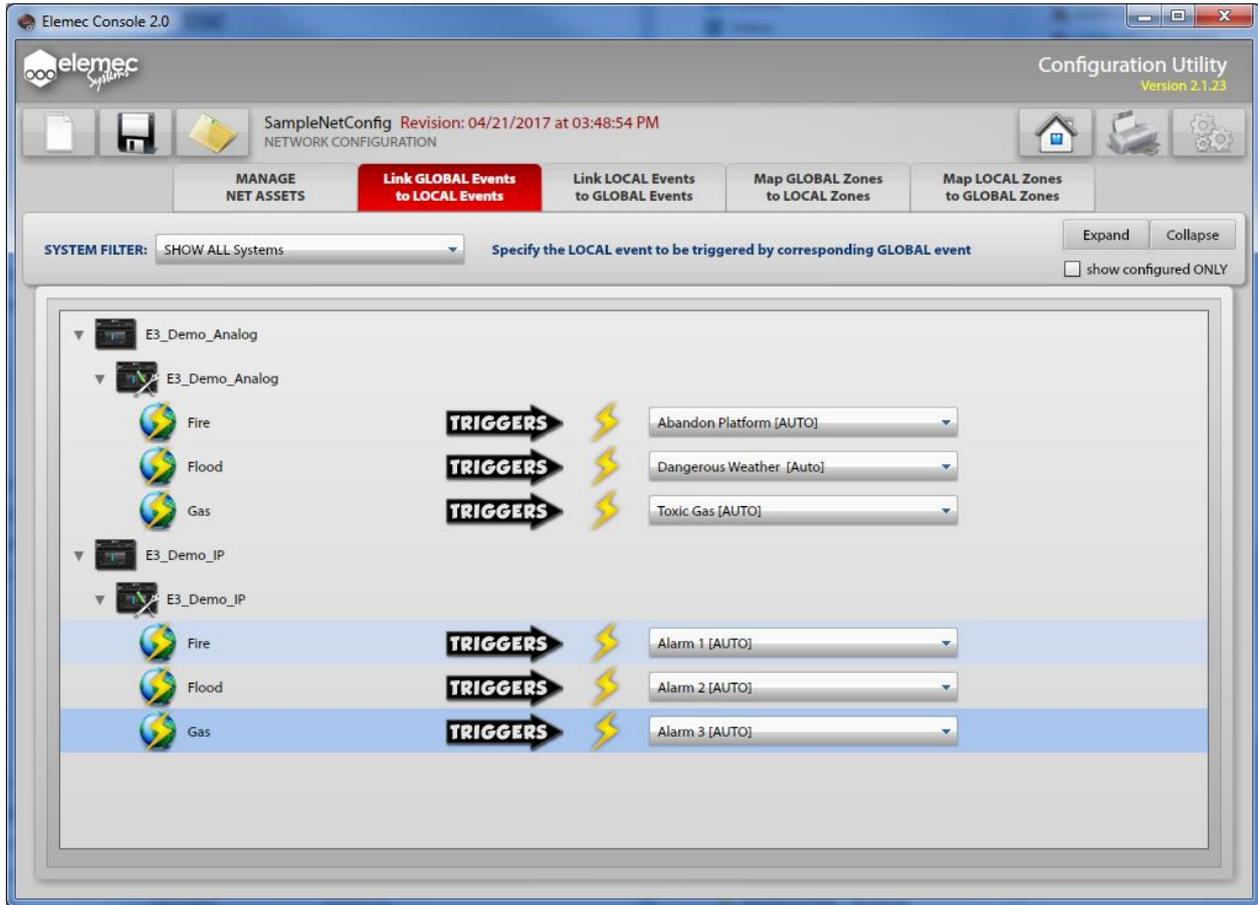


Figure 21. Global Events linked to Local Events

Key:

-  E3 System
-  E3 Configuration
-  Global Event
-  Local Event

Link LOCAL Events to GLOBAL Events

Local events are linked to global events to map the triggering of events into any other system in the network configuration when a particular event happens in one of the systems in the network configuration. [Figure 22](#) shows the LINK LOCAL EVENTS TO GLOBAL EVENTS tab. Only one global event can be triggered by each local event in any one of the networked systems.

