

# Liebert® SiteScan® Web

## User Manual





---

# TABLE OF CONTENTS

<b>TECHNICAL SUPPORT</b> .....	<b>1</b>
<b>1.0 WHAT IS LIEBERT SITESCAN WEB?</b> .....	<b>2</b>
1.1 How Does Liebert SiteScan Web Work? .....	2
1.2 Purpose of This Manual .....	2
<b>2.0 WHO CAN BENEFIT FROM LIEBERT SITESCAN WEB?</b> .....	<b>3</b>
2.1 Data Center .....	3
2.2 Facility .....	3
2.3 Enterprise .....	3
2.4 BMS Interface .....	3
<b>3.0 WHAT IS REQUIRED TO USE LIEBERT SITESCAN WEB?</b> .....	<b>4</b>
3.1 Liebert SiteScan Web Server Requirements .....	4
<b>4.0 TYPICAL LIEBERT SITESCAN WEB SYSTEM</b> .....	<b>5</b>
<b>5.0 OVERVIEW OF LIEBERT SITESCAN WEB</b> .....	<b>6</b>
5.1 The Liebert SiteScan Web Workspace .....	6
5.2 Menus and Buttons .....	7
5.3 Informational Icons in the Navigation Tree .....	8
5.3.1 Navigation Pane .....	8
5.3.2 Zooming and Resizing in the Viewing Area .....	8
5.3.3 Using Right-Click Menus .....	9
5.3.4 Tree Icons and Hover Text .....	9
5.3.5 Optional Icons .....	9
5.3.6 Optional Hover Text .....	10
5.4 Shortcut Toolbar .....	10
5.4.1 System Overview Shortcut .....	12
5.4.2 Summary Bezel Shortcut .....	12
5.4.3 Show/Hide Notes Shortcut .....	13
5.4.4 Area Graphic Shortcut .....	13
5.4.5 Up One Level Shortcut .....	14
5.4.6 Maintenance Mode Shortcut .....	14
5.4.7 Trend Graph Shortcut .....	15
5.4.8 Edit Page Icon .....	15
5.4.9 Area Edit Page .....	15
5.4.10 Pencil Icon (Available Only on Area Edit Page) .....	15
5.4.11 Save Changes Icon (Available Only on Area Edit Page) .....	15
5.4.12 Unlock / Lock Units Icons (Available Only on Area Edit Page) .....	16

---

5.5	Liebert SiteScan Web Features . . . . .	17
<b>6.0</b>	<b>GETTING STARTED WITH LIEBERT SITESCAN WEB . . . . .</b>	<b>18</b>
6.1	Start Liebert SiteScan Web . . . . .	18
6.2	Log on . . . . .	18
<b>7.0</b>	<b>VIEWING STATUS . . . . .</b>	<b>19</b>
7.1	View Graphic Status . . . . .	19
7.2	View Unit Data . . . . .	20
7.3	View an Area Graphic or Summary Pages . . . . .	20
7.3.1	View an Area Graphic . . . . .	21
7.3.2	View a Summary Page . . . . .	21
7.3.3	Unit-Specific Summary Pages . . . . .	23
<b>8.0</b>	<b>MANAGING ALARMS . . . . .</b>	<b>24</b>
8.1	Alarms Window Overview . . . . .	24
8.2	View Alarms . . . . .	25
8.2.1	View the Alarm List . . . . .	26
8.2.2	Acknowledge and Delete Alarms . . . . .	26
8.3	Messages . . . . .	28
8.4	Actions . . . . .	29
8.4.1	Alarm Popup Action . . . . .	30
8.4.2	Print Action . . . . .	31
8.4.3	Run External Program Action . . . . .	32
8.4.4	Send Alphanumeric Page Action . . . . .	33
8.4.5	Send E-Mail Action . . . . .	34
8.4.6	Send SNMP Trap Action . . . . .	35
8.4.7	Write Property Action . . . . .	36
8.4.8	Write to Database Action . . . . .	37
8.4.9	Write to File Action . . . . .	39
8.4.10	Field Code Definitions . . . . .	40
8.5	Enable/Disable . . . . .	42
8.5.1	Enable or Disable Features . . . . .	42
8.5.2	View Selected Sources . . . . .	43
8.6	Category . . . . .	44
8.7	Template . . . . .	45
8.8	Alarm Reports . . . . .	46
<b>9.0</b>	<b>VIEWING TRENDS . . . . .</b>	<b>47</b>
9.1	View an Existing Trend Graph . . . . .	47

---

---

9.2	Create a New Trend Graph . . . . .	48
9.2.1	Tools for Viewing Trends . . . . .	48
9.3	Configure Trends . . . . .	50
<b>10.0</b>	<b>VIEWING REPORTS . . . . .</b>	<b>51</b>
10.1	Description of Liebert SiteScan Web Reports. . . . .	51
10.2	Finding Reports . . . . .	52
10.3	View Reports. . . . .	52
10.4	Set Up Report Options . . . . .	53
10.5	Set Up a New Report . . . . .	54
10.5.1	Create a Report. . . . .	55
10.5.2	Design the New Report . . . . .	56
10.6	Built-In Reports . . . . .	56
10.6.1	Report Options . . . . .	57
10.7	Equipment Checkout . . . . .	57
10.8	Alarms. . . . .	57
10.8.1	Alarm Sources. . . . .	57
10.8.2	Alarm Prefixes and Details . . . . .	58
10.8.3	Alarm Actions . . . . .	58
10.9	Equipment . . . . .	58
10.9.1	Locked Values. . . . .	58
10.9.2	Network IO . . . . .	58
10.9.3	Trend Usage . . . . .	58
10.9.4	Parameter Mismatch . . . . .	58
10.10	Security . . . . .	58
10.10.1	Location Audit Log . . . . .	58
10.10.2	System Audit Log . . . . .	58
10.11	Network (Only on NET Tree). . . . .	58
10.11.1	Equipment Status. . . . .	58
10.11.2	Controller Status . . . . .	59
<b>11.0</b>	<b>CONFIGURING LIEBERT SITESCAN WEB . . . . .</b>	<b>60</b>
11.1	My Settings. . . . .	60
11.1.1	Settings . . . . .	60
11.1.2	Contact Info. . . . .	61
11.2	System Settings . . . . .	61
11.2.1	General . . . . .	61
11.2.2	Daylight Saving . . . . .	62

---

---

11.3	Set Up Users . . . . .	62
11.3.1	Set Up Operators . . . . .	62
11.3.2	Create Operator Groups . . . . .	63
11.4	Assign Privileges to Users . . . . .	64
11.4.1	Add a Privilege Set . . . . .	64
11.5	Services . . . . .	67
11.6	Trends Setup . . . . .	68
11.6.1	Trends Display Setup . . . . .	68
11.6.2	Trends Print Setup . . . . .	68
11.7	Client Installs . . . . .	69
11.8	Changing Unit Bezel Colors . . . . .	69
11.9	Event Color Scheme . . . . .	72
<b>12.0</b>	<b>LIEBERT SOFTWARE PROGRAM LICENSE AGREEMENT . . . . .</b>	<b>73</b>

## FIGURES

Figure 1	Alarm icons . . . . .	8
----------	-----------------------	---

## TABLES

Table 1	Minimum requirements - Liebert SiteScan Web server* and client workstations . . . . .	4
Table 2	View buttons and menu options - summary . . . . .	7
Table 3	Shortcut icons . . . . .	11
Table 4	Features available in Liebert SiteScan Web . . . . .	17
Table 5	Field code definitions . . . . .	40
Table 6	Tools for viewing trend graphs . . . . .	49
Table 7	Description of available reports . . . . .	51
Table 8	Privilege descriptions . . . . .	65

## TECHNICAL SUPPORT

### How Do You Contact Emerson for Technical Support?

For help on setting up Liebert SiteScan Web or any other monitoring product, contact Emerson's Software Technical Applications Support Center at:

<b>UNITED STATES</b>	1 800 222 5877
<b>FRANCE</b>	+33 (0) 1 46 87 51 52
<b>GERMANY</b>	+49 (0) 89 99 19 220
<b>ITALY</b>	+39 (0) 2 98250 324
<b>NETHERLANDS</b>	+31 (0) 475 503333
<b>UNITED KINGDOM</b>	+44 1628403200
<b>EUROPE</b>	+800 11554499
<b>ASIA</b>	+800 11554499
<b>AUSTRALIA</b>	1 800 147704
<b>NEW ZEALAND</b>	0 800 447415
<b>WORLDWIDE</b>	1 614 841 6755
	FAX: 1 740 833 8631
	All Products: <a href="http://www.liebert.com">http://www.liebert.com</a>
	Liebert SiteScan Web: <a href="http://sitescan.liebert.com">http://sitescan.liebert.com</a>
	E-mail: <a href="mailto:liebert.monitoring@emerson.com">liebert.monitoring@emerson.com</a>

## 1.0 WHAT IS LIEBERT SITESCAN WEB?

---

Liebert SiteScan Web uses a network of microprocessor-based control modules to monitor and control Liebert precision cooling, power, UPS and other critical equipment.

Liebert SiteScan Web enables the user to monitor and control equipment in a single building, an entire campus or a network of facilities around the globe. A Liebert SiteScan Web system utilizes a Web-based server running Microsoft® Windows® Server® 2003 x64 or Windows Server® 2008 x64 and a conventional Web browser to gather information, change operating parameters, run reports and perform similar functions on various types of critical equipment.

### 1.1 How Does Liebert SiteScan Web Work?

A central Web-based server communicates with control modules and generates Web pages that may be accessed using a conventional Web browser. Liebert SiteScan Web allows you to gather information, change operating parameters, run reports and perform other critical monitoring system functions on equipment in a single facility or in dozens of locations.

The Web server and Liebert gateway communicate over an Ethernet network. The Liebert gateway communicates to the Liebert control modules using the Control Module network (CMnet) and the ARCnet156 protocol. The control modules communicate with the Liebert environmental and power equipment using the Information Gathering Network (IGMnet) or to contact closure equipment using a signal cable.

Customers access the information presented as a result of these functions using a Web browser. Internet Explorer is the browser supported by the Liebert SiteScan Web server.

### 1.2 Purpose of This Manual

This manual is intended to serve as an operation manual for Liebert SiteScan Web. The manual presents instructions and illustrations to assist operators with day-to-day activities that may be required for managing a Liebert SiteScan Web system.

Functions typically performed by an Emerson Network Power Liebert Services representative are not covered in this manual:

- Installing the Liebert SiteScan Web software
- Connecting equipment that will be monitored by Liebert SiteScan Web
- Configuring equipment in the Liebert SiteScan Web software



## 2.0 WHO CAN BENEFIT FROM LIEBERT SITESCAN WEB?

Any industry operating devices utilizing the BACnet protocol can benefit from using Liebert SiteScan Web to protect valuable equipment, data and other assets in the event of power or mechanical failure.

Different people in an organization need to know different things about the operation of critical facilities. Liebert SiteScan Web has the unique ability to be tailored to provide various levels of information to those in your organization responsible for system operations.

Examples include personnel running a data center, an entire facility, an enterprise-wide network or a building management system (BMS).

### 2.1 Data Center

Those responsible for the operation of large data or telecommunications centers must be aware of all protective infrastructure within these facilities.

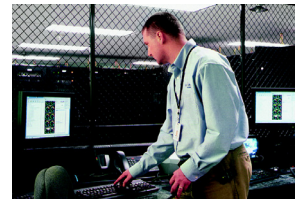
They need up-to-the minute information that will allow them to keep systems operating—no matter what the situation.



### 2.2 Facility

These people are interested in the performance of critical operations in the context of an entire facility.

Events in one area of a facility can directly affect the operation of critical systems in another and vice versa.



### 2.3 Enterprise

Multiple sites mean multiple responsibilities for those in charge of an enterprise-wide network and communications system.

They need to know the status of many remote locations to keep the entire organization working smoothly.



### 2.4 BMS Interface

Liebert SiteScan Web can interface with an existing building management system (BMS) or other facility supervisory equipment for expanded monitoring capability.



### 3.0 WHAT IS REQUIRED TO USE LIEBERT SITESCAN WEB?

Visit the Liebert Web site at <http://sitescan.liebert.com> for the latest product information. The Web site always has the most detailed and up-to-date information on system requirements and Liebert SiteScan Web's capabilities.

#### 3.1 Liebert SiteScan Web Server Requirements

Liebert SiteScan Web is based on server/thin-client architecture, designed around the open standards of Web technology. The Liebert SiteScan Web Server communicates using ASHRAE's BACnet/IP protocol and is accessed using a Web browser over the owner's intranet or external through the Internet. The intent of the thin-client architecture is to provide operators complete access to the system via a standard Web browser. The thin-client Web browser Graphical User Interface (GUI) supports Microsoft® Internet Explorer (version 7.0 or later). The Liebert SiteScan Web server software supports Microsoft® Windows® Server® 2003 x64 or Windows Server® 2008 x64.

System configuration requirements differ slightly for the Liebert SiteScan Web server and any associated client workstations. **Table 1** shows the recommended requirements for the server and client workstations running on a Microsoft Windows Platform.

**Table 1 Minimum requirements - Liebert SiteScan Web server\* and client workstations**

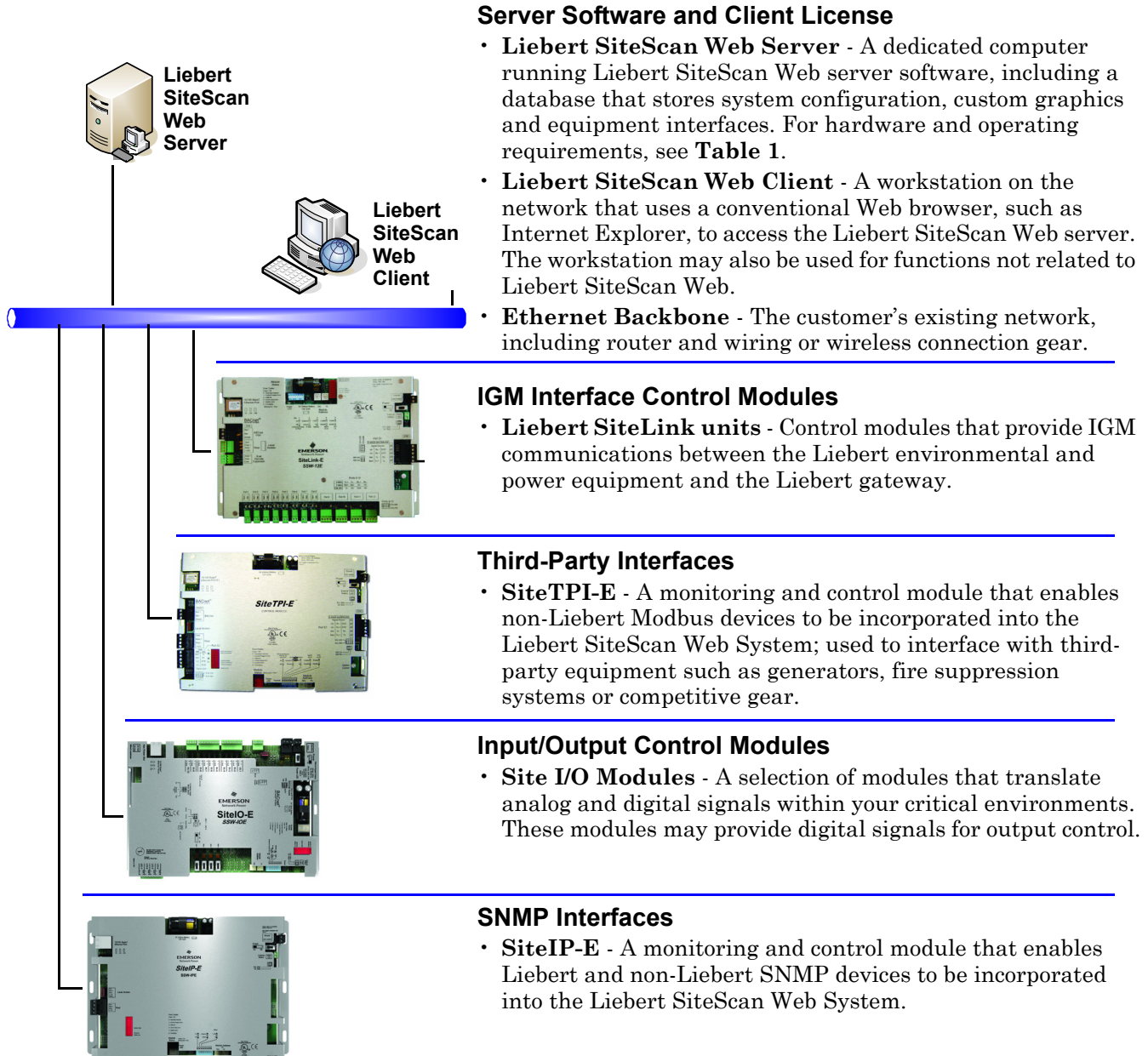
Feature	Minimum Server Requirements*	Client Workstation Requirements
<b>Operating system</b>	Microsoft® Windows® Server® 2003 x64 or Windows Server® 2008 x64	Windows XP or later
<b>Browser</b>	Microsoft Internet Explorer v7 or later with Sun Systems Java ( <a href="http://www.java.com">www.java.com</a> )	Microsoft Internet Explorer v7 or later with Sun Systems Java ( <a href="http://www.java.com">www.java.com</a> )
<b>Computer system (CPU) speed</b>	The more simultaneous users on a system, the faster the CPU speed required to maintain good user response time. For a system with: <ul style="list-style-type: none"> <li>• One or two active users, a 2 GHz CPU should provide adequate performance.</li> <li>• Three or more active users, select a 3 GHz or faster CPU.</li> <li>• 10 or more active users, consider multiple CPUs. Moving the database to another computer is more economical than running both Liebert SiteScan Web and the database on a multiple CPU system.</li> </ul>	Dual-core processor
<b>System memory</b>	6GB system memory recommended to eliminate excessive swap file usage. The responsiveness of larger systems will benefit directly from more memory.	—
<b>Hard disk space</b>	80GB free hard disk space available for Liebert SiteScan Web <b>Note:</b> A SCSI hard disk interface is recommended for users making extensive use of alarms or historical trends.	10Mb of free hard disk space available for caching images
<b>USB ports</b>	USB ports available for system backups, preferably front-mounted to avoid disturbing computer room cabling.	—
<b>CD drives</b>	CD-ROM drive (CD-RW drive recommended for alternate backup purposes)	—
<b>Mouse/ keyboard</b>	2-button mouse / 104-key keyboard	2-button mouse / 104-key keyboard
<b>Remote control software</b>	For large systems with remote sites, Liebert strongly recommends using remote control software—for example, Windows Remote Desktop, VNC or PC Anywhere—to allow Liebert service engineers to access the server remotely.	—
<b>Display</b>	SVGA display card and monitor that support a resolution of 1024x768 pixels with True Color (32-bit) or better	SVGA display card and monitor that support a resolution of 1024x768 pixels with High Color (16-bit) or better
<b>Network</b>	10/100 Mbps Ethernet network card	Network connection capable of reaching the server—for example, an Ethernet network card or a dial-up modem connection.

\* Liebert SiteScan Web should have its own dedicated server. Having other web server applications—such as Apache or IIS—running on the same machine will cause conflicts.

Running the client-side browser on the server will add to the server's load; to compensate, increase CPU and memory headroom.

## 4.0 TYPICAL LIEBERT SITESCAN WEB SYSTEM

A typical Liebert SiteScan Web system may include the components shown in the figure below.



### Server Software and Client License

- **Liebert SiteScan Web Server** - A dedicated computer running Liebert SiteScan Web server software, including a database that stores system configuration, custom graphics and equipment interfaces. For hardware and operating requirements, see **Table 1**.
- **Liebert SiteScan Web Client** - A workstation on the network that uses a conventional Web browser, such as Internet Explorer, to access the Liebert SiteScan Web server. The workstation may also be used for functions not related to Liebert SiteScan Web.
- **Ethernet Backbone** - The customer's existing network, including router and wiring or wireless connection gear.

### IGM Interface Control Modules

- **Liebert SiteLink units** - Control modules that provide IGM communications between the Liebert environmental and power equipment and the Liebert gateway.

### Third-Party Interfaces

- **SiteTPI-E** - A monitoring and control module that enables non-Liebert Modbus devices to be incorporated into the Liebert SiteScan Web System; used to interface with third-party equipment such as generators, fire suppression systems or competitive gear.

### Input/Output Control Modules

- **Site I/O Modules** - A selection of modules that translate analog and digital signals within your critical environments. These modules may provide digital signals for output control.

### SNMP Interfaces

- **SiteIP-E** - A monitoring and control module that enables Liebert and non-Liebert SNMP devices to be incorporated into the Liebert SiteScan Web System.

# 5.0 OVERVIEW OF LIEBERT SITESCAN WEB

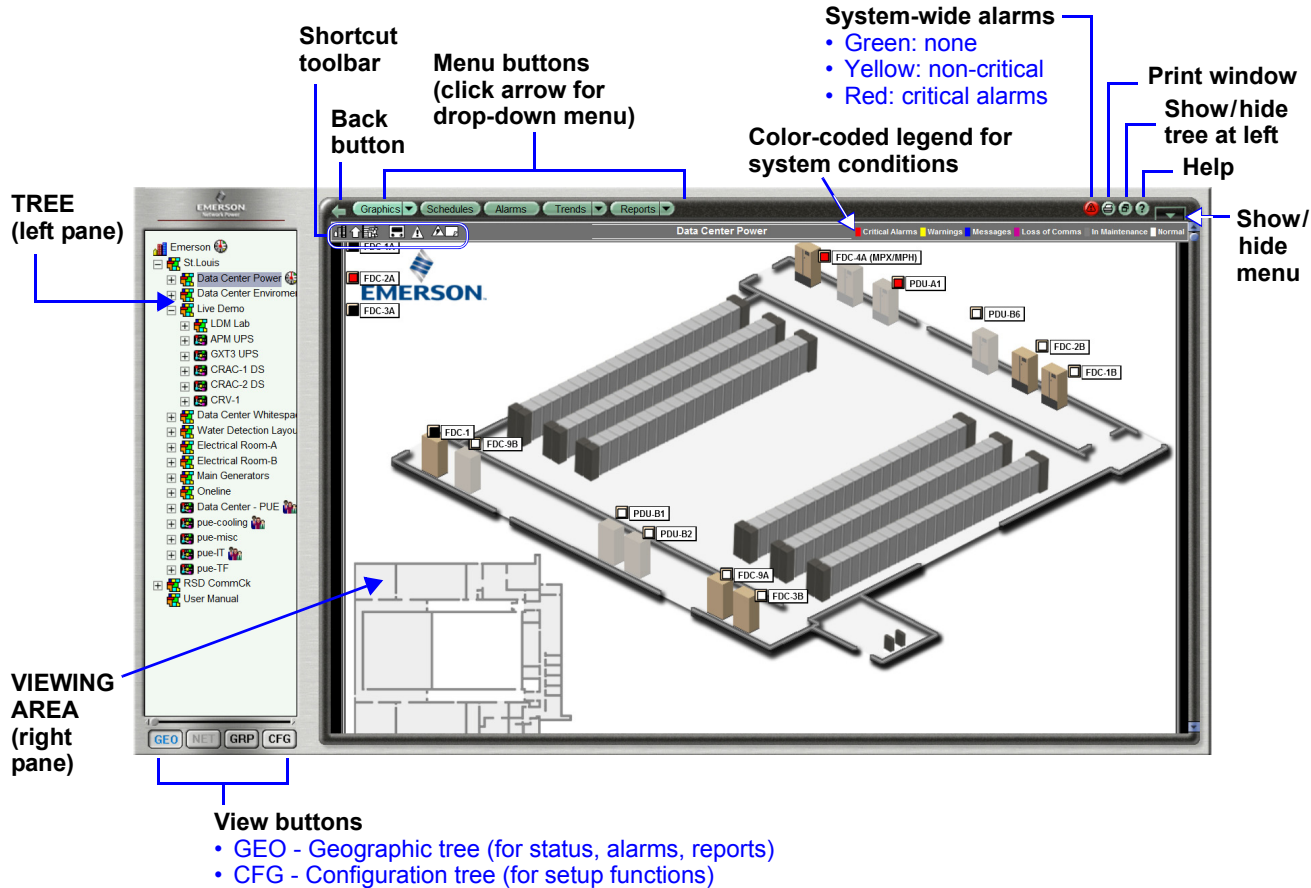
This section provides a quick look at the navigation and configuration features available through Liebert SiteScan Web’s buttons and tabs.

Liebert SiteScan Web’s view buttons—GEO and CFG—logically divide Liebert SiteScan Web’s functionality.

- The **GEO** button displays the operational status and condition of configured devices.
- The **CFG** button is the entry point for all setup functions.

## 5.1 The Liebert SiteScan Web Workspace

The main sections of the Liebert SiteScan Web window are shown in the following example.



## 5.2 Menus and Buttons

Table 2 shows the Liebert SiteScan Web features discussed in this manual and where to learn more about each.

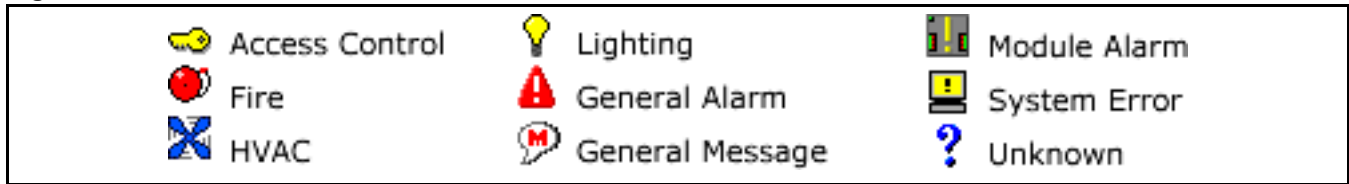
**Table 2 View buttons and menu options - summary**

Feature	Tab	Subcategories	For more information, see:	
<b>GEO View Button</b>				
<b>Graphics</b>	—	—	<b>7.0 - Viewing Status</b>	
<b>Alarms</b>	View	—	<b>8.2 - View Alarms</b>	
	Messages	—	<b>8.3 - Messages</b>	
	Actions	Alarm Popup	—	<b>8.4.1 - Alarm Popup Action</b>
		Print	—	<b>8.4.2 - Print Action</b>
		Run External Program	—	<b>8.4.3 - Run External Program Action</b>
		Send Alphanumeric Page	—	<b>8.4.4 - Send Alphanumeric Page Action</b>
		Send E-Mail	—	<b>8.4.5 - Send E-Mail Action</b>
		Send SNMP Trap	—	<b>8.4.6 - Send SNMP Trap Action</b>
		Write Property	—	<b>8.4.7 - Write Property Action</b>
		Write to Database	—	<b>8.4.8 - Write to Database Action</b>
	Write to File	—	<b>8.4.9 - Write to File Action</b>	
Enable/Disable	—	<b>8.5 - Enable/Disable</b>		
Reports	—	<b>8.8 - Alarm Reports</b>		
<b>Trends</b>	View	—	<b>9.1 - View an Existing Trend Graph</b>	
	Configure	—	<b>9.3 - Configure Trends</b>	
<b>Reports</b>	View	—	<b>10.3 - View Reports</b>	
	Configure	—	<b>10.4 - Set Up Report Options</b>	
	Design	Create a Report	—	<b>10.5 - Set Up a New Report</b>
		Report Options	—	<b>10.6 - Built-In Reports</b>
		—	—	<b>10.7 - Equipment Checkout</b>
		Alarm Sources, Details	—	<b>10.8 - Alarms</b>
		Locked Values	—	<b>10.9 - Equipment</b>
		Location, System log	—	<b>10.10 - Security</b>
Equipment Status	—	<b>10.11 - Network (Only on NET Tree)</b>		
<b>CFG View Button</b>				
<b>My Settings</b>	Settings	—	<b>11.1.1 - Settings</b>	
	Contact Info	—	<b>11.1.2 - Contact Info</b>	
<b>System Settings</b>	General	—	<b>11.2.1 - General</b>	
	Daylight Saving	—	<b>11.2.2 - Daylight Saving</b>	
<b>Operators</b>	—	—	<b>11.3.1 - Set Up Operators</b>	
<b>Privilege Sets</b>	—	—	<b>11.4.1 - Add a Privilege Set</b>	
<b>Operator Groups</b>	—	—	<b>11.3.2 - Create Operator Groups</b>	
<b>Services</b>	—	—	<b>11.5 - Services</b>	
<b>Trends Display Setup</b>	—	—	<b>11.6.1 - Trends Display Setup</b>	
<b>Trends Print Setup</b>	—	—	<b>11.6.2 - Trends Print Setup</b>	

### 5.3 Informational Icons in the Navigation Tree

The icons used in the alarm viewer are shown in **Figure 1**.

**Figure 1 Alarm icons**




The icon indicates the alarm category. The icon's color indicates severity, as shown below:

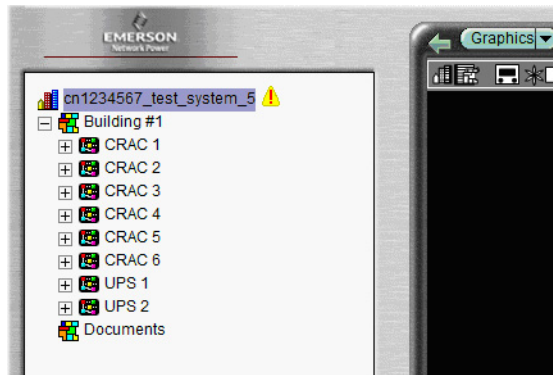
Color	Severity
Blue	Maintenance needed
Yellow	General non-critical alarm
Red	Critical alarm

#### 5.3.1 Navigation Pane

The Navigation Pane may be shown or hidden, depending on the desired view. To show or hide the navigation pane:

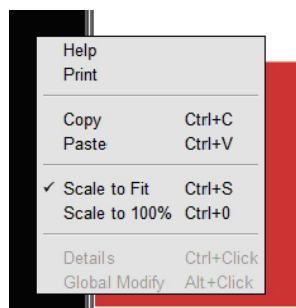
Click  to toggle the navigation pane between shown or hidden. When the navigation pane is hidden, move the cursor across the left edge of the browser to show the navigation pane.

