

# Open Graphic Navigator Annunciation Monitoring & Control Software



OpenGN version 3.9 Administrator Guide



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## 1.0 Welcome

Open Graphic Navigator, also known as OpenGN, is a fire alarm and asset protection management and warning system that lets you monitor remote sites located anywhere in the world.

This manual instructs you how to install and use the application and explains the responsibilities of the administrator and operator.

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Note: Mircom Group of Companies (MGC) periodically updates panel firmware and

software to add features and correct any minor inconsistencies. For information

about the latest software, visit the OpenGN website at: www.mircom.com/OpenGN

## This chapter contains the following sections:

- Introducing OpenGN
- Configurable Features
- Components
- Installed Software
- User Groups
- Related Documents



## 1.1 Introducing OpenGN

The OpenGN software application provides monitoring, control and software management solutions for the fire detection and asset protection market. It lets you monitor information from panel-controlled fire detection objects using a customized graphical display. OpenGN also stores all events in a log file.

OpenGN addresses the need for an easy-to-use real-time fire monitoring system and provides the administrator with a visually pleasing fire detection configuration utility for use in industrial and residential establishments.

You set up OpenGN by exporting a job file from the FACP Configurator, and then importing it into OpenGN, as shown in Figure 1.

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**Note:** Detection Objects are both the physical detectors in the field and the virtual devices in the OpenGN program. The fire monitoring panels are physical objects with a virtual counterpart in OpenGN. The OpenGN Gateway and the OpenGN application are software programs.

Figure 1 illustrates a typical OpenGN application over a TCP/IP network. For additional examples of network topology see Appendix C on page 105.

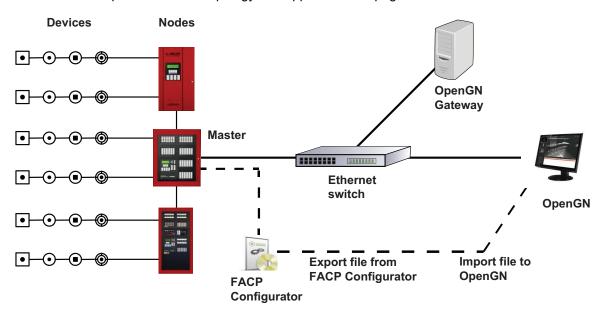


Figure 1 OpenGN TCP/IP Network Diagram

## 1.2 Configurable Features

OpenGN is an advanced fire detection and asset protection system that lets you monitor information from panel-controlled fire detection objects using a customized graphical display. OpenGN also stores all received events in a log file that can be viewed within the application.

Features of the OpenGN product suite include:

 An aesthetically pleasing, high quality, customizable graphical interface that administrators can use to monitor buildings or groups of buildings.



- A building ready monitoring control system with full software management in a user friendly graphical enabled interface.
- Easy configuration and customization of alarm objects.
- A display of the alarm location on the floor plan with specific information. User actions and events are logged and recorded for creation of customized reports.
- OpenGN authenticates the data source as well its sent data.

## 1.3 Components

The OpenGN fire monitoring system consists of the following components:

## 1.3.1 Objects

**Objects** are all the fire device, system points, switches, and custom objects connected to the Fire Alarm system. OpenGN assigns properties to objects to help define them, monitor, and control them. Objects connect to the panel or node using circuits (loops) and which are defined by their state and configuration.

#### Loops

Each CPU has several circuits where physical objects are placed.

#### State

All objects can have any of the following states (this is not a complete list):

Active

- Bypassed
- Trouble

Normal

## **Function**

Input Objects can have the following functions (this is not a complete list):

Alarm

Trouble

Supervisory

Monitor

#### 1.3.2 Node

A node is a Fire Alarm Control Panel such as FleX-Net™.

## 1.3.3 OpenGN Gateway

The OpenGN Gateway runs on either the same computer as OpenGN or on a separate computer on the same network. It is a software application that connects to a node and sends information to OpenGN.

## 1.3.4 Panel Configurator

The Configurator is a software application that produces the job file for use by OpenGN.To connect the Fire Alarm Control Panel with OpenGN, the administrator must export a job file



from the Configurator and import it into OpenGN. This procedure varies depending on the type of panel. In some cases an XML conversion tool is required. See section 1.6 on page 12.



**Note:** Verify with MGC that your Fire Alarm Control Panel Configurator is compatible with OpenGN.

## 1.3.5 OpenGN

OpenGN is the software application which receives event information from the Fire Alarm Control Panel through a TCP/IP port or an Ethernet connection. It allows the user to monitor the entire campus in 2D or 3D by building or by floor. A list of all active events from any object connected to the panel is displayed here.

## 1.4 Installed Software

When you run the OpenGN installer, the following software is installed.



**Note:** Do not remove or modify any of this software or the files in the locations shown in Table 1, or OpenGN might stop functioning.

#### **Table 1 Installed Software**

Software	Location
OpenGN	C:\Program Files\Mircom Group of Companies
SQL Server (database server)	C:\Program Files\Microsoft SQL Server
Codemeter (for licensing)	C:\Program Files (x86)\CodeMeter

## 1.5 User Groups

OpenGN allows users and user groups with Authorization Levels. See section 4.13.5 on page 77 for a description of Authorization Levels.

## 1.6 Related Documents

You can find these documents on the mircom.com website.

- LT-6674 OpenGN System Requirements
- LT-6701 OpenGN License Requirements
- LT-6622 OpenGN to FleX-Net<sup>™</sup> Connection InstructionsLT-6703 OpenGN to FleX-Net<sup>™</sup> FX-4000 Connection Instructions
- LT-6621 OpenGN to FX-3500 and FX-3318 Connection Instructions
- LT-6620 OpenGN to PRO-2000 Connection Instructions
- LT-6055 OpenGN to MR-2200/2900 Connection Instructions
- LT-1105 OpenGN to FX-2000 Connection Instructions



# 2.0 Installation



Note: The manual covers OpenGN version 3.9 only.

This chapter describes how to install OpenGN 3.9 and the OpenGN Gateway, and how to configure the OpenGN Gateway computer.

For instructions on connecting OpenGN to specific panels, see the following documents on the **mircom.com** website:

- LT-6622 OpenGN to FleX-Net™ Connection Instructions
- LT-6703 OpenGN to FleX-Net™ FX-4000 Connection Instructions
- LT-6621 OpenGN to FX-3500 and FX-3318 Connection Instructions
- LT-6620 OpenGN to PRO-2000 Connection Instructions
- LT-6055 OpenGN to MR-2200/2900 Connection Instructions
- LT-1105 OpenGN to FX-2000 Connection Instructions

## This chapter explains

- 1. Verifying Installation Requirements
- 2. Upgrading OpenGN
- 3. Installing OpenGN and the OpenGN Gateway
- 4. Configuring the OpenGN Gateway Computer
- 5. Configuring OpenGN and the OpenGN Gateway



## 2.1 Overview

This chapter describes how to set up the following components:

- OpenGN installed on a computer with TCP/IP network access.
- The OpenGN Gateway connected to the Fire Alarm Control Panel. The OpenGN Gateway can be installed on the same computer as OpenGN, or on a separate computer.



Attention: Verify that the Configurator version is compatible with OpenGN.

## 2.2 Verifying Installation Requirements

See the document LT-6674 OpenGN System Requirements on **http://www.mircom.com** for the recommended requirements.

If the OpenGN Gateway is installed on a separate computer, contact your MGC representative for the recommended requirements.

## 2.3 Upgrading OpenGN

If you are upgrading an earlier version of OpenGN to version 3.9, you must ensure that the currently installed version is 3.2 or later. You cannot upgrade from a version earlier than 3.2.

## 2.4 Installing OpenGN and the OpenGN Gateway



**lote:** To meet agency requirements, you must install OpenGN in the same room as the MGC Fire Alarm Control Panel that it is connected to. In addition, OpenGN must be networked via Ethernet within 18 meters (60 feet) to the MGC Fire Alarm Control Panel.



Attention: You need system administrator authentication to install OpenGN.

#### To install OpenGN

- 1. Do one of the following:
- From the USB key:
  - a. Insert the USB key into the computer.
  - b. Double-click the **OpenGN-v3.9** icon.
- From the downloaded file:
  - a. Double-click the downloaded file to extract it.



b. Double-click the **OpenGN-v3.9** icon in the extracted folder.

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**Note:** If at any time you are prompted to allow the OpenGN installer to make changes, enter your Windows username and password if required, then click **Yes**.

The first screen shows the license agreement for OpenGN, SQL Server, and Codemeter.

2. Read the license terms and conditions, then click **I agree**.

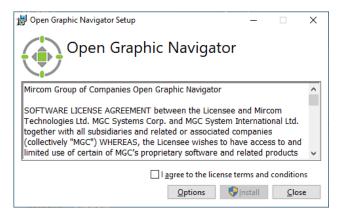


Figure 2 License Terms and Conditions

- If you are upgrading OpenGN, click **Install**, then go to step 3.
- If you are installing OpenGN for the first time, follow the instructions below:
- Click the **Options** button.

The SQL Server SA Password screen appears.

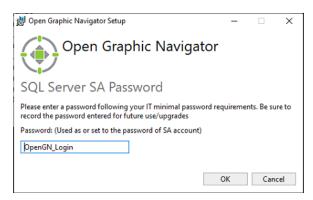


Figure 3 SQL Server SA Password

b. Enter the password that the SQL Server will use for the superadmin account. By default this is **OpenGN\_Login**.

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**Note:** Your IT department might have requirements for the SQL superadmin password that the default password (**OpenGN\_Login**) does not meet. In order for OpenGN to be installed correctly, you must create a password that meets your IT department's requirements.

Write down this password in a safe place; you need it to access OpenGN.

c. Click **OK**, then click **Install**, then go to step 3.



3. On the next screen, click Next.

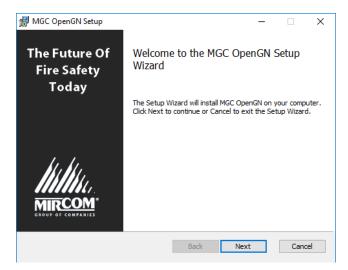


Figure 4 Welcome Screen

The next screen shows the license agreement for OpenGN.

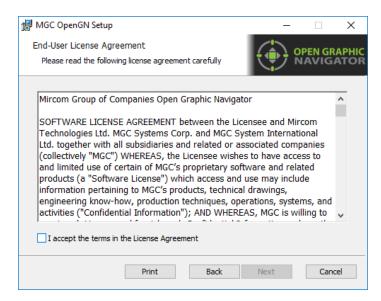


Figure 5 License Terms and Conditions

4. Read the license terms and conditions, then click I accept the terms of the License Agreement, then click Next.



The next screen asks if you want to upgrade OpenGN or install it for the first time.

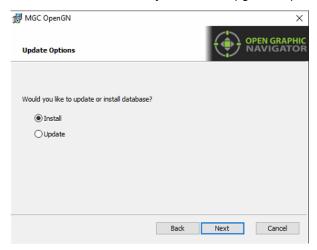


Figure 6 Update Options

- If you are upgrading OpenGN, go to section 2.4.1.
- If you installing OpenGN for the first time, go to section 2.4.2.

## 2.4.1 If you are upgrading OpenGN

a. Select Update, then click Next.

The SQL Server superadmin password screen appears.

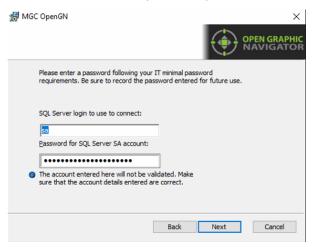


Figure 7 SQL Server superadmin password

- b. Enter the password that OpenGN will use to log into the SQL superadmin account. By default it is **OpenGN\_Login**. **This password must be the same as the password you entered earlier** (Figure 3 on page 15).
- c. Click Next.



d. Click **Next** on the next screen, then go to step 5 on page 20.

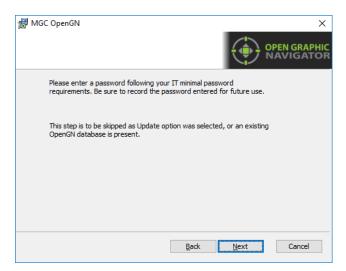


Figure 8 Click Next

## 2.4.2 If you are installing OpenGN for the first time

a. Select Install, then click Next.
 The SQL Server superadmin password screen appears.

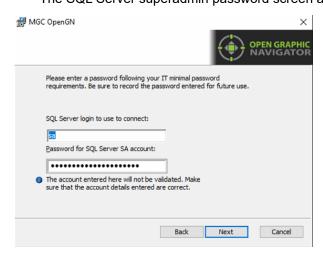


Figure 9 SQL Server superadmin password

- b. Enter the password that OpenGN will use to log into the SQL superadmin account. By default it is **OpenGN\_Login**. **This password must be the same as the password you entered earlier** (Figure 3 on page 15).
- c. Click Next.



## The OpenGN SecurityAdmin screen appears.

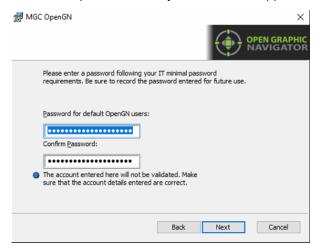


Figure 10 OpenGN SecurityAdmin password

d. Enter the password for the OpenGN SecurityAdmin account. By default this password is **Your\_Password4OpenGN**. The SecurityAdmin account is the OpenGN administrator account.

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**Note:** Your IT department might have requirements for SQL passwords that the default password (**Your\_Password4OpenGN**) does not meet. In order for OpenGN to be installed correctly, you must create a password that meets your IT department's requirements.

Write down this password in a safe place; you need it to access OpenGN.

e. Click Next, then go to step 5.



5. In the Choose Setup Type window, click **Typical**.



Note: If you want to install only OpenGN without the OpenGN Gateway, or only the OpenGN Gateway without OpenGN, go to Appendix I - Installing and Uninstalling OpenGN on page 128.

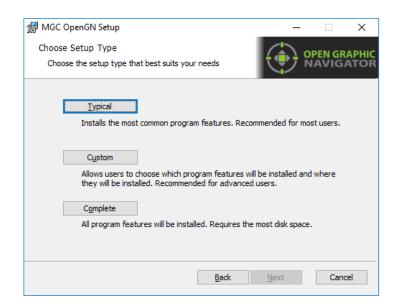


Figure 11 Choose Setup Type

6. On the next screen, click Install.

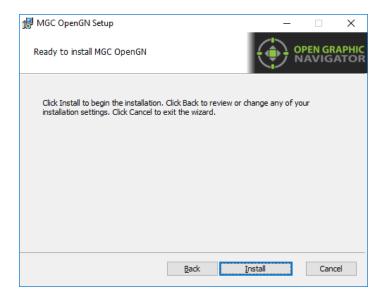


Figure 12 Ready to install MGC OpenGN



## OpenGN is installed.

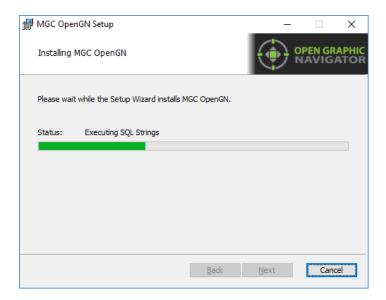


Figure 13 Installing MGC OpenGN

#### 7. Click Finish.

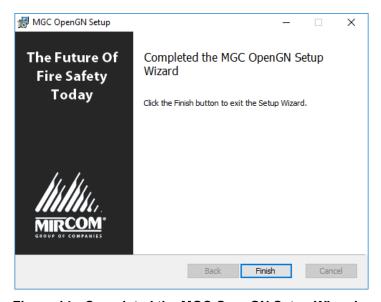


Figure 14 Completed the MGC OpenGN Setup Wizard



#### 8. Click Restart.

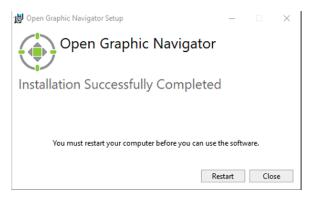


Figure 15 Installation Successfully Completed

After the computer restarts, you will have 2 icons on your desktop: **Open Graphic Navigator** and **Open Graphic Navigator Gateway**.

## 2.5 Configuring the OpenGN Gateway Computer

The OpenGN Gateway is an application that connects to the Fire Alarm Control Panel and sends information to OpenGN. The OpenGN Gateway runs on the same computer as OpenGN or on a separate computer on the same network. The computer that the OpenGN Gateway is running on must be connected to the Fire Alarm Control Panel.

Follow these instructions to assign a static IP to the computer that the OpenGN Gateway is on.

- 1. On the computer that the OpenGN Gateway is on, click Start, then click Control Panel.
- 2. Click Network and Internet.
- 3. Click Network and Sharing Center.
- Click the Ethernet connection.

The **Ethernet Status** window appears.

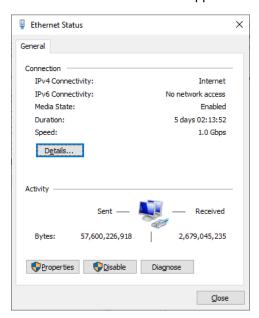


Figure 16 Ethernet Status

5. Click Properties.



#### The **Ethernet Properties** window appears.

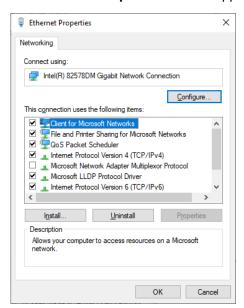


Figure 17 Ethernet Properties

6. Double-click Internet Protocol Version 4 (TCP/IPv4).

The Internet Protocol Version 4 (TCP/IPv4) Properties window appears.