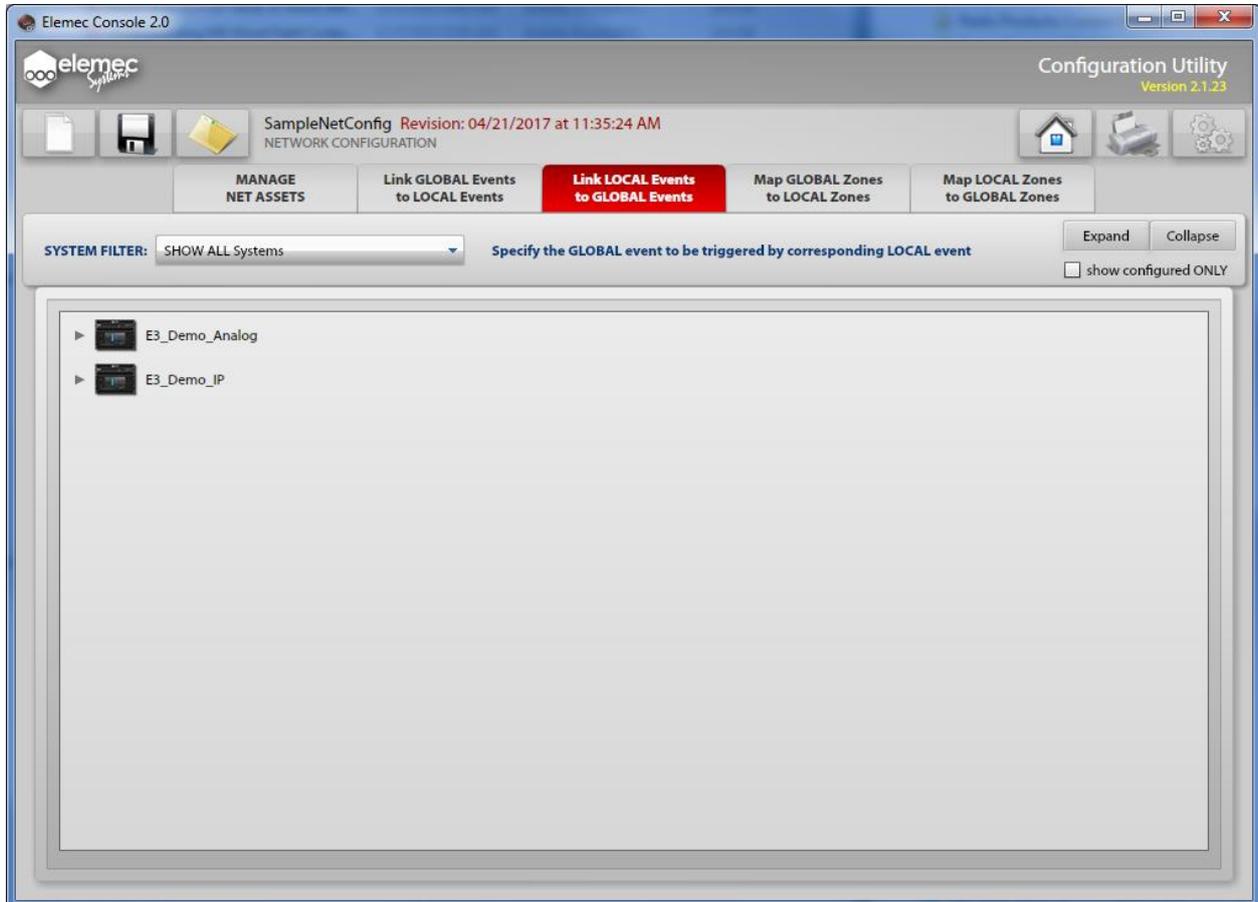


Figure 22. Linking LOCAL Events to GLOBAL Events

System Filter—The system filter drop down list is used to limit the amount of information displayed in the list of linked global events. The options provided allow for displaying each standalone system in the network configuration or to display all of the systems in the network configuration.

