SOFTWARE HOUSE

From Tyco Security Products

C•CURE 9000
Version 2.9

LifeSafety Power Integration Guide

REVISION 2

SOFTWARE HOUSE

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Preface

The LSP Integration is for new and experienced security system users who want to learn to use this product for the C•CURE 9000 Security Management System.

How to Use this Manual

This manual contains chapters that provide the following information about the C•CURE 9000 LSP Integration product.

Chapter 1: Introduction

Provides basic information about this product.

Chapter 2: Installation

Provides instructions for installing the LSP Integration product.

Chapter 3: C•CURE 9000 Hardware Tree Pane

Explains how to use the C•CURE 9000 Hardware Tree Pane.

Chapter 4: C•CURE 9000 NetLink Editor

Explains how to use the LSP NetLink Editor to configure NetLink objects in C•CURE 9000.

Chapter 5: C•CURE 9000 Power Supply Editor

Explains how to use the LSP Power Supply Editor to configure power supply objects in C•CURE 9000.

Chapter 6: C•CURE 9000 M8 Controller Editor

Describes how to use the LSP M8 Controller Editor to configure M8 Controller objects in C•CURE 9000.

Chapter 7: C•CURE 9000 M8 Output Editor

Describes how to use the LSP M8 Output Editor to configure M8 Output objects in C•CURE 9000.

Chapter 8: C•CURE 9000 Alerts and Journaling system

Describes LSP alerts handling by C•CURE 9000 Journaling system

Chapter 9: Commands (executors)

Describes LSP commands

Chapter 10: C•CURE 9000 Enterprise Architecture Consideration

Describes how to use the LSP integration in a MAS/SAS environment

Finding More Information

You can access C•CURE 9000 manuals and online Help for more information about C•CURE 9000.

CCURE 9000 Manuals

C•CURE 9000 software manuals and Software House hardware manuals are available in Adobe PDF format on the C•CURE 9000 DVD.

You can access the manuals if you copy the appropriate PDF files from the C•CURE 9000 Installation DVD English\Manuals folder and install the Adobe Acrobat reader. Adobe Acrobat Reader can be installed from the C•CURE 9000 Installation DVD English\Reader folder.

The available C•CURE 9000 and Software House manuals are listed in the *C•CURE 9000 Installation and Upgrade Guide*, and appear as hyperlinks in the online.pdf file on the C•CURE 9000 DVD English\Manuals folder.

These manuals are also available from the Software House Member Center website (http://www.swhouse.com/TechnicalLibrary/TechLibSW.aspx).

CCURE 9000 Online Help

You can access C•CURE 9000 Help by pressing F1 or clicking Help from the menu bar in the Administration/Monitoring Station applications.

Conventions

This manual uses the following text formats and symbols.

Convention	Meaning
Bold	This font indicates screen elements, and also indicates when you should take a direct action in a procedure. Bold font describes one of the following items: • A command or character to type, or • A button or option on the screen to press, or • A key on the keyboard to press • A screen element or name
blue color text	Indicates a hyperlink to a URL, or a cross-reference to a figure, table, or section in this guide.
Regular italic font	Indicates a new term.
<text>	Indicates a variable.

The following items are used to indicate important information.

NOTE	Indicates a note. Notes call attention to any item of information that may be of special importance.
TIP	Indicates an alternate method of performing a task.
	Indicates a caution. A caution contains information essential to avoid damage to the system. A caution can pertain to hardware or software.
	Indicates a warning. A warning contains information that advises users that failure to avoid a specific action could result in physical harm to the user or to the hardware.
	Indicates a danger. A danger contains information that users must know to avoid death or serious injury.

Software House Customer Support Center

C•CURE 9000 LSP Integration Product Technical Support

Software House supports the C•CURE 9000 LSP Integration Driver. Please contact Software House for questions regarding the driver and its operation within C•CURE 9000. For questions regarding the LSP hardware, LSP Software please contact LSP technical support.

Telephone Technical Support

During the period of the Agreement, the following guidelines apply:

■ Software House accepts service calls **only** from employees of the Systems Integrator of Record for the installation associated with the support inquiry.

Before Calling

Ensure that you:

■ Are the Dealer of record for this account.

■ Are certified by Software House for this product

■ Have a valid license and current Software Support Agreement (SSA) for the system.

■ Have your system serial number available.

■ Have your certification number available.