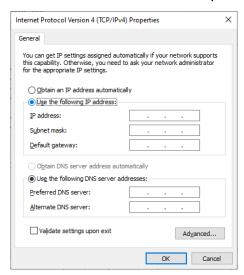


Figure 18 Internet Protocol Version 4 (TCP/IPv4) Properties

- 7. Click Use the following IP address.
- 8. Type the IP address, subnet mask and default gateway.
  - If you need assistance, contact your network administrator.
  - If you are connecting the OpenGN Gateway computer to a FleX-Net™ panel directly over Ethernet, enter an IP address that is different than the IP address of the FleX-Net™ panel. Enter the same subnet mask as the subnet mask on the panel.
  - See LT-6622 "OpenGN to FleX-Net™ Connection Instructions" for instructions on how to get this information from the FleX-Net™ panel.
- 9. Repeat these steps for the computer that OpenGN is installed on, if it is a different computer.

Congratulations! You have successfully installed OpenGN.



## 2.6 Configuring OpenGN and the OpenGN Gateway

The method for configuring OpenGN and the OpenGN Gateway depends on the panel that OpenGN is connecting to. For instructions, see the following documents on the mircom.com website:

- LT-6622 OpenGN to FleX-Net™ Connection Instructions
- LT-6703 OpenGN to FleX-Net™ FX-4000 Connection Instructions
- LT-6621 OpenGN to FX-3500 and FX-3318 Connection Instructions
- LT-6620 OpenGN to PRO-2000 Connection Instructions
- LT-6055 OpenGN to MR-2200/2900 Connection Instructions
- LT-1105 OpenGN to FX-2000 Connection Instructions



# 3.0 Navigating OpenGN

This chapter provides an overview of the layout and functions of the Main Display and Configuration windows of OpenGN.

## This chapter explains

- Main Display Window
- Navigating the Surveillance Area
- The Login Window
- The Configuration Window
- Using the Event Log
- OpenGN Gateway



## 3.1 Starting OpenGN



Attention: Before starting OpenGN, insert your CodeMeter USB key into a USB port of the computer that is running OpenGN. Failure to do so will cause OpenGN to run in a limited functionality demo mode.

Do not remove the USB key while OpenGN is running. Issues arising from doing so will not be supported.

## To launch OpenGN

- Do one of the following:
  - Double-click the shortcut on your desktop
  - Click Start > Mircom Group of Companies > OpenGN
  - Browse to the location where the application was installed, and then double-click OpenGN.

In Windows 10 IoT 64-bit, the default location is C:\Program Files\Mircom Group of Companies\Open Graphic Navigator

## 3.1.1 Log in to OpenGN



**Note:** If you upgraded OpenGN from a version earlier than 3.6, the users were migrated into 3.9 and assigned appropriate Group Authorizations.

You must log in as SecurityAdmin to change permissions for users. See section 4.13 on page 72 for information on users and user groups.

You must log in to OpenGN every time you start it.



#### To log in to OpenGN

- 1. Type the user in the **Login** box.
- 2. Type the password.

Ĭ

**Note:** The default user is **SecurityAdmin**. The SecurityAdmin can modify users and groups.

The default password for SecurityAdmin is **Your\_Password4OpenGN** if this is a new installation of OpenGN. You might have changed this password when you installed OpenGN.

See section 4.13 on page 72 for information on users and user groups.

 Leave the DB Server box as is, unless the SQL server is on a different computer. If the SQL server is on a different computer, type the IP address and server instance in the DB Server box.



Figure 19 Login Window

4. Click OK.

The Main Display window appears.



Note: You can change your password only after you have logged into OpenGN.



## 3.2 Main Display Window

Figure 20 shows the different areas of the Main Display window.

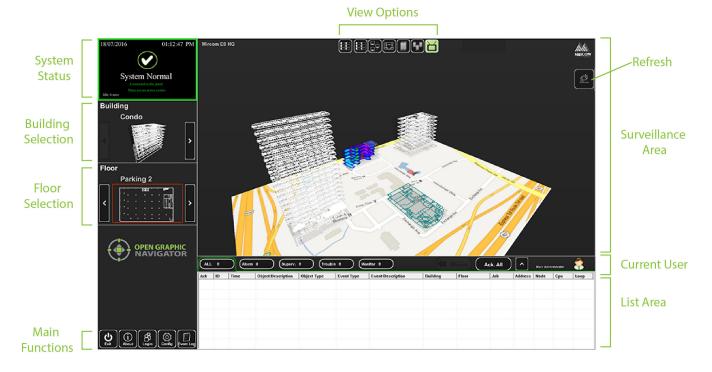


Figure 20 Main Display window

System Status	Displays status information such as the connection state and operation progress.
<b>Building Selection</b>	Cycles through the buildings in the campus.
Floor Selection	Cycles through the floors of the selected building, the <b>Control Switches</b> , and the <b>Unplaced Devices</b> .
<b>Main Functions</b>	Contains the Exit, About, Login, Config and Event Log buttons. See Table 2.
View Options	Changes how the information appears in the Surveillance Area. The options are Switches, Network, 2D View, Building View, Campus View and Auto-watch View. See Table 3.
Surveillance Area	Displays a close-up of the selected building or floor plan.
Refresh	If your CodeMeter USB key is not inserted in a USB port of the computer that is running OpenGN, insert it and then click <b>Refresh</b> .
	Attention: Do not remove the USB key while OpenGN is running. Issues arising from doing so will not be supported.
<b>Current User</b>	Displays the current user.
List Area	Manages all active events. See Chapter 6 on page 93.



#### 3.2.1 Main Function Buttons

Table 2 describes the Main Function buttons located in the bottom left corner of the Main Display window.

Table 2 Main Function button descriptions

Main Function Button		Description
<b>E</b> xit	Exit	Exits OpenGN.
(i) About	About	Displays the Version number, License Type, copyright information, CodeMeter stick License Type information, and company contact information.
8 Login	Login	Displays the Login window. See section 3.4 on page 33.
(S) Config.	Config.	Displays the Configuration window. See section 3.5 on page 35.
Event Log	The Event Log	Displays a printable log report. See section 3.6 on page 40.



Attention: Only users with the appropriate permissions can use the Exit, Config, and Event Log buttons. See section 4.13 on page 72.

## 3.3 Navigating the Surveillance Area

The Surveillance Area displays a view of Buildings and Floors in two or three dimensions. You establish a view in the Surveillance Area by:

- Selecting a building with the Building Selection tool.
- Selecting a floor with the Floor Selection tool.
- Selecting one of the View Options.

You can navigate the Surveillance Area with the pointer, keyboard or touchscreen.



#### To navigate the Surveillance Area with a pointer

Drag Click and drag the building or floor plan in any direction.

Rotate Right-click as you drag the pointer left or right. (Building/Campus view

only)

Tilt Right-click as you drag the pointer up or down.

(Building/Campus view)

**Zoom** Depending on your mouse, there are two zoom methods:

Scroll the wheel up or down.

Click the middle mouse button and move the mouse up and down.

Reset View Right-click the Surveillance Area, and then select Reset View. (2D View

only)

## To navigate the Surveillance Area with a keyboard

**Drag** Press the arrow keys.

Rotate Hold down the Shift key and press the left and right arrow keys. (Building/

Campus view)

Tilt Hold down the Shift key and press the up and down arrow keys.

(Building/Campus view)

Zoom Press the + and - keys to zoom in or out.

Reset View Press the Enter key.

#### To show the rotation sliders on a touchscreen

Click Config. > Settings > Display Settings > Show Rotation Sliders.

#### To navigate the Surveillance Area with a touchscreen

Tilt Press the vertical rotation slider.

Navigate screen

Press the screen and drag your finger up, down, left and right.

**Rotate** Press the horizontal rotation slider in the direction you want to rotate.

## 3.3.1 View Option Buttons

Table 3 describes the six View Option buttons located at the top of the Surveillance Area.

**Table 3 View Option button descriptions** 

View Option Button	Description
Switches	Displays a visual representation of an annunciator. You can place fire control switches here. If it is configured to meet listing agency requirements, then you can perform control functions here.
Network View	Displays a list of all imported jobs.



Table 3 View Option button descriptions (Continued)

View Option Button	Description
2D View	Displays a 2D representation of the selected floor of the selected building.
<b>Building View</b>	Displays a 3D representation of the selected building.
Campus View	Displays a 3D representation view of all buildings in the selected Campus.
Auto-watch View	Displays a rotating three dimensional campus view of all the buildings and floors.

## 3.3.2 Using the List Area

The List Area displays all active events.

## To quickly acknowledge the event

Check the corresponding box.

Right-click an event to manage the event. For more information on managing events see Chapter 6 on page 93.



Figure 21 List Area



#### **Event List**

Displays a color coded list of active events with the following information:

- Acknowledge
- Event ID
- Event Timestamp
- · Object Description
- Object Type
- Event Type
- · Event Description
- Building
- Floor
- Job
- Device Address
- Node (optional)
- · CPU (optional)
- Loop (optional)

#### **Event List Filter Tabs**

The event list can be filtered to show events of the following types:

- All
- Alarm (optional)
- Supervisory (optional)
- Trouble (optional)
- Monitor (optional)

# Action Buttons and Current User

Contains the Silence\Unsilence, Acknowledge All, Expand\Collapse List buttons, and displays the Current User.



#### 3.3.3 Action Buttons

**Table 4 Action Buttons** 

Action Buttons	Result
Ack. All Acknowledge All	Acknowledges all events under the selected sorting tab. The alarm tone from the computer stops.
Silence Silence	Silences the alarm tone. This silences only the alarm on OpenGN, not the alarm on the Fire Alarm Control Panel.
UnSilence Unsilence	Makes the alarm tone audible, if it was previously silenced.
Expand\Collapse List	Expands or collapses the List Area.

## 3.4 Login Window

The Login window lets you switch users or change the password of the current user.

## To access the Login window after OpenGN has started

1. Click the **Login** button in the Main Functions area of the Main Display window (in the lower left corner of your screen).

#### To change the current user

- 1. Type the user in the **Login** box.
- 2. Type the password.
- 3. Click OK.



Figure 22 Login Window



**Note:** The current user is shown in the Current User section of the Main Display Window. See section 3.2 on page 28.



#### To change the password of the current user

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Note: You can change your password only after you have logged into OpenGN.

You must log in as SecurityAdmin to change users' passwords. See section 4.13 on page 72 for details on user settings.

## 1. Click Change Password.

The Change Password window appears.



Figure 23 Change Password

- 2. Type the user in the **Login** box.
- 3. Type your old password in the **Old Password** box.
- 4. Type a password of 16 characters or less in the **New Password** box.
- 5. Type the same password into the **Re-enter New Password** box.
- 6. Click **OK** to save the information and return to the Main Display window.



## 3.5 Configuration Window

The Configuration window is the area where you set up your buildings and floor plans.

## To access the Configuration window

- 1. Click the **Config** button in the Main Display window.
- 2. Click OK.

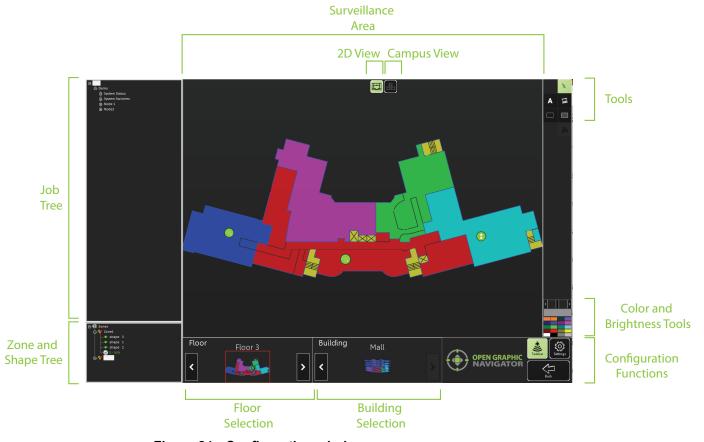


Figure 24 Configuration window

In the Configuration window, there are two different views available: the 2D view of the floors and the Campus view. By default, the Configuration window displays the 2D view of the selected Floor and Building.

## 2D View

In the 2D view, you can place objects by dragging them from the Job Tree to the Surveillance Area. For more information, see Chapter 5 on page 80.



#### Campus View

You can move, rotate, or rescale the Campus View buildings. Use this view to adjust the placement and layout of the buildings that are networked together in your fire protection system.

To... 
Reposition buildings

Enlarge or shrink a building

Rotate a building

Click and drag

Mouse over a building and use the mouse scroll wheel, or click and drag the edge of the building

Click and drag the corner of the building

The Configuration window has the following parts:

Job Tree	Shows all devices appear in the Job Tree in the following hierarchy: Job > Node > CPU > Loop > Object.	
Zone and Shape Tree	Lists all zones and the shapes assigned by zone. Unassigned shapes are listed in the Unassigned Shapes tree.	
Floor Selection	Cycles through the floors of the selected building. The first floor in the list shows all unplaced objects.	
<b>Building Selection</b>	Cycles through the buildings in the campus.	
Surveillance Area	Displays the requested information from the <b>Building Selection</b> , <b>Floor Selection</b> in 2D View. Only 2D navigation functions are available on the Configuration window Surveillance Area.	
Tools	Contains the <b>Selection</b> , <b>Text</b> , <b>Icon</b> , <b>Filled Rectangle</b> and <b>Empty Rectangle</b> buttons.	
Color and Brightness Tools	Changes the color of a building or zone. The currently selected color is shown in the large box immediately above the group of colors. Use the slider bar to change the brightness and opacity.	
Configuration Functions	Contains the <b>Taskbar</b> , <b>Settings</b> , and <b>Back</b> buttons. For more information see Table 5.	

## 3.5.1 Configuration Function Buttons

The Configuration Function buttons are located in the bottom right hand corner of the Configuration window.

**Table 5 Configuration Function button descriptions** 

Configuration Function Button	Description
Taskbar	Shows the Windows taskbar.



Table 5 Configuration Function button descriptions (Continued)

Configuration Function Button		Description
		Configures the following settings:
		Panel Settings
		Campus Settings
		Display Settings
		Icon Settings
50,5	Sottings	Object Type Settings
Settings	Settings	Event Log Settings
		Email Notification Settings
		Database Settings
		Connection Settings
		Users Settings
	For more information, see Chapter 4 on page 48.	
Back	Back	Takes you back to the Main Display window.

# 3.5.2 Tools

The Tool buttons are located in the top right corner of the Configuration window.

Table 6 Tool button descriptions

<b>Tool Button</b>		Description
0	Selection	Selects items in the Surveillance Area.
A	Text	Places new text or edits existing text in the Surveillance Area. You can change the color of the text by selecting the desired color in the <b>Color and Brightness Tools</b> section.
国	Add Image	Imports and places an image in the Surveillance Area.
	Empty Rectangle	Lets you draw an empty rectangle that you can assign to a new or existing zone. You can change the color of the rectangle by selecting the desired color in the <b>Color and Brightness Tools</b> section.
	Filled Rectangle	Lets you draw a filled rectangle that can you can assign to a new or existing zone. You can change the color of the rectangle by selecting the desired color in the <b>Color and Brightness Tools</b> section.



i

**Note:** All rectangles are filled with color when their associated zone is active. The **Empty Rectangle** and the **Filled Rectangle** tools differ only in how the areas appear when they are not active.

#### 3.5.3 Job Tree

The Job Tree is on the left side of the Configuration window. Click the + and - icons to expand and collapse the tree.

```
□ ·· 3NodeEngineeringLab
□ ·· Node 1
□ ·· Base I/O
□ ·· Loop 0 (Hardwired)
□ ·· Loop 1 (Hardwired)
···· 1.7 - N/A
···· 1.6 - N/A
···· 1.5 - N/A
···· 1.4 - N/A
···· 1.3 - N/A
···· 1.2 - N/A
···· 1.1 - N/A
···· 1.0 - N/A
···· 0.3 - N/A
···· 0.1 - N/A
···· 0.1 - N/A
···· 0.1 - N/A
```

Figure 25 Job Tree Hierarchy

The Job Tree hierarchy has the following structure:

Job	The Job is the top level of the tree and has branches for System Status, System Switches and Node directly under it.
System Status	System Statuses are inputs that can be correlated to outputs, LEDs, or switches. System Statuses report on the status of the system as a whole.
<b>System Switches</b>	System Switches are displayed as configured from the panel.
Node	A node is a fire panel that monitors and controls through the Base I/O. The master panel is always designated by the top level Job. The Node has branches for Base I/O, Node Status and any Remote Annunciators directly under it.
Base I/O	The Base I/O is the CPU inside the fire panel. Each CPU is dedicated to processing alarm, audio and LCD annunciation data. Each CPU receives data from a Loop. The Base I/O has branches for CPU Status and any Loops directly under it.
Node Status	Node Statuses are inputs that can be correlated to outputs, LEDs and switches. Node Statuses report on the status of the node that they are part of.