Click and drag the right edge of the navigation pane to adjust its width.



#### 5.3.2 Zooming and Resizing in the Viewing Area

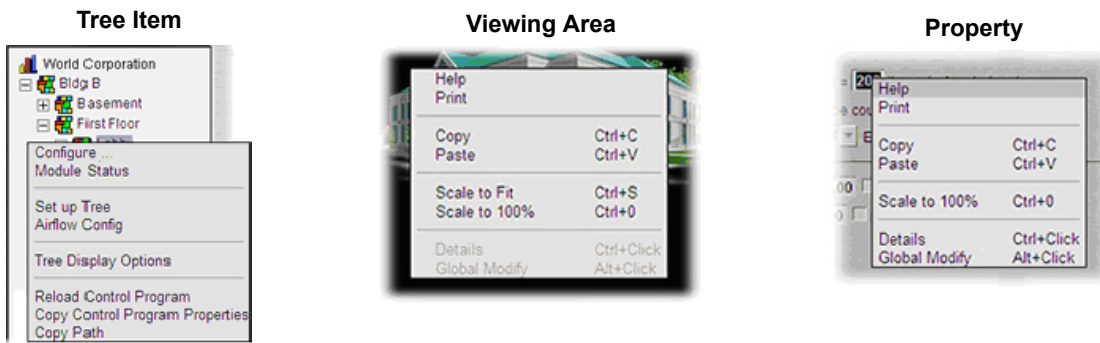
- Hold the Ctrl key while rolling the mouse wheel to zoom in or out on the contents of the Viewing Area.
- Right-click the Viewing Area and select Scale to 100% to restore the contents to their original size.
- If a graphic does not fit in the viewing area, right-click it and select Scale to Fit to make it fit the viewing area.
- Select Scale to 100% to return it to its original size.



### 5.3.3 Using Right-Click Menus

Right-clicking an item in the Navigation Tree, the Viewing Area or a property offers additional options and shortcuts:

Right-Clicking the items below yields the options and shortcuts



### 5.3.4 Tree Icons and Hover Text

The navigation tree displays an icon to the left of each item to denote the type of item. For example:



Custom equipment icons can be set up in Liebert SiteScan Web. Right-click the equipment in the **GEO** or **NET** tree, select **Configure**, then select the **icon**.

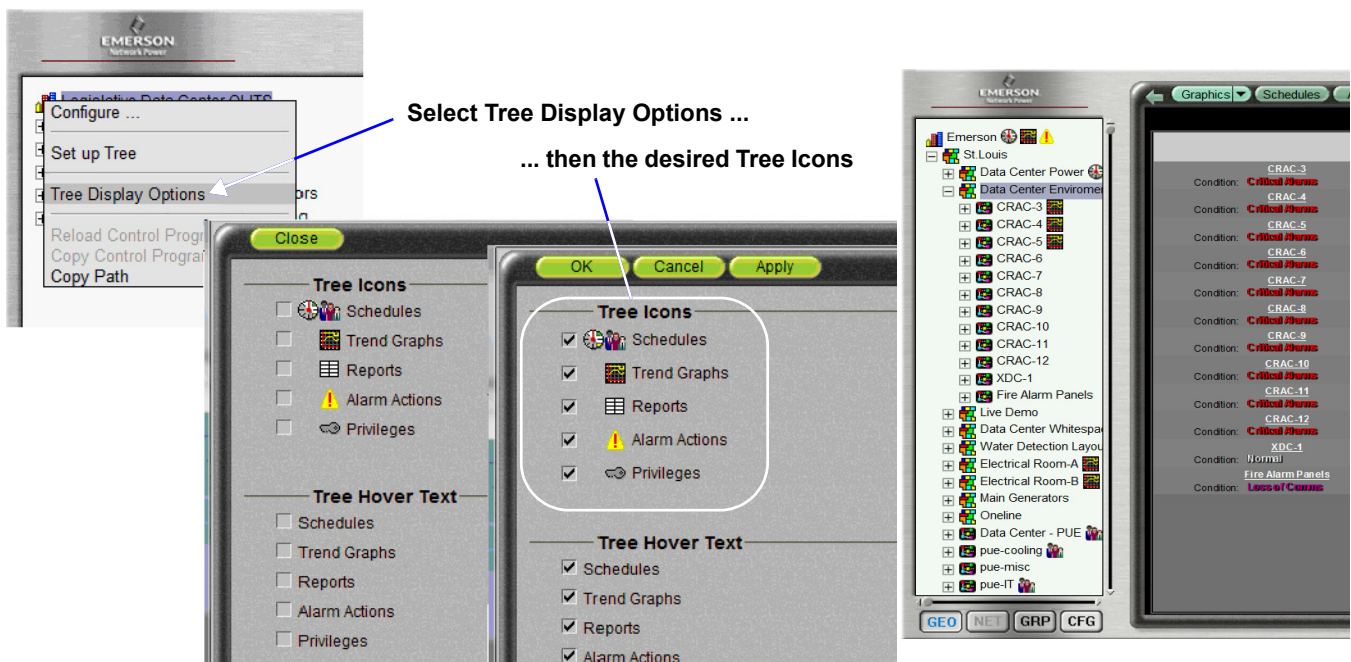
### 5.3.5 Optional Icons

The following icons can be displayed to denote locations in the GEO tree where items were created or assigned.



To turn on optional icons:

1. Right-click the GEO tree.
2. Select Tree Display Options.
3. Select the desired Tree Icons.
4. Click OK.

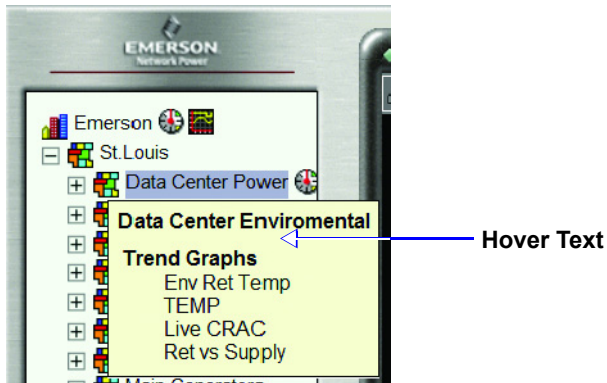


### 5.3.6 Optional Hover Text

Turning on hover text reveals information about an item when the cursor is held over a system, area or equipment icon. The information displayed depends on which hover text options selected.

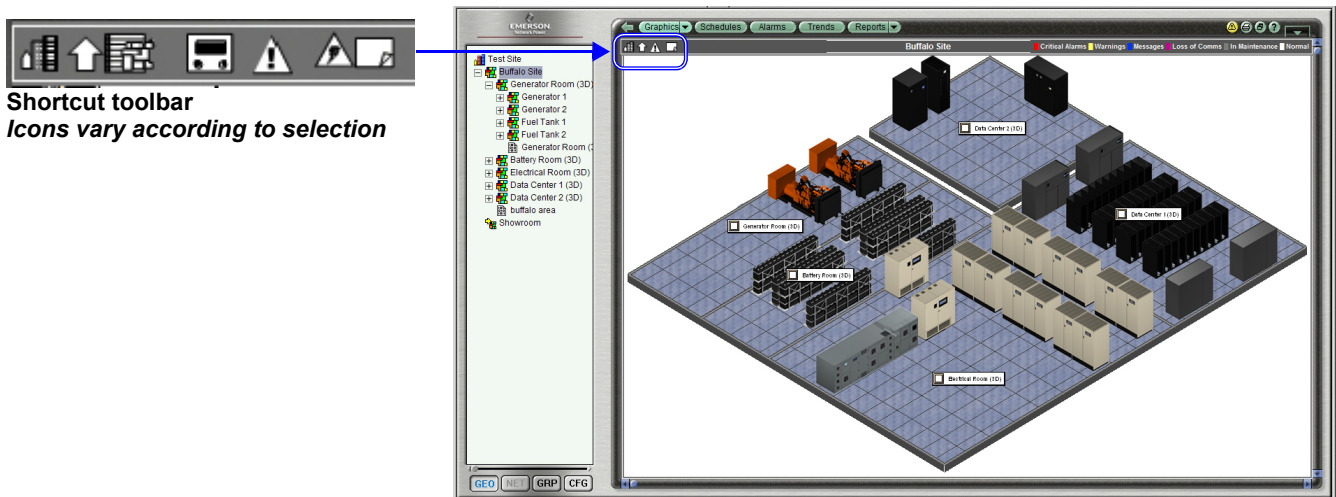
To turn on hover text:

1. Right-click the tree.
2. Select Tree Display Options.
3. Select the desired Tree Hover Text.
4. Click **OK**.



### 5.4 Shortcut Toolbar

A toolbar with shortcut icons appears directly below the menu action buttons in the right pane. These icons provide quick access to key features—for example, move up one level in the tree, add a note, view a trend graph, configure an item or a maintenance schedule.



The icons vary according to the selected item. If power equipment is selected, the icons shown will relate only to power equipment. If cooling equipment is selected, only icons related to cooling equipment will be displayed. **Table 3** provides a summary of these icons and where to find more information.





















**NOTE**

*The toolbar icons disappear in some views. They will be reappear when the mouse hovers over the toolbar area.*



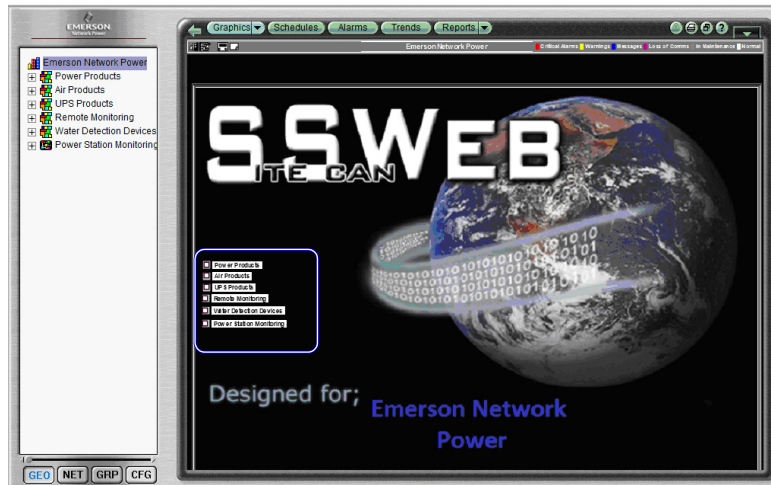
Table 3 Shortcut icons

Icon		Click the icon to:	For details, see:
	<b>System Overview</b>	Move to the top level of the tree in the GEO view tree and present the SSWEB splash screen in the right viewing plain.	<b>5.4.1 - System Overview Shortcut</b>
	<b>Summary Bezel</b>	Display summary data for a selected site and display the status of all equipment listed under the Area graphic.	<b>5.4.2 - Summary Bezel Shortcut</b>
	<b>Show/Hide Notes</b>	Add notes about any item or toggle between the notes window and the previous view.	<b>5.4.3 - Show/Hide Notes Shortcut</b>
	<b>Area Graphic</b>	Display a floor plan of a selected item in the tree.	<b>5.4.4 - Area Graphic Shortcut</b>
	<b>Up One Level</b>	Move up one level in the GEO tree.	<b>5.4.5 - Up One Level Shortcut</b>
	<b>Maintenance Mode</b>	Schedule maintenance for a selected point.	<b>5.4.6 - Maintenance Mode Shortcut</b>
	<b>Trend Graphs</b>	View a trend graph of a selected point.	<b>5.4.7 - Trend Graph Shortcut</b>
	<b>Edit Page</b>	View or change the characteristics of a selected unit or point.	<b>5.4.8 - Edit Page Icon</b>
	<b>Area Edit Page</b>	Displays Area Edit Page so the area graphic can be modified using same methods used to create the Area Graphic.	<b>5.4.9 - Area Edit Page</b>
	<b>Air Summary</b>	View summary page for environmental control units, temperature, heating, cooling, humidification, dehumidification.	<b>7.3 - View an Area Graphic or Summary Pages</b>
	<b>Power Summary</b>	View summary page of power status, input voltage, output (voltage and amps, load percentage, power factor).	
	<b>Static Switch Summary</b>	View summary page of status of each static switch (voltage, current and power in kVa, kW and Hz).	
	<b>UPS Summary</b>	View summary page of status of each UPS, bypass voltage, input voltage, battery condition, inverter status, output (voltage, current and power in kVa, kW and Hz).	
	<b>Disable Notifications</b>	Enable or disable notifications for each unit.	—
	<b>Pencil (available only on Area Edit Page)</b>	Edit unit and area names, as well as setpoints for applicable units.	<b>5.4.10 - Pencil Icon (Available Only on Area Edit Page)</b>
	<b>Save changes (available only on Area Edit Page)</b>	Save changes to the configuration.	<b>5.4.11 - Save Changes Icon (Available Only on Area Edit Page)</b>
	<b>Unlock (available only on Area Edit Page)</b>	Unlock to change the position of a unit on the floor plan.	<b>5.4.12 - Unlock / Lock Units Icons (Available Only on Area Edit Page)</b>
	<b>Lock (available only on Area Edit Page)</b>	Save and lock a unit's position on the floor plan.	

### 5.4.1 System Overview Shortcut

At any level in the GEO tree:

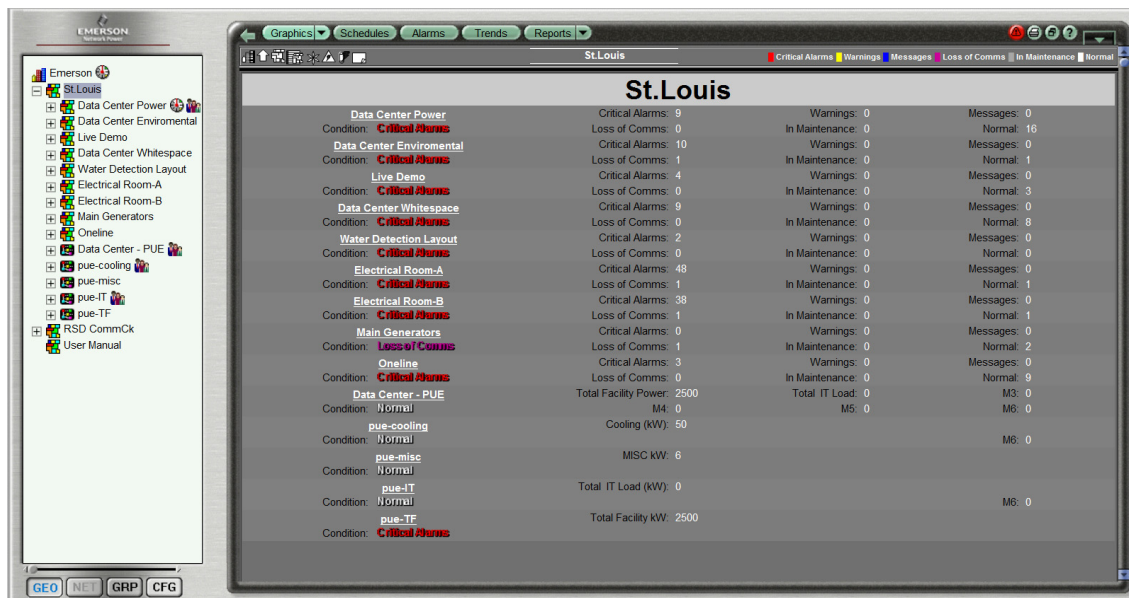
- Click on the System Overview icon to navigate to the highest level of the GEO tree.
- Site icons appear below the shortcut toolbar, as shown in the following example. Click on any site icon to display key information in a site box—the current condition and the number of alarms, warnings and other conditions.
- The Summary Bezel icon displays the same type of information for multiple sites (see 5.4.2 - Summary Bezel Shortcut).



### 5.4.2 Summary Bezel Shortcut

With a site selected in the GEO tree:

- Click on the Summary Bezel icon to display summary data for all areas in the selected site:
  - Condition (overall status)
  - The number of critical alarms and warnings detected, as well as messages sent
  - Statistics on conditions: loss of communications, in maintenance, normal operation
- The same type of information is available at the highest level in the tree (see 5.4.1 - System Overview Shortcut).



### 5.4.3 Show/Hide Notes Shortcut

With an item selected:

- Click on the Show/Hide Notes icon to display a notes window, as shown below.
- Enter text as desired.

The Show/Hide Notes icon changes color to indicate a note has been added to an item. The icon will be white if no notes are attached to the item. The icon changes to black if notes have been attached.

The note remains until it is deleted.

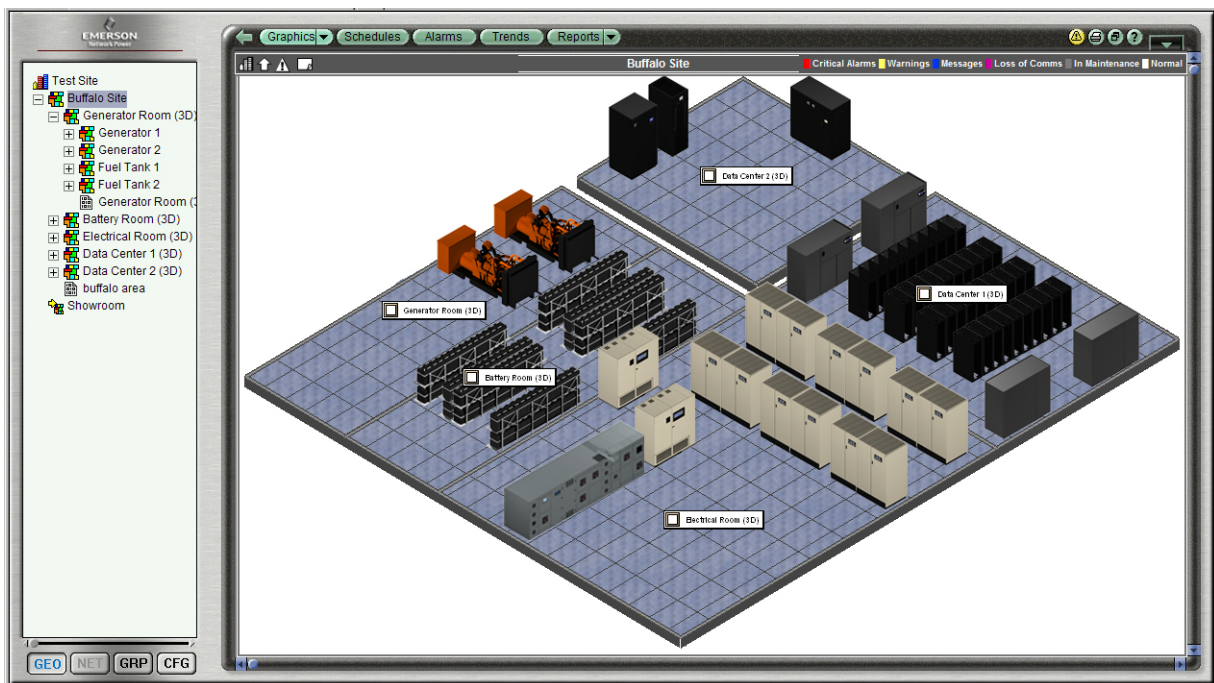
- Click on the Show/Hide Notes icon to return to the previous view.



### 5.4.4 Area Graphic Shortcut

With a site selected in the GEO tree:

- Click on the Area Graphic icon to display a floor plan of the selected site, as in this example.  
**Note:** If any units have moved out of view, press and hold the Ctrl key and right-click, then choose **Clear Unit Positions** from the popup menu. Reposition units as needed.



### 5.4.5 Up One Level Shortcut

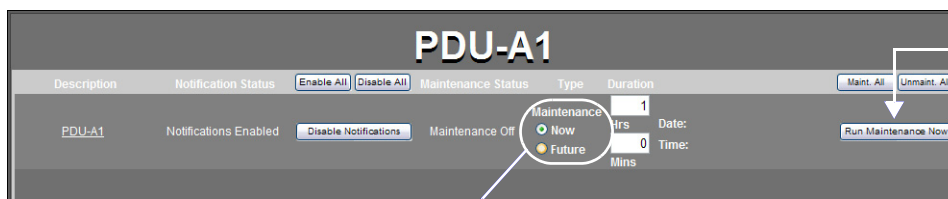
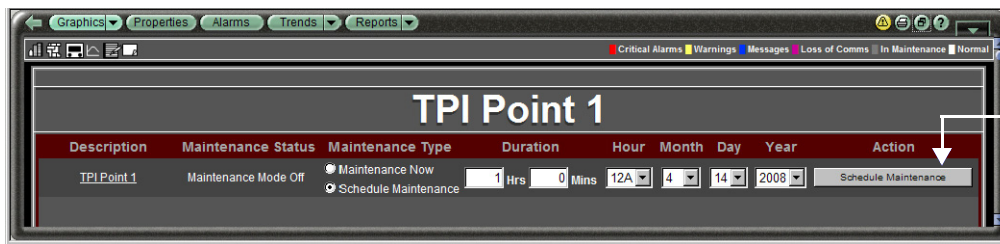
Use this icon to move up one level in the GEO tree:

- Click on the Up One Level icon to move up a level in the GEO tree—in the example above, from the site shown to the next higher level.

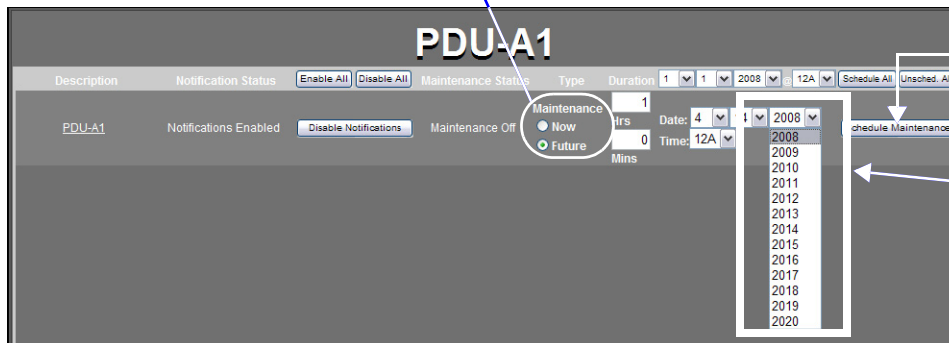
### 5.4.6 Maintenance Mode Shortcut

With an item selected:

- Click on the Edit Page icon, then on Maintenance Mode icon to view or change the maintenance schedule of the selected point.
- The example below includes the following data:
  - Description: shows the name of the selected item—for example, *TPI Point 1*.
  - Maintenance Status: displays whether the maintenance function is *Off* or *On*.



Maintenance Now or Future (schedule for later dates)

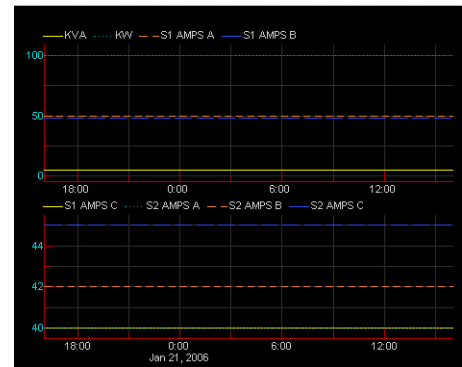


- Maintenance Type - select one of these options:
  - **Now** - Click this button to change the Action button to **Maintenance Now**.
  - **Future** - Click to change the Action button to **Schedule Maintenance** and display time and date options for the maintenance.
- Duration: enter the maintenance duration for the device in hours and minutes.
- If **Schedule Maintenance** is selected, specify the time and date for maintenance to begin.
- Action button - toggles according to the Maintenance Type selected for this point:
  - Click the **Maintenance Now** button to perform maintenance immediately.
  - Click the **Schedule Maintenance** button to save and activate the maintenance schedule.
- After clicking an Action button, click the **OK** button to confirm your choice (or **Cancel** to prevent the operation).

### 5.4.7 Trend Graph Shortcut

With a point selected in the tree at left:

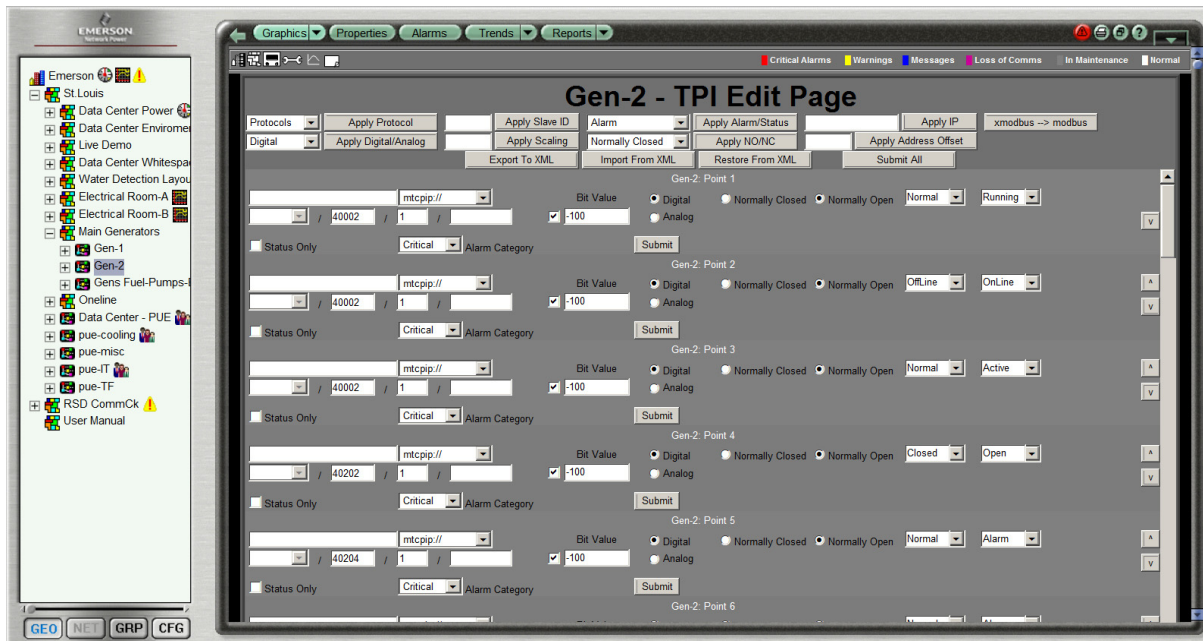
- Click on the Trend Graph icon to view a trend graph of the selected point, as in the example shown at right.
- See 9.0 - Viewing Trends for details.



### 5.4.8 Edit Page Icon

With a unit or data point selected in the left navigation tree:

- Click on the Edit Page icon to view or change the characteristics of the selected unit or point.
- Make changes as needed.
- When finished, click the **Submit** button for a single item (or click **Submit All** to save all changes). To cancel any changes, navigate to another page without clicking any Submit buttons.



### 5.4.9 Area Edit Page

With a site selected in the GEO tree:

- Click on the Area Edit Page icon to display an editable floor plan of the selected site. This permits moving units, renaming units and adding other custom area features.

**Note:** If any units have moved out of view, press and hold the Ctrl key and right-click, then choose **Clear Unit Positions** from the popup menu. Reposition units as needed

### 5.4.10 Pencil Icon (Available Only on Area Edit Page)

- When this icon appears in the shortcut toolbar, click to change the name of a unit or area.
- After making the change, click the **Save Changes** diskette icon described in the next section.

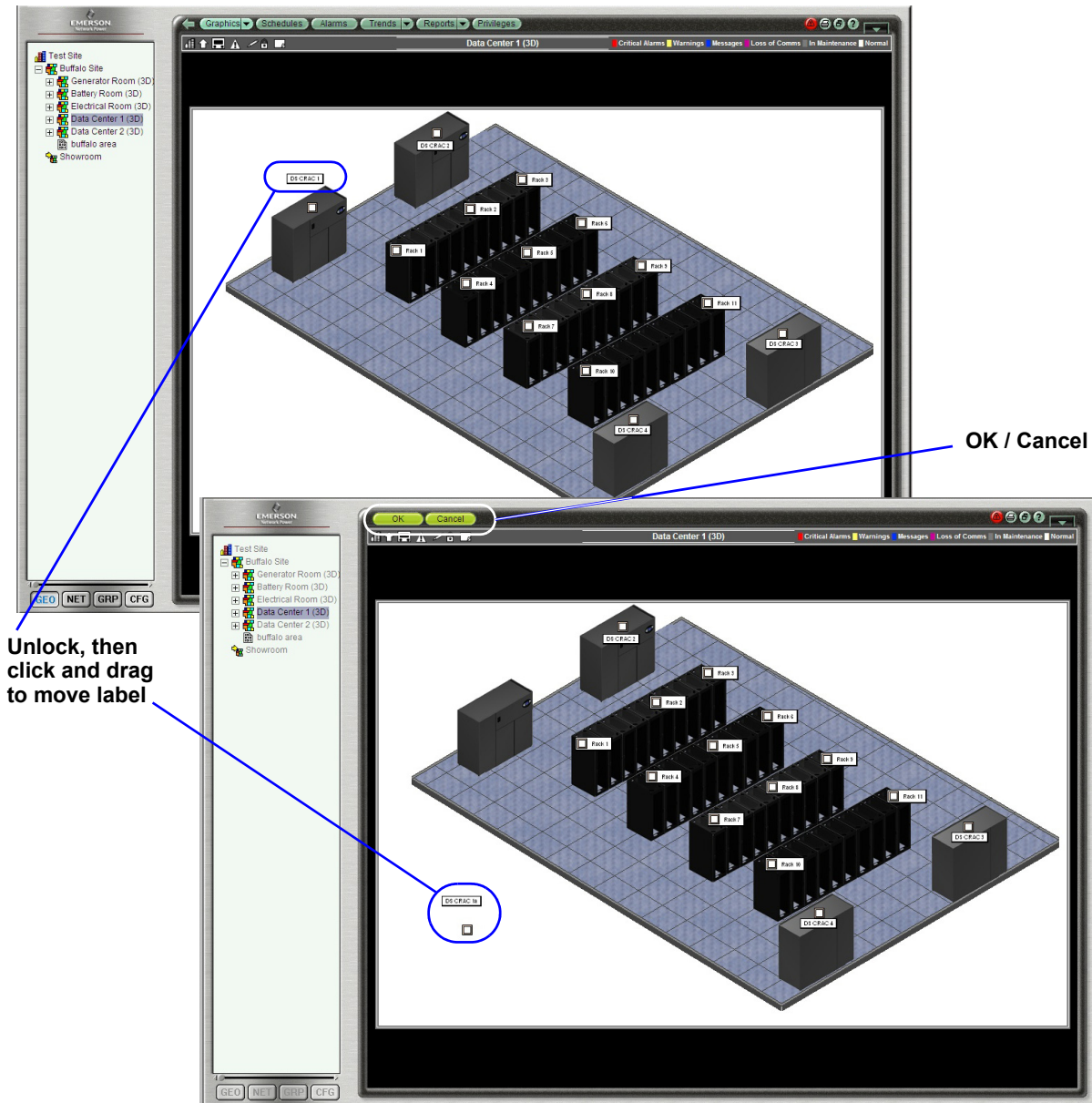
### 5.4.11 Save Changes Icon (Available Only on Area Edit Page)

- When this icon appears in the shortcut toolbar, click to save changes after using the **Pencil** icon to change unit or area names or using the **Unlock** icon to move units around on the floor plan.
- After clicking this **Save Changes** diskette icon, the **OK** and **Cancel** buttons appear at the top of the screen, as shown in the example in the next section.