Hours	Normal Support Hours	Monday through Friday, 8:00 a.m. to 8:00 p.m., EST.
	Emergency Support Hours	24 hours/day, seven days a week, 365 days/year. Requires Enhanced SSA "7 x 24" Standby Telephone Support (emergency) provided to Certified Technicians.
Phone	For telephone support contact numbers for all regions see:	http://www.swhouse.com/support/contact_technical_support.aspx.

1

Introduction

This chapter introduces the LSP Integration software that provides integration between the LSP System and C•CURE 9000 access security management.

LSP Integration Overview

The C•CURE 9000 LSP Integration product provides integration between the LSP System and the C•CURE 9000 Security Management System.

LSP is a network management system which can communicate with a NetLink NL2, NL4, NLX communication module either through SNMP or HTTP protocols. The Netlink module enables users to create a more secure system by adding the capability to remote monitor the system power, remote test battery sets, generate email SNMP alert messages on a fault, abnormal condition or scheduled service needed, remote control selected devices, and utilize remote diagnostics to reduce tech service time.

The C•CURE 9000 LSP Integration product combines real time device monitoring with traditional access control.

LSP Integration Components

The C•CURE 9000 LSP Integration product introduces the following objects into the C•CURE 9000 database to facilitate the integration between LSP and C•CURE 9000.

- LSP NetLink object - This object represents the LSP NetLink.
- LSP Power Supply object - This object represents the LSP Power Supply.
- LSP M8 controller object - This object represents the LSP M8 controller
- LSP M8 Output object - This object represents the LSP M8 output
- LSP SD controller object - This object represents the LSP SD controller
- LSP SD Output object - This object represents the LSP SD output
-

LSP Integration Utilization

The LSP Integration can be used for LSP devices real time monitoring

Terminology

Table 1 lists some terms and definitions related to the C•CURE 9000 LSP Integration Product.

Table 1: LSP Integration Terminology Definitions

Term	Definition
LSP NetLink	LSP Netlink Network Module For DC Systems. NL4 Connects 4 Devices To WAN/LAN For Remote Power Monitoring, Email Reporting, Time to Service Advisory, Independent Output On/Off Control, And Remote Battery Load Testing. US/CAN Listed
LSP M8 controller	The M8 smart power controller communicates with the NL network module and provides eight (8) monitored and controlled relay outputs accessible from a network or internet.
LSP Sd4 controller	The SD smart power controller communicates with the NL network module and provides four (4) monitored and controlled relay outputs accessible from a network or internet.

LSP SD16 controller	The SD16 smart power controller communicates with the NL network module and provides sixteen (16) monitored and controlled relay outputs accessible from a network or internet.
LSP Power Supply	The FPO family of switch mode power supplies incorporates the advanced FlexPower feature set, two user outputs, 12V or 24VDC user selectability, Fire Alarm Interface function, on board programmable battery charger, fault detection reporting, and network monitoring and programming capability of battery, power, and fault status.
LSP M8 Output	External device powered by M8 controller.
LSP SD Output	External device powered by an SD controller.

LSP NetLink Module Configuration

Life Safety Power installation and configuration guide may be found on the LSP website (http://www.lifesafetypower.com/docs/im_nl4.pdf)

C•CURE 9000 Configuration

The C•CURE 9000 Administration Workstation is used to configure C•CURE 9000 objects. You must configure the following objects in C•CURE 9000 for the LSP Integration to function properly.

- LSP NetLink object
- LSP Power Supply object
- LSP M8 Controller object
- LSP SD4 Controller object
- LSP SD16 Controller object
- LSP SD Output object
- LSP M8 Output object

Licensing the LSP Integration Product

The LSP Integration product is a licensed option for a C•CURE 9000 Server. You must purchase the license to use the software.

Only the server is licensed. You can have as many client connections as C•CURE is licensed for.

When you access the C•CURE 9000 License application on your C•CURE 9000 server, you can see if your license includes the LSP Integration product by running the C•CURE 9000 Licensing program (**Start>All Programs>Software House>C•CURE 9000>Licensing)** and clicking the Options tab. If the LSP Integration product is selected, you have a valid license.

If you do not have a license for the LSP Integration product, contact Software House to purchase a license.

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Installation

This chapter explains how to install and uninstall the LSP Integration.

Installation Overview

C•CURE 9000 must be installed before you install the LSP Integration. For more information on how to install C•CURE 9000, see the *C•CURE 9000 Installation and Upgrade Guide.*

■ The LSP Integration supports Windows 8/8.1/10 and server versions Windows 2012 R2/Windows 2016/Windows 2019. The LSP Integration supports MAS/SAS server installation.

