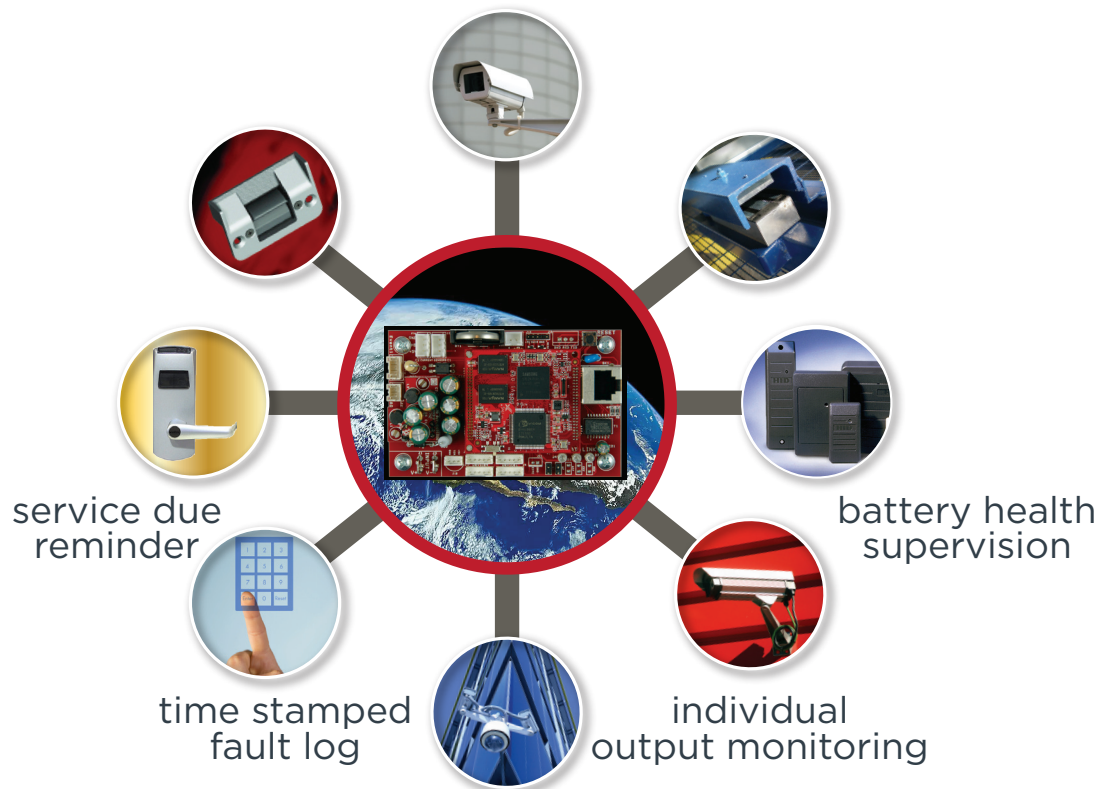




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# NetLink - LenelS2 OnGuard Integration Installation Manual



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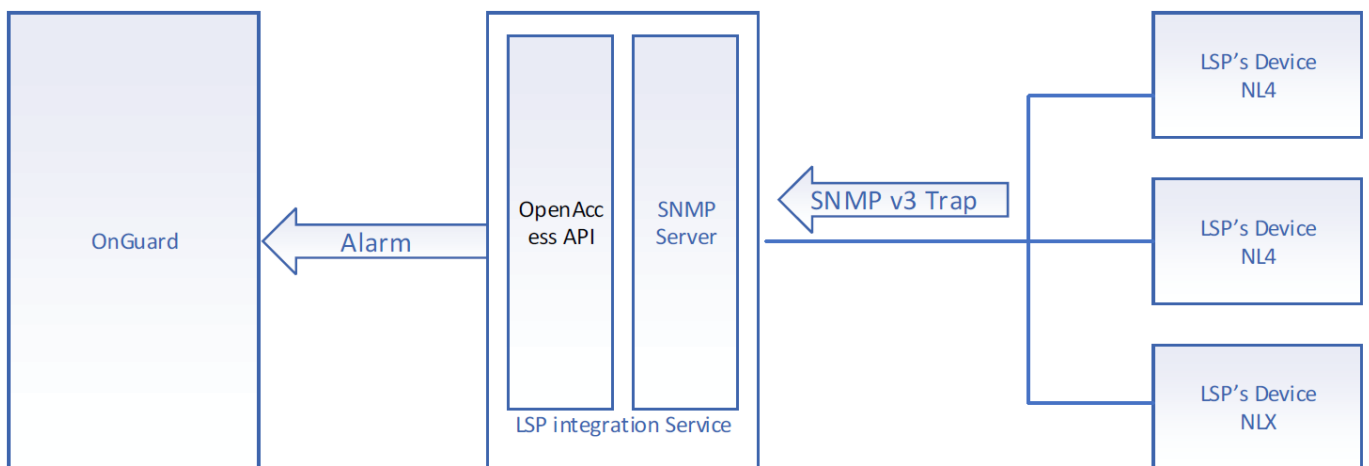
## Section 1 – Introduction

LifeSafety Power's NL2, NL4, or NLX NetLink modules may be added to LenelS2 OnGuard by installing the LenelS2 Integration software package available from LifeSafety Power. Once installed, the integration software allows the user to add one or more NetLinks as into OnGuard, allowing OnGuard to have access to the NetLink's status, measurement, and control features, as well as provide a link to the NetLink's browser interface directly from within OnGuard. This manual assumes the user is already familiar with LenelS2's OnGuard application and LifeSafety Power's NetLink module. For more information, consult the OnGuard or NetLink documentation.

### 1.1 Lenel Integration Architecture

The LenelS2 Integration software integrates LifeSafety Power NetLink® (NL) devices into OnGuard.

The integration software is a Communication Transporter - it communicates with NetLink devices using the SNMPv3 communication protocol and communicates alarms to OnGuard via OpenAccess API.



## Section 2 – Installing the Integration Application

The integration application must be installed on the PC which is running OnGuard.