Expand/Collapse—The EXPAND and COLLAPSE buttons provide for expansion and contraction of the listing of local events linked to global events in each system.

Show Configured Only—This check box filters the listing of local events linked to global events to only those that have been configured.

An example showing local events linked to global events is displayed in [Figure 23](#).

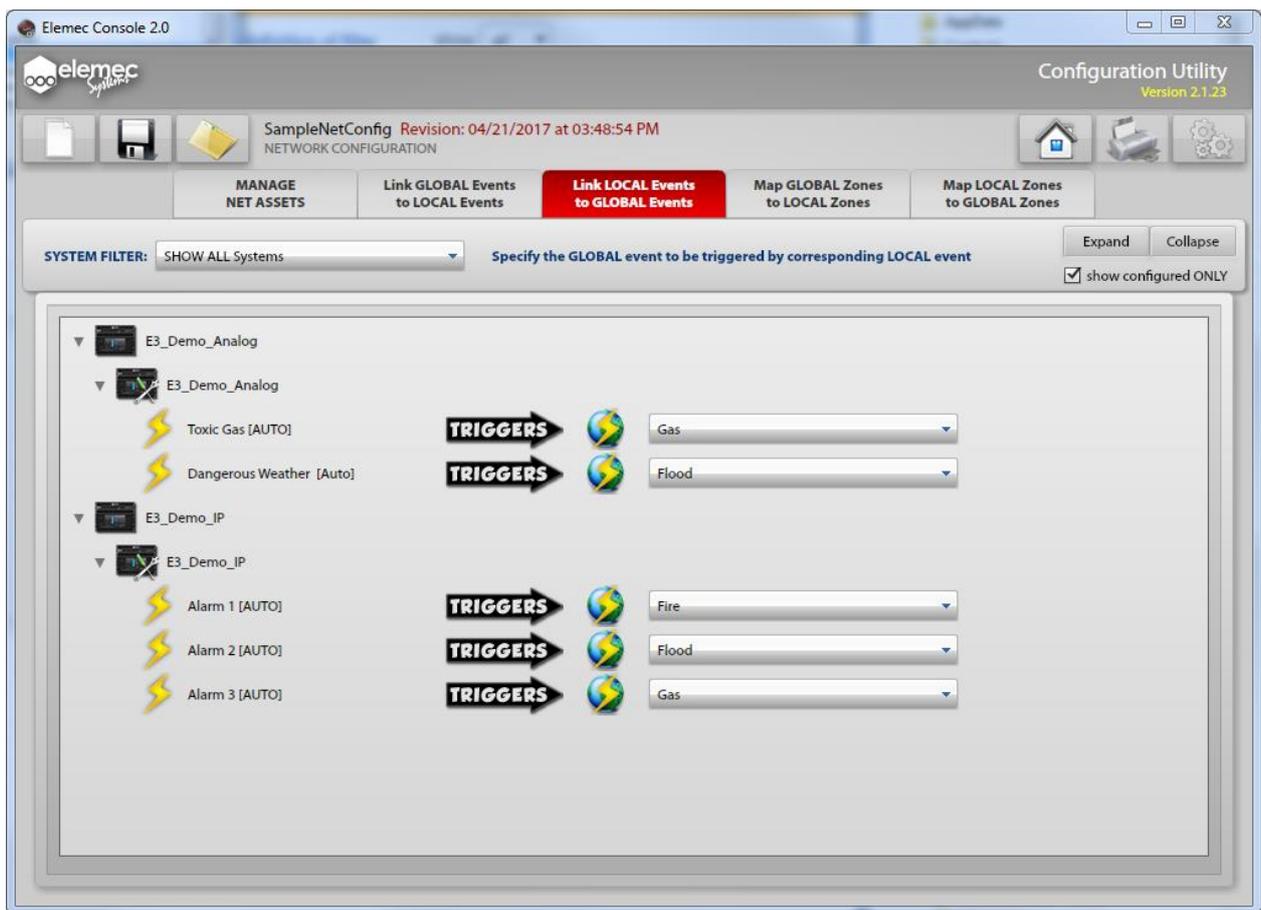


Figure 23. Local Events linked to Global Events (Configured)

Key:

-  E3 System
-  E3 Configuration
-  Global Event
-  Local Event

Map GLOBAL Zones to LOCAL Zones

Global zones are linked to local zones to define the set of local zones that are to be included when a global event is triggered. Each global zone can be linked to one or more local zones in each system in the network configuration. Clicking on the Map GLOBAL Zones to LOCAL Zones tab opens the screen shown in Figure 24.