### 5.4.12 Unlock / Lock Units Icons (Available Only on Area Edit Page)

To move a unit or its label on the floor plan:

- Click the **Unlock** icon in the shortcut toolbar.
- Click on the unit or its label and drag to the desired position.
- At the top of the window, click the **OK** button to save changes (or **Cancel** to clear any changes).
- Click the **Lock** icon in the shortcut toolbar to prevent users from moving the unit or its label on the floor plan.



Unlock, then click and drag to move label

## 5.5 Liebert SiteScan Web Features

Table 4 compares the features in versions of Liebert SiteScan.


**Table 4 Features available in Liebert SiteScan Web**

	SiteScan 2000/ SiteScan 2W	SiteScan Web v2	SiteScan Web v3	SiteScan Web v4	SiteScan Web v5
<b>System Feature</b>					
Operating System Compatibility	Windows 95 / 98 / ME	Windows NT	Windows 2000 / XP	Windows XP / 2003	Windows 2008 R2
32-Bit Application		✓	✓	✓	
64-Bit Application					✓
System Security			✓	✓	✓
Role Based Privileges			✓	✓	✓
Standard Point-and-Click Operation	✓	✓			
Enhanced Navigation			✓	✓	✓
Client Applications	✓				
Unlimited licensing		✓	✓	✓	✓
Client to Server Accessibility			✓	✓	✓
Based on Open Standards			✓	✓	✓
Alarm Management	✓	✓	✓	✓	✓
Reporting Functions		Formula One	✓	✓	✓
Time-Based Data Logging	✓	✓	✓	✓	✓
Enhanced Data Logging			✓	✓	✓
Data Graphing	✓	✓	✓	✓	✓
Hardware Base	General Specifications: <ul style="list-style-type: none"> <li>• 8-bit processors</li> <li>• 2MB of memory (max)</li> <li>• 19.2 kBaud (max speed)</li> </ul>		<ul style="list-style-type: none"> <li>• 32-bit, multi-thread processor</li> <li>• 2-16MB of memory</li> <li>• 156kBaud max speed</li> </ul>	Latest hardware: <b>Ethernet based</b> <ul style="list-style-type: none"> <li>• 32-bit, multi-thread processor</li> <li>• 2-16MB of memory</li> <li>• 156kBaud max speed</li> </ul>	
Hierarchical Servers			✓	✓	✓
Alarm-Pop Notification				✓	✓
Email Action Sends Attachments				✓	✓
Intelligent Alarm Filtering				✓	✓
Auto-Pilot				✓	✓
Maintenance Mode				✓	✓
New Alarm Severity Levels				✓	✓
Unit Bezel Enhancements				✓	✓
Mini Status Bezels				✓	✓
Administrative Floor plan and Graphic Changes				✓	✓
Energy Tracking Module				✓	✓
Secure VPN Gateway				✓	✓
Enhanced Status-at-a-Glance Summary Views					✓
User-Configurable Bezel Color Schemes					✓
Enhanced Floor Plan Management					✓
Trellis Integration					✓

## 6.0 GETTING STARTED WITH LIEBERT SITESCAN WEB

This section explains how to start the Liebert SiteScan Web application, log in and change your password. You should change the default password for security purposes.

### Saving Changes

You must save certain changes to Liebert SiteScan Web. Whenever you make a change that is not yet saved, the OK and Cancel buttons  appear at the top of the toolbar:

- Click on the **OK** button  to save your changes.
- or*
- Click on the **Cancel** button  to cancel your changes.

### Using Internet Explorer

Liebert SiteScan Web is designed to work in Microsoft® Internet Explorer. If you use a different browser, screens appear in Wireless Access Protocol (WAP) formats.

### 6.1 Start Liebert SiteScan Web

To begin a session:

- Click on the **Start** button, then on **Programs**, then on **Internet Explorer**.
- Type the address of the Liebert SiteScan Web server in the Address Bar and press the Enter key.

### 6.2 Log on

After connecting to the server, the login screen appears, as shown at right.

To log on:

- Enter the user name in the Name box.
- In the Password box, enter the password provided by Liebert Services. To change the password, see 11.1.1 - **Settings**.
- Click the **Log In** button.





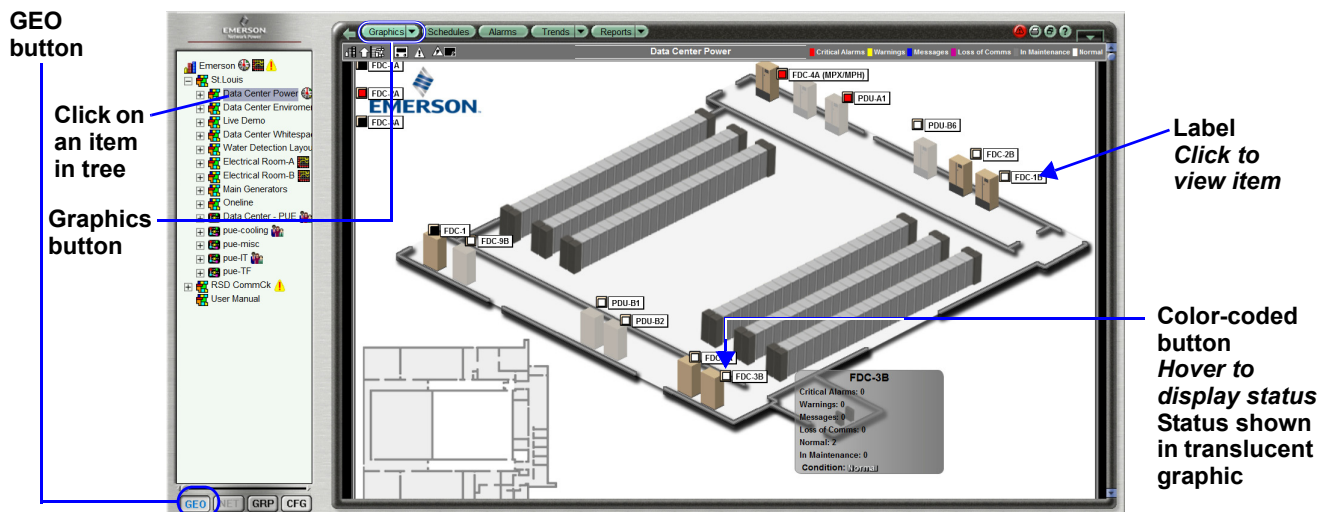
## 7.0 VIEWING STATUS

The **Graphics** button offers a quick look of the status of your entire system or any portion of it.

### 7.1 View Graphic Status

To view a graphic representation of your system:

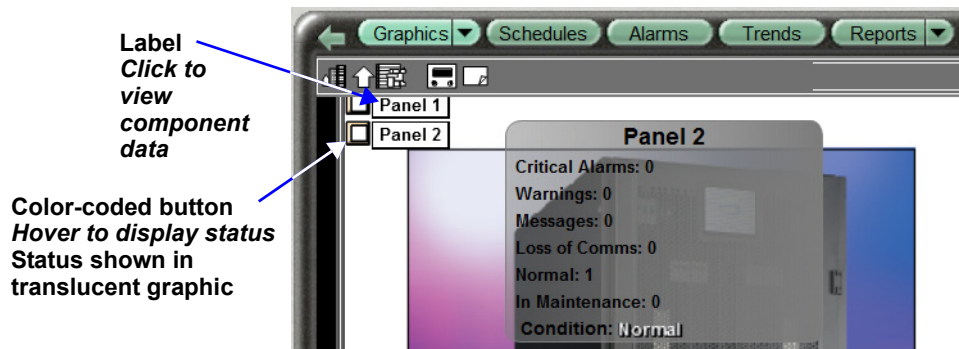
- Click the **GEO** button in the bottom left corner.
- Click on an item in the geographic tree at left—**Data Center Power** in the example below.
- Click the **Graphics** menu action button at the top. The example below shows a 3D floor plan.



- Each item in the floor plan has a clickable site icon with two parts:
  - A text label with the user-assigned name
  - A color-coded button indicate whether active alarms are present (red) or not (white). For alarm details, see **8.0 - Managing Alarms**.

Color	Indicates:
Red	A critical alarm is present
White	No alarms are present
Yellow	A warning is present
Blue	A message is present
Purple	Loss of communication
Gray	Maintenance Mode

- Hover over the color-coded button to display key information in a translucent popup box—the current status and the number of alarms, warnings and other information. This information is also available on a summary page for all components in the selected area (see **5.4.2 - Summary Bezel Shortcut**).
- Click on any color-coded button to go to a view of that item. Color-coded buttons on the new view shows information for item components; hover text reveals the component's status.



## 7.2 View Unit Data

- To view the status of a unit, click on the device in the tree at left to display detailed information, as in this example of a Liebert Precision Cooling unit.

The screenshot displays the Liebert SiteScan Web interface. On the left is a tree view showing the site hierarchy: Test Site, Buffalo Site, Generator Room (3D), Battery Room (3D), Electrical Room (3D), Data Center 1 (3D), and various Racks (Rack 1-11). Under Data Center 1, several DS CRAC units are listed. A blue arrow points to 'DS CRAC 1' with the annotation 'Select device in tree'. The main display area shows 'Temperature' and 'Humidity' sections. The Temperature section has a setpoint of 70°F, a current reading of 78°F, and alarm setpoints of 79°F (High) and 64°F (Low). The Humidity section has a setpoint of 50%, a current reading of 51%, and alarm setpoints of 65% (High) and 35% (Low). Below these sections are icons for On, Heating, Cooling (85%), Humidifying, De-Humidifying, Free Cooling, and Maintenance Timer (01:00). At the bottom, there are 'Critical', 'Warnings', and 'Messages' tabs. A blue arrow points to these tabs with the annotation 'ALARMS tabs Critical Warnings Messages'. Another blue arrow points to the top right corner of the main display area with the annotation 'DEVICE STATUS AT A GLANCE'. The unit name 'Liebert - DS CRAC 1' is displayed at the bottom of the main area.

- In the Alarms section at the bottom of the window, click on any tab to display descriptive text for alarms that have been detected:
  - Critical** - text description of critical alarms detected
  - Warnings** - text description of warnings detected
  - Messages** - text description of alarm messages sent

## 7.3 View an Area Graphic or Summary Pages

Two types of graphics are available in Liebert SiteScan Web:

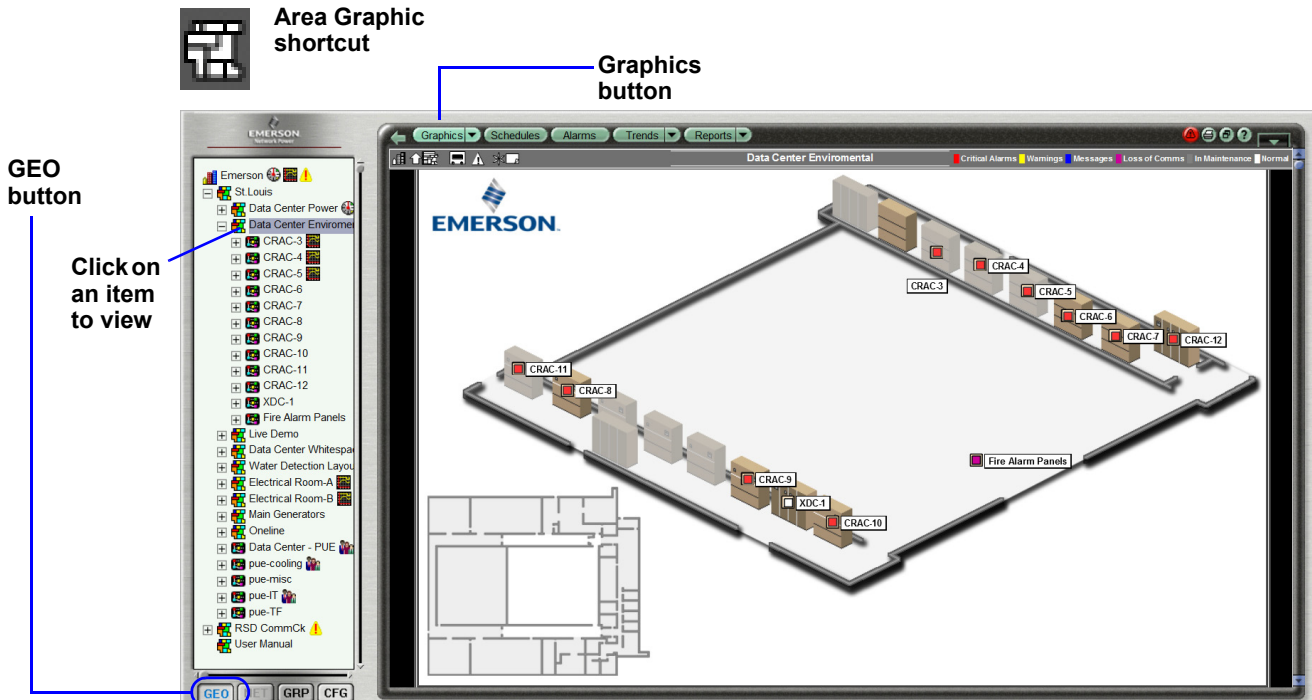
- Area Graphic** - a drawing showing device placement (purchased separately)
- Summary Pages** - a text listing with status of all components of a selected item (standard).

Available summary pages are:

- Unit\_summary
- Air\_summary
- Power\_summary
- Ups\_summary and
- Staticswitch\_summary

### 7.3.1 View an Area Graphic

- Click the **GEO** button at bottom left, then click on an item in the tree at left.
- Click the **Area Graphic** shortcut or click the **Graphics** button.

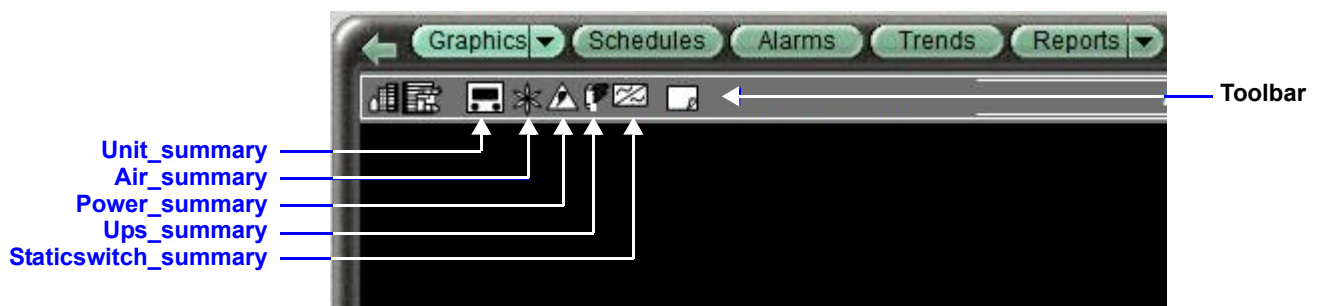
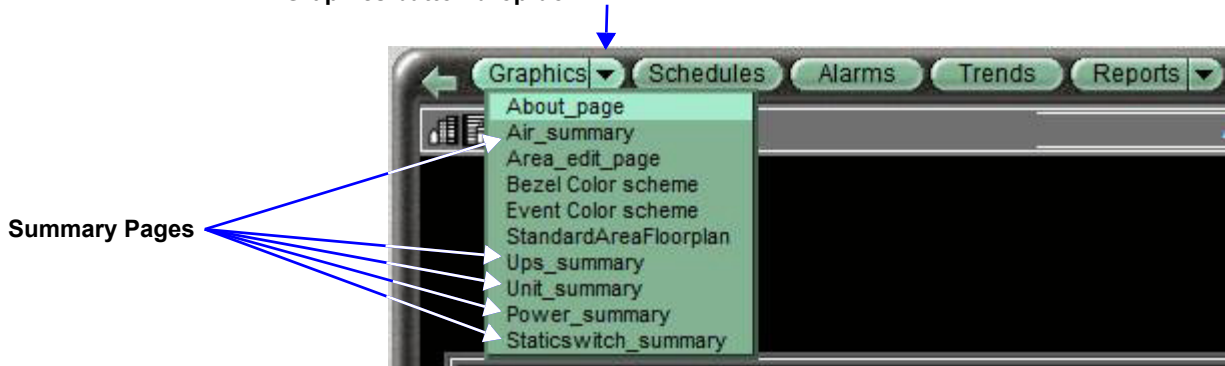


### 7.3.2 View a Summary Page

Summary pages can be viewed by these methods:

- Click the **GEO** button at the bottom left of the Web page, then click on an item in the tree.
- Click the appropriate shortcut on the Liebert SiteScan Web toolbar.
- OR
- Click the **Graphics** button drop-down arrow and choose the desired summary page.

Graphics button drop-down



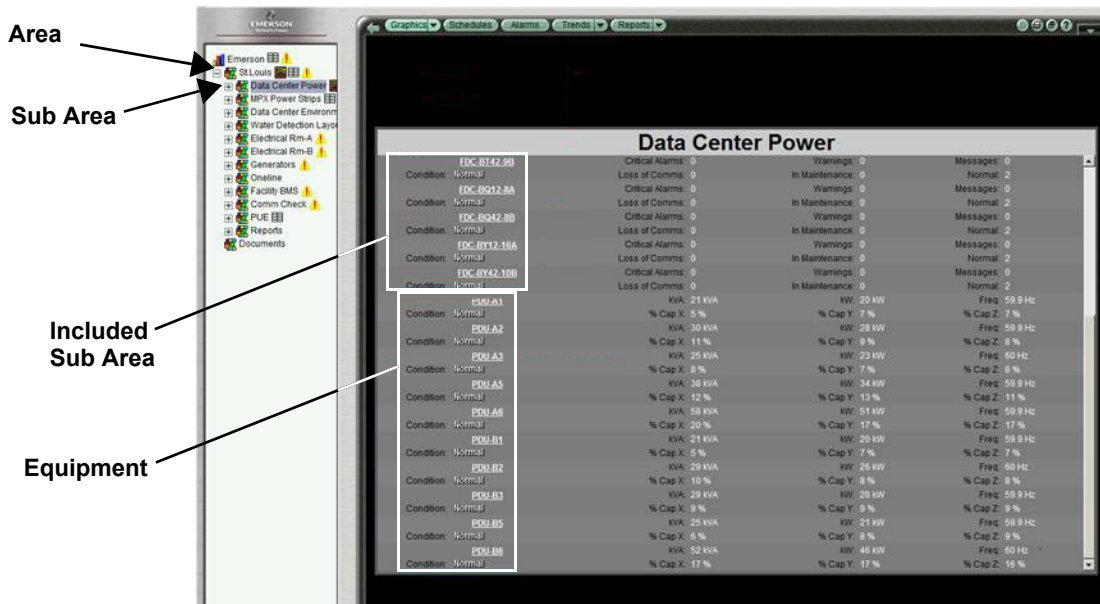
## Unit Summary

The Unit Summary will present different views, depending on the level selected in the Geo tree.

The example below shows a summary of an installation's top level of the Geo tree. It lists all the areas it includes with alarm information for each area.



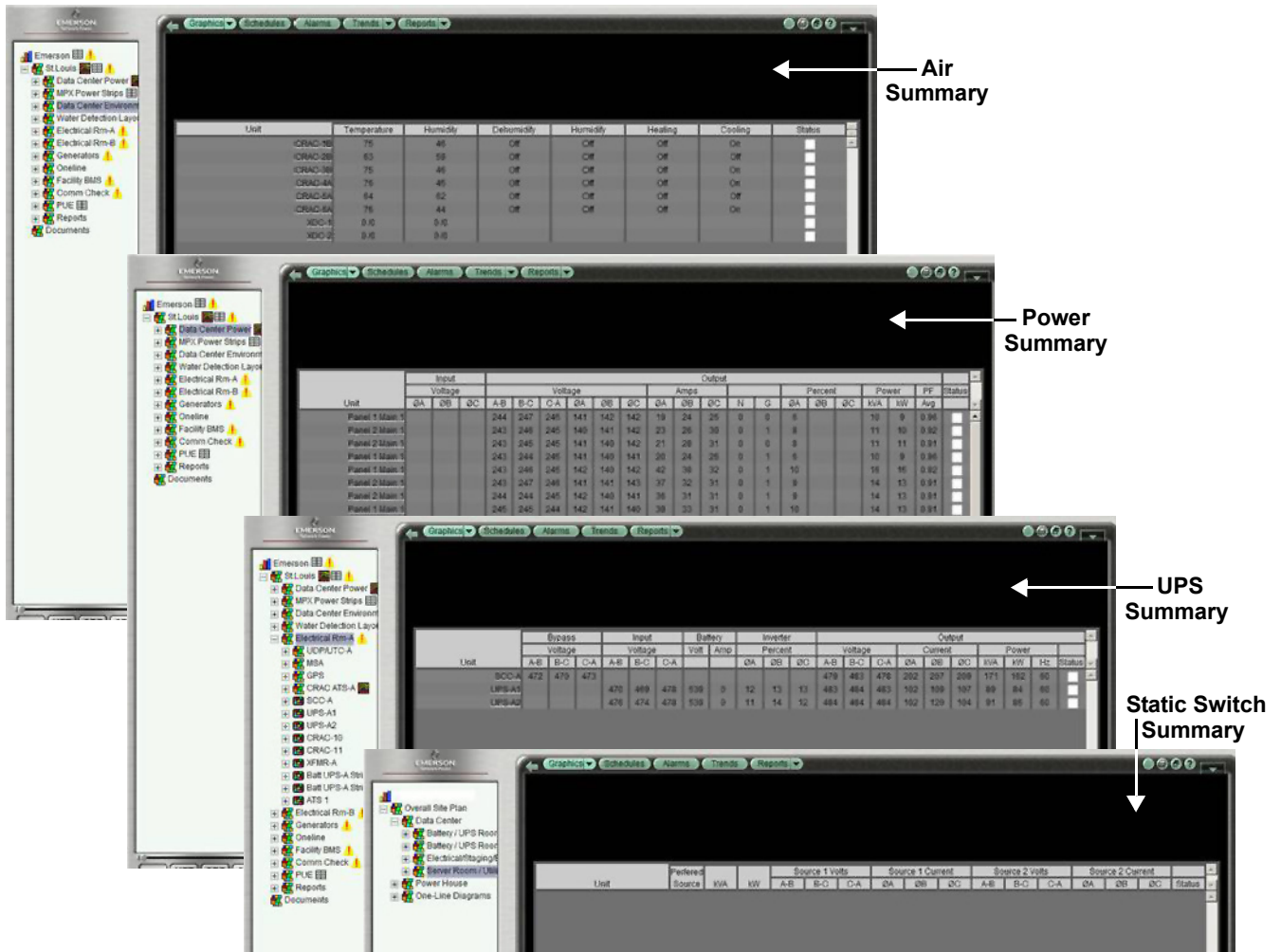
An area's Unit Summary may have multiple types of units. The Unit Summary page will list the monitored equipment in that area (cooling units, power equipment, UPS's and static switches). Summary pages are also available for any sub areas.



### 7.3.3 Unit-Specific Summary Pages

Liebert SiteScan Web displays summary pages for types of units. The Precision Cooling units will be grouped and shown on the Air Summary Page. Similarly, all Liebert units will be shown on their associated summary pages.

#### Summary Pages—Air, Power, UPS, Staticswitch



## 8.0 MANAGING ALARMS

The **Alarms** button offers quick access to alarm-related features:

- View, acknowledge and delete alarms
- Set up actions that Liebert SiteScan Web performs when an alarm is received
- Customize alarms by changing the message
- Generate alarm reports to view, print or save to a file

### 8.1 Alarms Window Overview

- Click the **GEO** button in the bottom left corner.
- Click on an item in the tree at left—**Emerson** in the example below.
- Click the **Alarms** menu action button at the top.
- The Alarms window has several tabs across the top; the example below shows the **View** tab.



- The alarm list displays all alarms for the location selected in the tree at left, including all items below it in the tree.
- For details on viewing alarms, see **8.2.1 - View the Alarm List**.
- For instructions on responding to alarms, see **8.2.2 - Acknowledge and Delete Alarms**.

## 8.2 View Alarms

The **View** tab allows you to view alarms and perform functions such as acknowledging alarms.

To access the View functions:

- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Alarms** button, then the **View** tab.

The screenshot shows the Emerson Alarms View interface. On the left is the **Alarm Categories list** with a tree view. The main area displays a table of alarms with columns for **Occurred**, **To Do**, and **Details**. A **Status table** at the top right shows counts for **Need Rtn**, **Need Ack**, and **Closed**. At the bottom are **Alarm Action buttons** including Acknowledge, Force Normal, Delete, and Additional Actions. **Navigation buttons** are located on the right side of the interface.

Need Rtn	Need Ack	Closed
Here	694	122
Total	694	122

Occurred	To Do	Details
12/14/2012 01:28:09PM	Acknowledge	Warning is in an alarm state of 'On'.
12/14/2012 01:28:09PM	Acknowledge	Warning at Data Center Power / FDC-3B / Panel 1 / Panel 1 Breaker 3
12/14/2012 01:28:09PM	Acknowledge	Tripped is in alarm.
12/14/2012 01:28:10PM	Acknowledge	Tripped at Data Center Power / FDC-3B / Panel 1 / Panel 1 Breaker 15
12/14/2012 01:28:10PM	Acknowledge	Notifications Disabled is in alarm.
12/14/2012 01:28:10PM	Acknowledge	Notifications Disabled at Data Center Power / FDC-3B / Panel 1 / Panel 1 Breaker 7
12/14/2012 01:28:10PM	Acknowledge	Critical is in an alarm state of 'On'.
12/14/2012 01:28:10PM	Acknowledge	Critical at Data Center Power / FDC-3B / Panel 2 / Panel 2 Breaker 7
12/14/2012 01:28:10PM	Acknowledge	Unit In Maintenance Mode is in alarm.
12/14/2012 01:28:10PM	Acknowledge	Unit In Maintenance Mode at Data Center Power / FDC-3B / Panel 2 / Panel 2 Breaker 26
12/14/2012 01:28:10PM	Acknowledge	Tripped is in alarm.
12/14/2012 01:28:10PM	Acknowledge	Tripped at Data Center Power / FDC-3B / Panel 2 / Panel 2 Breaker 26
12/14/2012 01:28:10PM	Acknowledge	Notifications Disabled is in alarm.
12/14/2012 01:28:10PM	Acknowledge	Notifications Disabled at Data Center Power / FDC-3B / Panel 2 / Panel 2 Breaker 26
12/14/2012 01:28:10PM	Acknowledge	Message is in an alarm state of 'On'.
12/14/2012 01:28:10PM	Acknowledge	Message at St. Louis / Online / Side B Subfeed / PDU-B6
12/14/2012 01:28:10PM	Acknowledge	Maintenance Mode Time Expired indicates an alarm condition.
12/14/2012 01:28:10PM	Acknowledge	Maintenance Mode Time Expired at Data Center Power / FDC-3B / Panel 2 / Panel 2 Breaker 26
12/14/2012 01:28:34PM	Acknowledge	Common Alarm is in an alarm state of 'On'.
12/14/2012 01:37:09PM	Acknowledge	Common Alarm at FDC-4A (MPX/MPH) / Rack 1 / MPX 1 / MPX 1 PEM
12/15/2012 02:23:23PM	Acknowledge	System Breaker(s) Close Failure - alarm
		System Breaker(s) Close Failure at Emerson / St. Louis / Electrical Room-A / UI...
		Error #1021: Operator LibertRep is currently locked out of SSWEB. Contact your...
		at Emerson

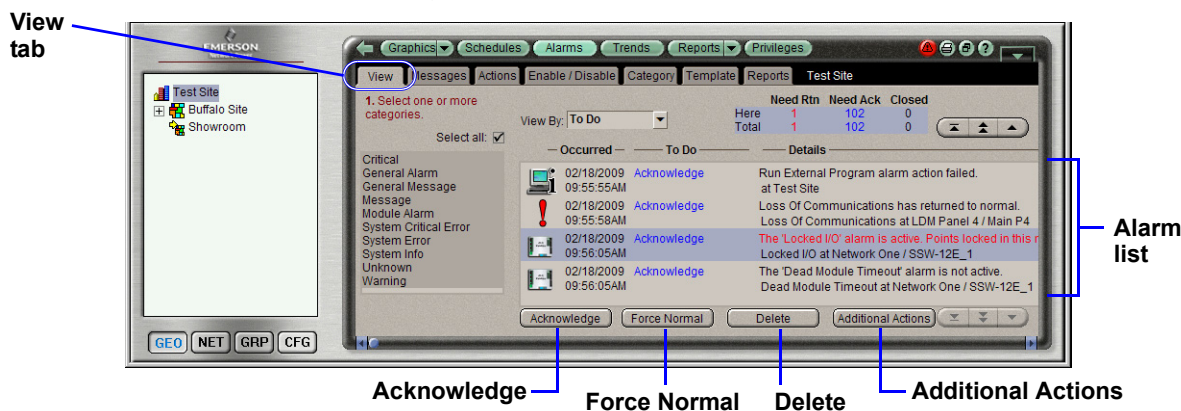
### 8.2.1 View the Alarm List

- Double-click on an alarm in the list to reveal or hide more details about the alarm. The alarm list displays three columns of information about each alarm:
  - **Occurred** The date and time the alarm was generated.
  - **To Do**
    - **Acknowledge** indicates the alarm needs to be acknowledged.
    - **Waiting for Normal** indicates the alarm requires a return-to-normal.
    - A check mark (✓) indicates the alarm is closed.
  - **Alarm Report** Displays the alarm message—a text description of what occurred and where.
- Use the navigation buttons at right to scroll through the list one alarm at a time, a page at a time or to the beginning or end of the list.
- To view all types of alarms or choose from the Alarm Categories list:
  - To display all alarms, click to place a check mark (✓) in the Select All box.
  - To display only selected alarms, click on an item in the Alarm Categories list. (Control-click to select additional items.)
- To sort or filter the list, click on the down arrow to the right of the View By box, then select an option from the drop-down menu:
  - **Date** Displays all alarms sorted by the time each alarm was generated, from newest to oldest.
  - **To Do** Displays only alarms requiring one or more actions to be done before they can be closed.
  - **Incident Group** Groups all alarms related to a particular incident with a bracket to the left of the icons—for example, an alarm and its subsequent return-to-normal event form an incident group.
- The status table to the right of the View By box offers a quick glance at the current state of alarms at the location selected in the tree (**Here**) and in the entire system (**Total**):
  - **Need Rtn** Number of alarms that need a return-to-normal
  - **Need Ack** Number of alarms that need to be acknowledged
  - **Closed** Number of alarms that are closed

### 8.2.2 Acknowledge and Delete Alarms

To access the alarm action functions:

- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Alarms** button, then the **View** tab.