**NOTE: It is strongly recommended to disable all antivirus software before installation.**

### 2.1 Create the Database

Please follow the steps below closely to properly create the database for the integration.

1. In Windows, open the **SQL Server Management Studio**. (Figure 1)
2. Select the method of authentication, provide credentials if required, and click Connect.  
Note: If using SQL Authentication, select SA.
3. In the Object Explorer pane, expand the Databases folder. Right click on the Databases folder and select New Database.
4. The New Databases window will be displayed. On the General page, adjust the following settings:  
Database Name: LIFESAFETYPOWER (This is case sensitive)  
Database Initial Size: 10MB  
Log File Initial Size: 5MB
5. Scroll to the right in the Database files listing window and click the Browse button in the Autogrowth/Maxsize column of the log file row.
6. Under Maximum File Size, select Unlimited

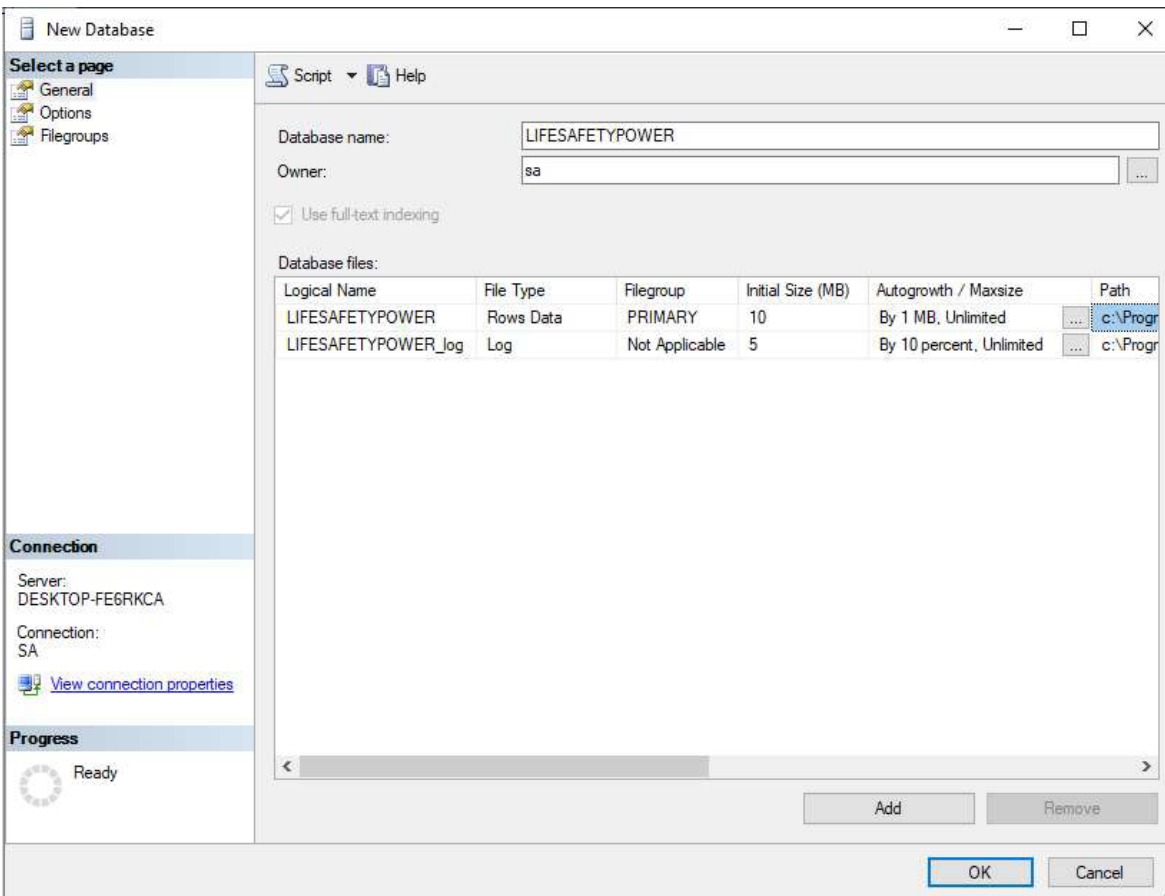


Figure 1

## Section 2 – Installing the Integration Application (continued)

7. Select the Options page from the Select a Page pane. (Figure 2)
8. In the Recover Model dropdown, select Simple
9. Verify that the Compatibility Level dropdown is set to the proper compatibility level for your SQL Server version.
10. In the Other Options list, set the Auto Create Statistics, Auto Shrink, Auto Update Statistics, and Recursive Triggers Enabled dropdowns to True.
11. Click OK.