Remote Remote Annunciators are devices that make announcements, for **Annunciator** instance a speaker or LCD panel. **CPU Status** The CPU Status shows the status of the main CPU on the node.

Loop **Device** A device is a fire monitoring unit. The device placement state is shown

by color.

Green - Device is placed on the floor plan.

A Loop is a circuit that all addressable devices are on.

**Red** - Device is not placed on the floor plan.

Gray - Device is not visible on the floor plan.

Note: By default, all devices are visible after importing the job file.

#### 3.5.4 **Zone and Shape Tree**

The Zone and Shape Tree is on the left side of the Configuration window below the Job Tree. Click the + and - icons to expand and collapse the tree.

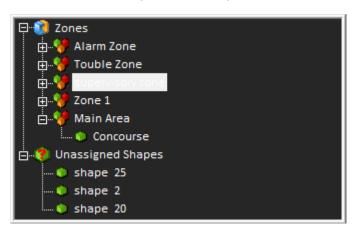


Figure 26 Zone and Shape Tree Hierarchy

The Job Tree hierarchy has the following structure:

**Zones** This area contains all the existing zones. Under each zone is a list of all shapes, objects and images assigned to that zone.

Unassigned This area lists all shapes and images that are not assigned to Zones. See

Chapter 5 on page 80. **Shapes** 



#### 3.6 **Using the Event Log**

The Event Log records all system events and alarms. The administrator establishes what information is shown in the Event Log. For more information on Event Log criteria, see section 4.9 on page 65.

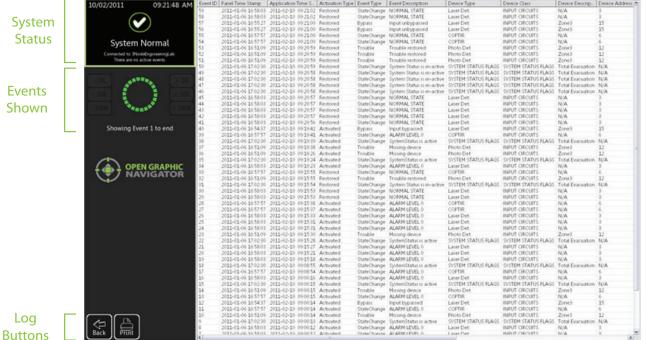


Figure 27 Event Log

**System Status Events Shown**  Displays status information such as the connection state and operation progress.

**Event** Log

This section shows all the events.

- If there are less than 1 000 events, this area displays Showing Event 1 to end.
- If there are 1 500 events, then this area displays **Showing Event 500 to end**.

Contains the Back and Print buttons. For more information see Table 7.

**Log Functions Event Log** 

Displays all system events and alarms. For more information, see section 4.9 on page 65.



The Event Log is currently not sortable. To print a filtered or sorted list, use the Note: Print Feature. For more information, see section 3.6.2 on page 41.



# 3.6.1 Log Buttons

Table 7 describes the two Log Buttons at the bottom left of the Event Log.

Table 7 Log button descriptions

Log Button	Description	
Back Back	Takes you back to the Main Display window.	
Print Print	Opens the Print Event Log Report. For more information, see section 3.6.2 on page 41.	

# 3.6.2 Saving the Event Log Report

You can save the event log report as a CSV (comma separated values) file. You can filter and sort the report before you save it.

### To save an Event Log Report

- 1. Click the **Event Log** button in the main Display window.
- 2. Click the Print button.

The Print Event Log Report window appears.

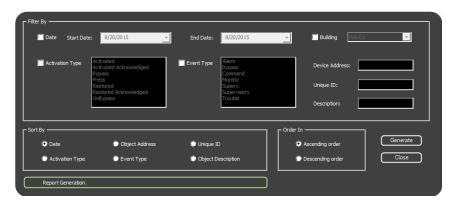


Figure 28 Print Event Log Report window

3. Select the criteria to filter the report. The criteria are listed below. Select as many criteria as required.



Attention: Filtering reports is not in compliance with regulatory agencies.



**Start Date** This menu lets you select the first date that you want to filter by. **End Date** This menu lets you select the last date that you want to filter by. This menu lets you select the building that you want to filter by. **Building** In order for OpenGN to filter events by building, devices must be placed on the floor plan. **Activation Type** Select the desired Activation Types that you want to filter by. To remove a filter selection, select the highlighted item. Note: If you do not select any Activation Types, then the report will be empty. Select the desired Event Types that you want to filter by. If you **Event Type** do not select any items, all event types will be included in the report. To remove a filter selection, select the highlighted item. **Device Address** Device Address is the address of the object circuit on an addressable loop. **Unique ID** Unique ID is a unique ID panel address. **Description** Description is the label in the Object description column of the Events Log. You can type a partial description to find all matches. For instance, to find "sprinkler", type "spr".

- 4. Click one of the radio buttons in the **Sort By** section. This determines how the report is sorted. If you click none of the buttons, an unsorted report will be generated.
  - Date

- Object Address
- Unique ID

- Activation Type
- Event Type
- Object Description
- Click Ascending order or Descending order in the Order In section. This determines the order of sorting.
- Click Generate.

The Save As window appears (Figure 29).

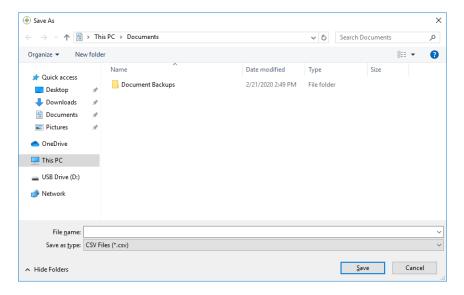


Figure 29 Save Report

7. Type a name for the report, then click **Save**.



# 3.7 OpenGN Gateway

Verify with MGC that you have the latest version of the OpenGN Gateway.

You must run the OpenGN Gateway in order for OpenGN to communicate with the Fire Alarm Control Panel. The OpenGN Gateway runs on the same computer as OpenGN or on a separate computer on the same network. The computer that the OpenGN Gateway is running on must be connected to the Fire Alarm Control Panel.

#### To run the OpenGN Gateway

1. Double-click the **Open Graphic Navigator Gateway** icon.

The **OpenGN** Gateway appears.



Figure 30 The OpenGN Gateway with 2 adapters

### 3.7.1 Adapter List

The Adapter List appears when you start the OpenGN Gateway. It contains adapters (saved settings).

The Adapter List displays the following information:

Source Type	The type of Fire Alarm Control Panel.
Source Connection	The IP address and port of the Fire Alarm Control Panel.
Command IP	The IP address of the computer that the OpenGN Gateway is installed on.
Command Port	The port that the OpenGN Gateway communicates through.



#### To start an adapter

- 1. Select the adapter that you want to start.
- 2. Click the green arrow icon.

# To stop an adapter

- 1. Select the adapter that you want to stop.
- 2. Click the red pause icon.

#### To edit an adapter

- 1. Select the adapter that you want to edit.
- 2. Click the pencil icon.
- 3. Follow the instructions under section 3.7.3 on page 45 to edit the settings.

#### To delete an adapter

- 1. Select the adapter that you want to delete.
- 2. Click the X icon.

## 3.7.2 About adapters

An adapter is a setting that tells the OpenGN Gateway how to connect to the Fire Alarm Control Panel and OpenGN. The OpenGN Gateway must have at least one adapter in the Adapter List in order to work. The OpenGN Gateway can run more than one adapter at the same time.

An adapter includes the following information:

- Source Type: The type of Fire Alarm Control Panel.
- Connection String: The Fire Alarm Control Panel's IP address and port.
- **Destination:** The IP address and port of the computer that OpenGN is on. An adapter can have more than one Destination. In this case, one Fire Alarm Control Panel is sending information to two or more instances of OpenGN.
- Command Connection and Port: The IP address and port of the computer that the OpenGN Gateway is on.



#### To see the details of an adapter

1. Double-click the adapter in the Adapter List.

The Adapter Configuration window appears, showing the details for the adapter.

Figure 31 shows the **Adapter Configuration** window for an adapter that is connected to 3 instances of OpenGN.

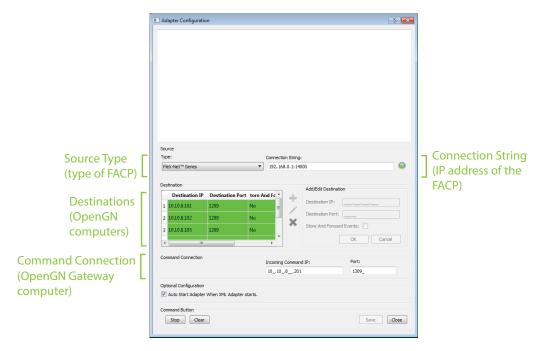


Figure 31 Adapter connected to 3 instances of OpenGN

### 3.7.3 Adding and editing adapters

#### To add an adapter

In OpenGN, click the + button. —
 The Adapter Configuration window appears.

2. Provide the following information:

Type Select the kind of Fire Alarm Control Panel that the OpenGN Gateway

is connecting to.

Connection String Type the IP address and the port of the Fire Alarm Control Panel,

separated by a colon.



3. Click the green + button under **Destination**, and then provide the following information:

**Destination IP** The IP address of the computer that OpenGN is installed on.

**Destination Port** 1209

Store and Forward **Events** 

Reserved for future use.

Click OK.

The Destination appears in the **Destination** field on the left.

- 5. Repeat steps 3 and 4 to add more than one destination to an adapter if you want the OpenGN Gateway to communicate with more than one instance of OpenGN. For each instance of OpenGN, provide a different Destination Port.
- 6. Under **Command Connection**, provide the following information:

Incoming **Command IP** 

The IP address of the computer that the OpenGN Gateway is on.

Port

**1309**. This must be a different port than the port listed above.

- 7. Select Auto Start Adapter When OpenGN Gateway Starts if you want the OpenGN Gateway to connect automatically with these settings when it starts.
- 8. Click Save.
- Quit the OpenGN Gateway and start it again. See section 3.7.4 below.

#### To change a Destination

1. In the **Destination** box, select a Destination, and then click the pencil icon.



- 2. Follow step 3 above to edit the Destination.
- Click **OK** (or click **Cancel** to abandon your changes).

#### To delete a Destination

In the **Destination** box, select a Destination, and then click the **X** icon.



#### To connect the adapter

Click Start.

When it is connected, the light beside **Connection String** turns from red to green.



# 3.7.4 Quitting the OpenGN Gateway

### To quit OpenGN Gateway

1. In the Windows taskbar, right-click the **OpenGN Gateway** icon, and then select **Close window**.

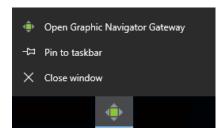


Figure 32 Close OpenGN Gateway

### 3.7.5 Starting and stopping adapters

#### To start an adapter

- 1. In OpenGN, select the adapter that you want to start.
- 2. Click the green arrow icon.

#### To stop an adapter

- 1. In OpenGN, select the adapter that you want to stop.
- 2. Click the red pause icon.

### 3.7.6 The colors show the adapter status

The adapters in the Adapter List change color to show whether they are connected.

- White: The adapter is not connected.
- Green: The adapter is connected to both the panel and OpenGN.
- **Red:** The adapter is attempting to connect to either the panel or OpenGN.
- **Orange:** The adapter is not connected to all instances of OpenGN (when it is configured to connect to more than one instance).



# 4.0 Configuration Settings

This chapter provides an overview of the configuration settings of OpenGN.

#### This chapter covers

- Panel Settings
- Campus Settings
- Display Settings
- Icon Settings
- Object Type Settings
- Event Log Settings
- Email Notification Settings
- Database Settings
- Connection Settings
- User Settings
- Localization



# 4.1 Opening the Configuration Settings

#### NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES

This product incorporates field-programmable software. In order for the product to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864, certain programming features or options must be limited to specific values or not used at all as indicated below.

Program feature or	Permitted in UL 864?		Settings permitted in
option	(Y/N)	Possible settings\methods	UL 864
Filterable Report Generation	NO	Filter report by Date, Activation Type, Event Type, Node, CPU, Loop, Object Address, Unique ID, Description	All events must be reported. Filtering is not permitted.
Display Mode	YES	Dual Monitor, Graphics and List, Graphics Only, List Only	Dual Monitor, Graphics and List
Supervision Mode	YES	Supervised Mode, Non- Supervised Mode	Supervised Mode



Attention: Do not open the Settings window while OpenGN is connected to a panel.

1. Click the **Config** button from the Main Display window, and then click **Yes** to confirm that you want to enter the configuration section.

The Configuration window appears. See Figure 24 on page 35.

2. Click the **Settings** button in the lower right-hand corner of the Configuration window.

# 4.2 Panel Settings

The Panel Settings window:

- Selects a Fire Alarm Control Panel from the list of loaded configurations.
- Displays the Details for the selected panel.
- Imports a job file from the Configurator.



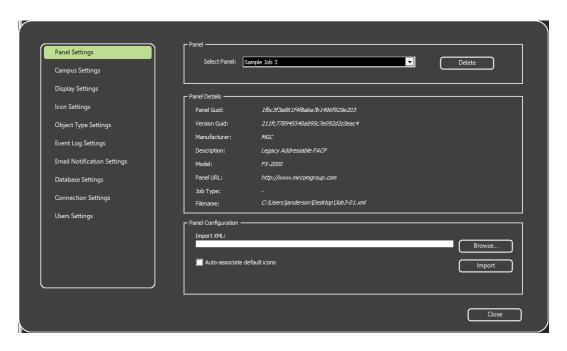


Figure 33 Panel Settings

# 4.2.1 Selecting a Fire Alarm Control Panel to View its Details

Click the **Select Panel** menu, and then choose a previously imported Fire Panel.

# 4.2.2 Deleting a Panel

You can delete a panel configuration that you no longer need.

#### To delete a panel

- 1. Click the Panel Settings tab (see Figure 33).
- 2. Select the panel from the Select Panel menu.
- 3. Click Delete.
- 4. Click **Yes** in the pop up confirmation window.



#### 4.2.3 Panel Details

Panel Guid and Version Guid

Each job has a Panel GUID (also called the Job Unique ID) and Version GUID (also called Job Version) that uniquely identifies it. These numbers are generated by the Configurator or the XML conversion tool, depending on the type of panel.

Because OpenGN can manage more than one job, it must associate every event it receives with the correct job. Every event that is sent to OpenGN contains the Panel GUID and Version GUID, and OpenGN uses this information to determine which job the event belongs to.

If OpenGN receives an event with an unknown Panel GUID, OpenGN generates an Unknown Panel Event System Message.

If OpenGN receives an event with a known Panel GUID but an unknown Version GUID, OpenGN generates a Version GUID Mismatch System Message.

For more information see about status messages, see Appendix B on page 102.

The name of the Fire Alarm Control Panel manufacturer.

**Description** A brief description of the Fire Alarm Control Panel.

Model The name that the manufacturer has assigned to this model of Fire

Alarm Control Panel.

Panel URL A link to the Fire Alarm Control Panel manufacturer's website.

Job Type Reserved for future use.

Filename The location of the job file on the computer.

# 4.2.4 Importing the Job File

Manufacturer

OpenGN uses the job file to create a Job Tree that matches the job on the Fire Alarm Control Panel. When importing the job file, the object icon images may be associated with the default images.



**Note:** If the job on the Fire Alarm Control Panel changes, you must export the job file from the Configurator, and then import it into OpenGN again.

#### To import the job file

- In the Main Program Settings window, click the Panel Settings tab.
   The Panel Settings window appears (see Figure 33 on page 50).
- 2. Click **Browse** in the Panel Configuration section, and then navigate to the job file.
- Select Auto-associate default icons if you want to associate the objects with the default icons.
- 4. Click Import XML.



If the job already exists, a window appears asking you if you want to update the stored version of the job with the one you are importing.

Click Yes.



Figure 34 Update Job Confirmation Box

A message appears saying that the import was successful.

5. Click Close.

# 4.3 Campus Settings

The Campus Settings window is where the administrator:

- Enters the Campus Information. The Campus Contact Person and Phone Number will appear in email messages if email notification is configured (see section 4.10 on page 67).
- Names each Building that is a part of the Campus.
- Constructs the visual representation of buildings by importing image files of floor plans.



Figure 35 Campus Settings



# 4.3.1 Supported Floor Plan File Formats



Attention: MGC recommends not uploading any files larger than 25 MB.

OpenGN supports the following image file formats for importing floor plans. Table 8 shows them in the order of their recommended use.

**Table 8 Supported Floor Plan File Formats** 

Supported File Type	Description	
SVG	This is a vector based file format that ensures the quality of the drawings will not change regardless of the <b>Zoom</b> setting.	
4 channel PNG (RGBA)	This includes alpha transparency. Floor plans will be transparent, enabling you to view all floors of a building at the same time without obstruction.	
3 channel PNG (RGB) JPG BMP GIF	These formats do not support transparency. OpenGN will convert white color to transparency.	



**Note:** For a description on how to convert PDF files to SVG, see Appendix H on page 125.

After you import the floor plans, you can arrange object icons on specific locations on the floor plan. For more information on objects, see Chapter 5 on page 80.

### 4.3.2 Adding a Campus Plan

A campus is a collection of buildings. You must create a campus before you create buildings.

#### To add a Campus Plan

Click Update Campus Plan in the Campus Settings window (Figure 35 on page 52).
 The Campus Plan Properties window appears.