#### Acknowledge a Single Alarm

- Select an alarm that shows *Acknowledge* in the To Do column.
- Click the **Acknowledge** button below the list. A check mark (✓) appears in the To Do column.

#### Force a Return-To-Normal State

If an alarm is not followed by a return-to-normal event, you can force a Return-To-Normal state:

- Select an alarm that shows *Waiting for normal* in the To Do column.
- Click the **Force Normal** button below the list. A check mark (✓) appears in the To Do column.



## Delete a Single Alarm

- Select the alarm you want to delete from the list.
- Click the **Delete** button below the list. The alarm disappears from the list.

## Additional Actions: Acknowledge/Delete Multiple Alarms, Search for an Alarm

The **Additional Actions** button allows you to acknowledge or delete multiple alarms all at once.

- Unless you want to acknowledge or delete all alarms, select the appropriate alarms—for example, click on View By **To Do**, then highlight alarms that show *Acknowledge* in the To Do column.
- Click the **Additional Actions** button below the list. The Additional Alarm Actions window opens, as shown at right.

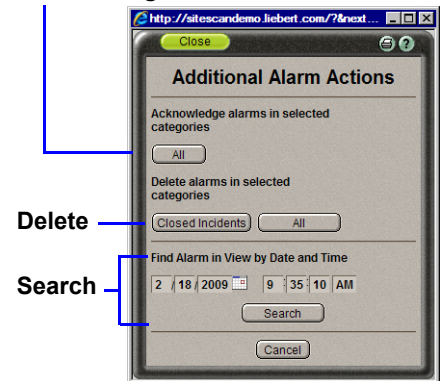
### Acknowledge Multiple Alarms

- To acknowledge multiple alarms, click the **All** button under Acknowledge Alarms in Selected Categories.

### Delete Multiple Alarms

- To delete multiple alarms, click the appropriate button under Delete Alarms in Selected Categories:
  - **Closed Incidents** Removes incident groups of related alarms in which all alarms have been closed.
  - **All** Removes all alarms at the selected location in the tree.

### Acknowledge selected alarms



### Search for an Alarm by Time of Occurrence

- In this window, you may also search for an alarm generated on a particular date and time. Enter the desired date and time, then click the **Search** button. The Events screen will display the listing of alarm events as defined by the search criteria.

### 8.3 Messages

An alarm message is the text displayed in the Alarms **View** tab window and in alarm reports. An alarm message may consist of three parts:

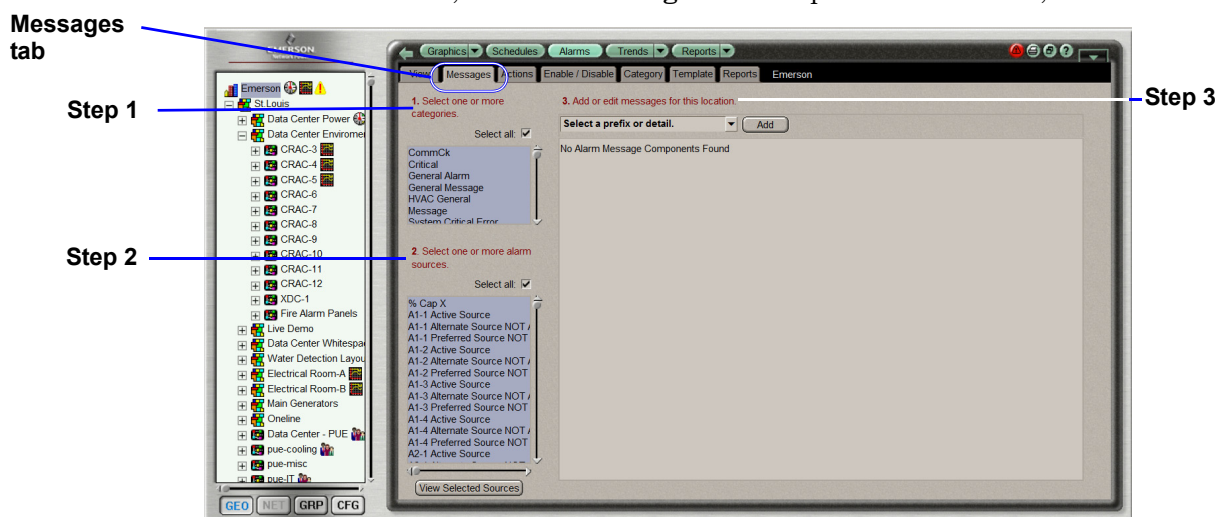
Prefix (optional)	Text	Details (optional)
Text at beginning of message	The alarm or return-to-normal	Text at end of message

This section describes how to add, change or delete the Prefix and Details portions of alarm messages.

Changes apply to the location in the tree where they are added and to all its subordinate members of the tree. For example, if you add Details at the system level to show the Acknowledge Time for alarms in a certain category, that will appear in all alarm message for any element in the system.

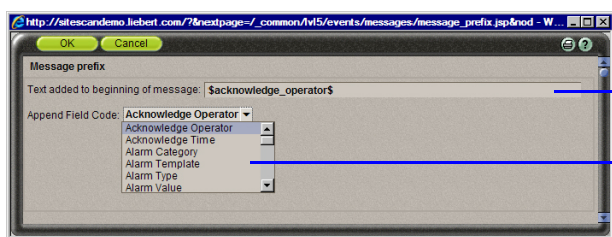
To access the Message functions:

- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Alarms** button, then the **Messages** tab. Steps are listed in red, as shown below.

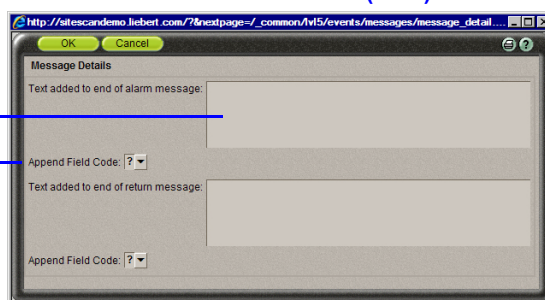


1. Select the categories that contain the alarm sources with messages you want to edit.
2. Select the alarm sources for the selected categories.  
Note: In **Steps 1** and **2**, control-click to select multiple items, or check the **Select All** box.
3. Click on the down arrow and select an option from the drop-down menu: **Add new prefix to beginning of message** or **Add new details to end of message**.

#### MESSAGE PREFIX



#### MESSAGE DETAILS (END)



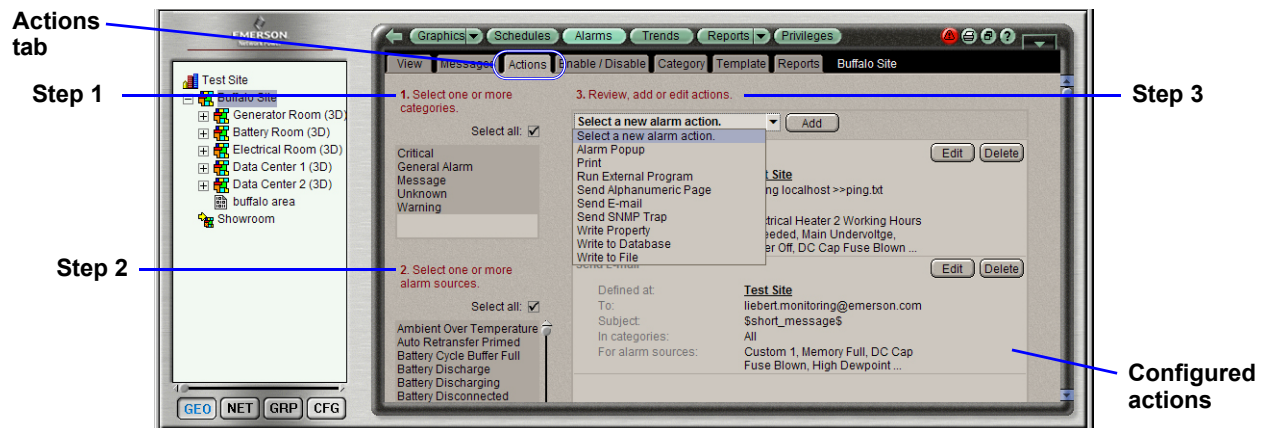
4. Click the **Add** button to open the appropriate window. The Message Details window, shown above right, allows you to make separate entries for alarms and return-to-normal events.
  - Type the text you want to add to the message in the text boxes.
  - To add a field code to a message, click the Append Field Code down arrow and select an option from the drop-down menu (see **Table 5** for definitions).
  - Click the **OK** button to save your changes (or click **Cancel** to close without saving).
5. The new Prefix or Details appears in the **Messages** tab window. Click the **Edit** button to make additional changes. Click **Delete** to remove the item.

## 8.4 Actions

Certain Liebert SiteScan Web features may be set up to protect valuable equipment, data and other assets by responding automatically to alarms in devices affected by such events as power failures, overheating and mechanical failures.

For example, if a cooling unit's performance becomes impaired, Liebert SiteScan Web may be set up to send e-mail alerts to various personnel, record data pertaining to the event and append it to a particular file and launch a command or batch file that can execute user-customized scripts.

- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Alarms** button, then the **Actions** tab. Steps are listed in red, as shown below.



1. Select the categories that contain the alarm sources to be set up.
2. Select the alarm sources for the selected categories.  
Note: In **Steps 1** and **2**, control-click to select multiple items, or check the **Select All** box.
3. To choose an action, click on the down arrow and select an option from the drop-down menu.
4. Click the **Add** button.
5. Proceed to the appropriate section to continue setting up the action.
  - **8.4.1 - Alarm Popup Action**
  - **8.4.2 - Print Action**
  - **8.4.3 - Run External Program Action**
  - **8.4.4 - Send Alphanumeric Page Action**
  - **8.4.5 - Send E-Mail Action**
  - **8.4.6 - Send SNMP Trap Action**
  - **8.4.7 - Write Property Action**
  - **8.4.8 - Write to Database Action**
  - **8.4.9 - Write to File Action**

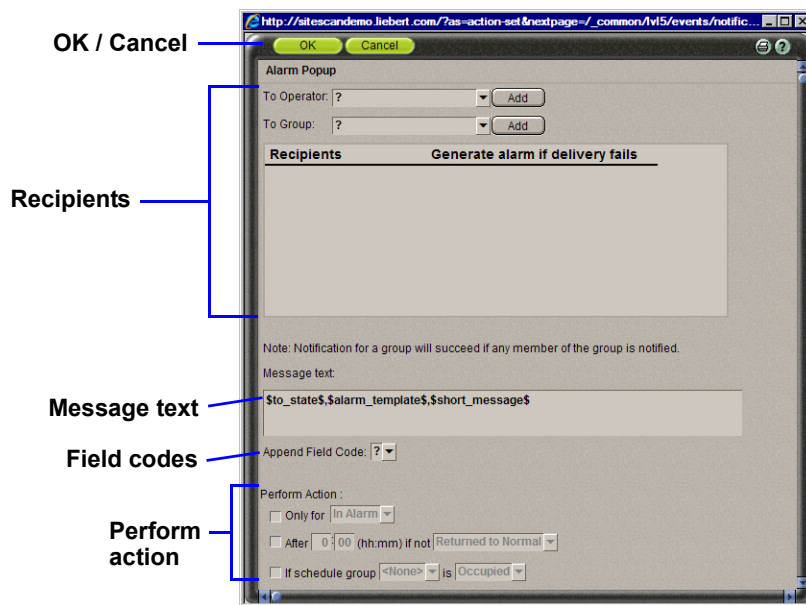
### 8.4.1 Alarm Popup Action

The Alarm Popup action sends an alert to designated recipients' computers when specified alarms occur. The alert pops up in a dialog box on each recipient's computer when an alarm occurs.

A recipient may be any networked computer running the Liebert SiteScan Web Alarm Popup application. Individuals and groups may be selected from a list set up via the CFG functions. For details on editing these lists, see **11.3.1 - Set Up Operators** and **11.3.2 - Create Operator Groups**.

Open the Alarm Popup window, shown below, to set up this action. To do this:

- Click the **GEO** button, then click on an item in the tree at left. When configured, the action will apply to the designated item in the tree as well as its subordinate items.
- Click the **Alarms** button, then the **Actions** tab. Perform **Steps 1-3** (see **8.4 - Actions**):
  - Select the alarm categories (**Step 1**) and alarm sources (**Step 2**) you want linked this action.
  - Select **Alarm Popup** from the drop-down menu (**Step 3**), then click **Add**.



- Specify the recipients who should receive notifications by clicking on the appropriate down arrow and selecting a name from the drop-down list:
  - Select an individual from the **To Operator** list, then click the **Add** button.
  - Select a group of operators from the **To Group** list, then click the **Add** button.
- Once added, the selected names appear in the Recipients list with a check box in the **Generate Alarm if Delivery Fails** column. Click to place a check mark (✓) to send a System Info alarm to the Liebert SiteScan Web server if the recipient is not running the Alarm Popup application when an alert is sent.
- In the Message Text box, enter the message as you want it to appear in the popup window, using the appropriate punctuation, including spaces and returns to separate lines of text.
- You can add dynamic alarm data to the text by selecting field codes from the Append Field Code list (see **Table 5** for definitions). To do this:
  - Place the cursor in the Message Text box where you want the data to appear.
  - Click on the Append Field Code down arrow, then select an option from the drop-down list.
- By default, the action will be performed both when an alarm is detected and after the device returns to normal. In the Perform Action section, you may specify when to run the action:
  - Only when the device is **In Alarm** or after **Return to Normal**.
  - After a specified time if not **Returned to Normal** or not **Acknowledged**.\*
  - If a group with a specified schedule is **Occupied** (e.g., during work hours) or **Unoccupied**.\*

\* Available only with Advanced Alarming
- When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

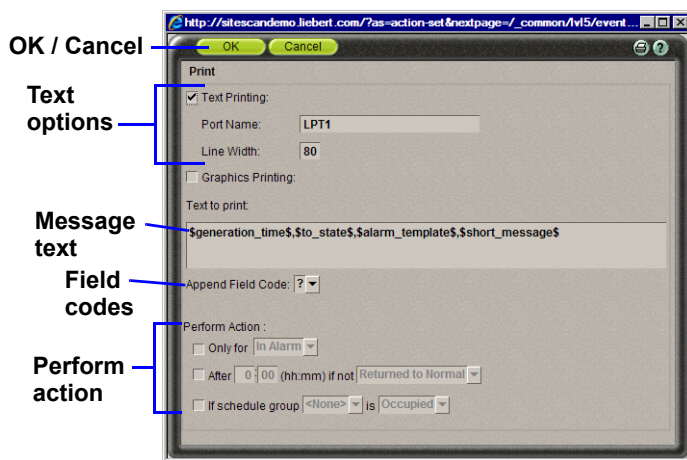
Once the action is set up, it appears in the **Actions** tab window. To remove it, click the **Delete** button; to make changes, click the **Edit** button.

### 8.4.2 Print Action

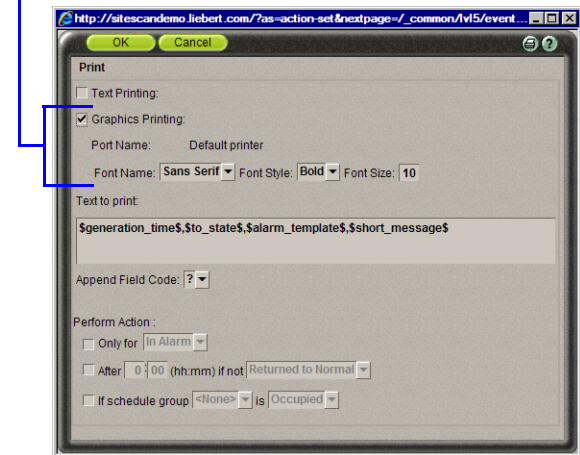
The Print action sends an alert to a designated printer when a specified alarm occurs. The printed message may be sent to any printer connected to the server or a workstation on the network.

Open the Print window, shown below, to set up this action. To do this:

- Click the **GEO** button, then click on an item in the tree at left. When configured, the action will apply to the designated item in the tree as well as to its subordinate items.
- Click the **Alarms** button, then the **Actions** tab. Perform **Steps 1-3** (see 8.4 - Actions):
  - Select the alarm categories (**Step 1**) and alarm sources (**Step 2**) you want linked this action.
  - Select **Print** from the drop-down menu (**Step 3**), then click **Add**.



Graphics options



- Click to place a check mark (✓) to choose a printing method based on the printer type:
  - Select **Text Printing** when using a dot matrix printer; this prints multiple alarms per page. Enter the designated name of the printer in the Printer Name box—for example, **LPT1**. Enter the maximum line width in the Line Width box.
  - Select **Graphics Printing** when using a laser printer; this prints one alarm per page. Click on the Font Name arrow and select the font: **Arial**, **Courier**, **Sans Serif** or **Times New Roman**. Click on the Font Style arrow and select a style: **Plain**, **Bold** or **Italics**. Enter the point size in the Font Size box—for example, **10** for 10-point type.
- In the Text to Print box, enter the message as you want it to appear, using the appropriate punctuation, including spaces and returns to separate lines of text.
- You can add dynamic alarm data to the text by selecting field codes from the Append Field Code list (see **Table 5** for definitions). To do this:
  - Place the cursor in the Text to Print box where you want the data to appear.
  - Click on the Append Field Code down arrow, then select an option from the drop-down list.
- By default, the action will be performed both when an alarm is detected and after the device returns to normal. In the Perform Action section, you may specify when to run the action:
  - Only when the device is **In Alarm** or after **Return to Normal**.
  - After a specified time if not **Returned to Normal** or not **Acknowledged**.\*
  - If a group with a specified schedule is **Occupied** (e.g., during work hours) or **Unoccupied**.\*

\* Available only with Advanced Alarming
- When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

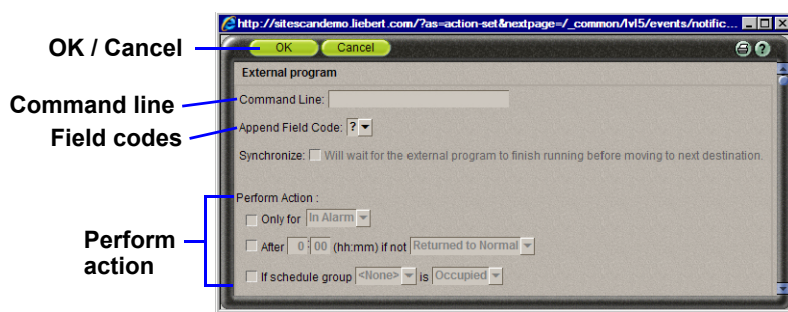
Once the action is set up, it appears in the **Actions** tab window. You may click the **Edit** button to make changes or the **Delete** button to remove it.

### 8.4.3 Run External Program Action

The Run External Program alarm action launches a script that starts a program or batch file on the server when an alarm is received.

Open the External Program window, shown below, to set up this action. To do this:

- Click the **GEO** button, then click on an item in the tree at left. When configured, the action will apply to the designated item in the tree as well as its subordinate items.
- Click the **Alarms** button, then the **Actions** tab. Perform **Steps 1-3** (see **8.4 - Actions**):
  - Select the alarm categories (**Step 1**) and alarm sources (**Step 2**) you want linked this action.
  - Select **Run External Program** from the drop-down menu (**Step 3**), then click **Add**.



- Enter the path of the executable file to be run followed by the path of the output file. For example:
  - c:\windows\notepad.exe
  - c:\SiteScan Web\output1.txt
 In the example, the program **Notepad** will be opened and a text file named **output1.txt** will be created in the **SiteScan Web** program folder on the server's **C: drive**
- Append Field Codes to the command line by choosing from the drop down list (see **Table 5** for definitions). More than one field code may be chosen. For example:
  - c:\reports\run\_report.bat \$Generation\_time\$\$To\_State\$
 This starts a batch file on the server and uses the alarm's **generation time** and **state** as values.
- Placing a check mark (✓) in the **Synchronize** box forces a delay until the external program has finished running before initiating the next **Run External Program** alarm action.
- By default, the action will be performed both when an alarm is detected and after the device returns to normal. In the Perform Action section, you may specify when to run the action:
  - Only when the device is **In Alarm** or after **Return to Normal**.
  - After a specified time if not **Returned to Normal** or not **Acknowledged**.\*
  - If a group with a specified schedule is **Occupied** (e.g., during work hours) or **Unoccupied**.\*
 \* Available only with Advanced Alarming
- When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

Once the action is set up, it appears in the **Actions** tab window. You may click the **Edit** button to make changes or the **Delete** button to remove it.

### 8.4.4 Send Alphanumeric Page Action

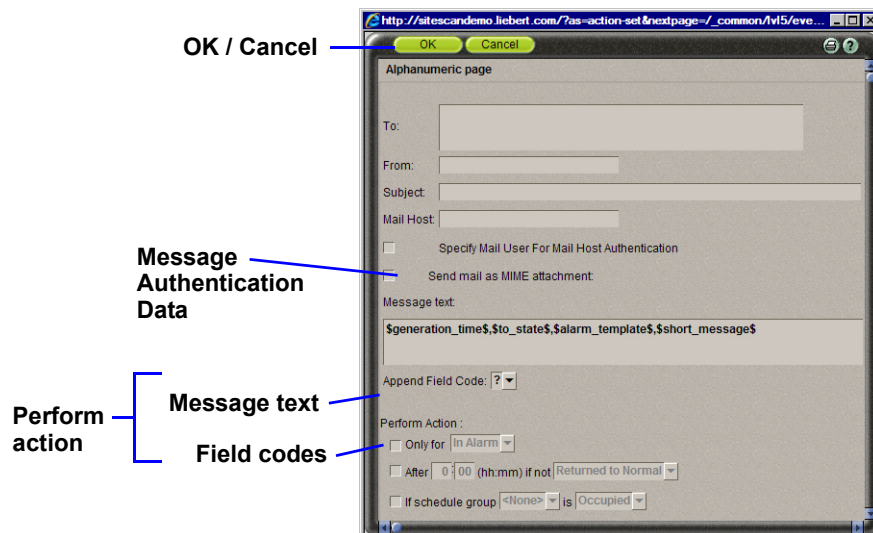
The Send Alphanumeric Page alarm action sends a page to one or more alphanumeric pagers or sends text messages to cell phones. The recipient's pager or phone must be able to accept e-mail.

Do not assign the Alphanumeric Page alarm action to frequently occurring alarms if you are using a stand-alone workstation. Sending pages for a frequently occurring alarm may dramatically slow down your system and cause problems with your mail server.

If the page will be sent over the Internet from a workstation that is not directly connected to the Internet, the workstation must first be configured to connect to the Internet automatically (see **Set Up a Dial-Up Networking Connection on page 34**).

Open the Alphanumeric Page window, shown below, to set up this action. To do this:

- Click the **GEO** button, then click on an item in the tree at left. When configured, the action will apply to the designated item in the tree as well as its subordinate items.
- Click the **Alarms** button, then the **Actions** tab. Perform **Steps 1-3** (see **8.4 - Actions**):
  - Select the alarm categories (**Step 1**) and alarm sources (**Step 2**) you want linked this action.
  - Select **Send Alphanumeric Page** from the drop-down menu (**Step 3**), then click **Add**.



- In the **To** box, enter the service provider's phone number in this format: 1 800-555-1212. Do not use parentheses around the area code. More than one recipient may be specified.
- Enter a valid address, if required by your mail server, in the **From** box.
- Enter a subject of the notification in the **Subject** box.
- Enter your Simple Mail Transfer Protocol in the **Mail Host** box. This can be either an IP address or a system name, such as *mail.mycompany.com*.
- If your mail server requires a user name and password, put a check mark (✓) in the **Specify Mail User** box. This opens the **Mail User** and **Password** boxes to accept the information.
- Put a check mark (✓) in the **Send mail as MIME attachment** box if your mail server allows only MIME attachments.
- Compose a message to be sent in the **Message Text** box, using punctuation, spaces and returns to format the text.
- Add live data to the message by selecting field codes from the **Append Field Code** list (see **Table 5** for definitions).
- By default, the action will be performed both when an alarm is detected and after the device returns to normal. In the Perform Action section, you may specify when to run the action:
  - Only when the device is **In Alarm** or after **Return to Normal**.
  - After a specified time if not **Returned to Normal** or not **Acknowledged**.\*
  - If a group with a specified schedule is **Occupied** (e.g., during work hours) or **Unoccupied**.\*

\* Available only with Advanced Alarming
- When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

Once the action is set up, it appears in the **Actions** tab window. You may click the **Edit** button to make changes or the **Delete** button to remove it.

## Set Up a Dial-Up Networking Connection

A dial-up networking connection must be set up if the page will be sent over the Internet from a workstation that is not directly connected to the Internet. This enables SiteScan Web to dial out to send an e-mail or alphanumeric page. After creating and executing an alarm action, the modem should dial automatically, then hang up after a minute of inactivity.

- Set up your server and modem to dial the default connection to your Internet Service Provider. See your server and modem documentation.
- Connect to the Internet and enter your Internet Service Provider's name and phone number, then your user name and password. Your modem must be detected before you can configure your Internet account connection.
- Type the following line at the end of the **system.properties** file in your system directory:  
*repactions.connection.name=<name of connection>*

### 8.4.5 Send E-Mail Action

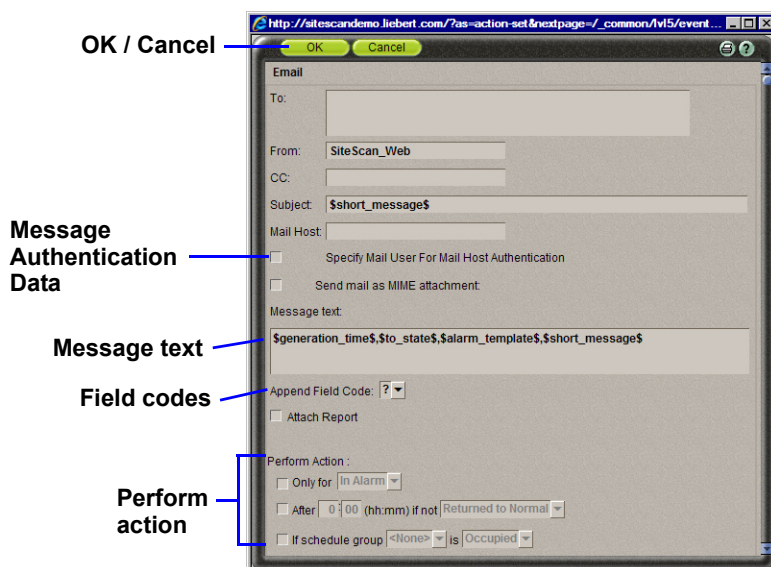
Use the Send E-Mail action to send customized e-mail messages to selected recipients when an alarm occurs.

Do not assign the Send E-Mail alarm action to frequently occurring alarms if you are using a stand-alone workstation. Sending e-mails for a frequently occurring alarm may dramatically slow down your system and cause problems with your mail server.

If the e-mail will be sent from a workstation that is not directly connected to the Internet, the workstation must first be configured to connect to the Internet automatically (see **Set Up a Dial-Up Networking Connection on page 34**).