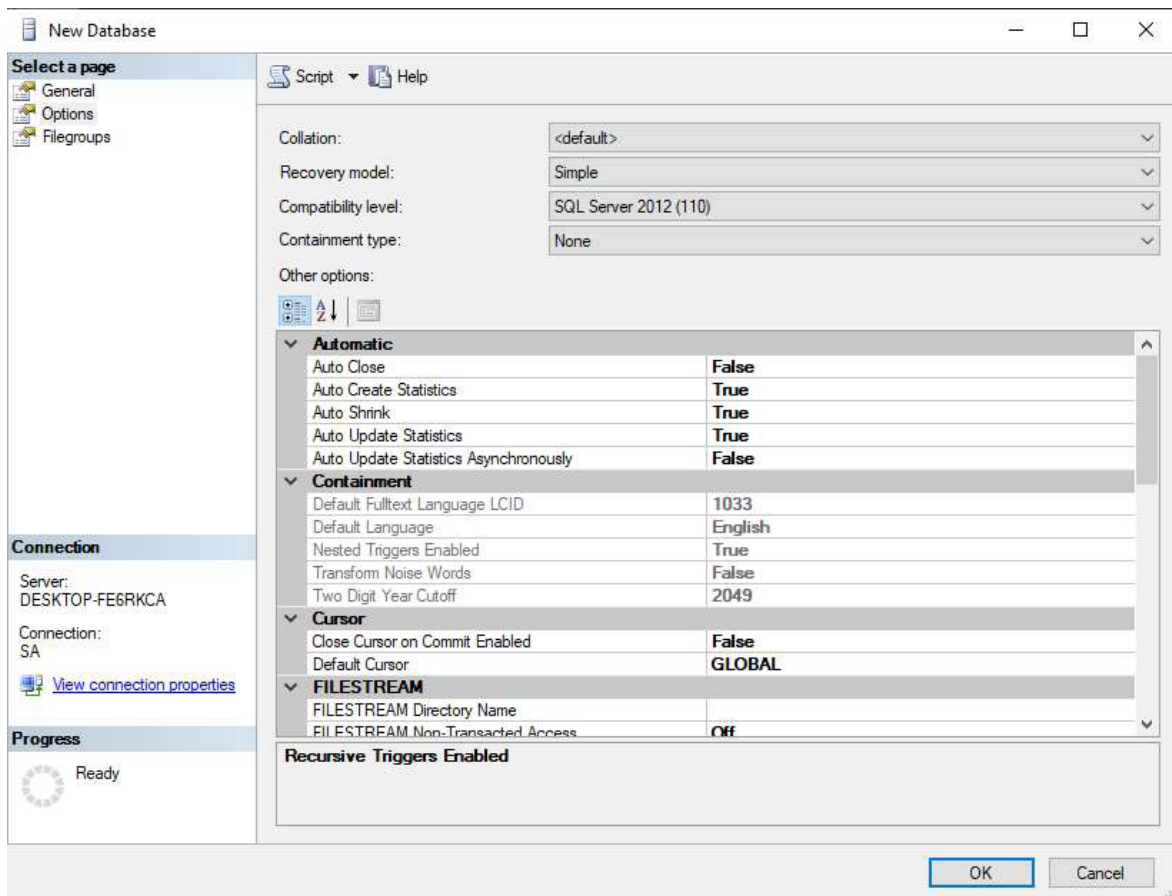


Figure 2

## Section 2 – Installing the Integration Application (continued)

### 2.2 Configuring the NetLink Module Trap Settings

Each NetLink to be monitored needs to be configured to send trap messages to OnGuard. Please follow the steps below.

1. Log into the NetLink module to be configured. Consult the NetLink module installation manual for more information on logging into the NetLink.
2. Navigate to the Configure page and scroll down to the SNMP Settings section. (Figure 3)
3. Set the Select Traps Version dropdown to V3.
4. Set the Trap Receiver IP address to the IP address of the PC running the OnGuard service.
5. Set the Port number to 162 and click Submit.
6. Set the V3 User Name to "lsp" and the password to "12345678". This is the default password. Click Submit.
7. Reboot the NetLink for the SNMP changes to take effect.

The screenshot displays the NetLink configuration web interface. At the top, there is a header with the LSP logo, 'REMOTE REPORTING', and 'SYSTEM MANAGER POWERCOM®'. Navigation links include HOME, Reporting, Configure, and Tools. User information shows 'msm Log Out' and 'Firmware: 9.41'.

The main configuration area is divided into several sections:

- Basic:** Contains fields for Read Community (publicread), Write Community (publicwrite), Location (LSP), Port # (161), and Trap Type (Trap). A Submit button is present.
- Security Name:** A table with columns for Name, Source Network, User Name, and Password. It contains one entry with Name 'mynetwork', Source Network '10.0.0.0/24', User Name 'lsp', and Password '12345678'. Submit and Delete buttons are at the bottom.
- V3 User:** A table with columns for User Name and Password. It contains one entry with User Name 'lsp' and Password '12345678'. Submit and Delete buttons are at the bottom.
- SNMP Trap Receiver:** Fields for IP (10.0.0.110) and Port (162). Submit and Delete buttons are at the bottom.
- Traps Version:** A dropdown menu set to 'V3'. A Submit button is at the bottom.
- SNMP Inform Log:** A 'Show Inform Log' button.

Figure 3

## Section 2 – Installing the Integration Application (continued)

### 2.3 Configuring the NetLink Reporting Settings

Selecting which alerts are sent from the NetLink to OnGuard is controlled by the Reporting settings in the NetLink. Please follow the steps below.

1. Log into the NetLink module to be configured. Consult the NetLink module installation manual for more information on logging into the NetLink.
2. Navigate to the Reporting page and locate the Alert Enable On section. (Figure 4)
3. Select the checkboxes for the items for which OnGuard alerts are desired. Consult the NetLink installation manual for details on the listed alerts. OnGuard will not receive alerts for items that are unchecked.
4. Once the alerts are selected, click Submit.

The screenshot displays the NetLink SYSTEM MANAGER POWERCOM® interface. The top navigation bar includes links for HOME, Reporting, Configure, and Tools, along with a user login (msm Log Out) and the current firmware version (Firmware: 9.41). The main content area shows the Client ID as NXP-NL4-235 and the SITE ID as OnGuard Trap Test Unit. A green button labeled 'Send Email Report' is visible. Below this, the 'Alert Enable On' section lists various system alerts with checkboxes, all of which are currently checked. The alerts include System Fault, AC Fault, Battery Backup Time, Input AC Voltage, External Event, FAI Active, ADC1 Reading, Battery End of Life, Battery Condition, Current Sense 1, Service Reminder, Device Detect, and Current Sense 2. A blue 'Submit' button is located at the bottom of the alert list.

Alert Enable On			
System Fault <input checked="" type="checkbox"/>	External Event <input checked="" type="checkbox"/>	Battery End of Life <input checked="" type="checkbox"/>	Service Reminder <input checked="" type="checkbox"/>
AC Fault <input checked="" type="checkbox"/>	FAI Active <input checked="" type="checkbox"/>	Battery Condition <input checked="" type="checkbox"/>	Device Detect <input checked="" type="checkbox"/>
Battery Backup Time <input checked="" type="checkbox"/>	ADC1 Reading <input checked="" type="checkbox"/>	Current Sense 1 <input checked="" type="checkbox"/>	Current Sense 2 <input checked="" type="checkbox"/>
Input AC Voltage <input checked="" type="checkbox"/>			

Figure 4



## Section 2 – Installing the Integration Application (continued)

### 2.4 Configuring the M8 Reporting Settings

If the NetLink has one or more M8 boards connected, the M8 zones must be configured to send alerts to OnGuard. Selecting which M8 zones will send alerts to OnGuard is done through the M8 Programming page on the NetLink. Please follow the steps below.