■ The LSP Integration must be installed on every C•CURE 9000 server and client system.

■ The LSP Integration has the same hardware, software, and disk space requirements as C•CURE 9000; if the target computer can install C•CURE 9000, then it satisfies the LSP Integration requirements.

You need to perform the basic installation process described in the following pages on each computer in your C•CURE 9000 system.

Table 2 provides an overview of the steps to install and register the LSP Integration on each C•CURE 9000 server and client system. Perform these steps in this order.

> Please be advised that the LSP Integration installation will temporarily shut down and restart the C•CURE 9000 services. Therefore, the LSP Integration installation should be planned accordingly.

Table 2: Standard Installation Tasks

Task	See...
1. Install C•CURE 9000.	*C•CURE 9000 Installation and Upgrade Guide*
2. Close any applications and disable virus checking software.	
3. Perform the pre-installation steps.	Before You Begin
4. Start the C•CURE 9000 LSP Integration installation program.	Installation
5. Verify the license for the LSP Integration software by running the License program on your C•CURE 9000 server.	*C•CURE 9000 Installation and Upgrade Guide*
6. If you did not select to restart the C•CURE 9000 server services during the installation procedure, you must manually restart the C•CURE 9000 server services.	Starting the C•CURE 9000 Server Services
7. If you are using EMC Redundancy on a C•CURE 9000 Server, you must manually make changes to the TSP.Enterprise.LSP.Server.DriverService.exe.config file.	Installation

Before You Begin

You should perform the following pre-installation steps described below.

Pre-installation Steps

1. The ports configured in LSP must be enabled in the C•CURE 9000 server's firewall to allow the reception of UDP messages. LSP is the Visibility and Security Management software used to configure and setup the LSP system. It is used to set rules for the LSP system, but is not required for the operation of the C•CURE 9000 LSP Integration product.

2. If you are installing C•CURE 9000 on a corporate network, be sure to coordinate with your corporate network administrator.

3. To perform the LSP Integration installation, you must have appropriate Windows permissions. You must be in the local Administrator group, or have equivalent privileges. See the Microsoft Operating System documentation or your system administrator for more information.

Installation

The LSP Integration Installation Program is downloaded from the Integrations section of the LifeSafety Power website. Once you download the LSP Integration Installation Program, you can run the installation program.

> ⚠️ Please be advised that the LSP Integration installation will require the C•CURE 9000 services to be stopped. Therefore, the LSP Integration installation should be planned accordingly.

To Run the Installation Program

1. Copy **CCURE_LSP_IM.exe** file on the local disk on the C•CURE Server.
2. From your local disk run CCURE_LSP_IM.exe a**s Administrator.**

3. The Windows Installer Preparing to Install dialog box briefly appears. The setup program then checks the system to see if it meets minimum requirements. If minimum requirements are met, a Welcome dialog box appears, shown in Figure 1.

Figure 1: Welcome Screen
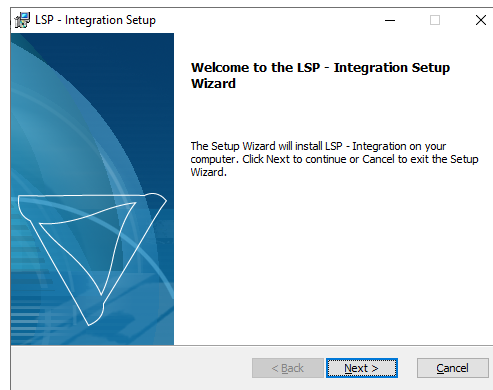
4. Click **Next** to proceed.
5. End User License Agreement window briefly appears, shown in Figure 2.

Figure 2: EULA Window
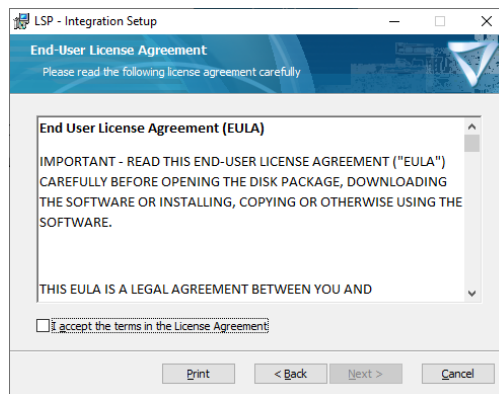
6. Check license agreement checkbox and press **Next**
7. The path selection window appears as shown in Figure 3.