Open the Email window, shown below, to set up this action. To do this:

- Click the **GEO** button, then click on an item in the tree at left. When configured, the action will apply to the designated item in the tree as well as its subordinate items.
- Click the **Alarms** button, then the **Actions** tab. Perform **Steps 1-3** (see **8.4 - Actions**):
  - Select the alarm categories (**Step 1**) and alarm sources (**Step 2**) you want linked this action.
  - Select **Send E-Mail** from the drop-down menu (**Step 3**), then click **Add**.



- In the **To** box, enter the recipient's e-mail address. More than one recipient may be specified.
- Enter a valid address, if required by your mail server, in the **From** box.
- Enter a subject for the e-mail notification in the **Subject** box.
- Enter your Simple Mail Transfer Protocol in the **Mail Host** box. This can be either an IP address or a system name, such as mail.mycompany.com.
- If your mail server requires a user name and password, put a check mark (✓) in the **Specify Mail User** box. This opens the **Mail User** and **Password** boxes to accept the information.



- Put a check mark (✓) in the **Send mail as MIME attachment** box if your mail server allows only MIME attachments.
- Compose a message to be sent in the **Message Text** box, using punctuation, spaces and returns to format the text.
- Add live data to the message by selecting field codes from the **Append Field Code** list (see **Table 5** for definitions).
- By default, the action will be performed both when an alarm is detected and after the device returns to normal. In the Perform Action section, you may specify when to run the action:
  - Only when the device is **In Alarm** or after **Return to Normal**.
  - After a specified time if not **Returned to Normal** or not **Acknowledged**.\*
  - If a group with a specified schedule is **Occupied** (e.g., during work hours) or **Unoccupied**.\*

*\* Available only with Advanced Alarming*
- When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

### 8.4.6 Send SNMP Trap Action

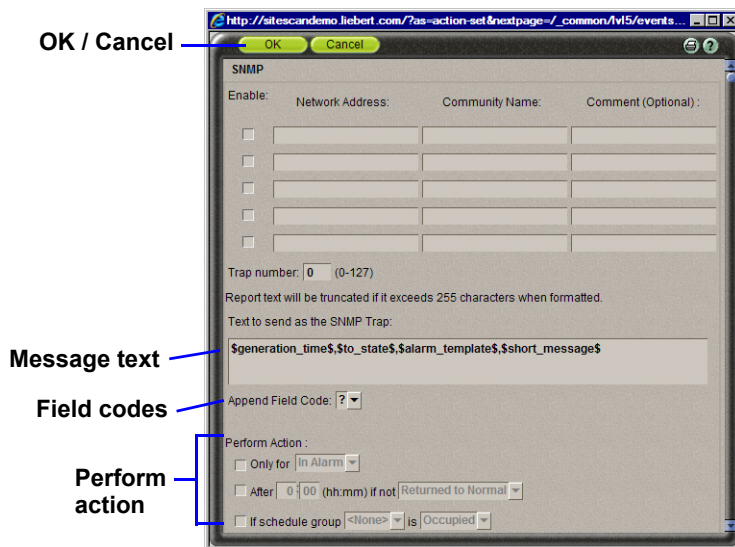
The Send SNMP Trap alarm action sends an SNMP trap in response to receiving an alarm. Traps contain the text created in the Text to send as the SNMP Trap field in the alarm action dialog box. You can configure up to five SNMP servers to receive traps.

Liebert SiteScan Web supports SNMP v1.

Each SNMP server chosen to receive these traps must have SNMP monitoring equipment installed. If problems arise with your SNMP connection or receiving traps, contact your information services department.

To set up this action, open the SNMP window, shown below. To do this:

- Click the **GEO** button, then click on an item in the tree at left. When configured, the action will apply to the designated item in the tree as well as its subordinate items.
- Click the **Alarms** button, then the **Actions** tab. Perform **Steps 1-3** (see **8.4 - Actions**):
  - Select the alarm categories (**Step 1**) and alarm sources (**Step 2**) you want linked this action.
  - Select **Send SNMP Trap** from the drop-down menu (**Step 3**), then click **Add**.



- Put a check mark (✓) in the **Enable** box and enter the SNMP server’s network address community name in the appropriate boxes. Obtain this information from your network administrator.  
Deleting the check mark (✓) from an **Enable** box removes the attendant address from the SNMP trap notification.  
The **Comment (optional)** field may be used for the location of the SNMP server.
- **Trap number** box accepts a numeral from 1 to 127 to identify a message from this alarm action. This featured is used if trap numbers have been configured. Obtain this information from your network administrator. The same trap number is used for all messages from this alarm action.

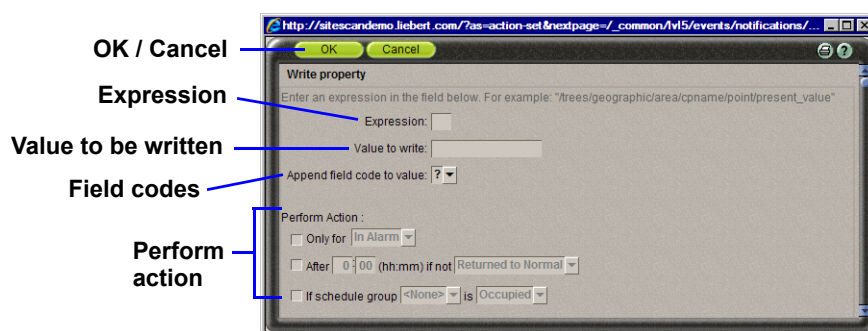
- The **Text to send as the SNMP Trap** box will accept up to 255 characters. Longer messages will be truncated.  
Use punctuation, spaces and returns to format the message. You may customize the message by selecting field codes from the **Append Field Code** list (see **Table 5** for definitions).
- By default, the action will be performed both when an alarm is detected and after the device returns to normal. In the Perform Action section, you may specify when to run the action:
  - Only when the device is **In Alarm** or after **Return to Normal**.
  - After a specified time if not **Returned to Normal** or not **Acknowledged**.\*
  - If a group with a specified schedule is **Occupied** (e.g., during work hours) or **Unoccupied**.\*  
\* Available only with Advanced Alarming
- When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

### 8.4.7 Write Property Action

The **Write Property** alarm action updates a microblock property value.

Open the Write Property window, shown below, to set up this action. To do this:

- Click the **GEO** button, then click on an item in the tree at left. When configured, the action will apply to the designated item in the tree as well as its subordinate items.
- Click the **Alarms** button, then the **Actions** tab. Perform **Steps 1-3** (see **8.4 - Actions**):
  - Select the alarm categories (**Step 1**) and alarm sources (**Step 2**) you want linked this action.
  - Select **Write Property** from the drop-down menu (**Step 3**), then click **Add**.



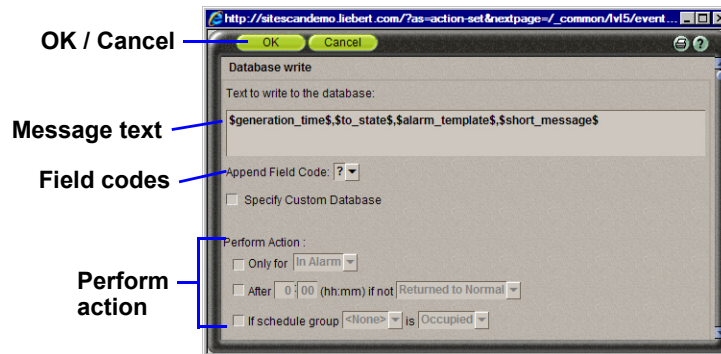
- In the **Expression** box, enter the microblock value that you want to update.
- In the **Value to Write** box, type the value you want to write to the microblock property. For a binary property, type **0** or **1**.
- Select field codes from the drop-down list to add to the Value to Write field.
- By default, the action will be performed both when an alarm is detected and after the device returns to normal. In the Perform Action section, you may specify when to run the action:
  - Only when the device is **In Alarm** or after **Return to Normal**.
  - After a specified time if not **Returned to Normal** or not **Acknowledged**.\*
  - If a group with a specified schedule is **Occupied** (e.g., during work hours) or **Unoccupied**.\*  
\* Available only with Advanced Alarming
- When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

### 8.4.8 Write to Database Action

The **Write to Database** alarm action stores alarm information in a table in the Liebert SiteScan Web alarm database or in a custom database. Third-party applications can access the alarm information for building maintenance management or alarm analysis. For example, an application can perform such actions as triggering a stored procedure or running a report.

Open the Database Write window, shown below, to set up this action. To do this:

- Click the **GEO** button, then click on an item in the tree at left. When configured, the action will apply to the designated item in the tree as well as its subordinate items.
- Click the **Alarms** button, then the **Actions** tab. Perform **Steps 1-3** (see 8.4 - Actions):
  - Select the alarm categories (**Step 1**) and alarm sources (**Step 2**) you want linked this action.
  - Select **Write to Database** from the drop-down menu (**Step 3**), then click **Add**.



#### Writing to the Liebert SiteScan Web Alarm Database

When you add the **Write to Database** alarm action, by default Liebert SiteScan Web writes alarm information to the **write\_db\_ra** table in the alarm database. The following table describes the information that SiteScan Web writes to the database and gives the column name and data type you will need in order to access the alarm information from a third-party application.

Description	Column Name	Data type
Alarm generation time	EVENT_TIME_	Datestamp
Reference name path to the alarm source Example: #slm/m073	SOURCE_PATH_	String
Display name path to the alarm source Example: Atlanta Office/R&D Facility/Second Floor/VAV 2-1/Zone Temp	DISPLAY_NAME_	String
Alarm state Example: OFF NORMAL, LOW LIMIT, HIGH LIMIT	EVENT_STATE_	String
Alarm text as defined in the Text to write to the database field on the alarm action page. You can add live data to the text by selecting field codes from the <b>Append Field Code</b> list (see Table 5 for definitions).	RA_TEXT_	String

To keep the database table from growing too large, you must delete old entries using a third-party database application. You cannot view, edit or delete entries from SiteScan Web.



#### NOTE

*If your system uses an Access or MSDE database, you cannot open the database in a third-party application while Liebert SiteScan Web or SiteBuilder is running.*

## Writing to a Custom Database

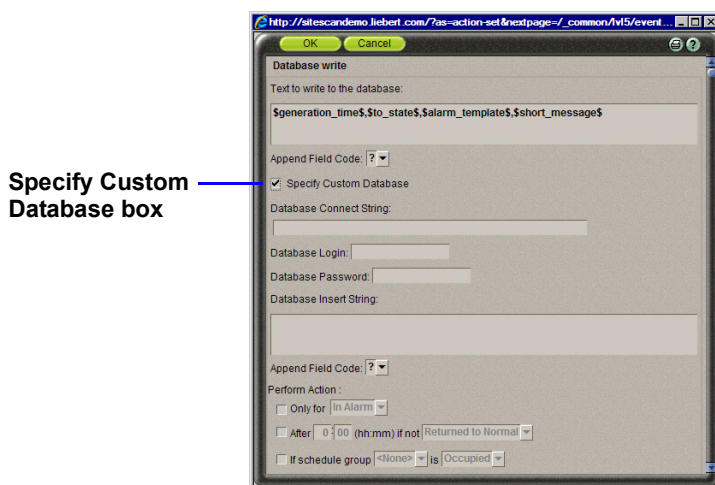
Liebert SiteScan Web can write alarm information to the following types of custom databases. The custom database does not have to be the same type as the Liebert SiteScan Web database.

- SQL Server
- MySQL
- PostgreSQL
- Oracle

You may create a table in an existing, third-party database or create a new database.

Using your database management tool, create a table in your custom database that includes fields for each alarm field code to be written to the table. Each field length in the table should be as long as the longest value to be written to that field.

To set up Liebert SiteScan Web to write to a custom database instead of to the Liebert SiteScan Web alarm database, select the **Specify Custom Database** check box on the Alarms page Actions tab, shown below. This reveals fields specifying how Liebert SiteScan Web writes to the database.



To enter the required information, refer to the following table.

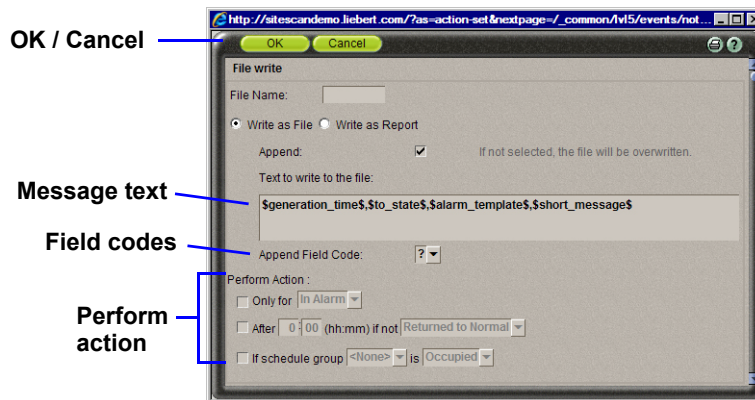
Field	Notes
<b>Text to write to the database</b>	The text is made up of field codes that add live data to the text. You can select additional field codes from the Append Field Code list (see <b>Table 5</b> for definitions). NOTE: To write the text in this field to the custom database, you must include the Report Text field code (\$report_text\$) in the <b>Database Insert String</b> field described below.
<b>Database Connect String</b>	<p><b>The connect string format is...</b></p> <pre>jdbc:odbc:&lt;odbc_alias&gt; jdbc:mysql://&lt;host&gt;:&lt;port&gt;/&lt;instance&gt; jdbc:postgresql://&lt;host&gt;:&lt;port&gt;/&lt;instance&gt; jdbc:oracle:thin@&lt;host&gt;:&lt;port&gt;/&lt;instance&gt;</pre> <p>where:            &lt;host&gt; is the database server name/IP address            &lt;port&gt; is the port number for the database            &lt;instance&gt; is the database name in the database server            &lt;odbc_alias&gt; is the name of the ODBC data source</p>
<b>Database Login and Password</b>	The login and password to connect to the database.
<b>Database Insert String</b>	Use the following format: Insert into <TABLE_NAME> (<column1_name>, <column2_name> ...) values (<\$field_code1\$>, <\$field_code2\$>, ...) Example: Insert into SiteScan Web_ALARMS (TIME_, LOCATION_, TO_STATE_, TEXT_) values (\$generation_time\$, \$location_path\$, \$to_state\$, \$report_text\$) NOTE: You can add <a href="#">field codes</a> to the Insert String using the Append Field Code list. If you add a timestamp type field code (for example, \$generation_time\$), you should have the data go into a timestamp data type field in the custom database. Otherwise, you must use <a href="#">field code formatting</a> to format the time.

### 8.4.9 Write to File Action

The Write to File action allows you to record alarm information in a file.

Open the File Write window, shown below, to set up this action. To do this:

- Click the **GEO** button, then click on an item in the tree at left. When configured, the action will apply to the designated item in the tree as well as its subordinate items.
- Click the **Alarms** button, then the **Actions** tab. Perform **Steps 1-3** (see **8.4 - Actions**):
  - Select the alarm categories (**Step 1**) and alarm sources (**Step 2**) you want linked this action.
  - Select **Write to File** from the drop-down menu (**Step 3**), then click **Add**.



- Enter a name in the File Name box.
- Choose either **Write to File** or **Write as Report**.
- Click to place a check mark (✓) in the Append box to add new entries at the end of the file.  
Note: If you do not check the Append box, the file contents will be overwritten with each new alarm message.
- In the Text to Write to the File box, enter the message as you want it to appear, using the appropriate punctuation, including spaces and returns to separate lines of text.
- You can add dynamic alarm data to the text by selecting field codes from the Append Field Code list (see **Table 5** for definitions). To do this:
  - Place the cursor in the Text to Write to the File box where you want the data to appear.
  - Click on the Append Field Code down arrow, then select an option from the drop-down list.
- By default, the action will be performed both when an alarm is detected and after the device returns to normal. In the Perform Action section, you may specify when to run the action:
  - Only when the device is **In Alarm** or after **Return to Normal**.
  - After a specified time if not **Returned to Normal** or not **Acknowledged**.\*
  - If a group with a specified schedule is **Occupied** (e.g., during work hours) or **Unoccupied**.\*

\* Available only with Advanced Alarming
- When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

Once the action is set up, it appears in the **Actions** tab window. You may click the **Edit** button to make changes or the **Delete** button to remove it.

## 8.4.10 Field Code Definitions

Table 5 shows the field codes displayed in Action and Messages windows.

**Table 5** Field code definitions

Field Code Name	Field Code	Definition
Acknowledge Operator	\$acknowledge_operator\$	The operator who acknowledged the alarm.
Acknowledge Time	\$acknowledge_time\$	The time when the operator acknowledged the alarm.
Alarm Category	\$event_category\$	The alarm category that the alarm is assigned to.
Alarm Template	\$event_template\$	The alarm template that the alarm is assigned to.
Alarm Type	\$event_type\$	The alarm type of the alarm source; for example, CHANGE OF VALUE, CHANGE OF STATE.
Alarm Value	\$alarm_value\$	The alarm value.
Alert Text	\$alerttext\$	For a converted SuperVision system if the option <b>Create a single alarm template...</b> was selected during upgrade. Retrieves alarm message text from <b>cmnet_alert_text.properties</b> .
		To use this field code:
		1. Select the <b>Alert Text</b> field code.
		2. After \$alerttext, type one of the following:
		:normalshort
		:normallong
		:alarmshort
:alarmlong		
		For example, \$alerttext:alarmlong\$
Character	\$c\$	A single ASCII character. Often used for form feeds and other printer escape sequences. For example, \$C:65\$ displays A.
Command Value	\$command_value\$	The commanded value from the alarm source. Valid only for alarm type COMMAND FAILURE.
Dead Band	\$deadband\$	The deadband value from the alarm source. Valid only for alarm type OUT-OF-RANGE.
Deletion Operator	\$deletion_operator\$	The operator who deleted the alarm.
Deletion Time	\$deletion_time\$	The time the alarm was deleted.
Device	\$device\$	The display name of the device where the alarm came from.
Equipment	\$equipment\$	The display name of the equipment where the alarm came from.
Error Limit	\$error_limit\$	The error limit, from the alarm source. Valid only for alarm type FLOATING LIMIT.
Exceeded Limit	\$exceed_limit\$	The exceeded limit value from the alarm source. Valid only for alarm type OUT-OF-RANGE.
Exceeding Value	\$exceeding_value\$	The exceeding value from the alarm source. Valid only for alarm type OUT-OF-RANGE.
Fault	\$fault\$	The status of the fault condition from the alarm source.
Feedback Value	\$feedback_value\$	The feedback value from the alarm source. Valid only for alarm type COMMAND FAILURE.
Field Message	\$field_message\$	Additional text recorded in the alarm by the device.
From State	\$from_state\$	The previous state of the alarm source.
Generation Operator	\$generation_operator\$	The operator who forced the alarm to return to normal.
Generation Time	\$generation_time\$	The time in the module when the alarm was generated.
In Alarm	\$in_alarm\$	The in alarm status from the alarm source.
Incident Closed Time	\$incident_closed_time\$	The time the alarm's entire incident group closed.

Table 5 Field code definitions

Field Code Name	Field Code	Definition
Latched Data Value (Analog)	\$latched_data_analog:x\$	"x" ranges from 1 to 5. The display name of the alarm source that generated the alarm.
Latched Data Value (Digital)	\$latched_data_digital:x\$	"x" ranges from 1 to 5. The display name of the alarm source that generated the alarm.
Location Path	\$location_path\$	Displays all the path display names from root to source.
Long Message	\$long_message\$	The formatted alarm long text displayed by double-clicking the alarm on the Alarms page.
Message Details	\$message_details\$	The message details displayed on the Alarms page <b>View</b> tab.
Message Prefix	\$message_prefix\$	The message prefix displayed on the Alarms page <b>View</b> tab.
Message Text	\$message_text\$	The message text displayed on the Alarms page <b>View</b> tab.
New State	\$new_state\$	The status of new state from the alarm source.
New Value	\$new_value\$	The new value from the alarm source. Valid only for alarm type CHANGE OF VALUE.
Object ID	\$object_id\$	Object ID of the alarm source.
Out of Service	\$out_of_service\$	The status of 'out of service' from the alarm source.
Overridden	\$overridden\$	The status of 'overridden' from the alarm source.
Program ID	\$program_id\$	The address of the control program that generated the alarm. BACnet program address format: device ID, program number (example: 240219,5) SuperVision program address format: site, gateway, module, fb (example: 1, 2, 13, 5)
Receive Time	\$receive_time\$	The time at the workstation when the alarm was received.
Recipient Device ID	\$device_id\$	The device ID of the device where the alarm came from.
Record Type	\$record_type\$	The type of alarm; for example, BACnet, SuperVision, System.
Reference Path	\$reference_path\$	Path to alarm source. Available in all alarm actions.
Reference Value	\$reference_value\$	The 'reference value' from the alarm source. Valid only for alarm type FLOATING LIMIT.
Referenced Bitstring	\$referenced_bitstring\$	The value of the 'referenced bitstring' value from the alarm source. Valid only for alarm type CHANGE OF BITSTRING.
Report Text	\$report_text\$	Used only with the <b>Write to Database</b> alarm action. You must include this field code in the <b>Database Insert String</b> .
RTN Time	\$RTN_time\$	The time when the alarm returned to normal.
Setpoint Value	\$setpoint_value\$	The 'setpoint value' from the alarm source. Valid only for alarm type FLOATING LIMIT.
Short Message	\$short_message\$	The formatted alarm short text.
Site	\$site\$	The display name of the site the alarm came from.
Source	\$source\$	The display name of the alarm source that generated the alarm.
Source description	\$source:description\$	The description of the alarm source that generated the alarm.
Source Path	\$source:<path>\$	For advanced users, displays the database item indicated by <path> relative to the alarm source; for example, <path> = ~equipment.display-name. The easiest way to display the path is to use Global Modify.
System Directory	\$system_dir\$	The system folder name.
To State	\$to_state\$	The current state of the alarm source; for example, Normal, Fault, Off-normal, High limit, Low limit.

## 8.5 Enable/Disable

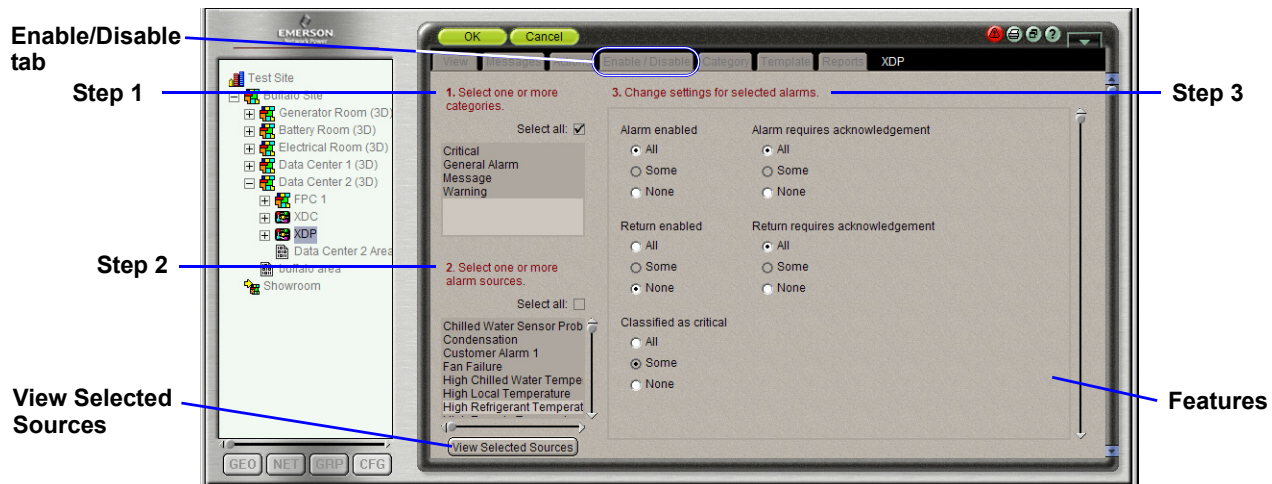
The **Enable/Disable** tab in the Alarms window allows you to customize the treatment of alarms and return-to-normal events for selected alarm sources. Through this function, you may:

- Activate or deactivate alarms and return-to-normal events
- Classify alarms as critical or non-critical
- Specify whether an operator must acknowledge alarms and return-to-normal events


### 8.5.1 Enable or Disable Features


To access the Enable/Disable functions:

- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Alarms** button, then the **Enable/Disable** tab. Steps are listed in red, as shown below.



1. Select the categories that contain the alarm sources you want to set up.
2. Select the alarm sources for the selected categories.  
Note: In **Steps 1** and **2**, control-click to select multiple items, or check the **Select All** box.
3. To change settings for the selected alarm sources, click on the **All** or **None** radio button for each of the following features:

Feature	If you click <b>All</b> to enable this feature, Liebert SiteScan Web:
• <b>Alarm enabled</b>	Generates an alarm when specified conditions occur in the alarm source.
• <b>Return enabled</b>	Generates a return-to-normal when the alarm source returns to a normal state.
• <b>Classified as critical *</b>	Changes the system-wide alarm button to red  when an alarm occurs. Critical alarms that pass through a modem are delivered to the Liebert SiteScan Web server immediately.
• <b>Alarm requires acknowledgement</b>	Requires that an operator acknowledge the alarm.
• <b>Return requires acknowledgement</b>	Requires that an operator acknowledge the return-to-normal event.

- \* Note: If the **Classified as critical** feature is disabled (**None** button selected), Liebert SiteScan Web changes the system-wide alarm button to yellow  when an alarm occurs. Non-critical alarms that pass through a modem are stored in the gateway until one of the following happens:
- A critical alarm occurs.
  - The gateway is contacted by Liebert SiteScan Web.
  - The gateway buffer is full, at which time all alarms are sent to Liebert SiteScan Web.
- When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

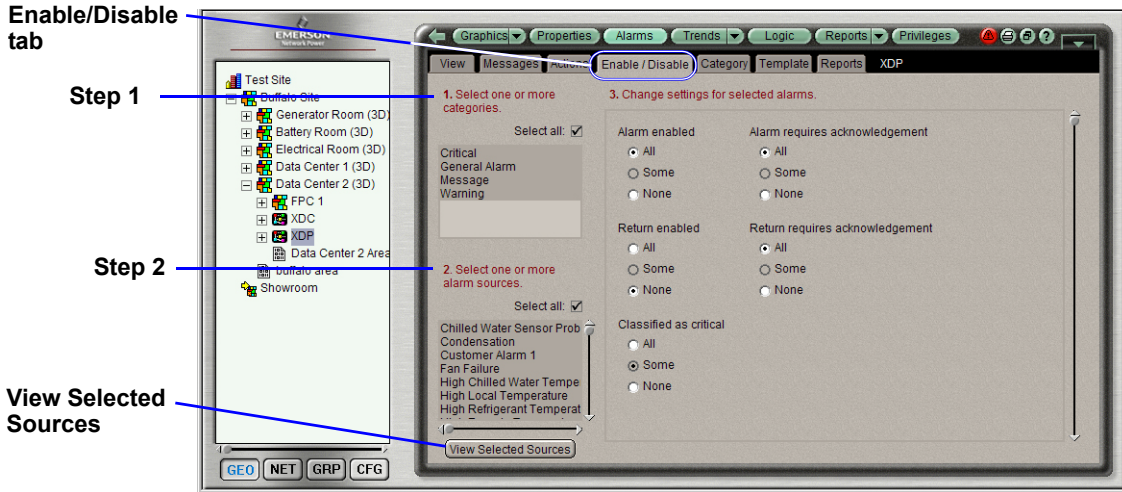


### 8.5.2 View Selected Sources

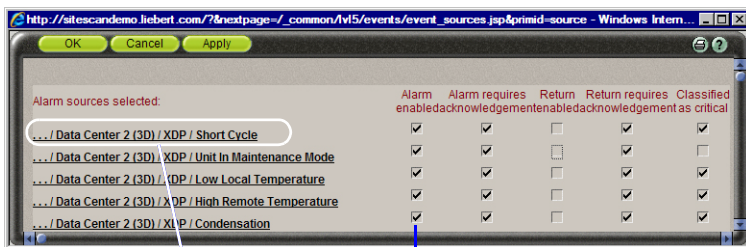
In the **Enable/Disable** tab, you may use the **View Selected Sources** button to view a listing of all selected alarm sources in a dialog box where you may enable or disable features for any source.

To access the Enable/Disable functions:

- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Alarms** button, then the **Enable/Disable** tab. Steps are listed in red, as shown below.



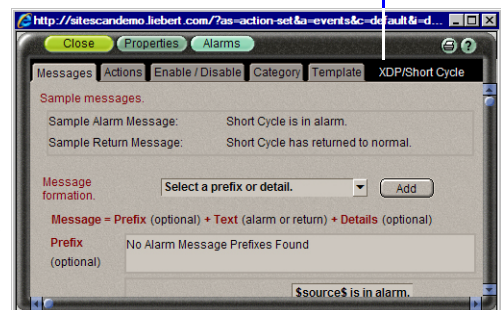
- In the **Enable/Disable** tab window:
  1. Select the categories that contain the alarm sources you want to view.
  2. Select the alarm sources for the selected categories.  
Note: In **Steps 1** and **2**, control-click to select multiple items, or check the **Select All** box.
  3. Click the **View Selected Sources** button.
- A dialog box appears, listing all selected alarm sources with check boxes for enabled features, as shown below left. Use the scroll bar as needed to view additional sources.
- To enable a feature, click to place a check mark (✓) in the box. To disable a feature, click to remove the check mark.
- When finished, click **OK** (or **Cancel** to close the window without saving your changes).
- You may click on an alarm source to open a details window, below right. The name of the alarm source appears to the right of the tabs. Click the **Close** button to return to the previous view.