Figure 36 Campus Plan Properties



- 2. Click Select Campus Plan.
- 3. Browse to the new Campus Plan image file, select it, and then click Open.
- 4. Click **OK** to save the information and return to the **Campus Settings** window.
- 5. Type the information for your campus in the **Campus Information** section.

### 4.3.3 Updating the Campus Logo

You can change or update the logo for your campus.

#### To update the Campus Logo

- 1. Click Change Campus Logo in the Campus Settings window (Figure 35 on page 52).
- 2. Browse to the file location and click Open.

## 4.3.4 Adding a Building



**Note:** If you have one building, you still need to import a campus plan.

A building consists of one or more floors, each of which has a floor plan. You must create a building before you can add floor plans.

#### To add a building

1. Click the **Config** button from the Main Display window, and then click **Yes** to go to the configuration section.

The Configuration window appears.

2. Click Settings > Campus Settings.

The Campus Settings window appears (see Figure 35 on page 52).

3. In the Buildings area, click New.

The Building Properties window appears.



Figure 37 Enter your New Building Properties

- 4. Type a name for the building.
- 5. Click OK.



### 4.3.5 Placing a Building on the Campus

You can move and resize buildings on the campus map.

- Click the **Campus View** button at the top of the Configuration window.

  By default, the building you just added is in the center of the campus.
- Click and drag a building to move it on the campus.
- Click and drag the edge of a building to change its size.
- Click and drag the corner of a building to rotate it.



**Note:** Only the top 6 buildings are visible in the Campus View. However, all the buildings are visible in Surveillance mode. To place more than 6 buildings, see Appendix F on page 112.

# 4.4 Modifying and Deleting a Building

#### To modify a building

- 1. In the Buildings area, select the building that you want to modify.
- 2. Click Modify.

The **Building Properties** window appears.



Figure 38 Modify Your Existing Building

- 3. Type a name for the building.
- 4. Click OK.

#### To delete a building

- 1. In the Buildings area, select the building that you want to delete.
- 2. Click Delete.
- 3. Click Yes.



# 4.4.1 Adding a Floor Plan

After you have added a building, you can assign a floor plan to each floor.

### To add a floor plan

1. Click **New** in the floor plan area.

The Floor Properties window appears.



Figure 39 Enter your new floor properties

2. Provide the following floor property information:

Description	A description of the floor.
Translate X	Reserved for future use.
Translate Y	Reserved for future use.
Width	Reserved for future use.
Height	Reserved for future use.
Scale	Reserved for future use.

- Click Select Floor Plan, then browse to the file location, and then click Open.
   A preview image of the floor plan appears.
- 4. Click OK.

See Chapter 5 on page 80 for instructions on how to configure and place objects on a floor plan.



# 4.5 Modifying and Deleting a Floor

#### To modify a floor plan

- 1. In the Buildings area, select the floor that you want to modify.
- 2. Click Modify.

The Building Properties window appears.



Figure 40 Modify your Existing Floor Properties

3. Provide the following floor property information:

Description A description of the floor.

Translate X Reserved for future use.

Translate Y Reserved for future use.

Width Reserved for future use.

Height Reserved for future use.

Scale Reserved for future use.

- 4. Click **Select Floor Plan**, then browse to the file location, and then click **Open**. A preview image of the floor plan appears.
- 5. Click OK.

#### To delete a floor

- 1. In the Buildings area, select the floor that you want to delete.
- Click Delete.
- 3. Click Yes.



# 4.6 Display Settings

You can configure how the Surveillance and List Areas appear in the Main Display window.

### To configure the Display Settings

1. Click the **Config** button from the Main Display window, and then click **Yes** to go to the Configuration section.

The Configuration window appears.

2. Click Settings > Display Settings.

The **Display Settings** window appears (Figure 41).

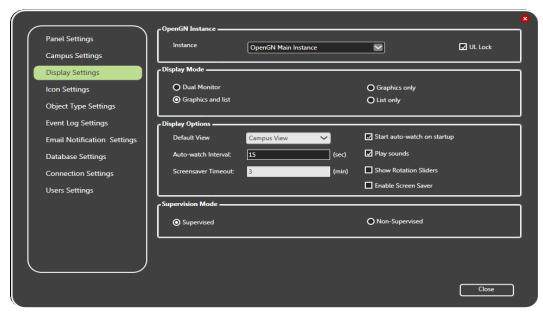


Figure 41 Display Settings



Attention: The UL Lock checkbox must be selected for UL / ULC compliance. It prevents the user from switching OpenGN to the background.



**Note:** The **Instance** menu is reserved for future use.



3. To determine how you want the display settings to appear, select from the following display mode parameters:

**Dual Monitor** Allows for dual monitor support.

**Graphics and list** Shows both the Graphics and List areas.

**Graphics only** Shows only the Graphics area.

List only Shows only the List area.



Attention: To comply with UL 864 Rev.9, use only Dual Monitor or Graphics and List.

4. To determine how you want the display options to appear, enter the following parameters:

**Default View** Specifies the default view as one of the following:

2D View

3D View

Campus View

Auto-watch Interval

Specifies the interval of time for each building to display.

Screensaver Timeout Reserved for future use.

**Start auto-watch on startup** Enables the auto-watch feature on startup.

Play Sounds Specifies if an audible tone sounds when an event

occurs.

Show Rotation Sliders On a touchscreen display, shows the rotation sliders,

which you use to modify the viewing angle of the

Surveillance Area.

**Enable Screen Saver** Reserved for future use.



**Note:** If the **Start auto-watch on startup** checkbox is selected, then **Campus View** is the only choice allowed as the default view.

To select the supervision mode, choose from one of the following parameters:

Supervised Requires you to manually acknowledge all problems

and restore events.

Non-Supervised Automatically acknowledges events when the problem

is restored.





Attention: To comply with UL 864 Rev.9, use Supervised mode.

6. Click Close.

# 4.7 Icon Settings

OpenGN has a pre-made set of customizable object icons. You can modify or add to these icons.

### 4.7.1 Creating a New Icon

You can create new icons and associate them with objects.

#### To create a new icon

1. Click the **Config** button from the Main Display window, and then click **Yes** to go to the configuration section.

The Configuration window appears.

2. Click Settings > Icon Settings.

The Icon Settings window appears (Figure 42).



Figure 42 Icon Settings

- 3. Select the **Invert preview background** check box to preview an inverted color background of a selected icon.
- 4. Click New.



The Icon Properties window appears.

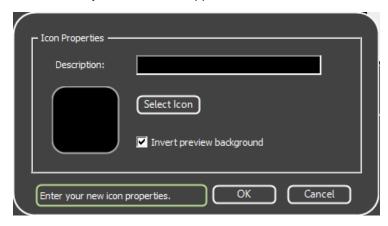


Figure 43 Enter your New Icon Properties

- 5. Click **Select Icon**, and then choose an image. The selected file can have an extension of PNG, ICO, BMP, JPG, JPEG, or GIF.
- 6. Type a description of the icon in the **Description** field.
- 7. Select **Invert preview background** if you want to preview an inverted color image of the selected icon.
- 8. Click **OK** to apply the settings and exit the **Icon Properties** window.
- 9. Click Close from the Icon Settings window to apply the settings.

# 4.7.2 Modifying an Existing Icon

You can modify existing icons.

#### To modify an existing icon

1. Click the **Config** button from the Main Display window, and then click **Yes** to go to the configuration section.

The Configuration window appears.

2. Click Settings > Icon Settings.

The **Icon Settings** window appears (see Figure 42 on page 60).

Select Invert preview background to preview an inverted color background of a selected icon.



4. Select an icon from the list of available icons.

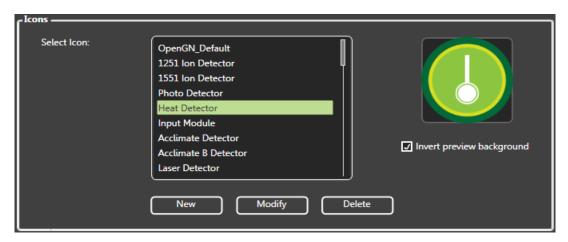


Figure 44 Icon Selection

5. Click Modify.

The Icon Properties window appears.

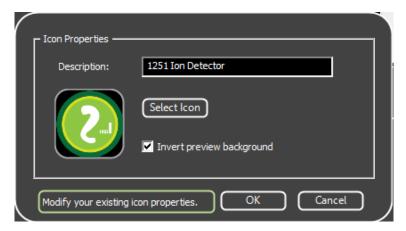


Figure 45 Modify your existing icon properties

- 6. Click **Select Icon**, and then choose an image. The selected file can have an extension of PNG, ICO, BMP, JPG, JPEG, or GIF.
- 7. Type a description of the icon in the **Description** field.
- 8. Select **Invert preview background** if you want to preview an inverted color image of the selected icon.
- 9. Click OK.
- 10. Click Close.

# 4.7.3 Deleting an Existing Icon

You can delete icons that you no longer need.

#### To delete an existing icon

1. Click the **Config** button from the Main Display window, and then click **Yes** to go to the configuration section.

The Configuration window appears.



2. Click Settings > Icon Settings.

The Icon Settings window appears (see Figure 42 on page 60).

- Select Invert preview background to preview an inverted color background of a selected icon.
- 4. Select an icon from the list of available icons (see Figure 44 on page 62).
- Click Delete.

The Icon Delete Confirmation window appears.



Figure 46 Icon Delete Confirmation

- 6. Click **Yes** to delete the selected icon.
- 7. Click Close.

# 4.8 Object Type Settings

An object type is a type of device, for instance a smoke detector or a phone. The list of object types ranges from ion detectors to heat sensors, with each object having a corresponding category:

**Detector** Indicates that the object is a smoke, heat, or fire detector.

Module Indicates that the object is a control or input device, such as a manual

station or a water flow switch.

Other Indicates that the Detector or Module categories do not apply.

You can associate a different icon with each state of an object. For example, you can give a heat detector three icons: an icon for its normal state, an icon for its alarm state, and an icon for its trouble state. When it goes into alarm, its icon on the floor plan changes from its normal state icon to its alarm state icon.

Several common object types (for instance smoke detectors and phones) have default icons. For a complete list of object types, see Appendix E on page 109.

The default icon for an unknown object type is a question mark.

OpenGN displays images of every placed object on the map area, color coded according to its configuration. When an event occurs, the object becomes active and concentric rings appear around its icon in the Surveillance area.



#### To discover a device's object type

· Hover the pointer over the device's icon on the floor plan.

In the window that appears, the object type corresponds to the Device Type. In Figure 47, the Device Type, and therefore the object type, is **Firephone lpt**.

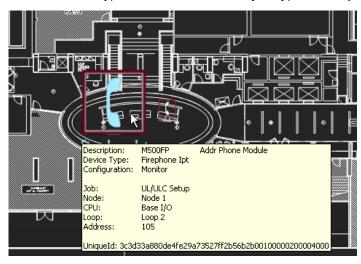


Figure 47 Object Info Message

# 4.8.1 Associating an Icon with an Object State

The **Object Type Settings** window has a list of object types.

#### To associate icons with states

1. Click the **Config** button in the Main Display window, and then click **Yes** to go to the configuration section.

The Configuration window appears.

2. Click Settings > Object Type Settings.

The **Object Type Settings** window appears (Figure 48).



Figure 48 Object Type Settings



- 3. Select an object type in the **Select Object Type** list.
- 4. Click a state in the Select Object State menu.
- 5. Select the appropriate icon for this state in the **Select Icon** list.
- 6. Select Invert preview background if you want to invert the icon color background.
- 7. Click Close.
- 8. Restart OpenGN.

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**Note:** When importing the Job file with the **Auto-associate default icon** option selected, object type and the corresponding icon are associated.

You must restart OpenGN for the icon changes to take affect.

# 4.9 Event Log Settings

OpenGN records all events and alarms, but you can select specific criteria for display in the Event Log.

The Event Log displays all recorded alarms and events that meet the search criteria entered in the Event Log Settings window. The data fields in the Event Log are listed by column according to the defined search criteria.

Clicking the **Event Log** button on the Main Display window opens the Event Log. For more information about the Event Log see Chapter 6 on page 93.

## 4.9.1 Configuring Event Log Settings

The Event Log displays many types of information. This section shows you how to choose what you want to see in the Event List.



#### To configure Event Log settings

1. Click the Config. button from the Main Display window, and then click Yes to confirm that you want to enter the configuration section.

The Configuration window appears.

2. Click Settings > Event Log Settings.

The **Event Log Settings** window appears (Figure 49)

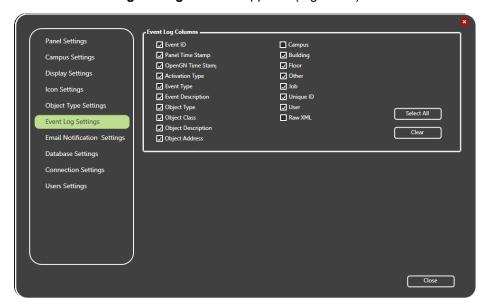


Figure 49 Event Log Settings

3. Select the check box beside the criteria you want to have appear in the Event Log.

To select all of the Event Log categories, click Select All.

To de-select all of the categories click Clear:

Event ID	Every system event receives a unique identifier.
Panel Time Stamp	Every fire panel has its own clock.
OpenGN Time Stamp	OpenGN uses the PC clock to set its time.
<b>Activation Type</b>	Activation or Restoration of an event.
<b>Event Type</b>	The type of event; Active, Trouble or Bypass.
<b>Event Description</b>	An event based description.
Object Type	The type of object that triggered the event.
Object Class	The family of objects an object belongs to, like Input Circuit or System Status Flag.
<b>Object Description</b>	An object based description.
Object Address	The loop address of the object that triggered the event.
Campus	The campus where the event occurred.



Building The building where the event occurred.

Floor The floor where the event occurred.

Job The name and configuration of the master panel.

Other Node, CPU, and Loop location of the Object that triggered the

event.

Unique ID The unique ID panel address.

**User** Displays the user that acknowledge the event.

Raw XML Displays the raw XML data associated with the event.

4. Click Close.

# 4.10 Email Notification Settings

OpenGN can send event notifications to a designated email address. In order to use email notification, you must have access to an SMTP server that does not use SSL. Emails are sent from info@OpenGN.com.

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Attention: For ULC S527 and UL 864 applications, email notification is an ancillary feature.

### 4.10.1 Configuring Email Messages

#### To configure email messages

1. Click the **Config.** button from the Main Display window, and then click **Yes** to confirm that you want to enter the configuration section.

The Configuration window appears.

- 2. Click Settings
- 3. Click the Email Notification Settings tab.



#### The **Email Notification Settings** window appears (Figure 50)



Figure 50 Email Notification Settings

4. Click the Enable e-mail notification checkbox.

Note: In order to use email notification, you must have access to an SMTP server that does not use SSL.

Provide the following information:

E-mail server Type the SMTP server's IP address or domain name. The SMTP server must not use SSL.

If you need assistance, ask your network administrator.

**SMTP Port** Type the port for the SMTP server. If you need assistance,

ask your network administrator.

To E-mail Address Type the email address to send notifications to.

> You can enter more than one email address. Separate the addresses with commas. For example, if you want to send notifications to sarah@email.com, tegan@email.com and

jo@email.com, then type:

sarah@email.com,tegan@email.com,jo@email.com

There is a maximum of 100 characters in this field, including commas.



Note: The Requires user authentication, E-mail user name, and E-mail password options are reserved for future use.

Click Campus Settings on the left and ensure that the Campus Contact Person and Phone Number are correct. (See section 4.3 on page 52.) This information will appear



in the email message in the form "Please contact Campus Contact Person at Phone Number if you need further assistance."

7. Click Close.

### 4.10.2 Viewing Email Messages

Email messages are colored depending on the Object Configuration:

- Alarm red
- Supervisory orange
- · Trouble yellow
- Monitor blue
- Restore events green

# OpenGN Event Received from - B200E Main Pull Station @ Address: 0.0

MGC's OpenGN, currently monitoring the 5-Node\_GroupTest fire alarm control panel, received a StateChange event to ACTIVE at 11:30AM on the 03rd November 2016.

Object Description: Object Type: Object Configuration:	B200E Main Pull Station Input Circuit Alarm
Object Class:	INPUT CIRCUITS
Building: Floor:	W-9 Building First Floor

Figure 51 Example Email Message

# 4.11 Database Settings

The database contains user, Job and system log information, and can be saved to a specified location.

# 4.11.1 Setting Database Information

Database Settings lets you define the backup location for the Job, system messages and object configuration.

# 4.11.2 Backing up Database Information



**Note:** Backing up the database regularly is recommended.

You can back up the database to preserve old configurations in case they are needed again later. This is especially useful to do before you make any changes to the configuration.



#### To backup database information

1. Click the **Config.** button from the Main Display window, and then click **Yes** to confirm that you want to enter the configuration section.

The Configuration window appears.