1. Log into the NetLink module to be configured. Consult the NetLink module installation manual for more information on logging into the NetLink.
2. Navigate to the M8 Programming page and locate the Email Alert On Fault column. (Figure 5)
3. Select the checkboxes for the zones for which OnGuard alerts are desired. OnGuard will not receive alerts for zones that are unchecked.
4. Verify the settings on the M8 zones to receive the proper alerts (such as zone overcurrent or cycle count over limit).
5. Once the alerts are selected, click Save Settings.
6. Repeat steps 2 through 5 for each M8 connected to the NetLink.

REMOTE REPORTING  
**LSP**

SYSTEM MANAGER POWERCOM®

HOME Reporting Configure Tools msm Log Out Firmware: 9.40

Client ID NXP-NL4-235  
SITE ID NL4-NXP-044  
Date Sat Sep 26 2020 Time 21:40:35

Return Save Settings Fill All Import Settings Include Output Description ☐ Export Settings

Output #	Output Description	Control Input Type	Output Load Type	Unlock on FAI Activation	Unlock on AC Loss	Email Alert on Fault	Voltage Lower Limit (V)	Voltage Upper Limit (V)	Current Lower Limit (A)	Current Upper Limit (A)	Cycle Count Limit
	Fill All	Fill All	Fill All	Fill All	Fill All	Fill All	Fill All	Fill All	Fill All	Fill All	Fill All
1	channel 1	Open Collector	Maglock	No	No	Yes	0.00	30.00	0.00	3.00	100000000
2	channel 2	Normally Open	Maglock	No	No	Yes	0.00	30.00	0.00	3.00	100000000
3	channel 3	Normally Open	Maglock	No	No	Yes	0.00	30.00	0.00	3.00	100000000
4	channel 4	Normally Open	Maglock	No	No	Yes	0.00	30.00	0.00	3.00	100000000
5	channel 5	Normally Open	Maglock	No	No	Yes	0.00	30.00	0.00	3.00	100000000
6	channel 6	Normally Open	Maglock	No	No	Yes	0.00	30.00	0.00	3.00	100000000
7	channel 7	Normally Open	Maglock	No	No	Yes	0.00	30.00	0.00	3.00	100000000
8	channel 8	Normally Open	Maglock/NC Contact	No	No	Yes	0.00	30.00	0.00	3.00	100000000

**Output Limit Setting Aid**

Set voltage upper limits to 30 % above the measured values Set current upper limits to 30 % above the measured values  
Set voltage lower limits to 30 % below the measured values Set current lower limits to 30 % below the measured values

Start Measurement

Output Limit Setting Aid aids in setting the output voltage and current limits of all outputs to a certain percentage above and below the measured value. Verify that all outputs are connected to their normal operating load and be aware that during this process ALL outputs will be simultaneously powered. Enter the desired percentage values for upper and lower limits, then click the "Start Measurement" button. The process will take approximately 10 seconds, after which the upper and lower limits of all output voltages and currents will be set according to the entered percentages.

Figure 5



## Section 2 – Installing the Integration Application (continued)

### 2.5 Adding a Logical Source to OnGuard

The LifeSafety Power OnGuard Integration service uses OpenAccess to send alerts to the Alarm Monitoring application. To do this, it is first necessary to set up a Logical Source through System Administration. OpenAccess will then use this source as the device to display alarms through OnGuard. Please follow the steps below.

1. Log into OnGuard System Administration.
2. From the Additional Hardware menu, select Logical Sources. The Logical Sources screen will open.
3. From the Logical Sources tab, click Add.
4. If Segmentation is enabled, the Segment Membership window opens. Select the Segment to which this logical source will be assigned and click OK.
5. In the name field, type "LSP".
6. Select whether or not the Logical Source will be online.
7. Select the world time zone and daylight savings options as appropriate.

**IMPORTANT** - In addition to having a Logical Source configured, there must be at least one panel (non-system Logical Source) configured and marked online so that the Communications Server will work properly with Logical Sources. The panel does not need to exist or actually be online in Alarm Monitoring; it simply needs to exist and show up in the System Status view. Once this is set up, events can be received successfully by Alarm Monitoring and event subscribers from Logical Sources. See Section 2.6 for adding an Event\_Generator type panel.