Enable or disable features

Link to details window

Alarm source



## 8.6 Category

The **Category** tab in the Alarms window allows you to customize alarm categories, which are groups of related alarm sources and their alarms.

Alarm categories let you perform tasks on groups of alarms, for example:

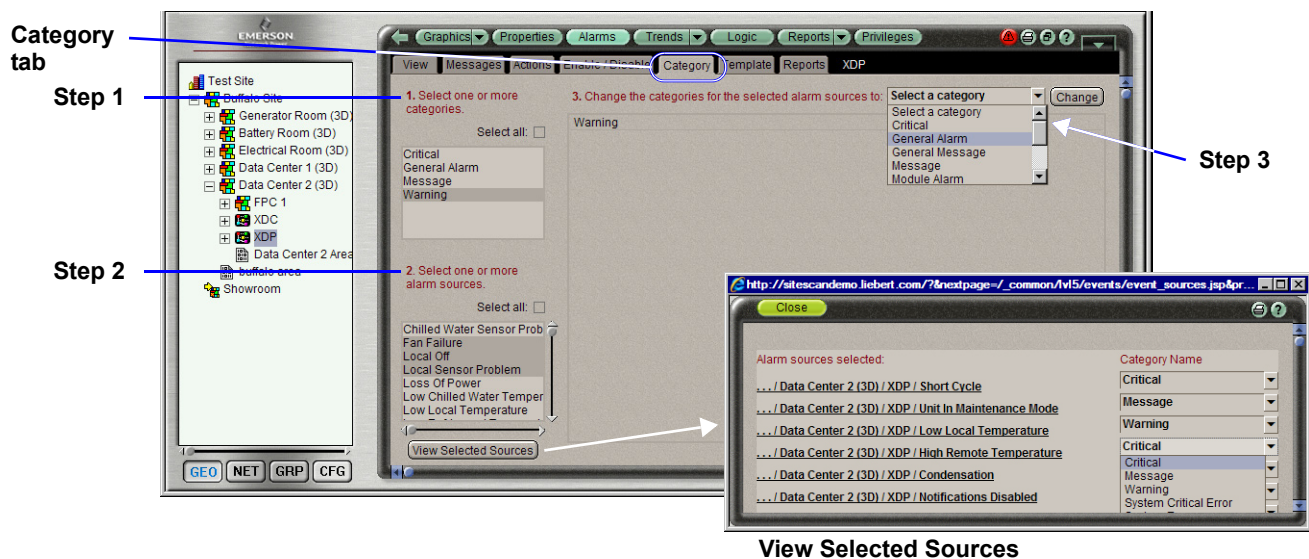
- View, acknowledge, or delete selected categories of alarms
- Assign alarm actions to selected categories of alarm sources
- Set up alarm sources in selected categories

Each alarm source is assigned to an alarm category, but you can change the category assignment in this window.

Liebert SiteScan Web has default alarm categories, but you can also create custom categories, if needed. (To do this, click the **CFG** button, open the **Categories** folder in the tree and click on **Alarm**. See the online help for more information.)

To access the Category functions:

- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Alarms** button, then the **Category** tab. Steps are listed in red, as shown below.



1. Select the categories that contain the alarm sources you want to customize.
  2. Select the alarm sources for the selected categories.  
Note: In **Steps 1** and **2**, control-click to select multiple items, or check the **Select All** box.
  3. To assign a different category for the selected alarm sources:
    - Click on the drop-down menu and choose a category from the list.
    - Click the **Change** button.
- Click the **View Selected Sources** button to open a window showing the selected items, above right. Each source has a link to a details window and shows the category currently assigned.
  - When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

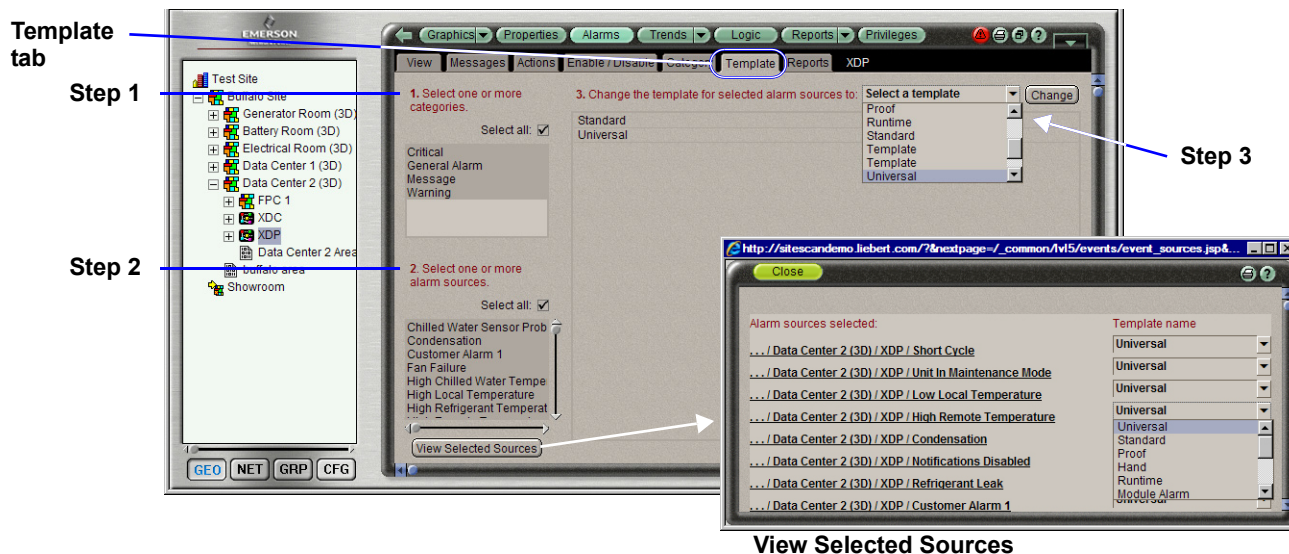
## 8.7 Template

All alarms in Liebert SiteScan Web v2.5 and later use one template called **Universal**. This template lets you define your alarm message text, the critical setting and the required acknowledgements at the alarm source.

If you upgraded your system from v2.0 or earlier, the alarm sources retained their existing templates and existing alarm settings. If the existing alarm sources contain little or no customization to the alarm settings, Emerson recommends that you change all of the alarms to use the Universal template. If the alarm sources had customized alarm settings, continue using the existing templates.

To assign a different template to alarm sources:

- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Alarms** button, then the **Template** tab. Steps are listed in red, as shown below.



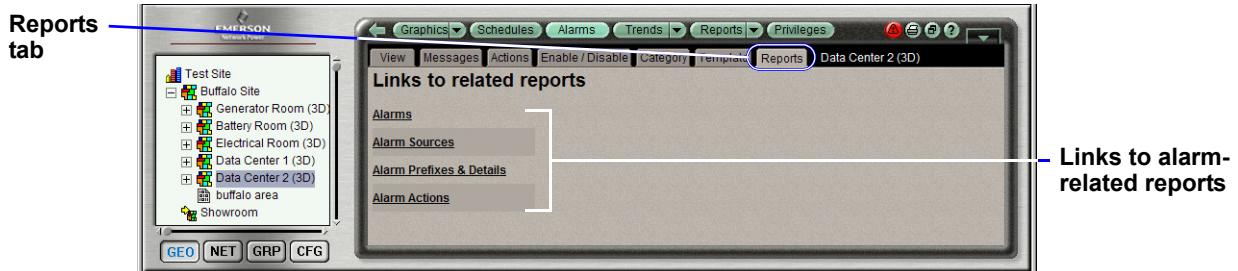
1. Select the categories that contain the alarm sources for which you want to change the template.
2. Select the alarm sources for the selected categories.  
Note: In **Steps 1** and **2**, control-click to select multiple items, or check the **Select All** box.
3. To assign a different template for the selected alarm sources:
  - Click on the drop-down menu and choose a template from the list.
  - Click the **Change** button.
- Click the **View Selected Sources** button to open a window showing the selected items, above right. Each source has a link to a details window and shows the currently assigned template.
- When finished, click the **OK** button (or **Cancel** to close the window without saving your changes).

## 8.8 Alarm Reports

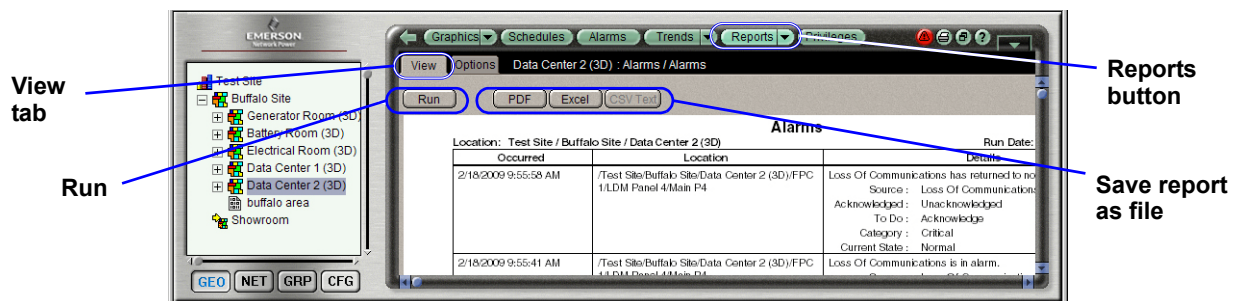
The **Reports** tab in the Alarms window offers quick access to all alarm-related reports. These reports are also accessible from the **Reports** menu action button (see 10.0 - Viewing Reports).

To access reports from the Alarms window:

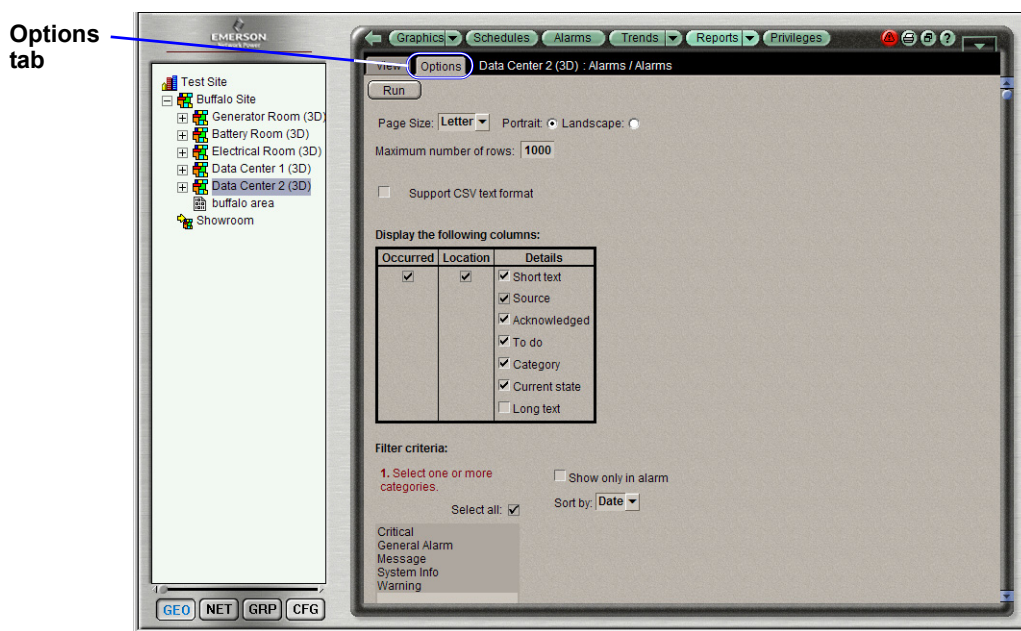
- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Alarms** button, then the **Reports** tab.



- Click on a link to any of the alarm-related reports you want to view. The Reports window opens, as shown below, with the **Reports** button highlighted.
- If needed, click the **View** tab, then click the **Run** button to generate the report. When the report is displayed, you may copy the contents to a file by clicking the **PDF**, **Excel** or **CSV Text** button. See 10.3 - View Reports for details about this window.



- Click the **Options** tab to view or change the report settings. See 10.4 - Set Up Report Options for details about this window.



## 9.0 VIEWING TRENDS

The Trends button allows you to create trend graphs that may be viewed, printed or copied to a spreadsheet program. Liebert SiteScan Web can read and store equipment status values over time and then display this information in a graph to help you monitor the equipment's operation.

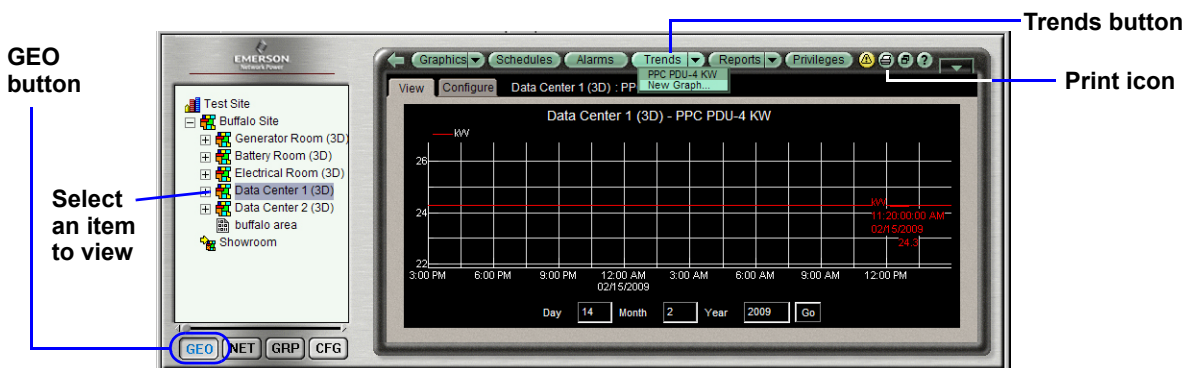
Trend data can be collected for any BACnet input or output point. The control module reads values for a point at intervals that you define and then stores that data in the module.

Because a control module has limited memory for storing trend data, you can set up historical trending to archive the trend data from the module to the Liebert SiteScan Web database. A trend graph can display data from both the control module and the database.

### 9.1 View an Existing Trend Graph

To view a trend graph:

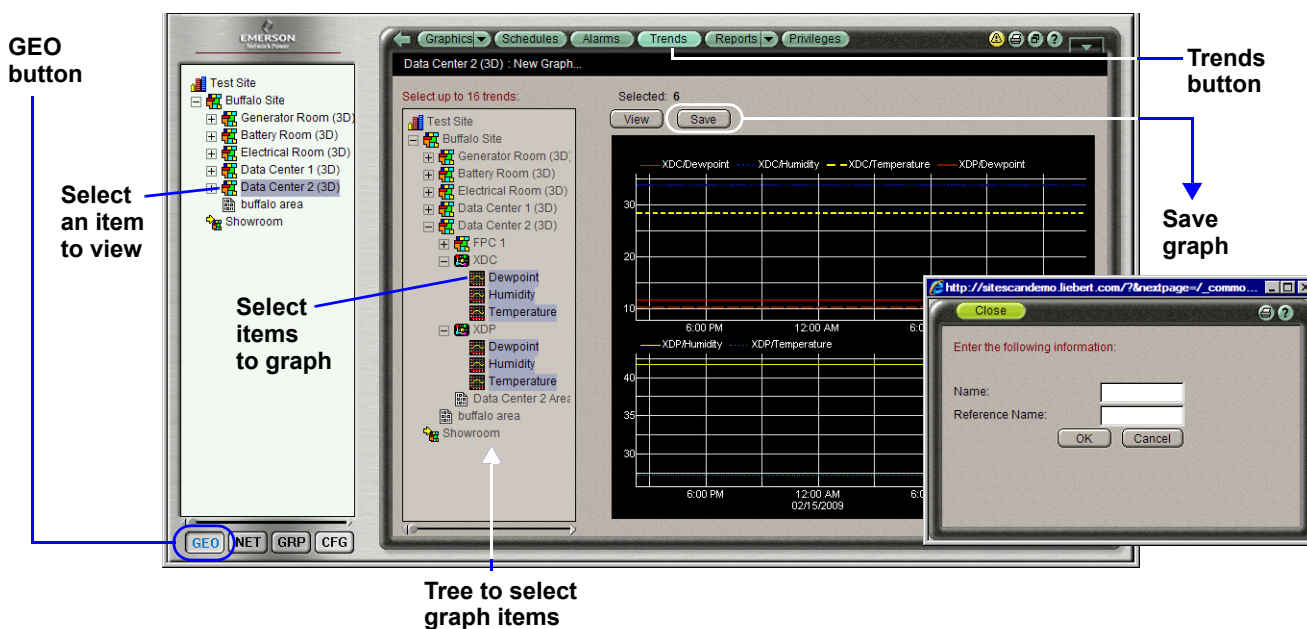
- Click the **GEO** button in the bottom left corner, then select an item in the tree at left.
- Click the **Trends** button at the top of the window. (If more than one graph has been saved, click the **Trends** button down arrow and choose a graph.) If no graph appears, proceed to **9.2 - Create a New Trend Graph**.
- Click **View** to display the graph. For tips on navigating the graph—zoom/pan, choose start dates, view point data—see **9.2.1 - Tools for Viewing Trends**.
- Click the **Print** icon in the top right corner of the Trends window to print the graph.



## 9.2 Create a New Trend Graph

To create a new graph:

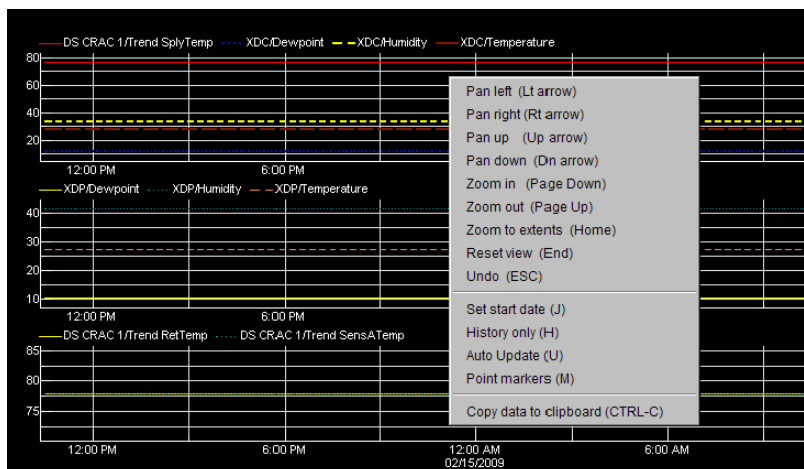
- Click the **GEO** button in the bottom left corner, then select an item in the tree at left.
- If any graph has been saved for this item, click the **Trends** button down arrow, then select **New Graph** from the drop-down menu. (This step is not needed if no graphs have been saved.)
- A new tree appears in the center, allowing you to select up to 16 items for the trend graph. Use standard shift-click and control-click methods to select multiple items.
- Click **View** to display the graph. For tips on navigating the graph—zoom/pan, choose start dates, view point data—see **9.2.1 - Tools for Viewing Trends**.
- Click **Save** to store the graph. In the popup window, enter a name as you want it to appear on the Trends drop-down menu. A reference name is created automatically. Click **OK** when finished.



### 9.2.1 Tools for Viewing Trends

Some tips for viewing trend graphs follow:

- A vertical dashed line indicates missing data.
- A large marker indicates a point that is in alarm, in fault, out of service or has been overridden. Control-click the marker to view details.
- Right-click anywhere on a trend graph to display a popup menu with tools described in **Table 6**. Click on an item in the menu—or use keyboard shortcuts shown in parentheses ( ) on the menu.



- **Table 6** shows commands available from the popup menu shown above and two other options.

Table 6 Tools for viewing trend graphs

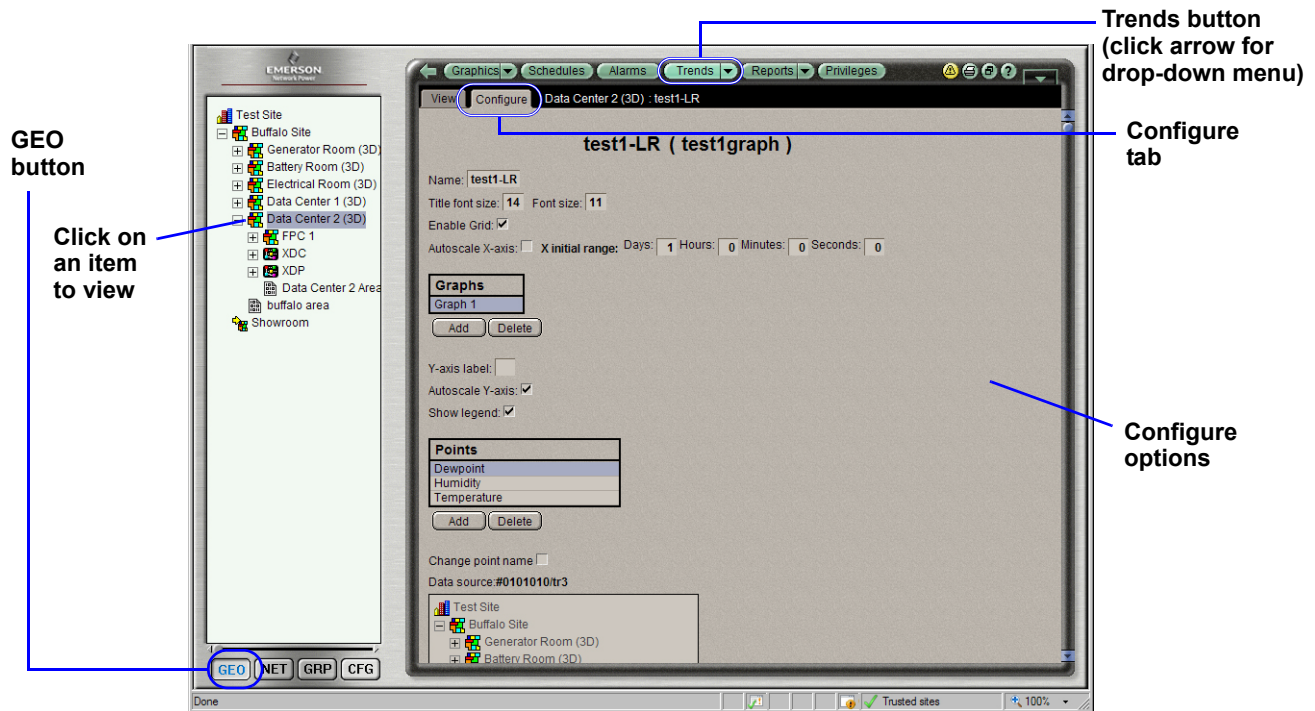
Tool	Keyboard Shortcut	Notes
Pan left/right/up/ down	Arrow keys	If you display more than one graph, panning up and down affects only one graph at a time. Panning left to right affects all graphs. You can also Alt+click and drag inside the graph.
Zoom in	Page Down	You can also use the plus (+) key on the numeric keypad, the <b>X</b> key, or drag a rectangle around area.
Zoom out	Page Up	You can also use the minus (-) key on the numeric keypad or the <b>Z</b> key.
Zoom to extents	Home	Shows all the data you have viewed in the current session of a particular trend graph.
Reset view	End	Resets the display to its default setting. You can also use the Enter or <b>R</b> key.
Undo	Esc	Undo up to 10 changes to your view.
Set start date	J	Enter the date you want the trend to jump to. The trend displays the same time range for the new date. Press the <b>J</b> key again to hide the date fields.
History Only	H	Displays only the historical data on the graph.
Auto Update	U	The trend graph polls for data every 10 seconds. Press <b>U</b> again to stop updating.
Point Markers	M	Shows a marker for each data point in the graph.
Copy	Ctrl+C	Copies only the data from the time range that is currently displayed.
<b>Other Options (not available on the popup menu)</b>		
Refresh the display (gather trend data)	—	Click the <b>Trends</b> button.
Display data for a specific sample	—	Ctrl+click a sample to view the point name, time and date the sample was read, the exact point value, and if the point is in alarm, is in fault, out of service, or has been overridden. Click anywhere to clear the details.

### 9.3 Configure Trends

Once a trend graph has been saved, the **Configure** tab appears in the Trends window, allowing you to specify options for the graph, such as changing the name, changing the appearance, adding or deleting points or selecting a different data source.

To configure a trend graph:

- Click the **GEO** button in the bottom left corner, then click on an item in the tree at left.
- Click the **Trends** button down arrow, then select a graph from the drop-down menu.
- Click the **Configure** tab.



- Set up the desired options for the trend graph.
- When finished, click the **OK** button to save any changes (or **Cancel** to leave without saving).



## 10.0 VIEWING REPORTS

The **Reports** button offers a quick way to compile alarm and other information to help manage and troubleshoot your system. You may access existing reports (see **Sections 10.1 - 10.4**) or generate a custom report (see **10.5 - Set Up a New Report**).


### 10.1 Description of Liebert SiteScan Web Reports

The reports available in Liebert SiteScan Web are described in **Table 7**.


**Table 7 Description of available reports**

Report	Description
<b>Alarms</b>	
Alarms	View, sort and filter the information displayed in the Alarms <b>View</b> tab.
Alarm Sources	Create a summary of potential alarm sources configured in the Alarms <b>Enable/Disable</b> tab.
Alarm Prefixes & Details	Create a summary of the information configured in the Alarms <b>Messages</b> tab.
Alarm Actions	Create a summary of the information configured in the Alarms <b>Actions</b> tab.
<b>Schedules</b>	
Schedule Instances	Find every schedule entered at and below a selected tree item. This report shows the location of each item and can help you find newly added and conflicting schedules.
Effective Schedules	View all equipment that may be scheduled and the net result of all schedules in effect for a selected date and time.
<b>Equipment</b>	
Point List	View the details of all points and verify that all points were checked out during commissioning. Create custom lists for other contractors, such as a list of BACnet IDs or Web services links.
Locked Values	Find all locked points and locked values.
Network IO	Verify the programming and status of all network points—especially useful for commissioning control modules used for third-party integration.
Trend Usage	Create a summary of the information configured in the Trends <b>Enable/Disable</b> tab.
Parameter Mismatch	Find out whether your system has any parameter mismatches that need to be resolved.
<b>Network</b>	
Equipment Status	Display the thermographic color, status and prime variable of each control program.
Module Status	Discover network communication problems (shown as purple squares on the report) that need troubleshooting.
<b>Commissioning</b>	
Test & Balance	View the results of VAV box commissioning.
Equipment Checkout	View the information on the <b>Equipment Checkout</b> tab of the Point Checkout tool during commissioning. Also, find equipment that has not been fully commissioned.
<b>Security</b>	
Audit Log	Create a chronological list of operators with property changes they have made and the reasons for those changes.
Security Assignments	View a list of locations showing which operators are assigned to each location and their privilege sets.

## 10.2 Finding Reports

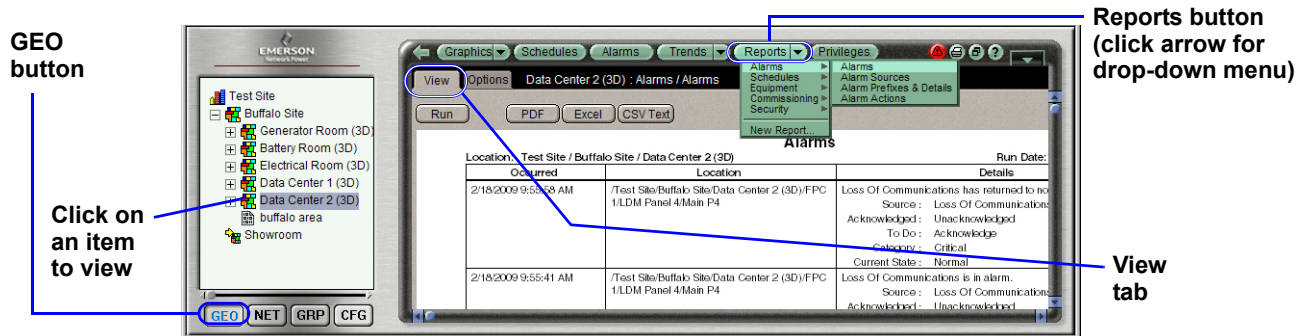
To find a custom report, look for the  symbol on the GEO tree

To edit or delete a report:

1. Select the item in the GEO or NET tree where the report was created.
2. Click the Reports menu drop-down arrow .
3. Select the report to be edited or deleted.
  - To edit the report, make the changes and click OK.
  - To delete the report, click the Reports menu button and click on Delete.

## 10.3 View Reports

- Click the **GEO** button in the bottom left corner.
- Click on an item in the tree at left—**Data Center 2** in the example below.
- Click the **Reports** button at the top, then click on the **View** tab.

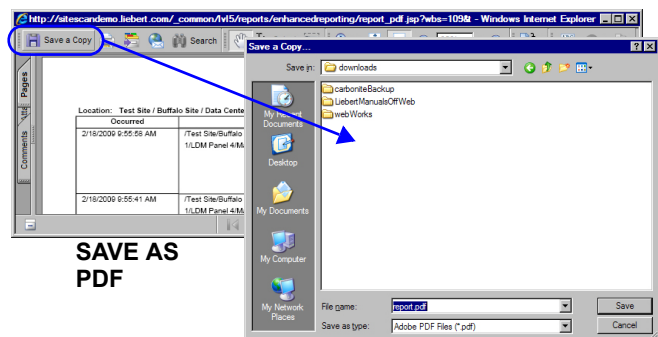


- To view an existing report, click on the **Reports** down arrow, then on a category. Choose a report from the submenu.
- Click the **Run** button below the **View** tab to generate a report.
- Once the report is displayed, you may copy the report contents to a file.

### PDF

To create a PDF that may be opened with Adobe Reader or Acrobat:

- Click the **PDF** button. A program window displays the PDF.
- Click the **Save a Copy** button to open the Save a Copy window, top right.
- Specify where to save the file and a file name. Click the **Save** button.