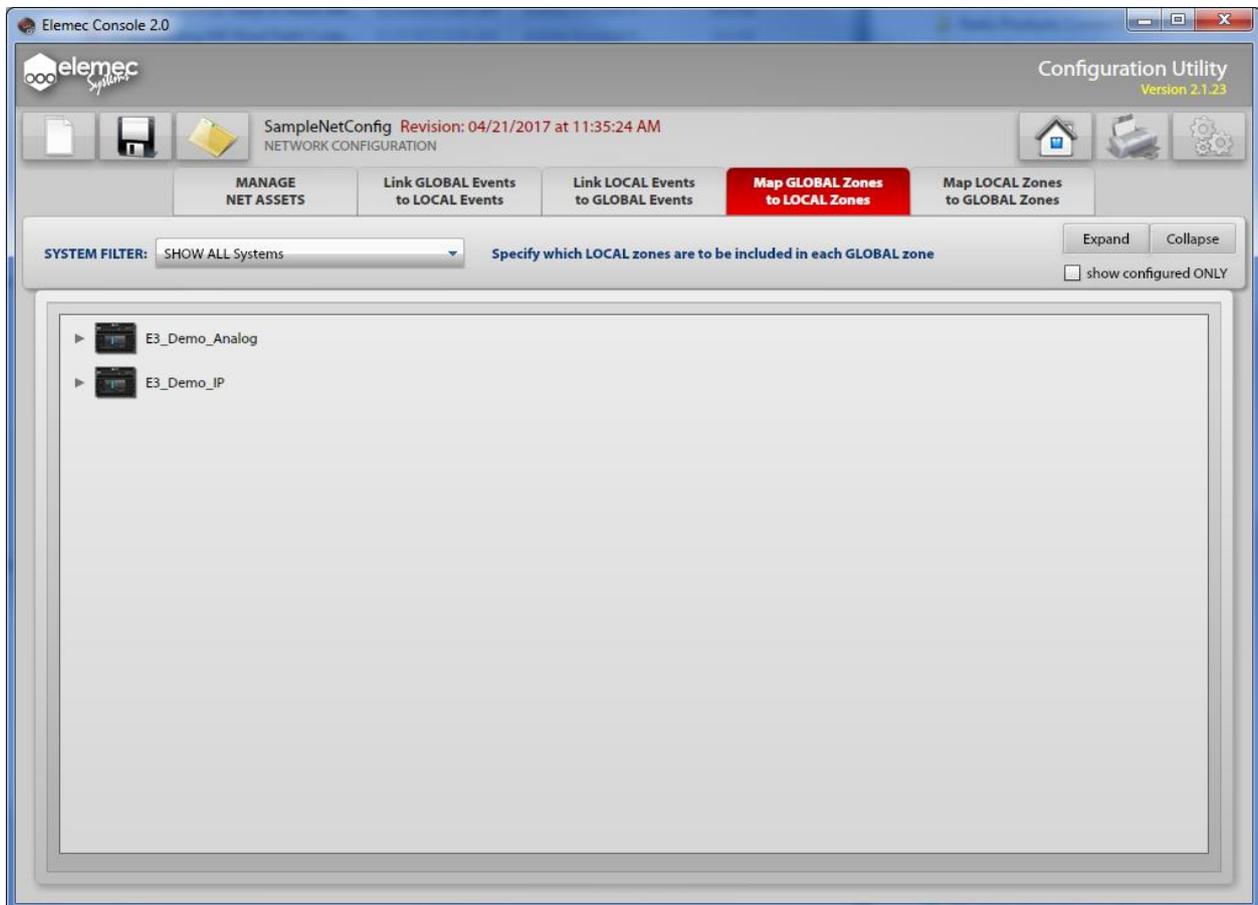


Figure 24. Mapping Global Zones to Local Zones

System Filter—The system filter drop down list is used to limit the amount of information displayed in the list of linked global events. The options provided allow for displaying each standalone system in the network configuration or to display all of the systems in the network configuration.