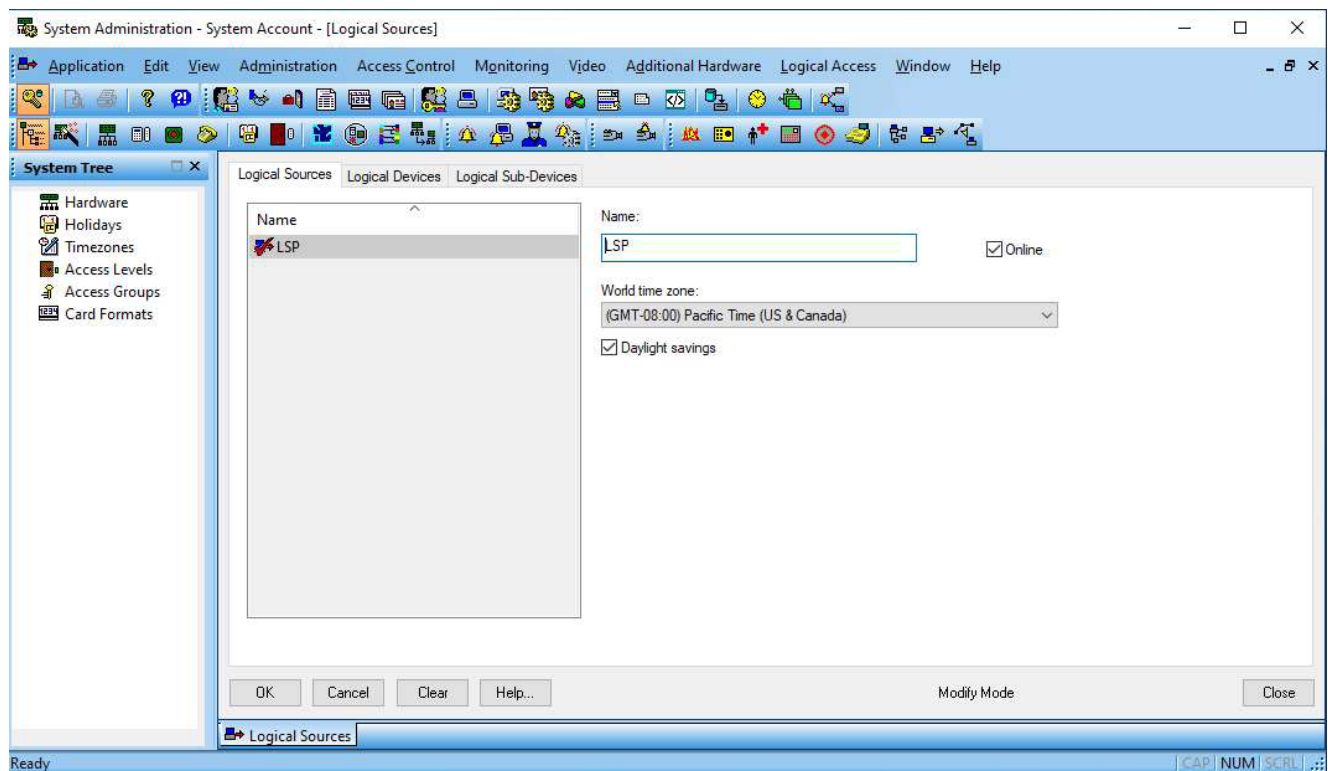


Figure 6

## Section 2 – Installing the Integration Application (continued)

### 2.6 Adding an Event\_Generator Type Panel to OnGuard

If there are no non-system Logical Source panels configured in OnGuard, one must be created so the Communications Server can operate properly. If an appropriate panel already exists these steps can be skipped.

1. Run EventGeneratorSetupTool.exe which is located at "C:\Program Files (x86)\LifeSafetyPower\LSP OnGuard Service\EventGenerator".
2. When the EventGeneratorTool opens, click "Add Necessary Information". See Figure 7.

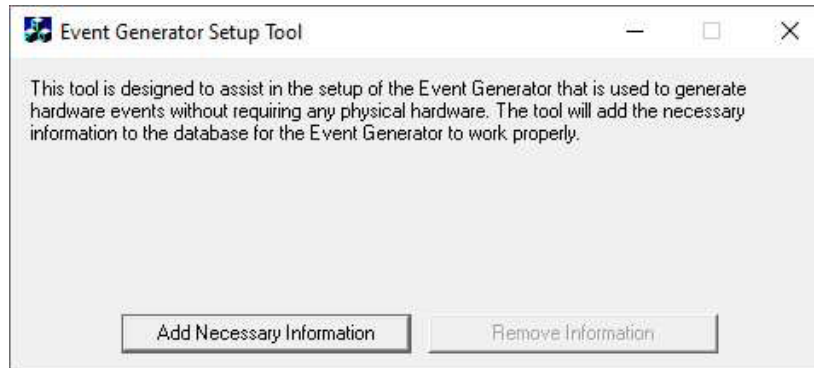


Figure 7

3. From the Access Control menu in OnGuard, select Access Panel and click the "Other" tab. See Figure 8.
4. Enter a name in the Name field.
5. Select the Workstation.
6. Check "Online".
7. On the Location tab, select "Event Generator".
8. On the Connection tab, enter the IP address 127.0.0.1. See Figure 9.
9. Click OK.
10. Start the Communication Server application if it is not already started.
11. Start the LS Web Service if it is not already started.