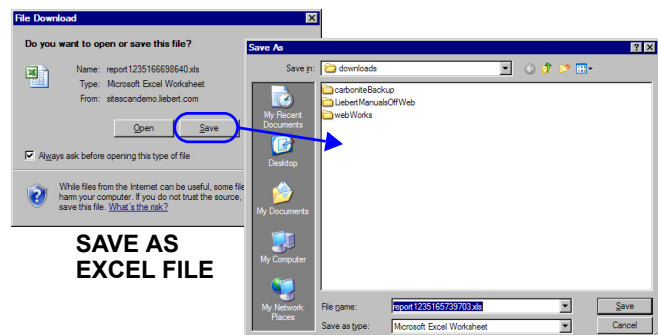


**SAVE AS PDF**

### Excel

To create a spreadsheet that may be opened with Microsoft Excel: Click the **Excel** button. If prompted whether to save or open, click **Save** to create a file.

- In the Save As window, center right, choose where to save the file and specify a file name. Click the **Save** button to download the file.



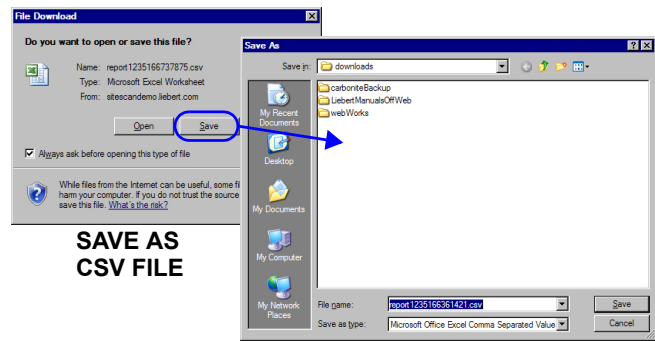
**SAVE AS EXCEL FILE**

## CSV

To create a CSV file that may be opened with a spreadsheet program or text editor:

Make sure the CSV feature is enabled (see **10.4 - Set Up Report Options**).

- Click the **CSV Text** button. If prompted whether to save or open, click **Save** to create a file.
- In the Save As window, bottom right, choose where to save the file and specify a file name. Click the **Save** button to download the file.



## 10.4 Set Up Report Options

The Reports **Options** tab permits customizing reports. For all report types, you may specify page size, orientation and maximum length. Other options vary by type of report.

To access the report Options functions:

- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Reports** button, then the **Report Options** tab.

### Page Size Choices

- In the **Printing details** section:
  - Specify the size of the report page by clicking the Page Size down arrow and selecting an option from the drop-down list—**A2, A3, A4 Letter, Legal** or **11x17** (see above).
  - Choose the orientation by clicking on **Portrait** or **Landscape**; this determines the report's appearance. The orientation should be chosen for reports that will be printed.
  - Specify the maximum number of rows to appear in the report—the default, shown in the example above, is 1000. This may be helpful to reduce the size of reports you expect to be excessively long. If the length is exceeded, there will be a note of the report saying “maximum number of rows exceeded. This may be resolved by either filtering the report results or increasing the maximum number of rows permitted.
- The report output format is CSV, denoted by the check mark (✓) in the **Support CSV text format** box in the example above. This format permits using the report in many database programs. When this option is enabled, the **CSV Text** button is activated in the View tab (see **10.3 - View Reports**).
- In the **Report component selection** section (not available for all report types):
  - For some report types, you may choose which report components to show or hide in the **Display the following columns** table.
  - Click to place a check mark (✓) for items you want to include; click to remove the check mark for items you want to omit. Some check boxes may be grayed-out; these items may not be changed.
- In the **Filter criteria** section (choices vary by report type):
  - Many report types allow you to choose criteria to filter the report. In the example above, you may select the categories that contain the alarm sources you want to view. Control-click to select multiple items, or click to place a check mark (✓) in the Select All check box.
  - For alarm reports, you may choose to include only those items that are currently in alarm. To do this, click to place a check mark (✓) in the **Show only in alarm** check box. (Leave the check box blank to include all items.)
  - If there is an option to sort the report, click on the Sort By arrow and select an option from the drop-down menu—in the example above, **Date** or **To Do**.
- When finished, click **OK** (or **Cancel** to close the window without saving your changes).
- At any time, click on the **Run** button to view the report.

## 10.5 Set Up a New Report

In addition to the standard reports available from the **Reports** button drop-down menu, Liebert SiteScan Web provides three basic templates for you to design a new report:

- Equipment Summary
- Equipment Values\*
- Trend Samples\*

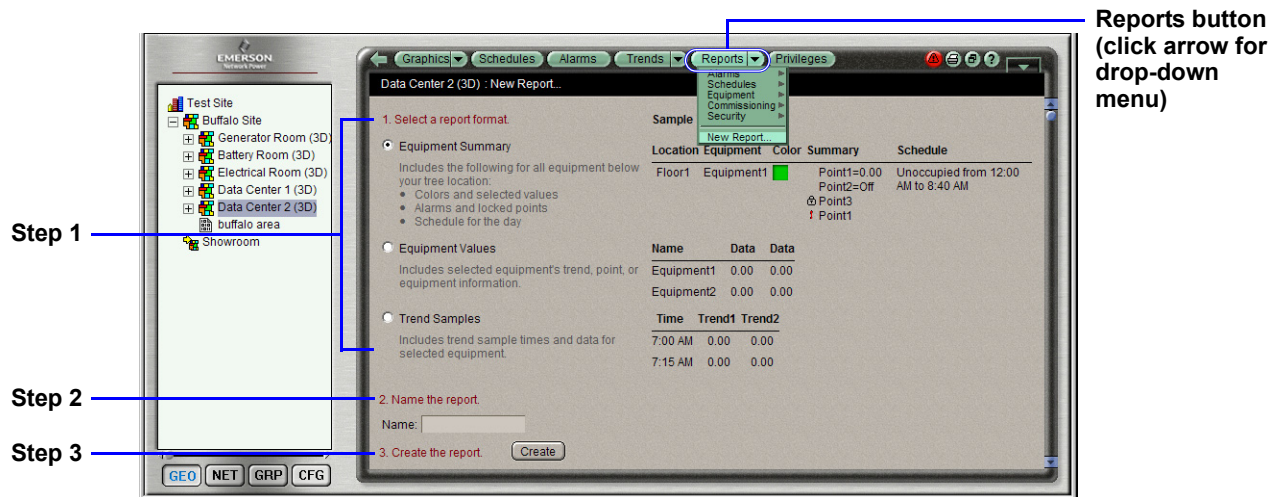
\* *Available with the optional Advanced Reporting package*

Once a new report is set up, it appears on the **Reports** drop-down menu. See **10.3 - View Reports** for details on all the functions available after the new report appears on the menu.

After creating a new report, the **Options** tab changes to the **Design** tab. At any time, you may select the report and click on the **Design** tab to make additional changes.

To set up a new report:

- Click the **GEO** button, then click on an item in the tree at left.
- Click the **Reports** button arrow, then click on **New Report** in the drop-down menu. Steps are listed in red, as shown below.

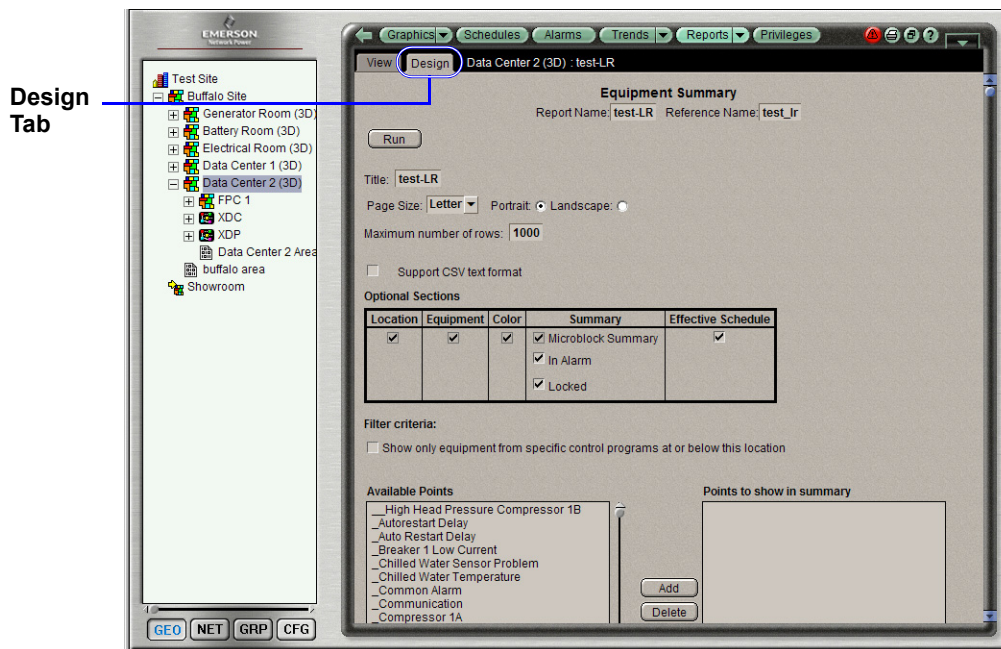


### 10.5.1 Create a Report

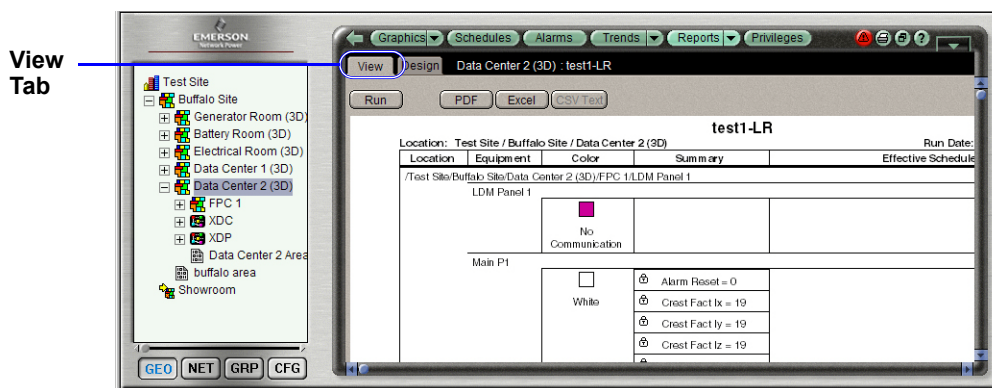
1. Choose one of the report formats: **Equipment Summary**, **Equipment Values** or **Trend Samples**. Each format has a description and an example of the layout.
2. In the Name box, enter a report name as you want it to appear on the **Reports** drop-down menu. Note: If you have created report categories via the CFG Categories function, you may click on the **Category** arrow and select an option from the drop-down menu.
3. Click the **Create** button to create the new report. The **Options** tab label changes to **Design**. To design the new report, proceed to the next section, **10.5.2 - Design the New Report**

## 10.5.2 Design the New Report

After you create a new report, click the **Design** tab to make changes to the format, as shown below.




- The top center portion of the window displays the report type and name. You may change the report name in the Title box below the Run button.
- The Design tab displays the same choices as the Options tab (see 10.4 - Set Up Report Options) for page size, orientation, maximum number of rows and enabling support for CSV.
- Each custom template provides additional options that vary by report type. The example above shows the design options for the Equipment Summary report.
- When finished, click **OK** to save your changes (or **Cancel** to close the window without saving).
- At any time, click on the **Run** button to display the report in the View tab. The example below shows the Equipment Summary report.



## 10.6 Built-In Reports

Standard reports appear throughout the system, though their function changes depending on where in the GEO tree or NET tree the report is run. If a report is run on a single unit in the GEO tree, the report will contain results from only that unit. Moving up to an area and running a report that will yield results from all the units in that area. A report run at the root of the system will contain results from the entire system.

These built-in reports are not marked with the  symbol.

## 10.6.1 Report Options

Clicking on the Design tab permits filtering the information displayed in a report. This can be used to limit the size of the report and its layout.

### Optional Columns

Many reports have optional columns, some of which may not be needed. When working with an unfamiliar report, running a test report with all columns activated will permit see the sort of information each field returns.

Display the following columns:

Location	Equipment	Alarm source	Category	Template	Alarm enabled			Requires ack		Critical	In Alarm	GQL Path
					Alarm	RTN	Fault	Alarm	Return			
			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Optional field disabled, not shown in report

**Alarm Sources**

Location: cn0000000\_default\_system\_5/Equipment/NXL-SMS with alarms Run Date: 11/2/2012 0:44:44 AM

Location	Control Program	Alarm Source	Category	Template	Enabled			Req. Ack		Critical	In Alarm
					Alarm	RTN	Fault	Alarm	RTN		
/cn0000000_default_system_5/Equipment											
NXL-SMS with alarms											
		Auto-Restart External Inhibit	Critical	Universal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
		Auto-Restart Failure	Warning	Universal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
		Auto-Restart In Progress	Warning	Universal	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

### Optional Rows

Many reports also have optional rows that are described as filter criteria. For example, the Location Audit Log can be filtered to show results from only one operator, administration and system changes or could restrict results to a date range. These can be combined. For example, a report could specify an operator and a date range.

Filter criteria:

Operator:

Show Administration and System Changes

Restrict By Date:

## 10.7 Equipment Checkout

View the information on the Equipment Checkout tab of the equipment's Properties page. Also, find equipment that has not been fully commissioned. Not all installing technicians use these reports, if they are blank, ask the technician for their commissioning notes.

## 10.8 Alarms

View, sort, and filter the information on the Alarms View tab. The report will be empty if there are no alarms recorded for a piece of equipment.


### 10.8.1 Alarm Sources

Create a summary of potential alarms. The list will help familiarize operators with the equipment by listing all the alarms a piece of equipment might generate.

## 10.8.2 Alarm Prefixes and Details

Create a summary of the information configured on the Alarms > Messages tab. To determine where these are configured in the system, run this report in the root of the GEO tree.

## 10.8.3 Alarm Actions

Create a summary of the information configured on the Alarms > Actions tab. Also useful to find where these are configured in the system, just run this report in the root of the GEO tree. Additionally, if you are merely looking for where an alarm action is defined, look for this symbol  in the GEO tree.

## 10.9 Equipment

### 10.9.1 Locked Values

Find all locked points and locked values. A common way to test alarms is to lock a point to an alarm condition, you can verify they are cleared and will respond normally with this report. It is very rare to have a normal situation where a point is locked all the time.

### 10.9.2 Network IO

Verify the programming and status of all network points-especially useful for verifying third-party integration points are reading with no errors. If you get a loss of communication alarm from a third party device this report can help you define what the trouble is. Detailed information on point read errors is generally located in the control module under driver, protocols, error definitions. When you are looking at an equipment on the GEO and you need to quickly get to the control module it is in run manual command go ~net and the system will take you to that equipment on the NET tree.

### 10.9.3 Trend Usage

Creates a summary of the information configured on the Trends > Enable/Disable tab.

### 10.9.4 Parameter Mismatch

Discover where your system has parameter mismatch between the database and the field controllers that need to be resolved. Contact Liebert Services if you have persistent problems with parameter mismatches.

## 10.10 Security

### 10.10.1 Location Audit Log

View chronological lists of location-based changes, the operators that made them, and the reasons for the changes. This report includes changes such as property edits, downloads, driver changes, and view changes.

### 10.10.2 System Audit Log

View chronological lists of system-wide changes, the operators that made them, and the reasons for the changes. This report includes changes such as any change made in the CFG tree, login/logout, and scheduled processes like deleting expired trends



#### NOTE

*Reason field will be empty unless system is configured to require operator notes when making changes. Contact Emerson Network Power Liebert Services to enable this feature.*

## 10.11 Network (Only on NET Tree)

### 10.11.1 Equipment Status

Display the unit alarm color, status, and prime variable of each control program. It is normal for Liebert SiteScan Web to not utilize the prime variable.



### **10.11.2 Controller Status**

Discover network communication problems (shown as purple squares on the report) that need troubleshooting. The report also shows the boot and driver version, download information and whether the controller has 4.x or later driver. The report shows the serial number and Local Access port status. The Controller Status is helpful when dead module alarms have been generated and Liebert SiteScan control module communication on the network must be verified.

## 11.0 CONFIGURING LIEBERT SITESCAN WEB

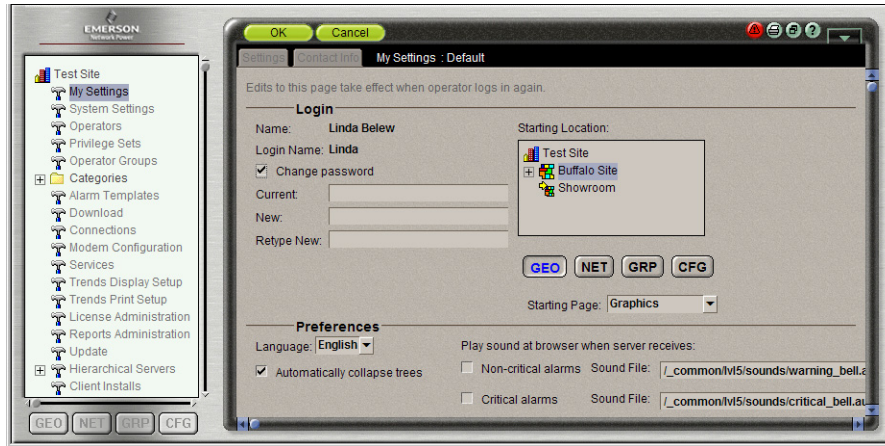
Most of the configuration for Liebert SiteScan Web is performed by Liebert Services. This section provides instructions on how to change the most commonly used configuration settings.

### 11.1 My Settings

My Settings has two tabs—**Settings** and **Contact Info**—that apply to the user currently logged in.

#### 11.1.1 Settings

- Click on the **CFG** button, then click on **My Settings** in the tree at left.
- Click on the **Settings** tab to display the following window.



#### Change Password

To change the login password:

- In the Login section, click to place a check mark (✓) in the Change Password box.
- Enter the existing password in the Current Password box.
- Enter the new password in the New Password box. The password is case-sensitive.
- Confirm the new password by re-entering it in the Retype New Password box.

#### Change Starting Location

To specify the opening view for Liebert SiteScan Web after you log in:

- Click on an item in the tree below Starting Location. Click the plus (+) sign to expand an item.
- Click on the view button—e.g., **GEO** or **CFG**—to be active when Liebert SiteScan Web starts.
- Click on the Starting Page arrow and select an option from the drop-down menu to determine the menu action button—e.g., **Graphics** or **Alarms**—to be active when Liebert SiteScan Web starts.

#### Change Preferences

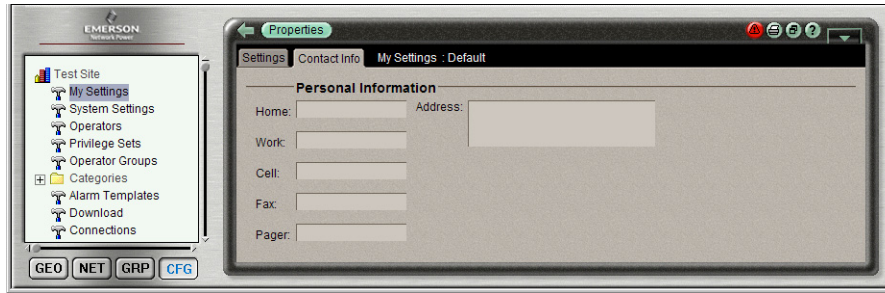
- The Language box has a drop-down menu of available languages. To set up your system for a language other than English, see the Help file for detailed procedures.
- Click to place a check mark (✓) in the **Automatically collapse trees** box to expand only one tree branch at a time.
- You may specify a custom sound file (with the extension **.au** or **.wav**) for each alarm type. Click to place a check mark (✓) in the alarm type box—**Non-critical alarms** or **Critical alarms**—and enter the file name with its path in the corresponding Sound File text box.

#### Save Changes

- When finished, click **OK** (or **Cancel** to close the window without saving your changes).

### 11.1.2 Contact Info

- Click on the **CFG** button, then click on **My Settings** in the tree at left.
- Click on the **Contact Info** tab to display the following window.



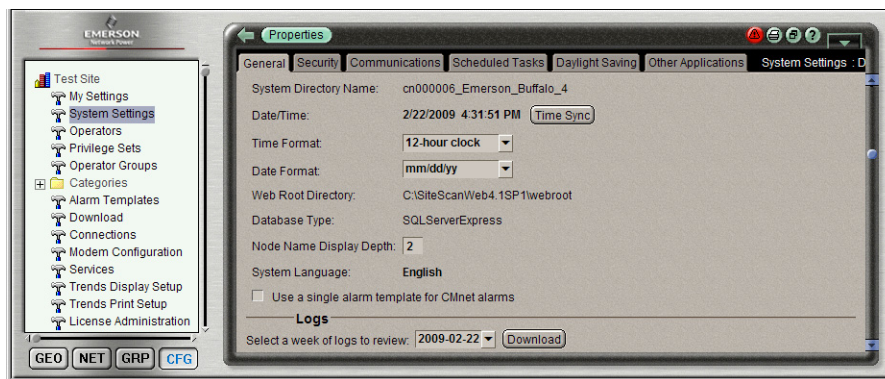
- Enter your contact information in the text boxes:
  - Enter telephone numbers for **Home**, **Work**, **Cell**, **Fax** and **Pager**.
  - Enter your work location in the **Address** box.
- When finished, click **OK** (or **Cancel** to close the window without saving your changes).

## 11.2 System Settings

This section describes two tabs in System Settings: **General** and **Daylight Saving**.

### 11.2.1 General

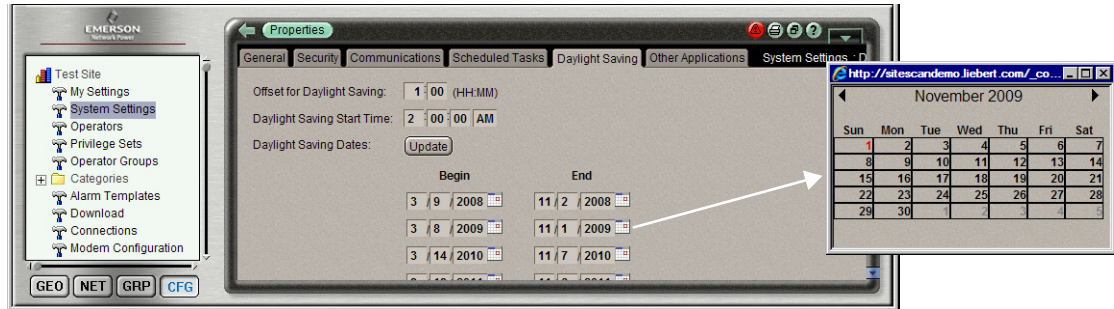
- Click on the **CFG** button, then click on **System Settings** in the tree at left.
- Click on the **General** tab to display the following window.



- The **General** tab displays several items that are not editable: System Directory Name, Current System Time, Path to the Web Root Directory, Database Type, System Language
- Choose the Time Format: **12-hour clock** (4:34 pm) or **24-hour clock** (16:34).
- Choose the Date Format—for example, **mm/dd/yy**.
- The Node Name Display Depth box shows the number of levels displayed in paths in Liebert SiteScan Web. For example, if this value is set at:
  - **2**, a typical path might be `..\First Floor\AHU`
  - **3**, a typical path might be `..\Atlanta R&D\First Floor\AHU`
 Changing this field does not take effect until you restart the Liebert SiteScan Web server.
- **Use a single alarm template for CMnet alarms** applies to upgraded legacy systems:
  - Check the box to use the **alert\_auto alarm** template only CMnet equipment alarms.
  - Leave the box unchecked to allow multiple alarm templates.
- In the **Logs** section, you may download a zip file with logs of system activity for a specified week. Choose a beginning date in the **Select a week of logs to review** drop-down list, then click the **Download** button.

## 11.2.2 Daylight Saving

- Click on the **CFG** button, then click on **System Settings** in the tree at left.
- Click on the **Daylight Saving** tab to display the following window.



- The Offset for Daylight Saving time should be **1 hour**, using the format HH:MM (01:00).
- Daylight Saving Start Time is typically 2:00 a.m. Enter in the format HH:MM:SS (02:00:00), then click on the AM/PM box to toggle between **AM** and **PM**.
- Daylight Saving Dates should have Begin and End dates for each year. Click on a calendar icon, then click on a date in the calendar, shown above right, or enter the date in mm/dd/yyyy format.

## 11.3 Set Up Users

The Administrator may set up users, defined as Operators in Liebert SiteScan Web, with customized access privileges. These operators may also be designated as recipients of alarm messages, as described in **8.4 - Actions**.



### NOTES

*Liebert SiteScan Web has a default **Administrator** operator. For security, either assign a password to this operator or delete it after assigning Admin privileges to another operator. With hierarchical servers, you must create identical operators on each server.*

Users may be assigned to Operator Groups to simplify the process of assigning access privileges and setting up recipients for alarm messages, as described in **11.3.2 - Create Operator Groups**.

### 11.3.1 Set Up Operators

The Operators window allows you to add, edit or delete users and assign access privileges.

- Click on the **CFG** button, then click on **Operators** in the tree at left.
- Click the **Add** button to create a new user or click on an existing user in the **Operators** list. The operator's data appears to the right.



- To remove an existing user, click the **Delete** button.

- In the **Login** section:
    - In the Name box, enter a name that will appear in lists in Liebert SiteScan Web.
    - In the Login Name box, enter a name for the operator to enter when logging in. This name must be unique within the system.
    - To assign a new password, check (✓) **Change password**, then refer to **11.1 - My Settings**.
    - To prompt a user to create a password, check **Force user to change password at login** box. Be sure to assign a temporary password.
    - Specify whether to use automatic logoff for this user: after 15 minutes of inactivity, a different time (up to 500 hours maximum) or not at all.
  - Complete the Personal Information for this user (see **11.1.2 - Contact Info** for details).
  - Specify the Starting Location when this user logs in (see **11.1.1 - Settings** for details).
  - In the **Privilege** section:
    - To assign access privileges to the user, check (✓) appropriate boxes under **System-Wide Privilege Sets** (see **11.4.1 - Add a Privilege Set**).
    - To assign the user to any groups, check (✓) appropriate boxes under **Groups** (see **11.3.2 - Create Operator Groups**). The user will have the same privileges as the group.
- Note:** To hide items not assigned to this user, check (✓) **Show current privileges only**. A grayed-out privilege set indicates it was assigned to the operator through a group listed next to the privilege—for example, *Admin From Reps*.
- When finished, click **OK** (or **Cancel** to close the window without saving your changes).

### 11.3.2 Create Operator Groups

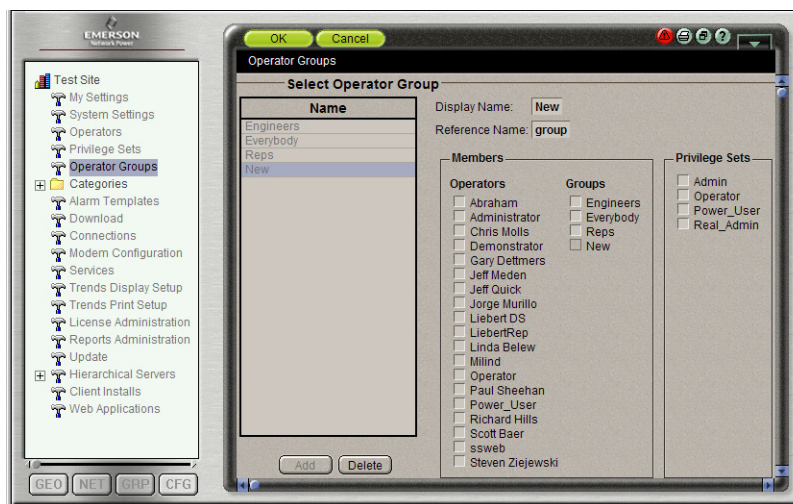
Users may be assigned to Operator Groups to simplify the process of assigning access privileges and setting up recipients for alarm messages. This step requires that individual operators have been created, as described in **11.3.1 - Set Up Operators**.



#### NOTE

Liebert SiteScan Web has a permanent default group called **Everybody** that automatically includes all operators as members. You may assign privilege sets to this default group.

- Click on the **CFG** button, then click on **Operator Groups** in the tree at left.
- Click the **Add** button to create a new group or click on an existing group in the **Name** list. The group's data appears to the right.



- To remove an existing group, click the **Delete** button.
- In the Display Name box, enter a name that will appear in lists in Liebert SiteScan Web.
- Enter a system name in the Reference Name box. The reference name must consist of alphanumeric and underscore characters only and may not begin with a numeral.
- In the **Members** section, check (✓) each existing individual operator under **Operators** you wish to add to the group. You may also add another group by checking boxes under **Groups**.
- To assign access privileges to the group, check (✓) appropriate boxes under **Privilege Sets** (see **11.4.1 - Add a Privilege Set**).
- When finished, click **OK** (or **Cancel** to close the window without saving your changes).

## 11.4 Assign Privileges to Users

You may create Privilege Sets—permission to use selected features in Liebert SiteScan Web—and assign them to individual operators and operator groups.



### NOTE

*Liebert SiteScan Web comes with a default privilege set called **Admin** that includes most privileges. Only an operator with the Admin privilege set can perform the following functions that are not controlled by privileges:*

- Add, edit and delete operators, operator groups and privilege sets.
- Update Liebert SiteScan Web Server.
- Register the Liebert SiteScan Web license.
- Enable and set up advanced security features such as location-dependent operator access and a configurable password policy (if included in your system).

### 11.4.1 Add a Privilege Set

- Click on the **CFG** button, then click on **Privilege Sets** in the tree at left.
- Click the **Add** button to create a new set of privileges or click on an existing set. The set's data appears below the button.



- To remove an existing privilege set, click the **Delete** button.
- Choose the type of privilege set: **System-wide** (available to assign to other users) or **Local**. Each option brings up a corresponding list of privileges from which to choose.
  - **System-wide** privileges include access and functional privileges.
 