2. Click Settings > Database Settings.

The Database Settings window appears (Figure 52)

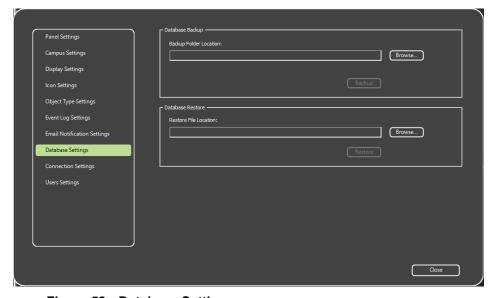


Figure 52 Database Settings

3. Click **Browse** in the **Backup Folder Location** section, and then navigate to the location where you want to store the database backup.



**Note:** The backup folder cannot be on the Desktop or in a user's folder.

Make a folder on the root drive of the computer and store the backups there.

4. In the Save As window, type a name for the backup, for instance **OpenGN backup**.

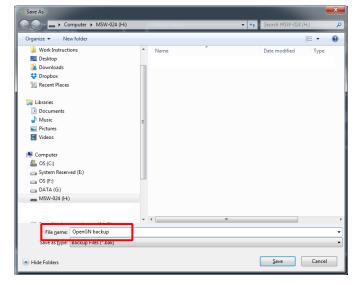


Figure 53 Choose a backup location and name



- 5. Click **Backup** to create the backup file of the current database.
- 6. Click Close to save the settings and return to the Configuration window.

# 4.11.3 Restoring Database Information

The following procedure shows how to restore a database.

#### To restore database information

1. Click the **Config.** button from the Main Display window, and then click **Yes** to confirm that you want to enter the configuration section.

The Configuration window appears.

2. Click Settings > Database Settings.

The Database Settings window appears (Figure 52 on page 70)

- 3. Browse to the location where you stored the backup and select it.
- Click **Restore** to restore the database.
- 5. Quit OpenGN and restart it.

# 4.12 Connection Settings

The Connection Settings show the TCP/IP connection details.

# 4.12.1 Viewing the Connection Settings

#### To view the Connection Settings

1. Click the **Config.** button from the Main Display window, and then click **Yes** to confirm that you want to enter the configuration section.

The Configuration window appears.

2. Click Settings > Connection Settings.

The Connection Settings window appears (Figure 54):

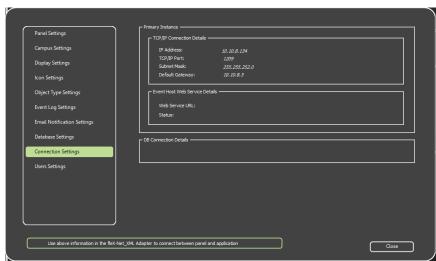


Figure 54 Connection Settings



Event Host Web Service Details and DB Connection Details are reserved for future use.

#### 4.12.2 TCP/IP

In an Ethernet based network, OpenGN and the OpenGN Gateway use the TCP/IP protocol to communicate.

A successful Ethernet based connection shows the following TCP/IP parameters:

IP Address IP address of the computer OpenGN is on.

TCP/IP Port 1209. This is the TCP/IP port that OpenGN uses.

Subnet Mask Subnet mask address of the network server.

**Default Gateway** Default gateway address of the network server.

# 4.13 User Settings

User Settings lets you create and manage User Groups and Users.

Users derive permissions from the User Group they are part of. User Groups consist of Authorization Levels that define what parts of OpenGN the User Group can access. An Authorization Level is a set of Group Authorizations (permissions). Table 9 lists the six Authorization Levels and their Group Authorizations.

There are 6 default User Groups that correspond directly to the Authorization Levels. For example, the SecurityAdmin User Group has the Security Administrator Authorization Level.



Note: If you upgraded OpenGN from a version earlier than 3.6, the users were

migrated into 3.9 and assigned appropriate Group Authorizations.



**Table 9 Authorization Levels** 

	[	II Levels				
	Security Administrator	Campus Administrator	Device Administrator	Report Administrator	Backup Operator	Observer
Access OpenGN Config	Х	Χ	X	X	Х	-
Access OpenGN Setting	Х	Х	Х	Х	Х	-
Access User Setting	Х	-	-	-	-	-
Access Campus Setting	-	Х	-	-	-	-
Access Display Setting	-	Х	-	-	-	-
Access Email Setting	-	Х	-	-	-	-
Access Panel Setting	-	-	Х	-	-	-
Access Icon Setting	-	-	Х	-	-	-
Access Object Type Setting	-	-	Х	-	-	-
Access Connection Setting		-	Х	-	-	-
Print Log	-	-	-	Х	-	-
Access Event Log Setting	-	-	-	Х	-	-
Access Database Setting	-	-	-	-	Х	-



**Table 9 Authorization Levels (Continued)** 

		Security Administrator	Campus Administrator	Device Administrator	Report Administrator	Backup Operator	Observer
User	Acknowledge Alarm	-	-	Х	-	-	X
nterfac	Send Command	1	-	Χ	-	-	-
User Interface Authorization	Receive Notification Email	1	-	-	-	-	-
rization	Acknowledge All Events	-	-	Х	-	-	-
	Manual Event Restore	-	-	Х	-	-	-
	Exit OpenGN	Х	Х	Х	Х	Х	-



**Note:** Permissions in the **User Interface Authorization** section can be enabled or disabled independently of the Authorization Levels.

# 4.13.1 Viewing User Groups and Users



**Note:** Only the SecurityAdmin User or Users with the Security Administrator Authorization Level can view, create, or modify Users and Groups.

The User Settings window lets you view and modify the User Groups and Users that exist in the system.

# To view user groups and users

- 1. Click the **Config.** button from the Main Display window, and then click **Yes** to confirm that you want to enter the configuration section.
  - The Configuration window appears.
- 2. Click Settings > Users Settings.



The User Settings window appears (Figure 55)

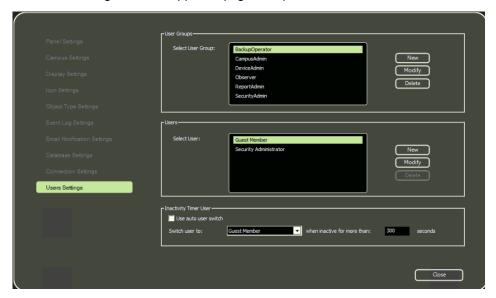


Figure 55 User Settings

# 4.13.2 Creating a new User Group

You create new groups to allow users specialized access for jobs that do not fit the definitions of the default User Groups.

# To create a new User Group

1. In the User Group section click **New**. The User Group window appears.

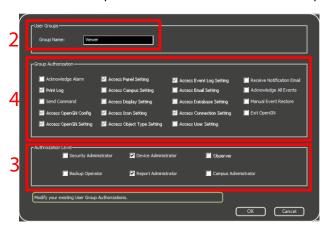


Figure 56 Enter your New User Group Authorizations

- 2. Enter the Group Name.
- 3. Select the appropriate Authorization Level or Levels that are essential to the functions of this group.



4. Select the Group Authorizations that are essential to the functions of this group.

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**Note:** All new User Groups have the Observer Authorization Level, in addition to any other Authorization Levels that you select.

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**Note:** There are six Group Authorizations (called User Interface Authorizations in Table 9) that can be enabled or disabled independently of the Authorization Levels.

The other Group Authorizations (called Database Authorizations) are linked to Authorization Levels. If you want to create a group that has a certain Database Authorization, select the Authorization Level that contains that Database Authorization. See Table 9.

5. Click **OK** to create the User Group.

# 4.13.3 Modifying an Existing User Group

You can add or delete Authorization Levels from groups that you have created.

# To modify an existing User Group

In the User Group section select the desired User Group, and then click Modify.
 The User Group window appears showing the current Authorizations Levels and Group Authorizations.

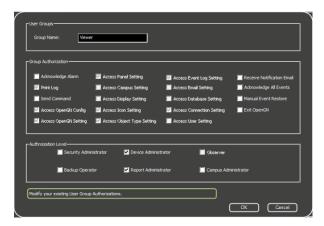


Figure 57 Modify your existing User Group Authorizations

- 2. Check or uncheck the desired Authorization Levels to add or remove rights from the user Group.
- 3. Click OK.

# 4.13.4 Deleting an Existing User Group

You can delete a User Group that is longer required.

# To delete an existing User Group

- 1. In the User Group section, select the desired User Group, and then click **Delete**.
- 2. A confirmation window appears asking if you are sure that you want to delete the groups selected and all dependent users.
- 3. Click Yes.



# 4.13.5 Managing Users

You can create New Users, and Modify or Delete existing Users.

There is one default User, as show in Table 10.

**Table 10 Default Users** 

User Full Name	Login	User Group	Password	
Security Administrator	SecurityAdmin	SecurityAdmin	Your_Password4OpenGN	

The User Full Name and Login fields for the Default User cannot be modified.

# 4.13.6 Creating a New User

You can create User accounts for new employees with the right permissions to allow them to do their job while ensuring site security.

# To create a new User

1. In the Select User section, click **New**. The User Details window appears.

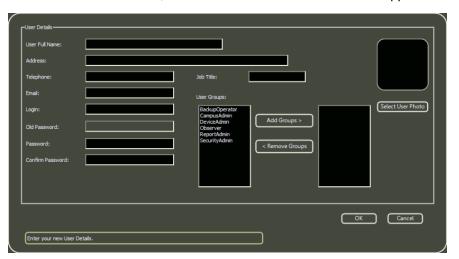


Figure 58 Enter your new User Details

- 2. Complete the following fields:
- User Full Name (mandatory)
- Address

Telephone

Email

Job Title

 User Groups (mandatory)

- Login (mandatory)
- Password (mandatory)
- Confirm Password (mandatory)

- User Photo
- 3. Click **OK** to create the new User.



# 4.13.7 Modifying an Existing User

When employee information changes, you can modify the User's information to reflect the changes.

# To modify an existing User

In the Users section select the desired User, and then click Modify.
 The User Details window appears showing the current information about this User.



Figure 59 Modify your Existing User Details

- 2. Change the current entries as needed.
- 3. Click OK.

# 4.13.8 Deleting an Existing User

You can delete users when they leave or move to a division where they no longer require access to OpenGN.

# To delete an existing User

- 1. In the Users section select the desired User click **Delete**.
- 2. A confirmation window pops up asking if you are sure that you that to delete the selected user.
- 3. Click Yes.

# 4.13.9 Inactivity Timer User

For security, OpenGN can be set to switch to a different user account after a certain period of mouse or keyboard inactivity. In this way, if the computer is unattended, the administrator features of OpenGN are not available.



**Note:** This feature works only when a user with the Security Administrator Authorization Level is active.

This feature works only when the main display window is active. It does not work when the Configuration or Settings windows are active.



# To set the inactivity timer

- 1. Under Inactivity Timer User, select Use auto user switch.
- 2. In the **Switch user to** menu, select a user that does not have the Security Administrator Authorization Level.
- 3. Enter a number of seconds after which OpenGN will switch to that user.
- 4. Click Close.

# 4.14 Localization

OpenGN is available in English and French.

# To change the language

- 1. Quit OpenGN.
- 2. In Windows, navigate to the directory where OpenGN is installed. By default this is: C:\Program Files\Mircom Group of Companies\Open Graphic Navigator
- 3. Double-click the opengn.ini file.
- 4. On the **Language** line, change the two-letter code to **en** for English or **fr** for French.

[Culture] Language=en

# Figure 60 Language

- 5. Close and save the file.
- 6. Start OpenGN.



**Note:** Some information from the panel is not localized. For example, the 3 last columns in the List Area (Node, CPU, and Loop) will remain in English when OpenGN is configured for French. Trouble and alarm messages from the panel may also remain in English.

Non-Roman characters in the job file may not display properly in OpenGN.



# **5.0** Configuring Objects and Zones

Adding objects to floor plans lets you observe real-time events in the Surveillance Area. You can label and define objects and zones, and you can add emergency instructions.

# This chapter covers

- Configuring Objects and Zones
- Configuring Objects in the Job Tree
- Configuring Objects in the Surveillance Area
- Configuring Zones
- Working with the Zone and Shape Tree
- Unplaced Objects Screen



# 5.1 Configuring Objects and Zones

Objects are all the fire objects, system statuses and switches connected to the Fire Alarm system. OpenGN assigns properties to objects to help define them, monitor, and control them.

A zone is an area that contains related objects.

You configure objects and zones in the Job Tree and the Surveillance Area of the Configuration window. For a general overview of the Configuration window, see section 3.5 on page 35.

# 5.2 Configuring Objects in the Job Tree

Right-click an object in the Job Tree to see the following menu:

Go to Fire Object
Place Selected Fire Objects
Remove Selected Fire Object Placements
Add Proxy Object
Remove Proxy Objects
Modify Fire Object Description
Modify Fire Object Take Action Message
Set Visible
Set Invisible
Description Editing Mode
Show Invisible Items

Show Placed Items

Figure 61 Fire Object Options

Go to Fire Object	Finds a placed or unplaced object.
Place Selected Fire Objects	Adds an object to the floor plan. Unplaced objects are red in the job tree, and placed objects are green.
Remove Selected Fire Object Placements	Removes any object from the floor plan.
Add Proxy Object	If the object is already placed, places a copy of the object.
Remove Proxy Objects	Removes all copies of the object that are placed.
Modify Fire Object Description	Modifies the description.
Modify Fire Object Take Action Message	Modifies the Take Action message. This message describes the actions you need to take when an event occurs.
Set Visible	Makes invisible objects visible on the floor plan.



Set Invisible Makes the object invisible on the floor plan.

**Description Editing**Lets you

Mode

Lets you rename multiple objects at once.

Show Invisible Items Shows all the invisible objects in the Job Tree. Invisible objects

are gray in the Job Tree.

**Show Placed Items** Reserved for future use.

# 5.2.1 Go to Fire Object

This option shows the object on the floor plan.

# To find an object

1. Double-click the object in the Job Tree.

Or

- 1. Right-click the object in the Job Tree.
- 2. Choose Go to Fire Object from the menu.

The object appears in the center of the Surveillance Area and is surrounded with a red square.

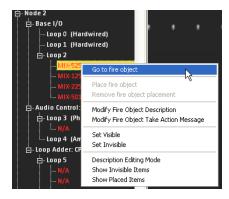


Figure 62 Go to Fire Object

3. Place the pointer over the object to display the object message.

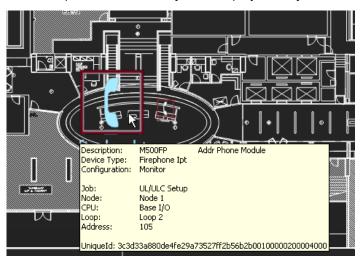


Figure 63 Object Info Message



# 5.2.2 Placing and Removing Objects

Adding objects to a map provides you with an accurate visual representation of the surveillance Area and allows you to effectively monitor the location. Unplaced objects are red in the Job Tree, and placed objects are green. When OpenGN is connected to the Fire Alarm Control Panel, all objects show alarm events whether they are on the floor plan or not.

i

**Note:** It is the customer's responsibility to ensure that the objects are placed accurately on the floor plan.

# To place objects

- 1. Select the building and floor plan where you want to add the objects.
- Right-click an object in the Job Tree, and then click Place Selected Fire Objects.
   The object appears at the top of the Map Area.
- 3. Drag the object to a location on the floor plan.

# To remove objects

 Right-click an object in the Job Tree, and then click Remove Selected Fire Object Placements.

The object disappears from the floor plan.

# 5.2.3 Placing and Removing Proxy Objects

You can add the same object to a floor plan or control switches more than once by creating proxy objects. A proxy object is a linked copy of the object. The behavior of a proxy object is the same as the behavior of the original object. For example, you can make a proxy for an interactive switch, such as a bypass switch or system reset switch. If the state of the switch changes, both the original object and the proxy object will reflect the change.



**Note:** It is the customer's responsibility to ensure that the objects are placed accurately on the floor plan.

# To place a proxy object

- 1. Select the building and floor plan where you want to add the object.
- Right-click an object in the Job Tree that is already placed, and then click Add Proxy Object.

The object appears at the top of the Map Area.

3. Drag the object to a location on the floor plan.

# To remove all proxy objects assigned to an object

Right-click an object in the Job Tree, and then click Remove Proxy Objects.
 All copies of the object disappear from the floor plan. This command does not remove the original object from the floor plan.



# To remove one proxy object

1. Right-click a proxy object on the floor plan, then click **Remove Proxy**.

# 5.2.4 Modify Fire Object Description

Every object has a description.

# To define or change an object description

- 1. Right-click an object in the Job Tree, and then click **Modify Fire Object Description**.
- 2. Type a unique description for the object.

# 5.2.5 Description Editing Mode

You can rename multiple objects at once.

# To enter Description Editing Mode

- 1. Right-click an object in the Job Tree, and then click **Description Editing Mode**.
- 2. Select an object in the Job Tree, then type a description.
- 3. When you are finished editing object descriptions, right-click in the Job Tree, and then uncheck **Description Editing Mode**.

```
□- Node 2
□- Base I/0
□- Loop 0 (Hardwired)
□- Loop 2
□- MIX-5251P Heat Detector
□- MIX-1251 Photo Dr
□- MIX-501 Input Mor
```

Figure 64 Description Editing Mode

# 5.2.6 Modify Fire Object Take Action Message

Every object has a Take Action Message.

# To enter or change a Take Action Message

1. Right-click an object in the Job Tree, and then click **Modify Fire Object Take Action Message**.

The Take Action Message window appears.