## Section 2 – Installing the Integration Application (continued)

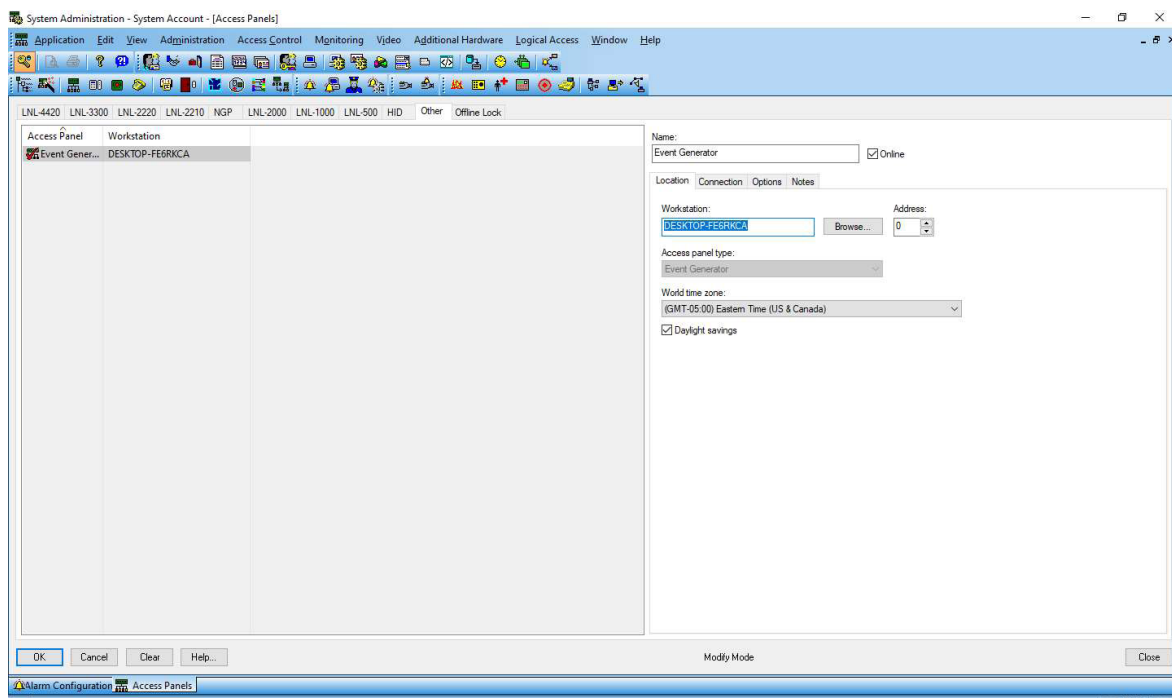


Figure 8

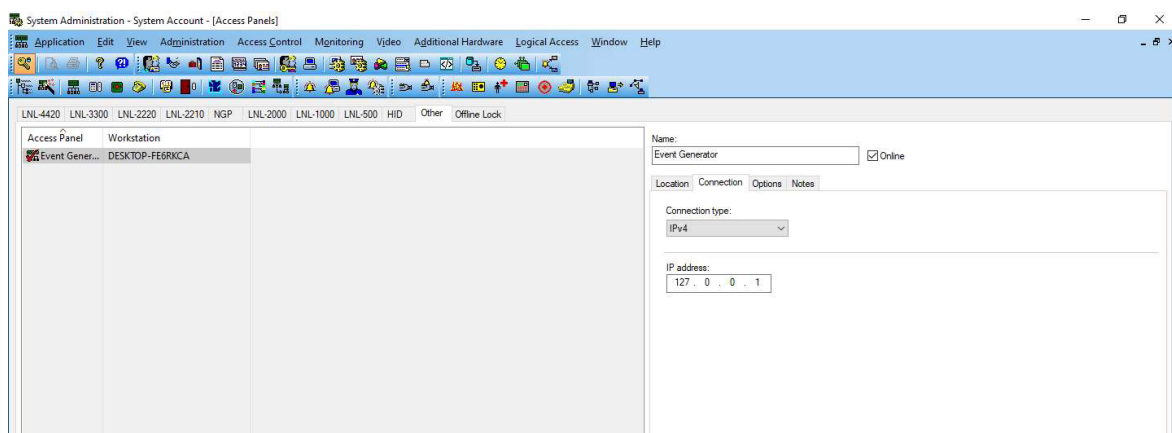


Figure 9

## Section 2 – Installing the Integration Application (continued)

### 2.7 Setting Up the LSP OnGuard Service

Please follow the below steps to install and setup the LSP OnGuard Service.

NOTE - When opening the LSP OnGuard service, click Yes on any "User Account Control" warnings that may appear.

1. Open the LSP OnGuard Service - a MSSQL Setup Connection window will open. See Figure 10
2. If MSSQL has never been configured, you will need to log in. Select the method of authentication, provide credentials if required, and click Test Connection. If successful, a message stating "Successfully made the MSSQL Connection!" will appear. Click OK to save the settings.

*Note: If using SQL authentication, use the LIFESAFETYPOWER Database owner account.*

*Note: If using the IP address, please open SQL Server Configuration Manager and ensure SQL Server>Protocols for MSSQLSERVER>TCP/IP is enabled.*

*Note: Ensure the Windows firewall will allow a connection to TCP Port 1433 when using Remote MSSQL Server.*

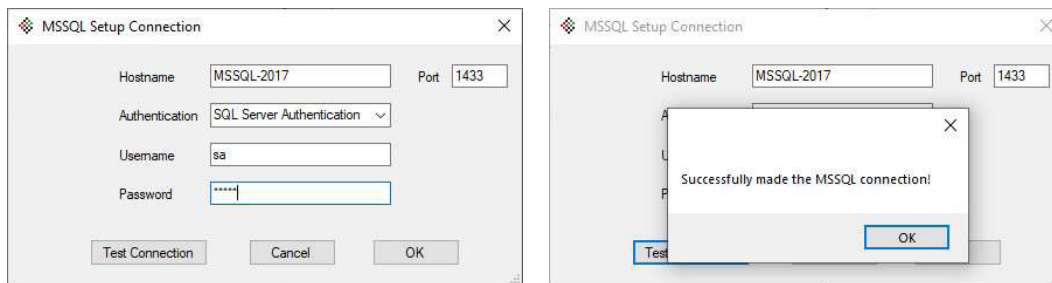


Figure 10

3. Once a successful MSSQL connection is made, the OnGuard login window will appear. See figure 11.
4. Enter the Hostname where OnGuard is running.
5. In the Port field, enter the LS OpenAccess Service port number (Default is 8080).
6. Enter the User Name and Password.
7. Select the directory from the Directory drop-down and click Sign In.

*Note: The OnGuard License must include OpenAccess Application Support.*

*Note: Ensure the Windows firewall will allow a connection to TCP Port 8080.*

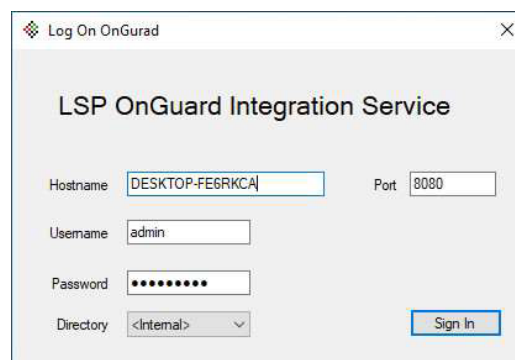


Figure 11

## Section 2 – Installing the Integration Application (continued)

8. Once logged in, the LSP OnGuard Integration form will be displayed. See Figure 12.
9. Enter the user name and password - these should match the credentials used for the SNMP v3 user entered in the NetLink device. Click Add.