Expand/Collapse—The **EXPAND** and **COLLAPSE** buttons provide for expansion and contraction of the listing of linked global events in each system.

Show Configured Only—This check box filters the listing of linked global events to only those that have been configured.

An example showing global zones mapped to local zones is displayed in [Figure 25](#).

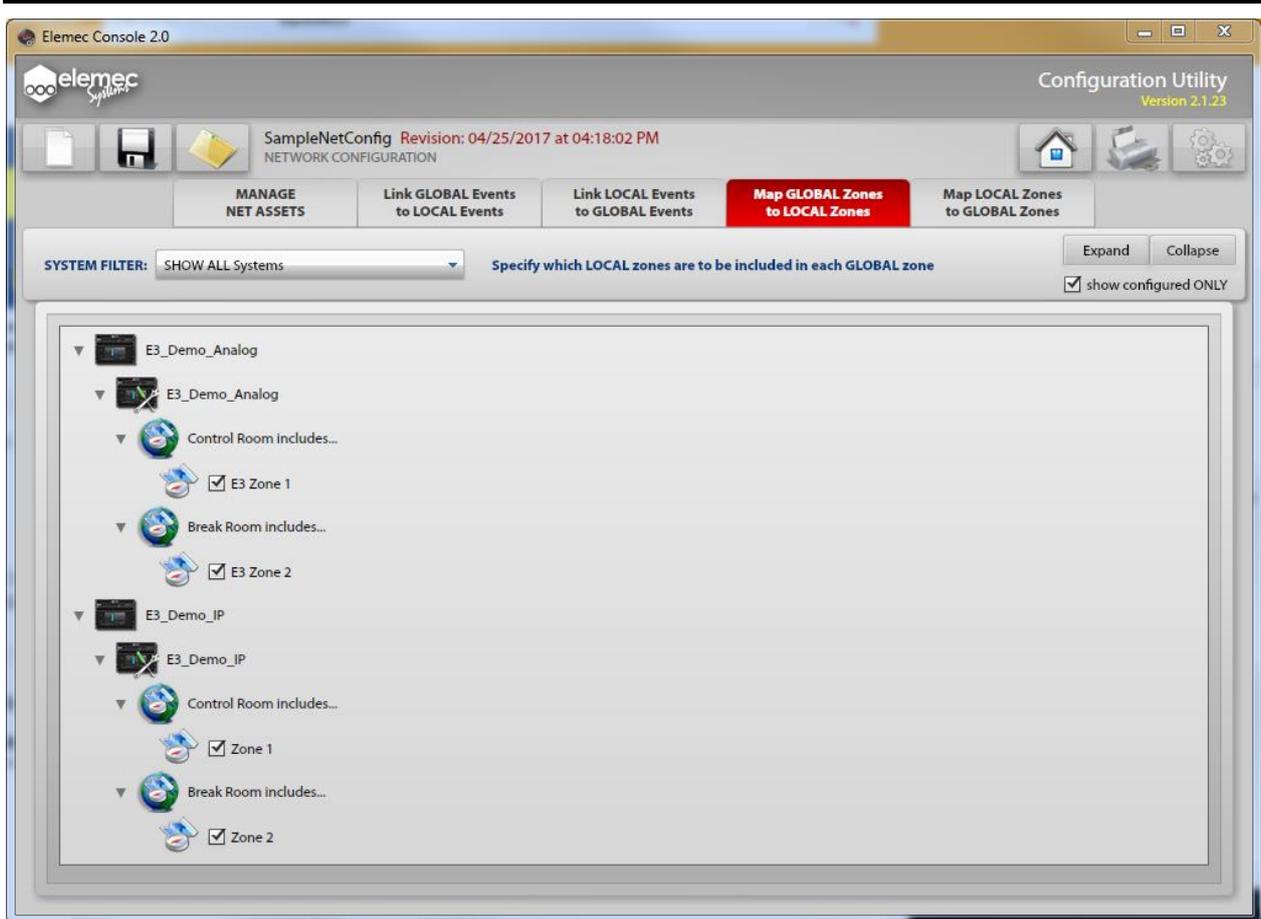


Figure 25. Global Zones Linked to Local Zones (Configured)