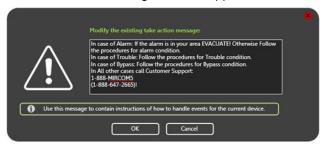


Figure 65 Take Action Message



- 2. Type the instructions that the operator needs to take when this object is active.
- 3. Click OK.

# 5.2.7 Set Visible or Invisible

By default, all objects are visible. You can make an object invisible on the floor plan, Job tree or both. Invisible objects are gray in the Job Tree.



**Note:** Invisibility does not change alarm and event notification.

# To make an object invisible

Right-click an object in the Job Tree, and then click Set Invisible.
 The object becomes invisible on the floor plan and in the Job Tree.

# 5.2.8 Show Invisible Items

**Show Invisible Items** shows the invisible objects in the Job tree. They are gray.

# To show an invisible object in the Job Tree

Right-click in the Job Tree, and then click **Show Invisible Items**.
 The invisible objects become visible in the Job Tree. They remain invisible on the floor plan.

# To hide an invisible object in the Job Tree

Right-click in the Job Tree, and then uncheck Show Invisible Items.
 All invisible objects on the floor plan become hidden on the Job Tree.

# 5.3 Configuring Objects in the Surveillance Area

# To move an object on the floor plan

- Click and drag an object in the Surveillance Area to move it to another location on the same floor.
- Right-click an object in the Surveillance Area to see the following menu:

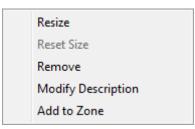


Figure 66 Commands for Objects in the Surveillance Area



Resize Move the pointer to change the size of the object icon. Click to finish

sizing the icon.

Reset Size Resets the icon back to its default size.

Remove Removes the icon from the floor plan. For instructions on placing

objects, see section 5.2.2 on page 83.

Modify Modifies the description. For instructions see section 5.2.4 on

**Description** page 84.

Add to Zone Opens the Zone Properties window. For more information on working

with zones, see section 5.4.1 on page 87.

# 5.3.1 Modify Description

Every object has a description.

# To enter or change an object description

1. Right-click an object, and then click **Modify Description**.

The Modify Description window appears.

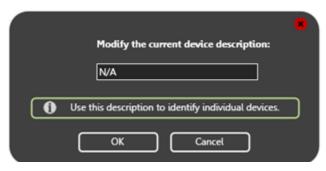


Figure 67 Modify Description

- 2. Type a unique description for the object.
- 3. Click OK.

# 5.4 Configuring Zones

Zones are areas that contain related objects, shapes and images. The Zone and Shape Tree lists all configured Zones and the objects, shapes and images in them, as well as all unassigned shapes and images



# 5.4.1 Adding Objects and Images to Zones

# To add an object or image to a zone

1. Right-click an object or image in the Surveillance Area, and then click **Assign to Zone**. The Zone Properties window appears.



Figure 68 Zone Properties

- 2. Click either Existing Zone or New Zone.
  - If you chose an **Existing Zone**, click the menu, and then click the Zone.
  - If you chose a **New Zone**, type the name of the zone in the **Description** field.
- 3. Click OK.

The object or image appears under the appropriate Zone in the **Zone and Shape Tree**.

# 5.4.2 Drawing Shapes

You can draw rectangles on the floor plan to represent fire zones. You can make more than one rectangle part of the same zone. If an event occurs on any object in a zone, the entire zone will change to the appropriate event color.

Use the Tool buttons and the Color and Brightness buttons to draw shapes.

The Tool buttons are located in the top right corner of the Configuration window (Figure 24 on page 35).

**Table 11 Tool button descriptions** 

<b>Tool Button</b>		Description
D	Selection	Selects items in the Surveillance Area.
A	Text	Places new text or edits existing text in the Surveillance Area. You can change the color of the text by selecting the desired color in the <b>Color and Brightness Tools</b> section.
国	Add Image	Imports and places an image in the Surveillance Area.
	Empty Rectangle	Lets you draw an empty rectangle that you can assign to a new or existing zone. You can change the color of the rectangle by selecting the desired color in the <b>Color and Brightness Tools</b> section.
	Filled Rectangle	Lets you draw a filled rectangle that can you can assign to a new or existing zone. You can change the color of the rectangle by selecting the desired color in the <b>Color and Brightness Tools</b> section.



The Color and Brightness buttons are located in the bottom right corner of the Configuration window.

# To draw a shape

- 1. In the Configuration window, use the Color and Brightness tool to set the color you want the new rectangle to be. See Figure 24 on page 35.
- 2. Click the Empty or Filled Rectangle tool. See Table 11.



**Note:** All rectangles are filled with color when their associated zone is active. The **Empty Rectangle** and the **Filled Rectangle** tools differ only in how the areas appear when they are not active.

- 3. Click in the Surveillance Area where you want the first corner of the rectangle to be.
- 4. Drag the pointer to create a rectangle.
- 5. Click again to finish drawing the rectangle.

You can resize, move, and change the color of the rectangle after you draw it.

# To resize a shape

- 1. Select the **Selection** tool. It looks like an arrow (see Table 11).
- 2. Hover the pointer inside one of the side sections of the rectangle so that the pointer changes to the Resize Tool Icon.

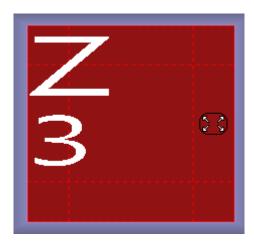


Figure 69 Resize Tool Pointer Icon

- 3. Click and drag the pointer to lengthen or shorten the rectangle.
- 4. To change the height of the rectangle, move the pointer to the upper or lower side section and drag the pointer.



**Note:** You can also resize a rectangle with the mouse wheel. Moving the mouse wheel shrinks or expands the rectangle proportionally.



# To move a shape

- 1. Select the Selection tool. It looks like an arrow (see Table 11).
- 2. Hover the pointer over the middle of the rectangle so that the pointer icon changes to the Move Tool Icon.

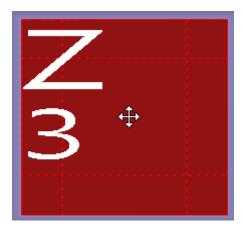


Figure 70 Move Tool Icon

3. Click and drag the pointer.

# To rotate a shape

- 1. Select the Selection tool. It looks like an arrow (see Table 11).
- 2. Hover the pointer over the corner of the rectangle so that the pointer icon changes to the Rotate Tool Icon.

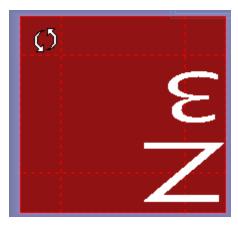


Figure 71 Rotate Tool Icon

3. Click and drag the pointer.



# 5.4.3 Assigning Shapes to Zones

After you create a shape, it has a default description and is not part of a zone. Hover the pointer over the shape to show the description in the top left corner of the shape.

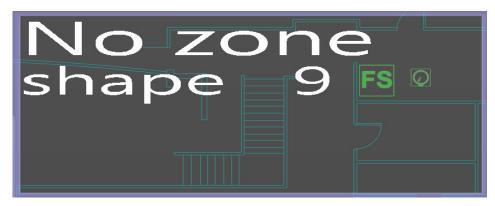


Figure 72 A New Shape

Right-click a shapes in the Surveillance Area to see this menu:

Modify Description	Modifies the description. For instructions see section 5.3.1 on page 86.
Assign to Zone	Opens the Zone Properties window. For more information on working with zones see section 5.4 on page 86.
Delete	Deletes the shape.

# To assign a shape to a zone

- Right-click a shape in the Surveillance Area, and then click Assign to Zone.
   The Zone Properties window appears.
- 2. Click either Existing Zone or New Zone.
  - If you chose an Existing Zone, click the menu, and then click the Zone.
  - If you chose a New Zone, type the name of the zone in the **Description** field.
- 3. Click OK.

The shape appears under the appropriate zone in the Zone and Shape tree.

# 5.5 Working with the Zone and Shape Tree

There are four types of items in the Zone and Shape Tree. The item types are:

- Zones
- Assigned Objects
- Assigned Shapes
- Unassigned Shapes



# 5.5.1 **Zones**

Right-click a zone to see this menu:

Modify Description Modifies the description. For instructions see section 5.3.1 on

page 86.

Delete Zone Deletes the zone. Any shapes or objects will be disassociated with

the zone.

# 5.5.2 Assigned Objects

Right-click an object that is part of a zone to see this menu:

Go to Fire Object The object appears in the center of the Surveillance Area.

Move to zone Moves the object to a different zone.

Add to zone Adds the object to another zone. The object now has duplicate

entries in the Zone Tree.

Remove from this

zone

Removes the object from the zone.

# 5.5.3 Assigned Shapes

Right-click a shape that is part of a zone to see this menu:

Go to Shape The shape appears in the center of the Surveillance Area.

Modify Description Modifies the description. For instructions see section 5.3.1 on

page 86.

Assign to Zone Opens the Zone Properties window. For more information on

working with zones see section 5.4 on page 86.

**Un-assign from this** 

zone

Removes the shape from the zone.

Deletes the shape.

# 5.5.4 Unassigned Shapes

Right-click a shape that is not part of a zone to see this menu:

Go to Shape The shape appears in the center of the Surveillance Area.

**Modify Description** Modifies the description. For instructions see section 5.3.1 on

page 86.

Assign to Zone Opens the Zone Properties window. For more information on

working with zones see section 5.4 on page 86.

Deletes the shape.



# 5.6 Unplaced Objects Screen

Click the first floor of the Floor Selection frame to see all unplaced objects.



Figure 73 Unplaced Objects

The Unplaced Objects screen displays all unplaced devices.

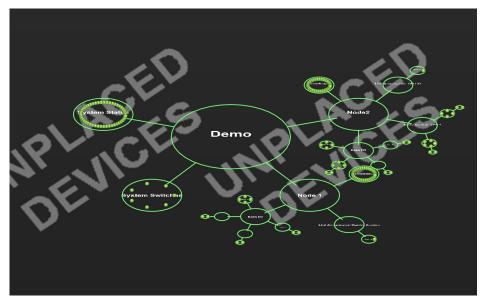


Figure 74 Unplaced Objects Screen



# **6.0** Managing Events

This chapter provides information for the operator on how to monitor system events and alarms.

# This chapter covers

- Monitoring Events and Alarms
- What to do When an Event Occurs
- Using the Control Functions



# 6.1 Monitoring Events and Alarms

OpenGN displays images of every object on the map area, with the correct location of the object in buildings and on floors, and each object color coded according to its status and state. When OpenGN receives an alarm notice, it emits a tone and a displays an visual indication to show the alarm and trouble conditions.



Figure 75 Object Alarm

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Note:

In order to ensure that events and alarms are synchronized correctly in FleX-Net<sup>™</sup> and FX-4000, restart OpenGN when you perform a network restart. See "The messages between OpenGN and the panel are out of sync." on page 114 for more information.

The network restart is a feature accessed through the configuration menu. Refer to the panel user guide for details.

# 6.1.1 Object States

An object state is its current status. Objects have four states:

**Normal** 

By default, objects in normal mode are green and not animated.

**Trouble** 

Objects reporting trouble have animated yellow rings.

Active

Active Objects are animated with concentric rings in their default configuration display colors.

- Alarm red
- · Supervisory orange
- · Trouble yellow
- · Monitor blue

**Bypass** 

Bypassed objects are yellow.

For instructions on how to associate object states with icons, see section 4.8 on page 63.



# 6.1.2 Object Functions

You can configure objects for the following functions:

Alarm Input

Trouble Input

Monitor Input

Supervisory Input

Color coded messages indicate the status and configuration of each object.

# 6.1.3 List Area

The List Area (see Figure 20 on page 28) displays all events and alarms and their search criteria. The search criteria are listed by column according to the following categories:

Acknowledged

Event Type

· Object Address

Event ID

Event Description

· Node (optional)

Event Timestamp

Building

CPU (optional)

Object Description

Floor

· Loop (optional)

Object Type

Job

# 6.2 What to do When an Event Occurs

When an event occurs, the following things happen:

- The Surveillance Area enters 2D view and zooms to the object that is causing the event.
- The object becomes animated with the appropriate colored concentric circles.
- The System Status area displays the appropriate message.
- The event is displayed on the Event List and is added to the Event Log.



Floor
Floor 15

Physical and a second and a

The Settings button on the Configuration window is disabled.

Figure 76 Active Events

When an event occurs, you can do the following things:

- View the object info.
- Go to the object.
- Acknowledge the event.
- View the Take Action message.
- Restore the event.

# 6.2.1 View the Object Info

 The Object Info appears in the Event List. If you hover the pointer over the object, the object info appears.

# 6.2.2 Go to the Object

- 1. Right-click the object in the Event List.
- 2. Click Go to.

OpenGN zooms to the floor where the object is.

# 6.2.3 Acknowledge the Event

When you acknowledge an event, the object stops flashing on the floor plan, and the event stops flashing in the Event List. Acknowledging affects OpenGN only; nothing changes on the panel.

There are two ways to acknowledge events.

- Select the corresponding checkbox in the Ack column.
- Click the Ack All button to acknowledge all events.



# 6.2.4 Acknowledge Restore Events

OpenGN displays a green restore event to indicate that the panel has restored an alarm, supervisory, or trouble. In Supervised mode (section 4.6 on page 58), you must acknowledge restore events. In Non-Supervised mode (section 4.6 on page 58), OpenGN acknowledges restore events automatically.

When a restore event is acknowledged either by the technician or by OpenGN, both the restore event and the event disappear from the event list.

# 6.2.5 View the Take Action Message

There are two ways to view the Take Action Message.

- Double-click the object in the Surveillance area.
- Right-click the object in the Event List, and then click Take Action Message.

# 6.2.6 Restoring the Event

When you restore an event, it disappears from the event list. Restoring affects OpenGN only; nothing changes on the panel.

Right-click the object in the Event List, and then click Restore.



# 6.3 Using the Control Functions

The Switches View button in the Surveillance area (see section 3.3.1 on page 30) shows a grid where you can place annunciator switches. You can control the panel from here if the authority having jurisdiction allows it.

For example, you can place a Acknowledge switch in the Switches View, so that the operator can send an acknowledge command to the Fire Alarm Control Panel.

# 6.3.1 Supported Control Functions

**Table 12 Supported Control Functions** 

Model	FleX-Net™	FleX-Net™ FX-4000	FX-3500, FX-3318	MR-2900, MR-2200	PRO-2000	FX-2000
Firmware version	11.11.14 12.1.45 12.2.41	1.10.1 1.11.1	3.0.16	22.12 for MR-2900 22.11 for MR-2200	5.51	2.16
Acknowledge				Х	Х	
Signal Silence	Х	Х		Х		
System Reset	Х	Х		Х	Х	
Fire Drill	Х	Х				
Bypass	Х			Х	Х	
Manual Evacuation	Х	Х				

# To set up control functions

- 1. Go to Configuration Settings, and navigate to Control Switches in the Floor Selection.
- 2. In the Job Tree, expand the **System Switches** section.
- 3. Drag a system switch from the Job Tree to the Control Switches grid.

# To use control functions

- 1. In the Surveillance Area, click the Switches View button.
- 2. Click a switch to send that command to the panel.
- 3. Click **Yes** in the window that appears.

# 6.3.2 Bypassing Objects

You can bypass an object in OpenGN. OpenGN sends a signal to the Fire Alarm Control Panel to bypass the object. The corresponding device will be shown as bypassed on the Fire Alarm Control Panel.

# To bypass an object

Right-click the object, and then select Bypass.

# To unbypass an object

Right-click the object, and then select Unbypass.



# **Appendix A - Computer Configuration**

This chapter describes some suggested Windows settings which will help OpenGN run smoothly.

# Set the computer to never go to sleep

- 1. Click Start, click Control Panel, click System, then click Power & Sleep.
- 2. Click Additional power settings.
- 3. Beside the plan you are using, click Change plan settings.
- 4. Select Never for Turn of the display, and Never for Put the computer to sleep.

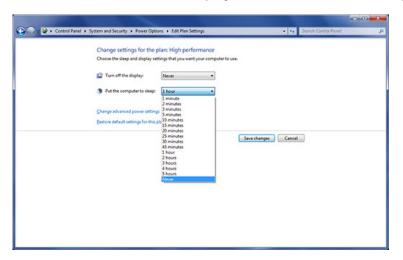


Figure 77 Power Options



- 5. Click Change advanced power settings.
- 6. Click the plus sign beside Hard disk, then Turn off hard disk after.
- Click the arrow to change the setting to **Never**. This setting ensures that the hard disk will never turn off.

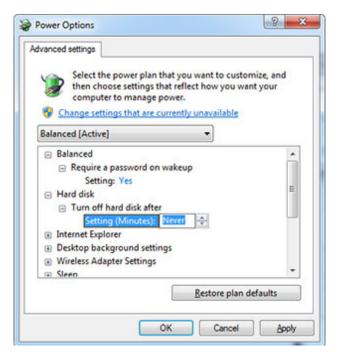


Figure 78 Power Options - Hard disk

- 8. Select **Sleep**, then **Sleep after**, and change the setting to **Never**.
- 9. Under **Hibernate after**, change the setting to **Never**. These settings ensure that the computer will never go to sleep.