*Note: Ensure the Windows firewall will allow a connection to UDP Port 162.*

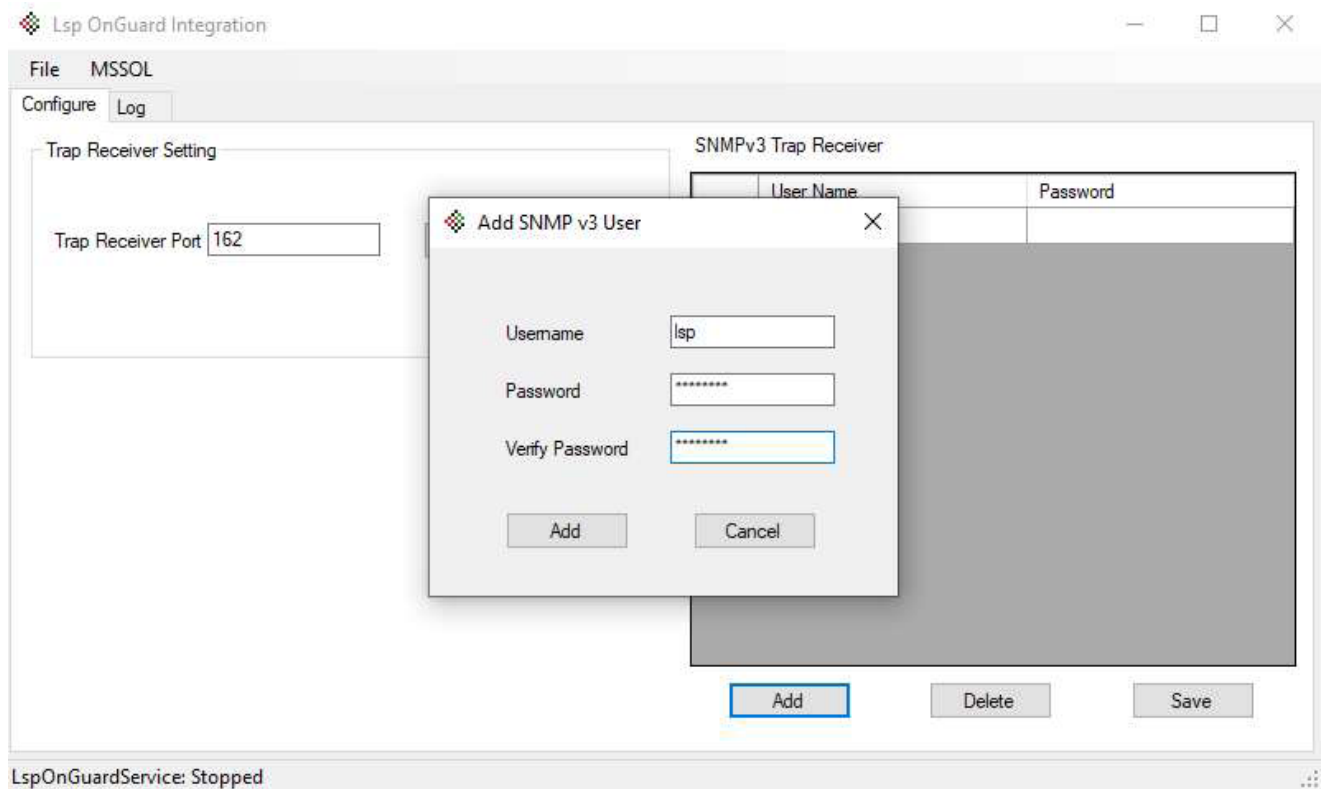


Figure 12

10. Enter the SNMP Trap Receiver port. This port number should match the port set in the NetLink devices. See Figure 13.
11. Click Start Service to begin listening for trap messages and sending events to the Alarm Monitor.

*Note: If an alert appears stating that the service is already started, the service must be stopped before making changes to the Trap Receiver settings.*