Key:

-  E3 System
-  E3 Configuration
-  Global Zone
-  Local Zone

Map LOCAL Zones to GLOBAL Zones

Local zones are linked to global zones to define the set of global zones that are to be included when a local event is triggered. Each local zone can be linked to one or more global zones in the networked system in the configuration. Clicking on the Map LOCAL Zones to GLOBAL Zones tab opens the screen shown in [Figure 26](#).

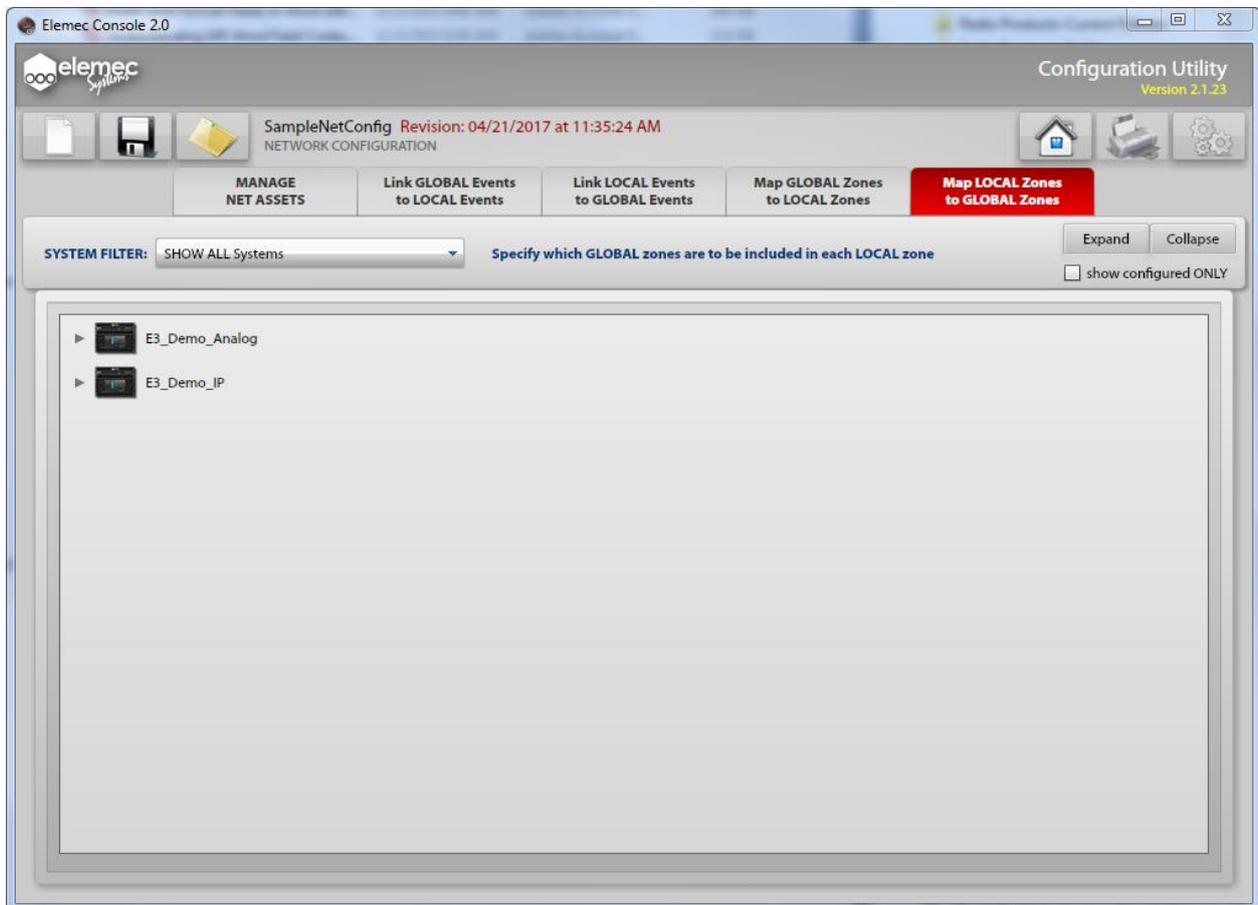


Figure 26. Mapping Local Zones to Global Zones

System Filter—The system filter drop down list is used to limit the amount of information displayed in the list of linked local events. The options provided allow for displaying each standalone system in the network configuration or to display all of the systems in the network configuration.