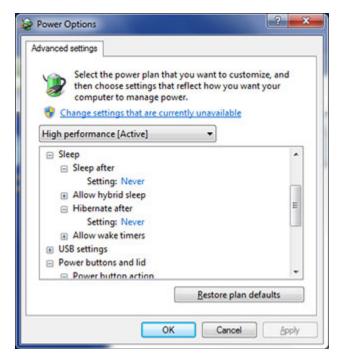


Figure 79 Power Options - Sleep



10. Under **Display**, change the setting to **Never**. This setting ensures that the display will never turn off.



Figure 80 Power Options - Display

11. Click **OK**.



# **Appendix B - System Messages**

System messages provide information about the connection settings and panel status.

# **Connection and Panel Status Messages**

Table 13 lists the Connection and Panel Status messages that appear in the Status Area and are listed by the order in which OpenGN checks them.

For complete descriptions of the Status Message see Table 14.

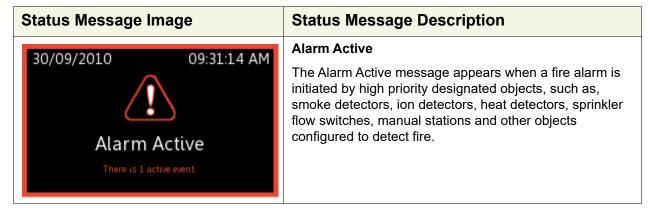
**Table 13 Status Message Type** 

Status Message	Status Message Type
Disconnected	Connection Status
No Jobs Imported	Connection Status
Alarm Active	Panel Status
Supervisory	Panel Status
Trouble	Panel Status
Monitor	Panel Status
Version Guid Mismatch	Connection Status
Unknown Panel Events	Connection Status
Unknown Heart Beat	Connection Status
System Normal	Panel Status and Connection Status

# **Status Message Descriptions**

Table 14 contains images and complete descriptions of each possible Status Message. The status messages are listed in alphabetical order.

**Table 14 Connection and Panel Status Messages** 





**Table 14 Connection and Panel Status Messages (Continued)** 

# Status Message Image

# **Status Message Description**



### Disconnected

The Disconnected message indicates that the panel is disconnected from the system. This message appears when at least one Job is imported and the job file is not received from the OpenGN Gateway.

In addition to this message, an alert appears in the Event List.



### **Monitor Active**

The Monitor message is initiated from panels containing this function by lower priority designated objects such as telephones. The fire department or monitoring company is not notified.



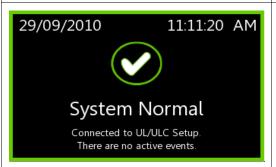
# No Panels Imported

This message appears when there is no imported job file.



# **Supervisory Active**

The Supervisory message indicates that a component of the fire detection system is disabled due to a manual error, such as a closed fire sprinkler valve or active tamper switch. Objects designated as a lower priority can also trigger a Supervisory alarm.



# **System Normal**

Once connection is established, both Job Unique ID and Job Version are identified, The job file is imported and there are no alarms. The system is normal.



Table 14 Connection and Panel Status Messages (Continued)

# Status Message Image

# **Status Message Description**



### **Trouble Active**

The Trouble message indicates that a fault or defect exists on the panel, such as a panel electrical problem, malfunctioning or disabled smoke detector, a disabled or disconnected zone, backup battery low power, ground faults, or short or open circuits.

# 30/09/2010 09:40:10 AM Unknown Heartbeat An unrecognized heartbeat was received. Ensure the panel is imported before connecting.

### **Unknown Heartbeat**

The panel sends a packet of data to the OpenGN Gateway on a periodic basis. This packet of data is called the heartbeat. OpenGN compares the heartbeat to the information in the database.

An Unknown Heartbeat message indicates that panel sending the message may not exist in the database.



### **Unknown Panel Event**

This message appears when the Panel GUID does not match the Panel GUID in the OpenGN database. Import the correct XML file for the current panel configuration.



# **Version Guid Mismatch**

This message appears when the Version GUID does not match the version in the OpenGN database. This can happen when the panel configuration has changed. An updated XML file is required.

Import the correct XML file for the current panel configuration.



# **Appendix C - Network Topologies**

Figure 81 shows the various ways that OpenGN can be connected.

A FleX-Net™ system can be connected to the OpenGN Gateway computer directly or through a switch. If if is connected directly, then it must be connected to a dedicated network interface card (NIC) on the OpenGN Gateway computer. In Figure 81, the OpenGN Gateway computer has 4 network interface cards because it is connected directly to 3 FleX-Net™ systems, and it is also connected to a switch.

The primary OpenGN can be run on the same computer as the OpenGN Gateway, or on a different computer.

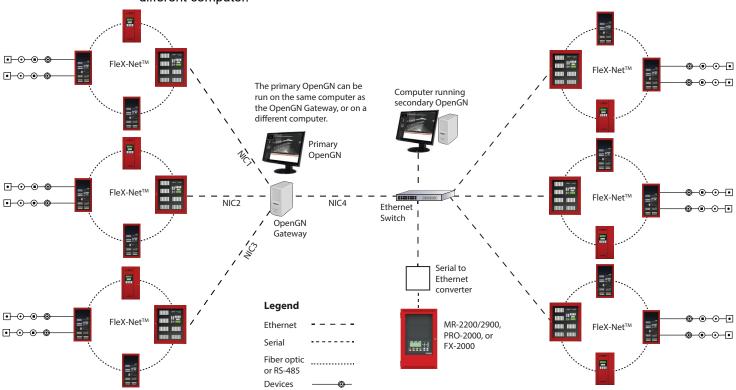


Figure 81 Networking OpenGN



# **Appendix D - Monitoring Instances**

The instructions below describe how to set up a second instance of OpenGN as shown in Figure 81 on page 105. These instructions assume that you have already configured the first instance of OpenGN and the OpenGN Gateway as described in Chapter 3 on page 36.

# To set up a monitoring instance

1. Install OpenGN on a computer on the same network as the first instance of OpenGN as described in chapter 2.

In the Choose Setup Type window, click Custom.

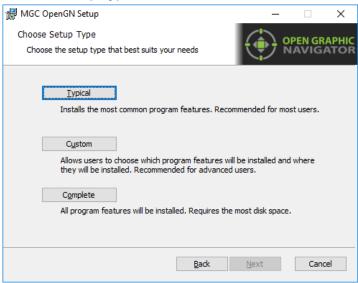


Figure 82 Choose Setup Type

Double-click OpenGN.

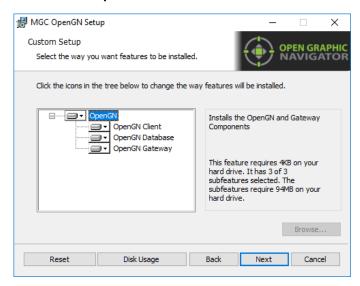


Figure 83 Custom Setup



- Click the menu beside OpenGN Gateway, then select Entire feature will be unavailable.
- 4. Click Next.

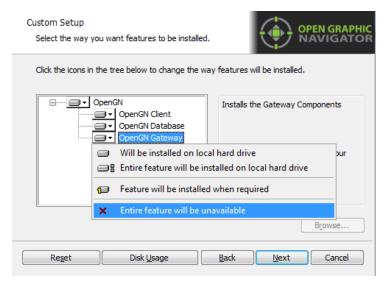


Figure 84 Custom Setup

- 5. After you install OpenGN, import the job file into OpenGN as described in the document specific to your panel:
- LT-6622 OpenGN to FleX-Net™ Connection Instructions
- LT-6703 OpenGN to FleX-Net™ FX-4000 Connection Instructions
- LT-6621 OpenGN to FX-3500 and FX-3318 Connection Instructions
- LT-6620 OpenGN to PRO-2000 Connection Instructions
- LT-6055 OpenGN to MR-2200/2900 Connection Instructions
- LT-1105 OpenGN to FX-2000 Connection Instructions



**Note:** Each instance of OpenGN requires the same job file, and a Codemeter USB key connected to the computer.



# To configure the OpenGN Gateway with the monitoring instance

In the OpenGN Gateway window, Click the + button.
 The Adapter Configuration window appears.

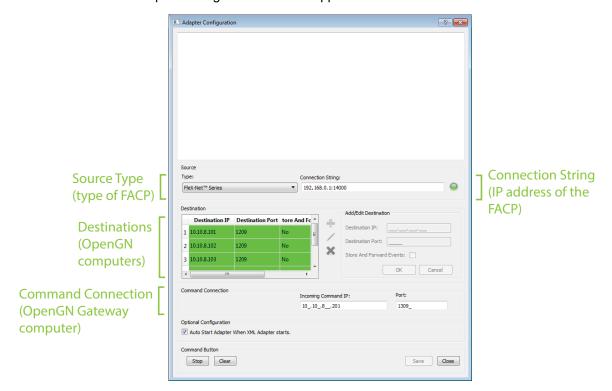
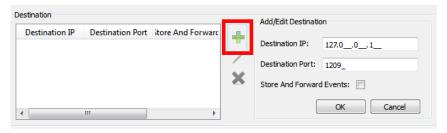


Figure 85 OpenGN Gateway Connected to 3 Instances of OpenGN

2. Click the green + button — under Destination and provide the following information for the second instance of OpenGN:



Destination IP The IP address of the computer that the second instance of OpenGN is installed on.

Destination Port 1209

Store and Forward Events Reserved for future use.

Figure 86 Destination

3. Click OK.

The Destination appears in the **Destination** field on the left.

4. Click **Save** at the bottom of the Adapter Configuration window.



# **Appendix E - Input Object and Assorted Status Types**

## **Input Object Types**

Table 15 lists the various types of input objects. This list is not exhaustive.

- Default
- Ion Input
- Photo Input
- Heat Input
- Input Module
- Laser Input
- Acclimate Input

- Fire Phone Input
- Addressable Output Signal
- Relay Driving Signal
- Relay
- Conventional Alarm Input
- Conventional Output Signal
- Conventional Relay Driving Signal

- Conventional Relay
- Conventional Phone
- · Voice Line
- Amplifier
- Remote Switch
- Addressable Relay

Table 15 Input Object Types

### **Object Icons**

The following figure shows the object icons bundled with OpenGN.









































Figure 87 Object Icons



## Job Status Types (for FleX-Net™ panels only)

Table 16 lists the various Job Status types.

- Alarm Ack
- Alarm Xmit Active
- Alert Active
- All Call
- All Call Minus
- Alm Buzzer
- Alm Buzzer Silence
- Amp Trouble
- Auto Day/Night
- Auto Ga Timing
- Auto SS Timing
- Auto Suite Resound
- Aux Disc
- Aux Reset Pulse
- Common Alarm
- Common Monitor
- Common Supv

- Common Trouble
- Evac Active
- Fire Drill
- Ground Fault
- Latched Relays
- New Alarm Active
- Off Hours
- Page by Phone
- Page to Alert
- Page Inhibit
- Page to Evac
- Page Ready
- Paging Active
- Page by Phone
- Pre-Alarm Active
- Pre-Tone Active
- Relay Auto Test Act

- Sig Sil Inhibit
- Sig Silence Pulse
- Signal Silence
- Signals Active
- Silenceable Opts Act
- Spv Buzzer
- Spv Buzzer Silence
- Subsequent Alarm
- Sys Reset
- Sys Reset Inactive
- · Telephone Call in
- · Telephone Call In Silenced
- · Telephone Trouble
- Total Evacuation
- Trb Buzzer
- Trb Buzzer Silence
- Trouble Xmit Active

Table 16 **Job Status Types** 

# Node Status (for FleX-Net<sup>™</sup> panels only)

Table 17 lists the various Node Status types.

- AC On
- · Alm Relay Active
- Audible Walktest
- Microphone Trouble
- Node Active
- Node Alarm
- Node Alarm Verif
- Node Alert Active
- Node Amp Trouble
- Node Call Control
- Node Evac Active

- Node Ground Fault
- Node Maint, Alert
- Node Monitor
- Node Pre-alarm
- Node Relay Auto Test
- Node PTT Pressed
- Node Signal Silence
- Node Signals Active
- Node Subsequent Alarm
- Node Supv

- Node Sys Reset Active
- Node Tel Call In
- Node Trbl Xmit Active
- Node Trouble
- Node Wflw Retard
- Page Ready
- · Pre-Tone Active
- Silent Walktest
- · Spv Relay Active
- Trb Relay Active

Table 17 **Node Status Types** 



## **Connection Status Conditions**

Table 18 shows the conditions that generate system messages.

		Conditions			
		Job file Successfully imported	Physical Connection established	Panel GUID Validated	Version GUID Validated
Message	Disconnected	Yes	No	N/A	N/A
	No Panels Imported	No	No	N/A	N/A
	Version GUID Mismatch	Yes	Yes	Yes	No
	Unknown Panel Events	N/A	Yes	No	N/A
	Unknown Heart Beat	N/A	Yes	No	N/A
	System Normal	Yes	Yes	Yes	Yes

**Table 18 Connection Status Conditions** 



# Appendix F - Troubleshooting FAQ

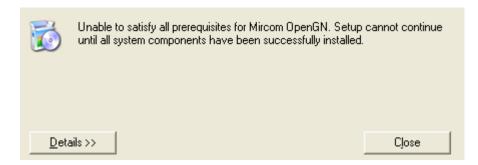
### **Frequently Asked Questions**

- Q: How do I back up the database?
- A: Follow the instructions in section 4.11.2 on page 69 to back up the database. Backing up the database regularly is recommended.
- Q: How do I resynchronize OpenGN if the system goes down?
- A: If the panel goes down or if OpenGN quits unexpectedly, follow these instructions.
  - 1. Close OpenGN if it is open.
  - 2. Close the OpenGN Gateway.
  - 3. Restart the computer.
  - 4. Restart the OpenGN Gateway.
  - 5. Restart OpenGN.
  - 6. Perform a network restart on the panel.

The network restart is a feature accessed through the configuration menu. Refer to the panel user guide for details.

OpenGN should reconnect to the panel and receive any events that the panel sent while OpenGN was down.

- Q: Why is the text on the screen jumbled?
- A: This is a known issue with some Intel graphics cards. Update your drivers to solve this issue.
- Q: Why does my installation fail and I receive this message?



A: Click the **Details** button. If you see the message **Administrator permissions are** required, install the application using a user profile that has Administrator rights.



Q: When I attempt to run OpenGN why do I receive the following message?



- A: Ensure that you are running OpenGN with Administrator rights.
- Q: Why is OpenGN telling me that I only have a Demo version when I have purchased a licensed version?
- A: Ensure that your CodeMeter USB key has been programmed and is connected to the computer running OpenGN.
- Q: How do I place more than 6 buildings?
- A: Only the top 6 buildings are visible in the Campus View. However, all the buildings are visible in Surveillance mode. If you have more than 6 buildings, follow these instructions.
  - 1. In Campus View in the Configuration window, place and size the visible buildings as desired.
  - 2. Click Settings, and then click Campus Settings.
  - 3. In the **Buildings** section, select the building at the bottom of the list, and then click the Up arrow to move the selected building to the top of the list.
  - 4. Click Close.
  - 5. Click the **Campus View** button at the top of the Configuration window. The building that you moved is now visible.
  - 6. Move and resize the new building as desired.
  - 7. Repeat steps 2 to 6 for each building after the 6th building.
- Q: OpenGN does not start.
- A: Follow the instructions in Appendix I Installing and Uninstalling OpenGN on page 128 to restore the database from a backup.



- Q: The messages between OpenGN and the panel are out of sync.
- A: For FleX-Net™ and FX-4000, do the following.
  - 1. Close OpenGN if it is open.
  - 2. Close the OpenGN Gateway.
  - 3. Restart the computer.
  - 4. Restart the OpenGN Gateway.
  - 5. Restart OpenGN.
  - 6. Perform a network restart on the panel.

The network restart is a feature accessed through the configuration menu. Refer to the panel user guide for details.



# Appendix G - Importing a Revised CAD Drawing

If the CAD drawings for your floor plans change, you can import revised CAD drawings into OpenGN.



Attention: These instructions should be completed by someone familiar with CAD software.

## 1 Import the new CAD drawing into DraftSight

#### To download and install the latest version of DraftSight

- Open a web browser and go to http://www.3ds.com/products-services/draftsight-cad-software/free-download/
- 2. Click Download.
- 3. After the download, run and complete the install application.

#### To import the drawing into DraftSight

- 1. In DraftSight, click File > Open and open the original CAD drawing.
- 2. Click **File > Open** and open the new CAD drawing into the original CAD file.

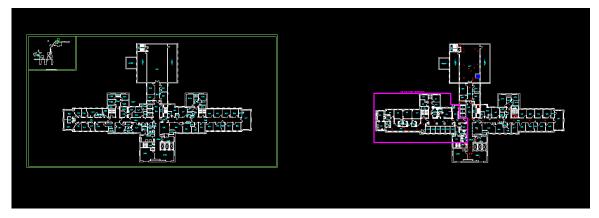


Figure 88 New and Old CAD Drawings



- 3. Click Format > Layer.
- 4. Unselect the layers in the new CAD drawing that you do not want to show in OpenGN.

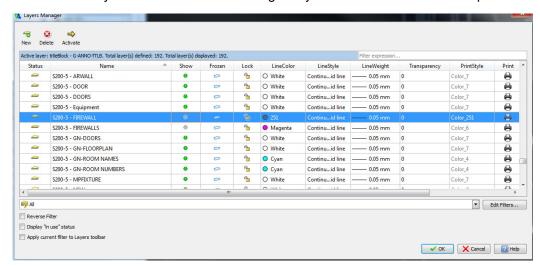


Figure 89 Hide layers

# 2 Align the new drawing with the original drawing

 Select the original CAD drawing, then right-click and select Entity Group > Quick Group.