## Section 2 – Installing the Integration Application (continued)

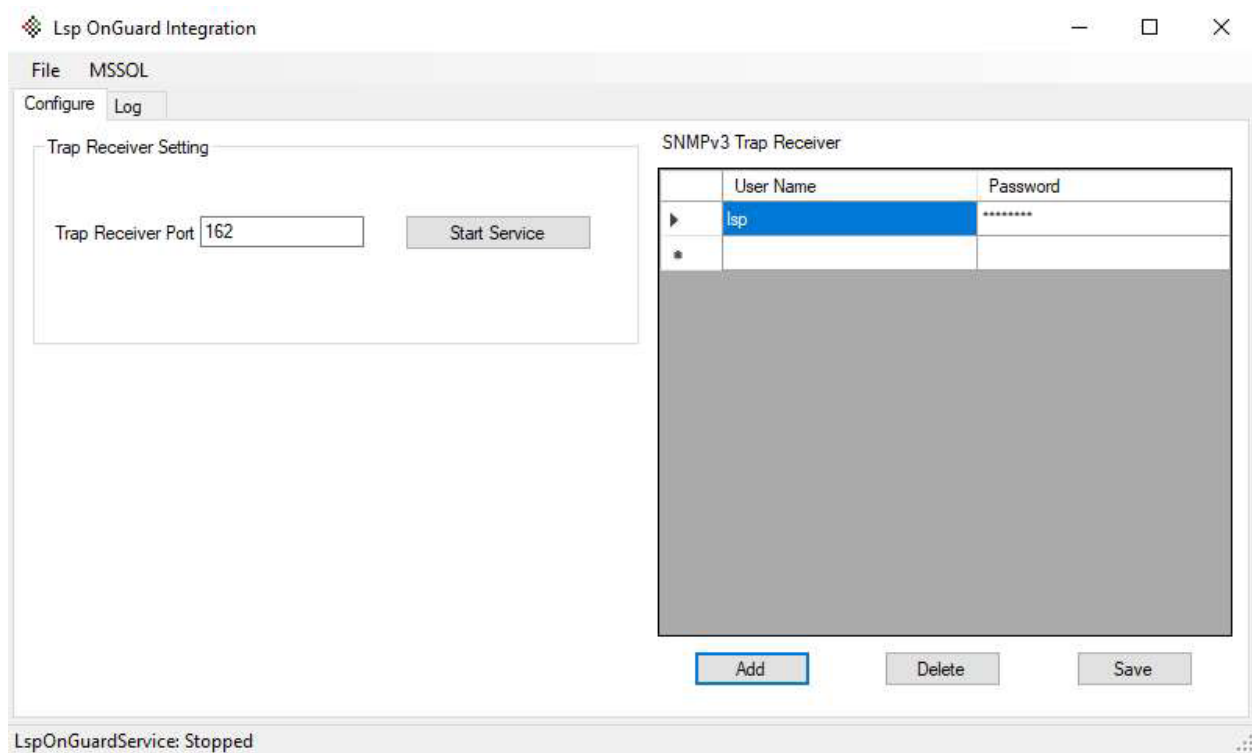


Figure 13

## Section 2 – Installing the Integration Application (continued)

### 2.8 Displaying Alert Messages

Use the Event\_Generator\_Tool to create an Event\_Generator type panel so the Communication Server can work properly with Logical Sources.

NOTE - In addition to having a Logical Source configured, there must be at least one panel (non-system Logical Source) configured and marked Online for proper operation.

Figure 14 is an example of power system alert messages as displayed in the OnGuard Alarm Monitor screen.

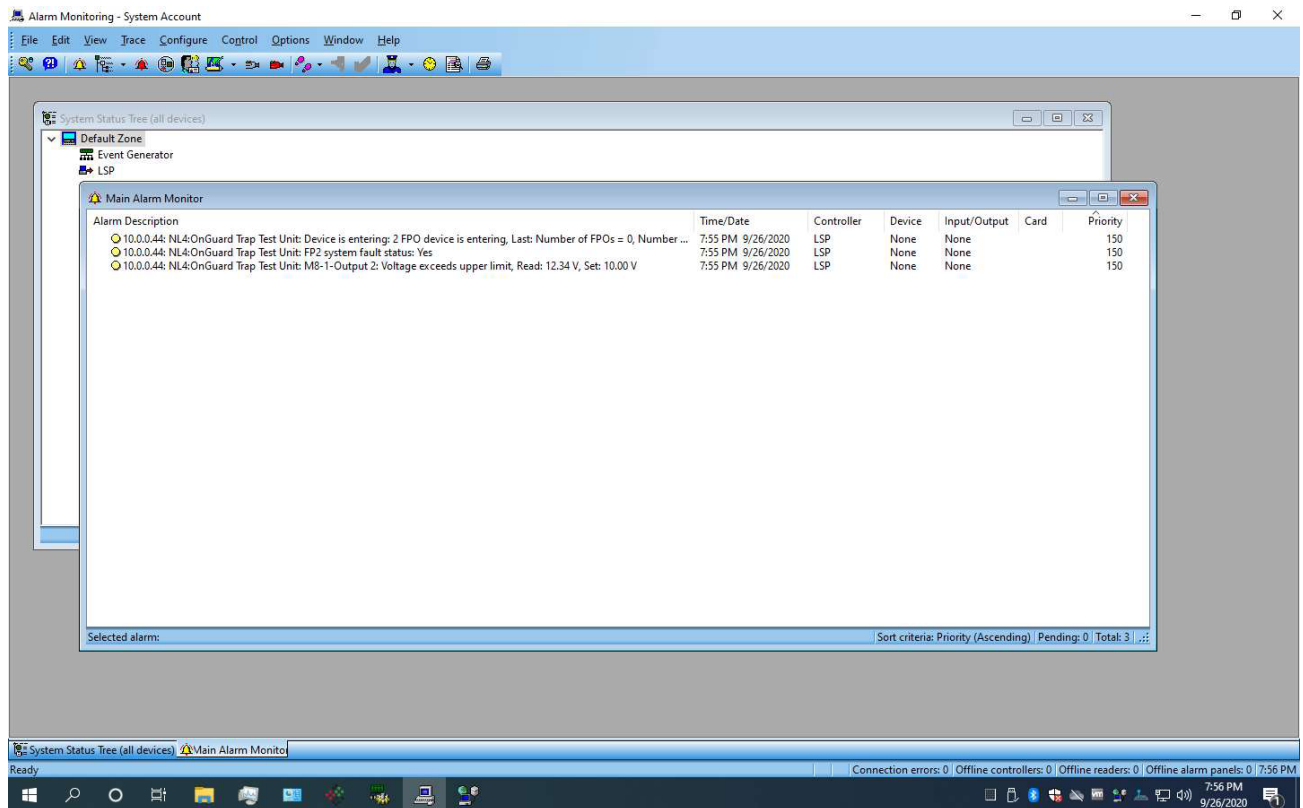


Figure 14



## Section 3 – Troubleshooting

The following are solutions to frequent troubleshooting issues.

**Problem:** Cannot open the database "LIFESAFETYPOWER" requested during login. The login fails.

**Solution:** Create the database LIFESAFETYPOWER and ensure the user logging in matches the owner of the LIFESAFETYPOWER database.

**Problem:** A server error occurred during a request.

**Solution:** Verify the User Name, Password, Directory, and Server Port. Ensure the LS Web service is running. Ensure the firewall is not blocking the port.

**Problem:** The Alarm Monitoring window does not display the NetLink trap messages.

**Solution:** Verify the SNMP v3 User Name and Password. Ensure the SNMP Trap Receiver port matches the port configured in the NetLink and that the firewall is open for access to this port. Verify that the NetLink's Trap Receiver IP address is the PC which hosts the integration service. Verify the Integration Service is running and that there are no error messages in the log. Ensure the Logical Source "LSP" is created and that there is at least one panel online.

**Problem:** The specified Trap Receiver port is occupied by another service.

**Solution:** Stop the other service or use another port, then reconfigure and restart the Integration Service.

**Note:** After modifying the OnGuard or MSSQL Login, SNMP Trap Receiver port, or SNMP v3 Username or password, please login again and restart the Integration Service.



## Section 3 – Troubleshooting Q&A (continued)