Expand/Collapse—The **EXPAND** and **COLLAPSE** buttons provide for expansion and contraction of the listing of linked local events in each system.

Show Configured Only—This check box filters the listing of linked local events to only those that have been configured.

An example showing local zones mapped to global zones is displayed in [Figure 27](#).

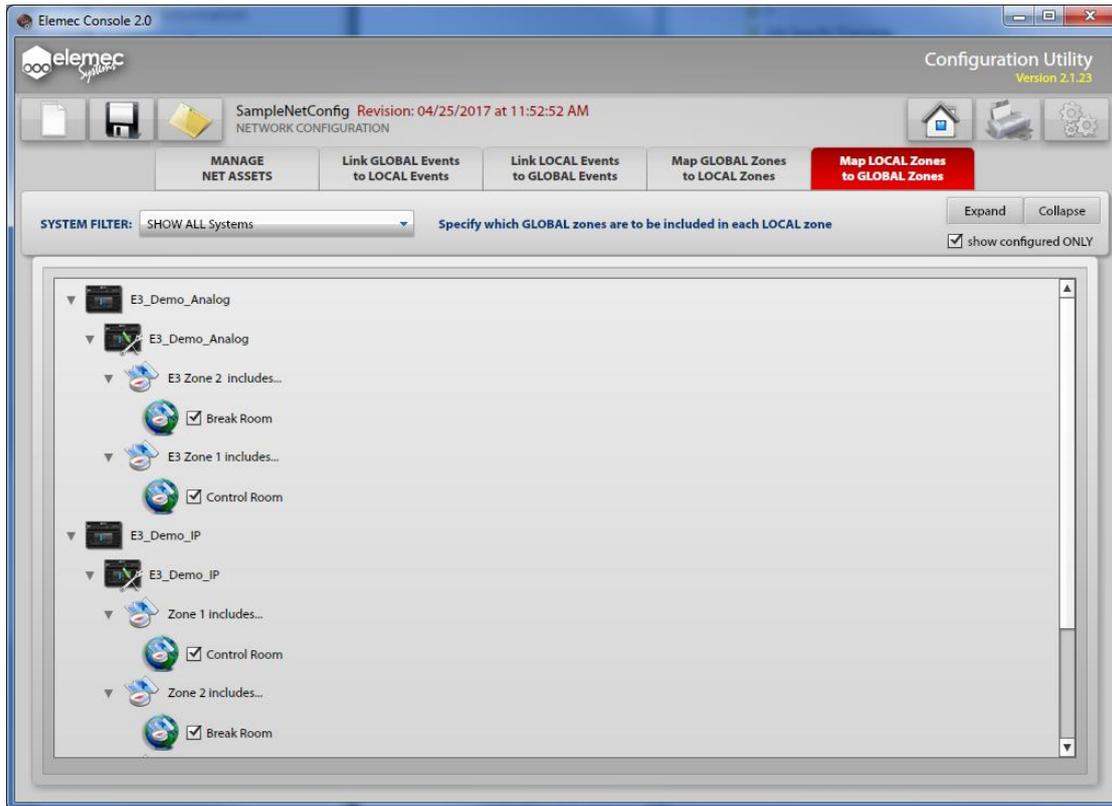


Figure 27. Local Zones Mapped to Global Zones (Configured)

Key:

-  E3 System
-  E3 Configuration
-  Global Zone
-  Local Zone

Saving the Configuration

To save the configuration, select the diskette icon from the system toolbar shown below:



Figure 28. Save the Network Configuration using the Diskette Tool

Clicking the **SAVE** toolbar icon (diskette) displays the **SAVE NET CONFIGURATION** dialog box shown in [Figure 29](#). It includes options for **SAVE AS COPY** and for **EXPORT NET CONFIGURATION TO NET BRIDGE FOR UPLOAD**.