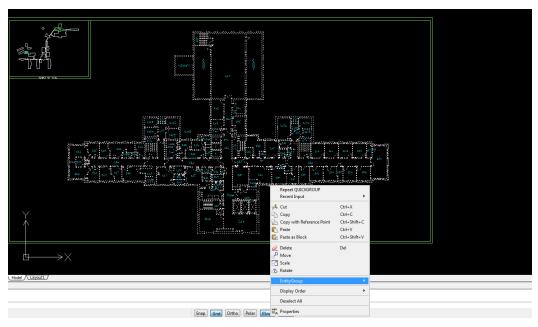


Figure 90 Entity Group



- 2. Right-click the new CAD drawing, and select **Cut**.
- 3. Paste the new CAD drawing on top of the original drawing, making sure that the new drawing has the same coordinates as the original drawing.

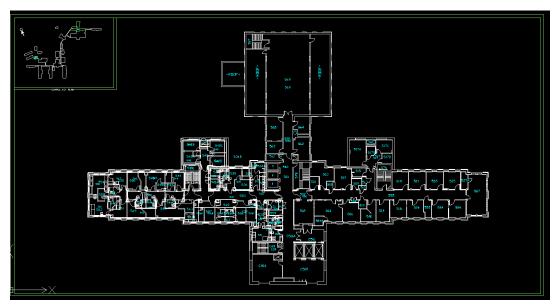


Figure 91 New Drawing on Top of Old Drawing

Select the original drawing, and press the Delete key.
 The new CAD drawing should now have the same coordinates as the original drawing.



Figure 92 New Drawing



### 3 Remove the non-essential objects

1. Enable the layers that were previously hidden.

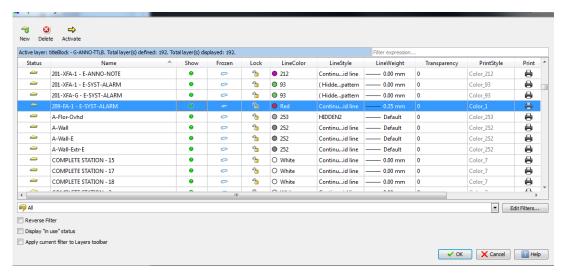


Figure 93 Show Layers

2. Delete the non-essential objects.



Figure 94 Non-Essential Objects



- 3. Double click the mouse wheel to automatically display the file to the outer drawing limits.
- 4. Make sure that all non-essential objects have been removed. Any objects not removed may affect the overall drawing scale.
- 5. Select File > Export > Export.

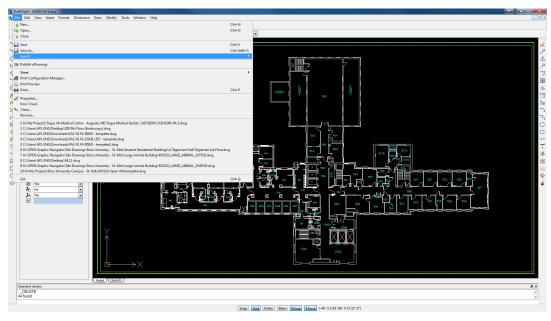


Figure 95 Export

- 6. Change the file type to Scalable Vector Graphics Format (SVG).
- 7. Click Save.



Figure 96 Save as Scalable Vector Graphics Format (SVG)

# 4 Remove the background and border in Inkscape

The instructions in this section are for cosmetic purposes and are not required.

Inkscape is an Open Source vector graphics editor, with capabilities similar to Illustrator, CorelDraw, or Xara X, using the scalable vector graphics (SVG) file format.



#### To download and install the latest version of Inkscape

- 1. Open a web browser and go to www.inkscape.org.
- Click Download Now.



3. After the download, run and complete the install application.

#### To remove the background and border in Inkscape

1. In Inkscape, click **File > Import** and import the SVG file.

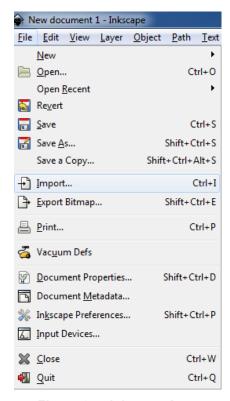


Figure 97 Inkscape Import



2. Click File > Document Properties.

The **Document Properties** window appears.

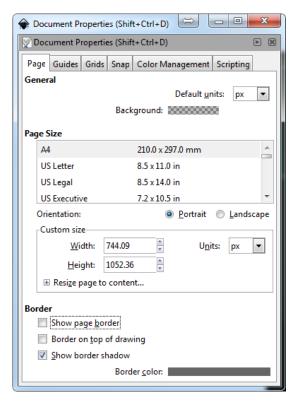


Figure 98 Document Properties



- 3. Unselect Show page border.
- 4. Close the **Document Properties** window.
- 5. Select the **Zoom to fit drawing in window** icon.

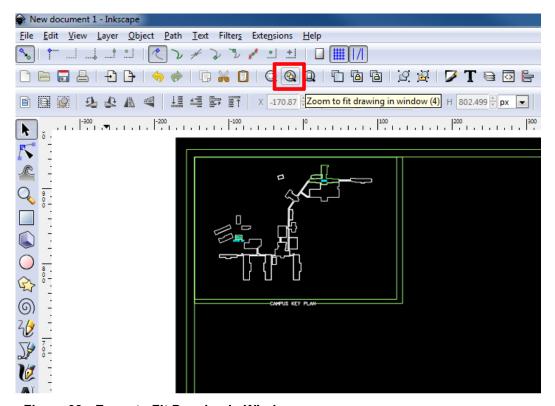


Figure 99 Zoom to Fit Drawing in Window

6. Select the black background near the corner so that the arrow icons appears at the corners as shown in Figure 100.



Figure 100 Select the Black Background Near the Corner



- Press the Delete key to remove the background.
   The SVG file should now have no background.
- 8. Select File > Save As, and save the file in Plain SVG format.

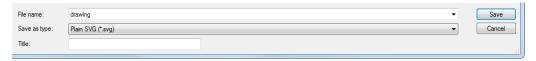


Figure 101 Save in Plain SVG format

## 5 Import the SVG file into OpenGN

- 1. In OpenGN, click the **Config** button from the Main Display window, and then click **Yes** to go to the configuration section.
- 2. Click Settings > Campus Settings.
- 3. Select the floor plan that you want to change.
- 4. Click Modify.



Figure 102 OpenGN Campus Settings



5. Click Select Floor Plan, and select the new SVG file.

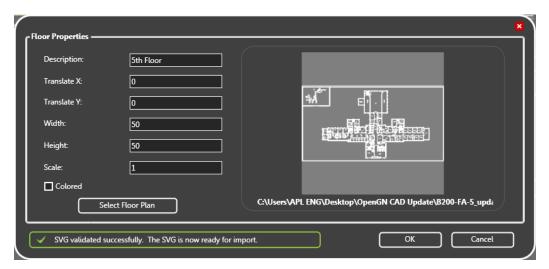


Figure 103 Floor Properties

- 6. Click OK.
  - OpenGN restarts.
- 7. Ensure that previous device placements have not changed, and modify any object placements that may have shifted with the floor plan update.



# **Appendix H - Converting PDF files** to SVG files

OpenGN works best with SVG (scalable vector graphics) files. To convert PDF files to SVG file format, MGC recommends using either of the following applications:

- Inkscape
- Adobe Illustrator

#### **Using Inkscape**

Inkscape is an Open Source vector graphics editor, with capabilities similar to Illustrator, CorelDraw, or Xara X, using the W3C standard Scalable Vector Graphics (SVG) file format.

#### To download and install the latest stable version of Inkscape

- 1. Open a web browser and go to www.inkscape.org.
- 2. Click Download Now.



Figure 104 Download Inkscape

3. After the download, run and complete the install application.

#### To convert a PDF file to SVG format using Inkscape

- Start Inkscape.
- 2. Click File > Open.

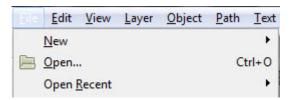


Figure 105 Inkscape File > Open



3. Browse to the desired file and click **Open**.

The PDF Import window appears.

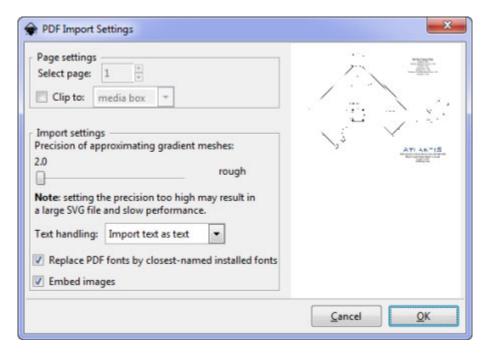


Figure 106 Inkscape PDF Import Settings

- 4. If the PDF has multiple pages, select the desired page from the Select page section.

  The page will be previewed on the right side of the window.
- 5. Click OK.

The file opens in Inkscape.

6. Click File > Save As.

The "Select file to save to" window opens.



Figure 107 Inkscape File > Save As



- 7. Enter the desired name of the file. Ensure that **Save as type** is either **Inkscape SVG** (\*.svg) or **Plain SVG** (\*.svg).
- 8. Click Save.

The file is now ready for import into OpenGN.

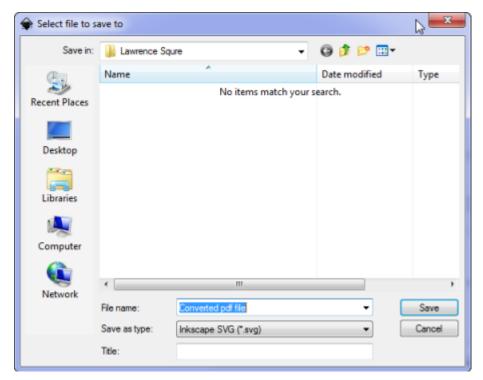


Figure 108 Inkscape - Select file to save to



**Note:** You should generally choose to save your file from Inkscape as Plain SVG. The Inkscape SVG format is slightly larger and the only benefit is that you can re-edit the file in Inkscape. Also, there is a slight chance of compatibility issues with the enhanced format.



# Appendix I - Installing and Uninstalling OpenGN

### Installing only OpenGN or only the OpenGN Gateway

- 1. Follow the instructions in section 2.4 on page 14.
- 2. When you see the Choose Setup Type window, click Custom.

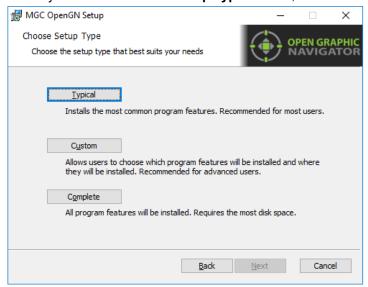


Figure 109 Choose Setup Type

3. Double-click OpenGN.

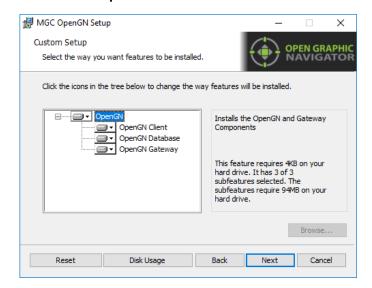


Figure 110 Custom Setup

- 4. If you want to install OpenGN only without the OpenGN Gateway:
  - Click the menu beside OpenGN Gateway, then select Entire feature will be unavailable.



#### b. Click Next.

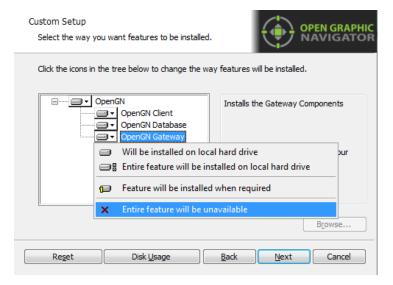


Figure 111 Custom Setup

- 5. If you want to install the OpenGN Gateway without OpenGN:
  - a. Click the menu beside OpenGN Client, then select Entire feature will be unavailable.
  - b. Click Next.

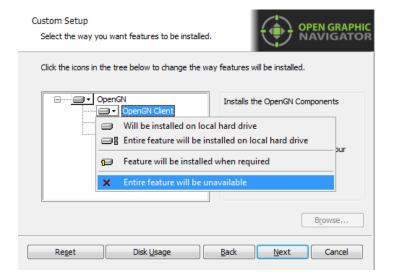


Figure 112 Custom Setup

6. Continue with the installation as described in step 6 on page 20.



### **Uninstalling OpenGN and its Components**

- 1. From the Windows Start menu, click **Start > Control Panel**.
- 2. Click System, then click Apps & Features.
- 3. Click Open Graphic Navigator, and then click Uninstall.

The uninstallation takes a few seconds.

i

**Note:** The database, which contains user, job and system log information, is not removed when OpenGN is uninstalled.

#### Restoring the Database from a Backup

If OpenGN does not start, and you have a backup of the database (see section 4.11.2 on page 69), you can restore the database.

#### To restore the database

- 1. Quit OpenGN and the OpenGN Gateway.
- 2. In Windows, click **Start**, then type **cmd** in the Search box, then press Enter. The command prompt appears.
- 3. Type the following command, and then press Enter.

#### sqlcmd -S .\SQLEXPRESS

The 1> prompt appears.

4. Type the following command, and then press Enter.

# RESTORE DATABASE opengn FROM DISK="PATH\_TO\_RESTORE\_FILE.BAK" WITH RECOVERY, REPLACE

For **PATH\_TO\_RESTORE\_FILE.BAK**, type the full path of the backup database file that you want to restore, with the **.BAK** extension. Type the double quotation marks as they appear above.

For example, if the full path of the backup database file is:

#### H:\OpenGN Backups\OpenGN backup.bak

Then type:

# RESTORE DATABASE opengn FROM DISK="H:\OpenGN Backups\OpenGN backup.bak" WITH RECOVERY, REPLACE

The 2> prompt appears.

5. Type the following command, and then press Enter.

GO

If the restore was successful, the message **RESTORE DATABASE successfully processed** appears.

6. Type the following command, and then press Enter.

#### **EXEC** [ogn].[MapUsersToLogins]

7. Type the following command, and then press Enter.

#### GO

There should be no error message.

- 8. Type exit and then press Enter to return to the command prompt.
- 9. Start OpenGN and the OpenGN Gateway.



# Appendix J - Agency Listed Specifications

### Requirements

To meet agency requirements the use of OpenGN must adhere to the following:

- Operated with an UL864 9th Edition/ULC-S527 Approved workstation. Testing has been done with a COMARK All-In-One QM57 Computer.
- For ULC, using OpenGN as Supervising station (Main Instance of the OpenGN program) the COMARK QM57 must be installed in a Rittal KS1454.500 Industrial Control Panel Enclosure in the same room and directly connected via Ethernet in conduit within 20ft to an FACP.
- If being used as a Remote Annunciator (Remote Instance of the OpenGN program) the COMARK QM57 must be installed in a Rittal KS1454.500 Industrial Control Panel Enclosure.
- Ethernet connection must be supervised in configuration software as shown in Figure 113.

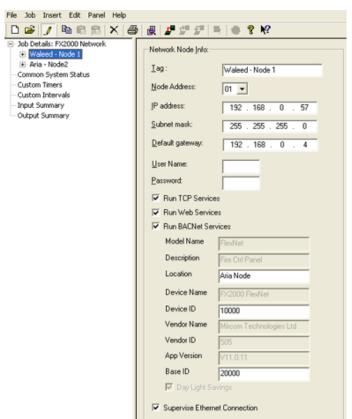


Figure 113 MGC Configurator Set to Supervise Ethernet Connection



Notes: FACP System configuration cannot be changed via OpenGN.



# **Appendix K - Mounting Instructions**

# Mounting the COMARK All-In-One QM57 Computer into a Rittal KS1454.500 Industrial Control Panel Enclosure

#### To mount the COMARK All-In-One QM57 Computer

- 1. Mount the KS1454.500 enclosure as per manufacturers instruction.
- 2. Wire the electrical box as per local electrical code.
- 3. Place the COMARK QM57 computer in the KS1454.500 enclosure.
- 4. Using the #8 screw holes in the bottom plate of the COMARK QM57, carefully mark drill holes on the bottom of the KS1454.500 enclosure with a permanent marker.
- Remove the COMARK QM57 computer from the KS1454.500 enclosure and drill the marked holes.
- 10. Place the COMARK QM57 computer into the KS1454.500 enclosure. From the bottom of the KS1454.500 enclosure screw three #8 screws into the drilled holes. Secure the screws using three #8 nuts.
- 6. Plug the power brick supplied with the COMARK QM57 computer into the electrical box.

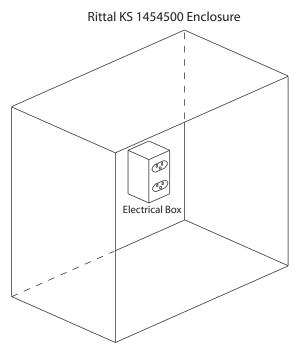


Figure 114 Rittal Enclosure (Door not Displayed)



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