These privilege sets may be assigned to other users in the Operators window (see 11.3.1 - **Set Up Operators**) and Operator Groups window (see 11.3.2 - **Create Operator Groups**).
  - **Local** include access, parameter and functional privileges.

**Note:** Once a privilege set is created, the only way to change the type is to delete the set and create a new one.

- In the Name box, enter a name that will appear in lists in Liebert SiteScan Web.
- Enter a system name in the Reference Name box. The reference name must consist of alphanumeric and underscore characters only and may not begin with a numeral.
- Click to place a check mark (✓) for each privilege you want to include in this privilege set. Refer to **Table 8** for a complete list of privileges with descriptions.
- When finished, click **OK** (or **Cancel** to close the window without saving your changes).

Table 8 provides descriptions for all privileges available in the **Privilege Sets** window.

**Table 8 Privilege descriptions**

<b>Access Privileges</b>	<b>Operators may access (but not edit):</b>
Access Geographic Locations	Pages from the GEO tree.
Access Network Items	Pages from the NET tree.
Access Groups	Pages from the GRP tree.
Access Config Items	Pages from the CFG tree.
Access Alarms	Alarms.
Access Logic Pages	Logic pages.
Access User Category (1-5)	<p>Anything in a category that has the same privilege assigned to it.</p> <p><b>Note:</b> These categories may be used to create a custom privilege:</p> <ul style="list-style-type: none"> <li>You can assign a privilege to a Graphic, Property, Trend, or Report category so that only operators with that privilege can access the category. You assign a category privilege on the page where you create or edit categories.</li> <li>If all the other privileges are too widely used to accomplish the results you want, you can assign one of the five Access User Category privileges to the operators and category.</li> </ul>
<b>Parameter Privileges</b>	<b>Operators may edit properties such as:</b>
Edit Setpoint Parameters	Occupied and unoccupied heating and cooling setpoints.
Edit Tuning and Logic Parameters	Gains, limits, trip points, hysteresis, color bandwidths, design temperatures and optimal start/stop.
Edit Manual Override Parameters	Locks on input, output and network points.
Edit Point Setup Parameters	Point number, type, range and network source and destination.
Edit Restricted Parameters	Properties the installer restricted with this privilege.
Edit Category Assignments	Alarm, Graphic, Trend and Report category assignments.
Edit History Value Reset	Elapsed active time and history resets and runtime hours.
Edit Trend Parameters	Enable trend logging, log intervals and log start/stop times.
Edit Calibration Parameters	Point calibration offsets.
Edit Hardware Device Parameters	Module driver properties.
Edit Critical Configuration	Critical properties the installer protected with this privilege.
Edit Area Name	Area display names.
Edit Equipment Name	Equipment display names.
Edit Alarm Configuration	Enabling/disabling alarms and editing alarm messages, actions, categories and templates.
InterOp Privilege 1 - 10	Those protected by password levels 1-10 in SiteScan 2000.
<b>Functional Privileges</b>	<b>Operators may:</b>
Manage Alarm Messages and Actions	Add, edit and delete alarm messages and actions.
Maintain System Parameters	Edit all properties on the System Settings page.
Maintain Schedules	Add, edit, delete and download schedules.
Maintain Schedule Group Members	Add, edit and delete schedule groups.
Maintain Categories	Add, edit and delete categories.
Maintain Trends Display and Print Setup	Edit Trends Display Setup and Trends Print Setup on the CFG tree.
Maintain Alarm Templates	Edit Alarm Template and Reporting Action Templates.
Acknowledge Non-Critical Alarms	Acknowledge all non-critical alarms.
Acknowledge Critical Alarms	Acknowledge all critical alarms.

**Table 8 Privilege descriptions (continued)**

<b>Functional Privileges (continued)</b>	<b>Operators may:</b>
Force Normal Non-Critical Alarms	Force non-critical alarms to return to normal.
Force Normal Critical Alarms	Force critical alarms to return to normal.
Delete Non-Critical Alarms	Delete non-critical alarms.
Delete Critical Alarms	Delete critical alarms.
Execute Audit Log Report	Run the Audit Log Report.
Download Devices	Mark equipment for download and initiate a download.
System Shutdown	Issue the Shutdown manual command that shuts down Liebert SiteScan Web Server.
Engineer System	<ul style="list-style-type: none"> <li>• Log in and make database changes in SiteBuilder.</li> <li>• Use the copy, notify, reload and revert manual commands.</li> <li>• Access the Configure and Set up Tree right-click menus in Liebert SiteScan Web.</li> <li>• Add text in the Notes field on an equipment's Properties page.</li> </ul>
Access Commissioning Tools	Access: <ul style="list-style-type: none"> <li>• Equipment Checkout</li> <li>• Airflow Configuration</li> <li>• Trend, Report and Graphic categories that require this privilege</li> <li>• Discovery tool</li> </ul>
Maintain Graphs and Reports	Add, edit and delete trend graphs and reports.
Maintain Connections	Edit Connections page properties.
Remote File Management	Access files using a WebDAV utility.
Remote Data Access-SOAP	Retrieve data through an Enterprise Data Exchange (SOAP) application.
Do not audit changes made using SOAP (Web services)	Not have SOAP (Web services) changes recorded in the Audit Log.
Manual Commands/Console Operations	Access the manual command dialog box and issue basic manual commands.
Manual Commands/File IO	Execute manual commands that access the server's file system.
Manual Commands/Adv Network	Execute manual commands that directly access network communications.
Manual Commands/Unrestricted	Execute manual commands that bypass all safeguards and may cause unpredictable results if used incorrectly.

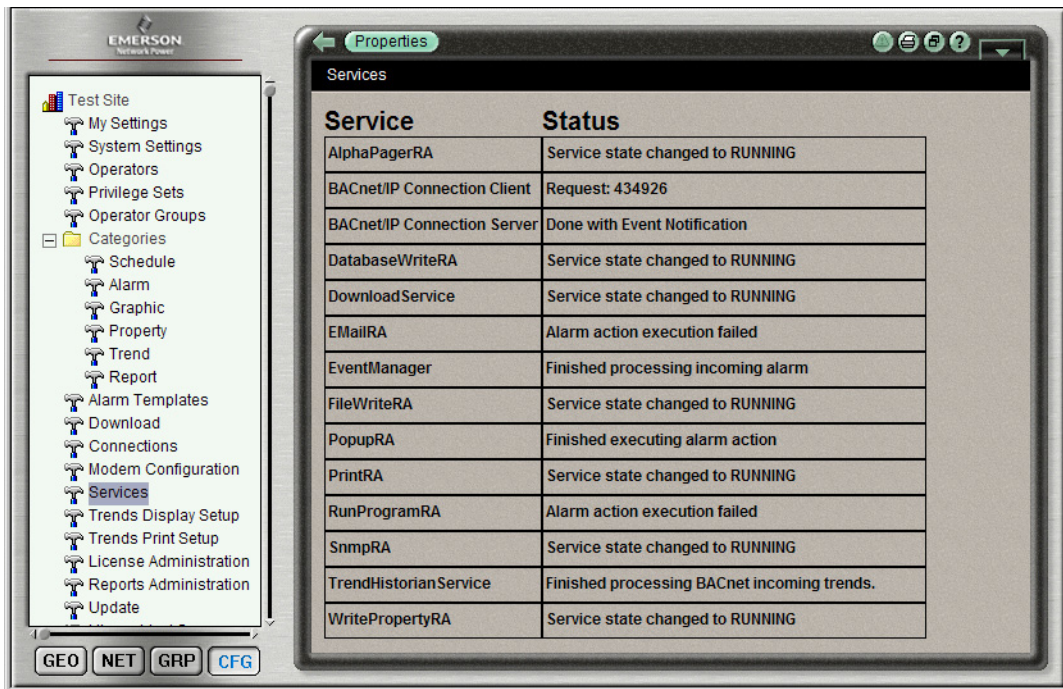


## 11.5 Services

The Services window displays all current services for Liebert SiteScan Web and the status of each.

To access the Services window:

- Click on the **CFG** button, then click on **Services** in the tree at left.

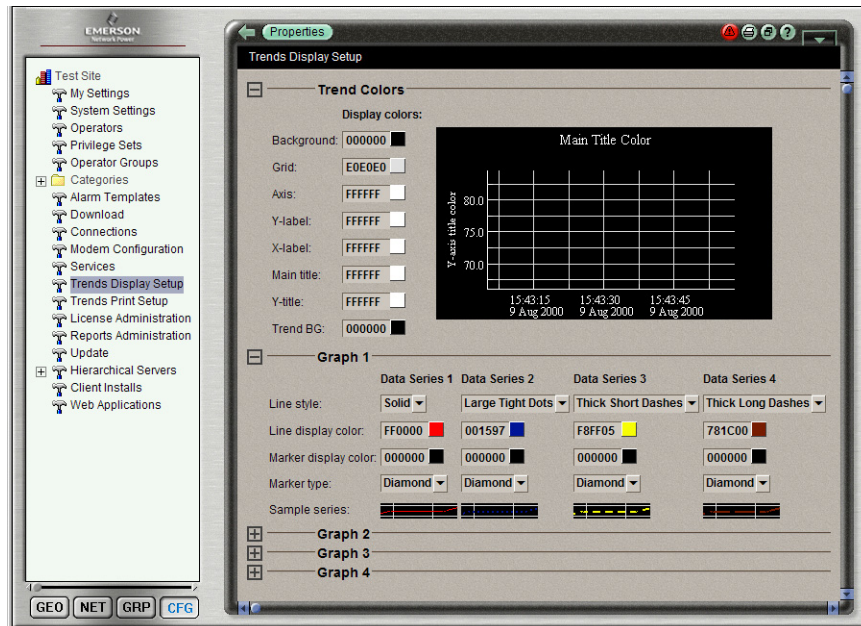


## 11.6 Trends Setup

### 11.6.1 Trends Display Setup

The Trends Display Setup options allow you to specify the appearance of graphs on the screen.

- Click on the **CFG** button, then click on **Trend Display Setup** in the tree at left.

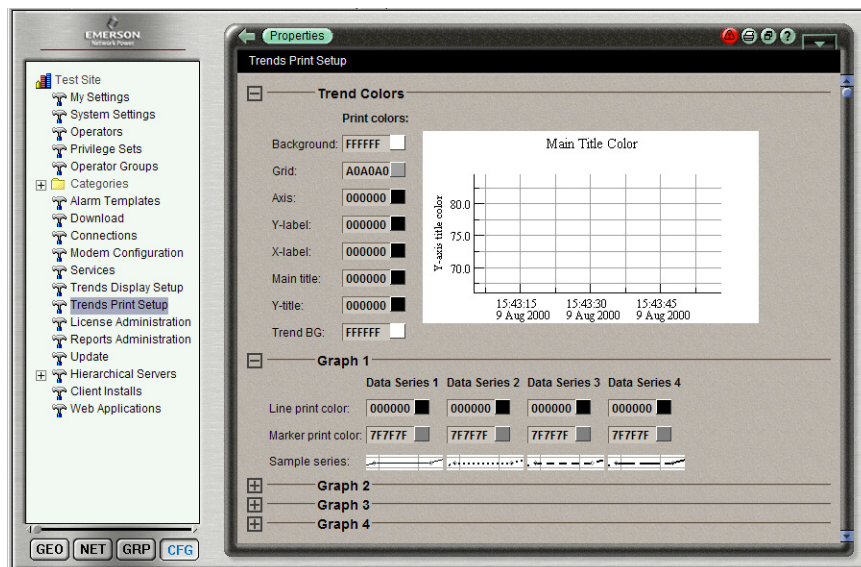


- In the Trend Colors section, choose options to specify colors for all graphs for the background, grid and axis, as well as text portions: labels for x-axis and y-axis labels, the main title and the y-axis title.
- You may set up display options for up to four types of graphs, including line style and color and marker color and type.

### 11.6.2 Trends Print Setup

The Trends Print Setup options allow you to specify the appearance of graphs on the printer.

- Click on the **CFG** button, then click on **Trends Print Setup** in the tree at left.



- In the Trend Colors section, choose options to specify colors for all graphs for the background, grid and axis, as well as text portions: labels for x-axis and y-axis labels, the main title and the y-axis title.
- You may set up display options for up to four types of graphs, including line style and color and marker color and type.

## 11.7 Client Installs

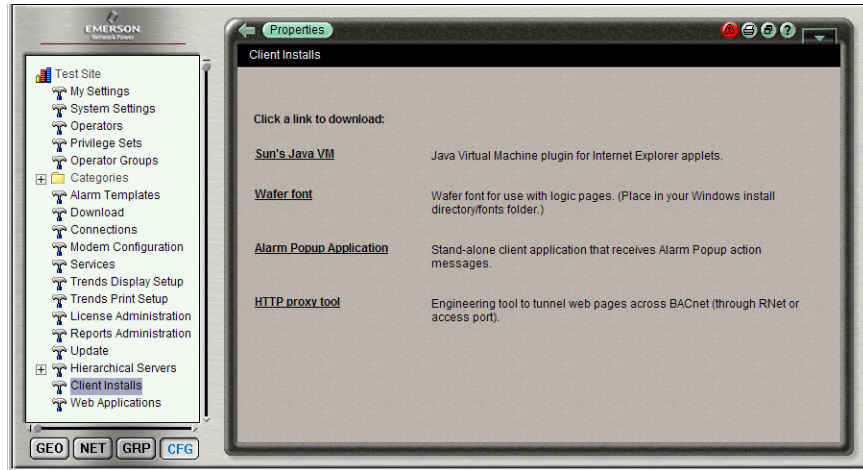
**Client Install** is used to install the Java Virtual Machine on the current connected workstation. Install only if required.

**Wafer Font** is used by Liebert SiteScan Web to display specific text in the Liebert SiteScan Web session. Install only if required.

**Alarm Pop Application** is a thin application that can be used by a client to receive alarm notifications to a workstation outside of the Liebert SiteScan Web browser.

To access these downloads:

- Click on the **CFG** button, then click on **Client Installs** in the tree at left.

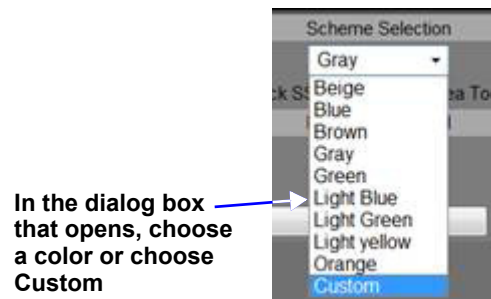
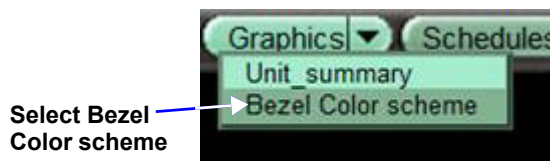


Click a link to download:

- **Sun's Java VM:** Java Virtual Machine plug-in for Internet Explorer applets.
- **Wafer font:** Wafer font for use with logic pages. (Place in your Windows install directory/fonts folder.)
- **Alarm Pop Application:** Stand-alone client application that receives Alarm Popup action messages.
- **HTTP proxy tool:** Engineering tool to tunnel web pages across BACnet (through RNet or access port).

## 11.8 Changing Unit Bezel Colors

1. On the top level floor plan in the GEO tree, select **Bezel Color Scheme** from the Graphics drop-down menu.
2. The color drop-down menu under Scheme Selection offers several colors and **Custom**. Gray is selected by default. To change colors, select either a color or **Custom** from the drop-down menu (see below, right).

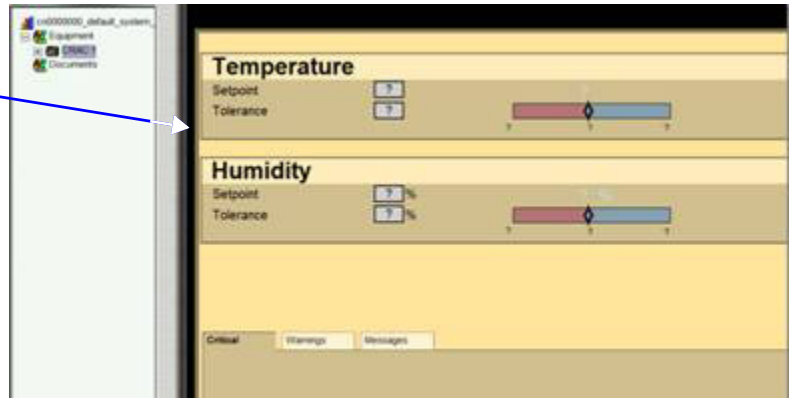


### Choosing a Color in Scheme Selection for the Entire Bezel

Selecting a color from the drop-down menu will apply a color scheme based on that color to the table header, bezel background and table background. Light Yellow was selected in the example below, making the entire bezel varying shades of light yellow. Choosing **Custom** permits selecting different colors for various elements of the unit bezel.



Choosing Light Yellow here makes the entire bezel light yellow.



### Choosing Different Colors for Elements of the Bezel

The **Custom** color selection permits setting different colors for each of these bezel elements:

- De-Selected Tab
- Table Header
- Bezel Background
- Table Background
- Summary Lines

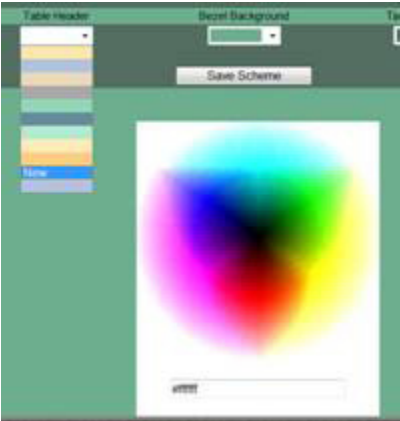
To change individual elements of the bezel, select **Custom** from the Scheme Selection drop-down menu. This brings up a dialog box with standard colors and a Custom option that will display a color wheel with a chromatic scale of 4096 colors.

To change the color of a portion of the bezel, click on the arrow associated with the name of the bezel element.

Choosing Custom enables drop-down lists for selecting colors for various parts of the bezel



If a desired color is not available, select **New** from the drop-down color list. This prompts Liebert SiteScan Web to display a color wheel. Use the cursor to select a color and click **Save Scheme**.



**Summary Line Colors**

Summary lines are used to change the colors of the summary views that Liebert SiteScan Web displays—Area, Unit, Air, Power and UPS. Selecting red in the next example yields the red lines in the example below.

Choosing red for the Summary Lines ...

... changes the lines in the summary pages to red.

Unit	Temperature	Humidity	Dehumidify	Humidify	Heating
CRAC 1	?	?	?	?	?

## 11.9 Event Color Scheme



**NOTE**

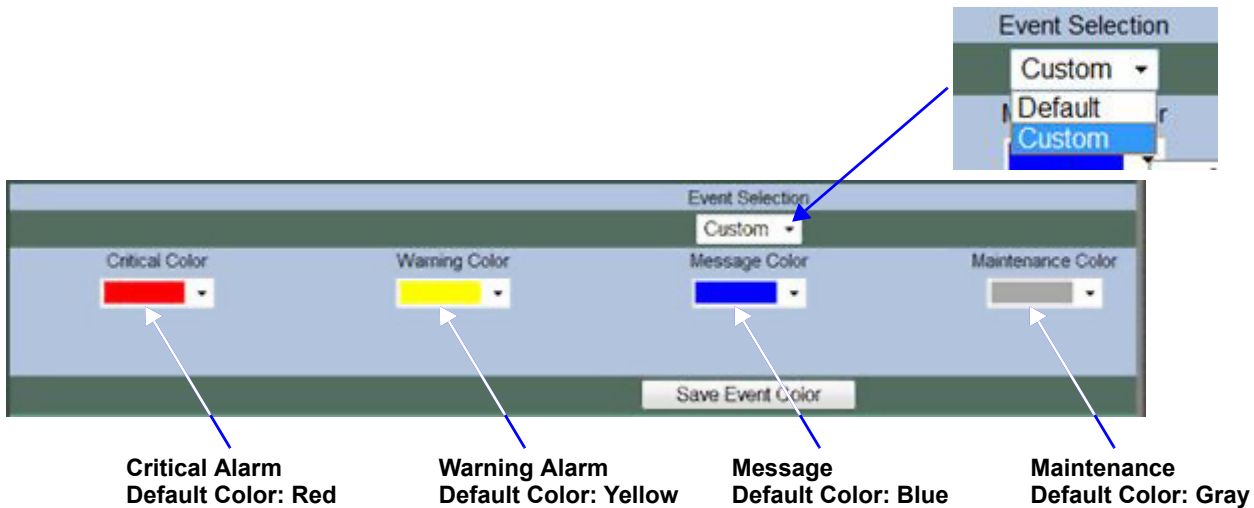
Alarm colors are a System setting. Changing a System setting, such as alarm colors, will affect all users.

If any user changes the event color scheme it will overwrite the previous setting.

Changing the alarm colors can only be performed by a person with administrative privileges in Liebert Site Scan Web. Changing the event color scheme may also require downloading a module.

To change the alarm colors:

1. On the top level floor plan in the GEO tree, click the arrow beside Graphics and choose **Event Color Scheme** from the drop-down menu. This brings up the Event Selection dialog box with the default colors displayed for each choice, see below.



The Event Selection offers two options: **Default** and **Custom**. **Default** sets the colors to the standard colors of Liebert SiteScan Web. Selecting **Custom** permits changing the colors.

2. Select **Custom** to change the colors. The example below shows green selected for Critical Warnings.

This will change all Critical Warnings for all users to green.



3. Click **Save Event Color** to save the colors chosen.

This will bring up confirmation popups. To make the color changes, click OK each time. Making the color change may take more than two minutes, depending on the size of the system.



**NOTE**

If the event color scheme does not take effect, a module download may be required. Contact your IT department to download the module.

## 12.0 LIEBERT SOFTWARE PROGRAM LICENSE AGREEMENT

This section contains the license agreement for Liebert SiteScan Web.

### LIEBERT SITESCAN WEB SOFTWARE LICENSE AGREEMENT

Liebert Corporation  
End User License Agreement (EULA)

This End User License Agreement (EULA) is a CONTRACT between the User, and Liebert Corporation (Liebert), which covers the User's use of the Liebert products (Products) that accompany this EULA, which may include software programs (Software), hardware (Hardware), associated media, printed materials, and "online" or electronic documentation. If the User does not agree to the terms of this EULA, then do not install or use the Software Product or the License. **BY EXPLICITLY ACCEPTING THIS EULA, HOWEVER, OR BY INSTALLING, COPYING, DOWNLOADING, ACCESSING, OR OTHERWISE USING THE SOFTWARE PRODUCT AND/OR LICENSE, YOU ARE ACKNOWLEDGING AND AGREEING TO BE BOUND BY THE TERMS OF THIS EULA.**

#### COPYRIGHT

Copyright laws and international copyright treaties, as well as other intellectual property laws and treaties protect the Products. User may not and shall not copy or otherwise reproduce or make available to any other party any part or all of the Products. The User may, however, make one (1) copy of Software for backup or archival purposes.

#### DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS

User may not reverse engineer, decompile or disassemble the Products, modify or create derivative works based upon the Products in whole or in part, distribute copies of the Software, remove any proprietary notices or labels on the Products or resell, lease, rent, transfer, sublicense or otherwise transfer rights to the Software. User acknowledges that no title to the intellectual property in the Products is transferred. Title, ownership, rights and the intellectual property rights in and to the Products shall remain with Liebert. Furthermore, this EULA does not grant User any rights in connection with any trademarks or service marks of Liebert.

#### GRANT OF NON-EXCLUSIVE LICENSE

Liebert Software that does not require registration (typically engineering tool software programs and training software programs) may be installed and used on multiple computers within the User's organization as required, but may not be shared with individuals outside the User's organization. User may not modify or create derivative copies of the License. User may not sublicense, reassign, or transfer this License or Agreement, or any part thereof, to any party. All rights not expressly granted to User are retained by Liebert.

#### WARRANTIES

Licensor warrants that Licensor has the right to license to User the nonexclusive use of the Products as set forth herein. Licensor warrants that, to the best of Licensor's knowledge, the intellectual property embodied in the Products do not infringe upon the registered U.S. copyright, patent, or trademark rights of third parties. **ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY EXCLUDED.**

#### INDEMNIFICATION

In the event of any United States copyright, patent, or trademark infringement claim brought against User arising out of use of the Product as authorized in this EULA, Licensor will defend, at its expense, and pay any direct costs and damages made in settlement or finally awarded as a result of any infringement action brought against User, subject to the limitations set out in the next paragraph, provided (1) Licensor is promptly notified in writing by User that such action is threatened or has been brought; (2) Licensor shall have sole control of the defense of any such action and all negotiations for its settlement or compromise; and (3) Licensor receives the cooperation and assistance of User.

*(continued)*

**LIEBERT SITESCAN WEB SOFTWARE LICENSE AGREEMENT** *(continued)*

**LIMITATION ON LIABILITY**

Licensor shall not be liable for loss of profit, loss of business, or other financial loss which may be caused, directly or indirectly, by the inadequacy of the Product for any purpose or any use thereof, or by any defect or deficiency therein. The User agrees that the Licensor's liability for damages, if any, shall not exceed the charges paid to the Licensor by the User under this Agreement. No action, regardless of form, arising out of any transaction under this Agreement may be brought by the User more than one year after the Licensee has knowledge of the occurrence which gives rise to the cause of such action.

**ADDITIONAL SOFTWARE**

This EULA applies to updates or supplements to the original Product provided by Liebert.

**TERMINATION**

Liebert may cancel this EULA if User does not abide by the terms and conditions of this EULA, in which case all Products and component parts must be returned to Liebert and all copies of Products, or any portions thereof, not returned to Liebert, must be destroyed.

**NOTE ON JAVA SUPPORT.**

Sun Microsystems, Inc. has contractually obligated Liebert to make this disclaimer:

THE PRODUCT MAY CONTAIN SUPPORT FOR PROGRAMS WRITTEN IN JAVA. JAVA TECHNOLOGY IS NOT FAULT TOLERANT AND IS NOT DESIGNED, MANUFACTURED, OR INTENDED FOR USE OR RESALE AS ONLINE CONTROL EQUIPMENT IN HAZARDOUS ENVIRONMENTS REQUIRING FAIL-SAFE PERFORMANCE, SUCH AS IN THE OPERATION OF NUCLEAR FACILITIES, AIRCRAFT NAVIGATION OR COMMUNICATION SYSTEMS, AIR TRAFFIC CONTROL, DIRECT LIFE SUPPORT MACHINES, OR WEAPONS SYSTEMS, IN WHICH THE FAILURE OF JAVA TECHNOLOGY COULD LEAD DIRECTLY TO DEATH, PERSONAL INJURY, OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE ENTIRE AGREEMENT.

This EULA, including any addendum or amendment to this EULA which is included with the Product, are the entire agreement between User and Liebert relating to the Products, and they supersede all prior or contemporaneous oral or written communications, proposals and representations with respect to the Products or any other subject matter covered by this EULA. To the extent the terms of any Liebert policies or programs for support services conflict with the terms of this EULA, the terms of this EULA shall control.

**CONTACT INFORMATION**

If the User has any questions about this EULA, or wants to contact Liebert for any reason, please direct all correspondence to: Liebert Corporation, Attn: Marketing Department, 975 Pittsburg Drive, Delaware, OH 43015, United States of America.

© 2003 Liebert Corporation



## **Notes**





# Ensuring The High Availability Of Mission-Critical Data And Applications.

Emerson Network Power, a business of Emerson (NYSE:EMR), is the global leader in enabling *Business-Critical Continuity™* from grid to chip for telecommunication networks, data centers, health care and industrial facilities. Emerson Network Power provides innovative solutions and expertise in areas including AC and DC power and precision cooling systems, embedded computing and power, integrated racks and enclosures, power switching and controls, infrastructure management, and connectivity. All solutions are supported globally by local Emerson Network Power service technicians. Liebert AC power, precision cooling and monitoring products and services from Emerson Network Power deliver Efficiency Without Compromise™ by helping customers optimize their data center infrastructure to reduce costs and deliver high availability.

While every precaution has been taken to ensure the accuracy and completeness of this literature, Liebert Corporation assumes no responsibility and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

© 2012 Liebert Corporation

All rights reserved throughout the world. Specifications subject to change without notice.

® Liebert is a registered trademark of Liebert Corporation.

All names referred to are trademarks or registered trademarks of their respective owners.

SL-27050\_REV03\_08-13

## Technical Support / Service

### Web Site

[www.liebert.com](http://www.liebert.com)

### Monitoring

[liebert.monitoring@emerson.com](mailto:liebert.monitoring@emerson.com)

800-222-5877

Outside North America: +00800 1155 4499

### Single-Phase UPS & Server Cabinets

[liebert.upstech@emerson.com](mailto:liebert.upstech@emerson.com)

800-222-5877

Outside North America: +00800 1155 4499

### Three-Phase UPS & Power Systems

800-543-2378

Outside North America: 614-841-6598

### Environmental Systems

800-543-2778

Outside the United States: 614-888-0246

### Locations

#### United States

1050 Dearborn Drive

P.O. Box 29186

Columbus, OH 43229

#### Europe

Via Leonardo Da Vinci 8

Zona Industriale Tognana

35028 Piove Di Sacco (PD) Italy

+39 049 9719 111

Fax: +39 049 5841 257

#### Asia

29/F, The Orient Square Building

F. Ortigas Jr. Road, Ortigas Center

Pasig City 1605

Philippines

+63 2 687 6615

Fax: +63 2 730 9572

## Emerson Network Power.

The global leader in enabling *Business-Critical Continuity™*

AC Power

Embedded Computing

Outside Plant

Connectivity

Embedded Power

Power Switching & Controls

DC Power

**Infrastructure Management & Monitoring**

Precision Cooling

## EmersonNetworkPower.com

Racks & Integrated Cabinets

Services

Surge Protection