Save as Copy allows this current configuration to be saved with a different name. The **EXPORT TO NET BRIDGE FOR UPLOAD** allows the configuration to also be copied to the Elemec Net Bridge location in order that it can be easily uploaded to the controllers using the E3 Portal application.

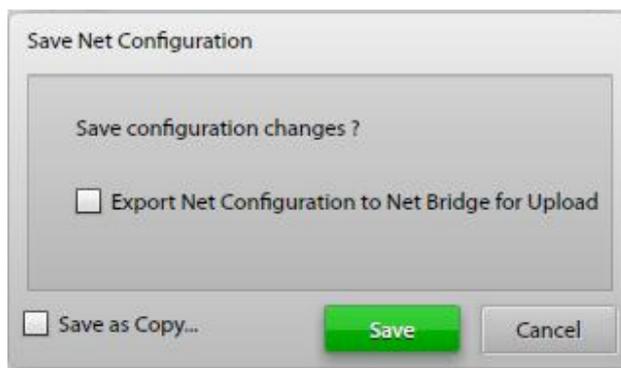


Figure 29. Save Net Configuration screen

Save Configuration Changes?—select the **SAVE** button to save the current configuration.

Export Net Configuration to Net Bridge for Upload—when checked, the system will save the current network configuration and export it to the net bridge folders used by the E3 Portal application to update the configuration on an *Elemec3* networked system.

Save as Copy—when checked, a Save as Copy window will appear. Enter the new name for the configuration file in the box below. Specify a name for the configuration copy. This will save the configuration to a new file without changing the originally opened configuration.

Glossary of Terms

A-B SYSTEM	The arrangement of two <i>Elemec3</i> systems whereby redundancy is achieved through coordinated duplicated operations. The B 'Redundant' system may have some amplifiers excluded.
COMMAND CHANNEL	A multicast address used to send command and control information between E3 systems in a network configuration.
CONFIGURATION	A named collection of settings that describe system behavior. The <i>Elemec3</i> Console application is used to create, modify, and manage configurations. The configuration is contained in a file system directory and consists of a main file (config.db) plus several audio message (.mp3) files.
CONTROLLER	The central device of the PAGA system that coordinates audio routing and event activation requests in accord with the configuration.
ELEMEC3 PORTAL	Software application that provides for viewing of an <i>Elemec3</i> system's status, for initiating Tick Tone, and for managing Configuration updates.
EVENT	A defined set of actions performed by the controller. An event may generate audio, route audio, and activate outputs. Events are set up using the <i>Elemec3</i> Console application. At any given time, an event in the system is either active or idle. Each event has many characteristics that govern the system's response to the activation of the event and to the event's progression. Event types include live speech, playback, record/playback, silent, and external.
GLOBAL EVENT	A global event is an action that is triggered by a local event in one system for the purpose of triggering events in other E3 systems in a networked configuration.
GLOBAL ZONE	A global zone is a remote destination for an event triggered on a local system in a networked configuration.
LOCAL EVENT	A local event is an action that is triggered on a local networked E3 system.

LOCAL ZONE	A local zone is a destination for an event on a local networked E3 system.
MULTICAST ADDRESS	An IP address in range of 224.0.0.0–239.255.255.255 used for one to many communications on a network.
N+1 SYSTEM	A duplicated (A-B) type system in which the ‘B’ system contains no amplifiers.
NETWORKED CONFIGURATION	A named set of E3 configurations with events and zones linked between the E3 systems to provide cross system messaging and alarm functions.
PAGA	Acronym for Public Address/ General Alarm.
STAND-ALONE SYSTEM	An <i>Elemec3</i> system that consists of a single system E3 Controller. This type of system has no backup in the case of controller failure.
ZONE	A zone is a collection of amplifier channels, digital/analog outputs, logic flags, output groups, as well as other zones that is used as a destination for an event.