Figure 3: Path Selection Window
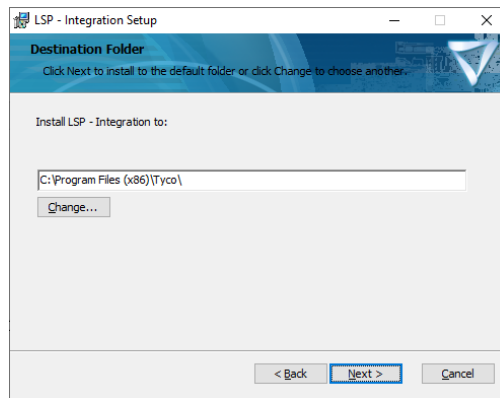
8. Select the folder where Tyco products are installed and click **Next.**
9. **Skip to step 11** if your server is not under a **domain account**.
10. If your server is under a domain the **Service and Database Configuration** screen will appear, shown in Figure 4. Enter your **Domain**, **Login ID** and **Password** and click **Next**.

Figure 4: Service and Database Configuration
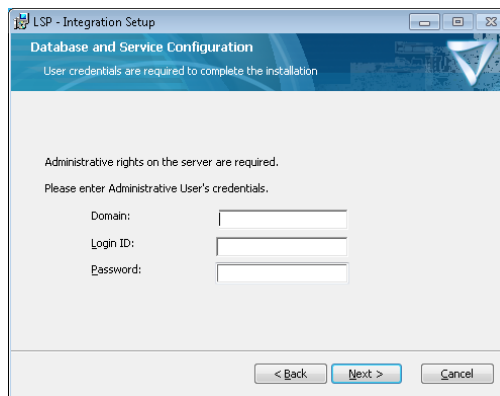
11. Click **Install** to start the installation. The integration is installed. Click **Finish** to close the installation.

Figure 5: Installation complete
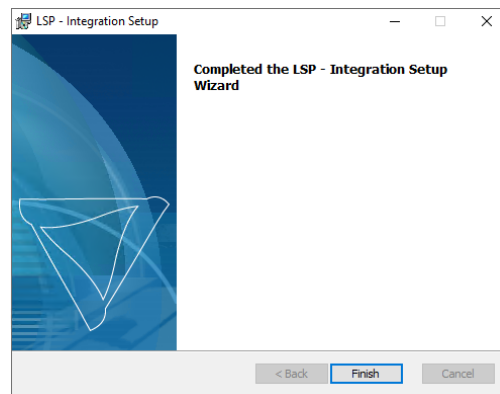
Starting the C•CURE 9000 Server Services

Prior to configuring an LSP integration, the CrossFire Framework Service, CrossFire Server Component

Framework Service must be running.

To Start C•CURE 9000 Server Services

1. From the Start Menu, select **Start>All Programs>Tyco>Server Configuration**. Right-click on Server Configuration and select Run as administrator. The C•CURE 9000 Server Management Application opens.

2. Click the **Services** tab.

3. The Status is displayed as "Stopped" for the **CrossFire Framework Service** under Framework Services, click **Start.**

4. The Status is displayed as "Stopped" for the **CrossFire Server Component Framework Service** under Framework Services, click **Start**.

5. After the CrossFire Framework Service and CrossFire Server Component Service display a status of "Running", click the **Server Components** tab.

When the CrossFire Framework Service, CrossFire Server and Component Framework Service display a Status of "Running", you can configure LSP objects in C•CURE 9000. You only have to enable these services once.

Uninstalling the LSP Integration

This section describes how to uninstall the LSP integration from the Server computer and Client computers in your security system.

The Uninstall process removes all software components that were installed on the computer by the LSP Integration installation.

> ⚠️ Please be advised that the LSP Integration uninstall will temporarily shut down and restart the C•CURE 9000 services. Therefore, the LSP Integration uninstall should be planned accordingly.

NOTE   Uninstalling this integration does not automatically remove database LSP specific objects

To Uninstall the LSP Integration

1. From the Windows Start menu, select **Control Panel>Programs and Features**.
2. In the list, click on **LSP - Integration** to highlight it.
3. Click the **Uninstall** button above the list.
4. Click **Uninstall** in the appearing window. The integration is uninstalled.

Figure 6: Uninstall window

3
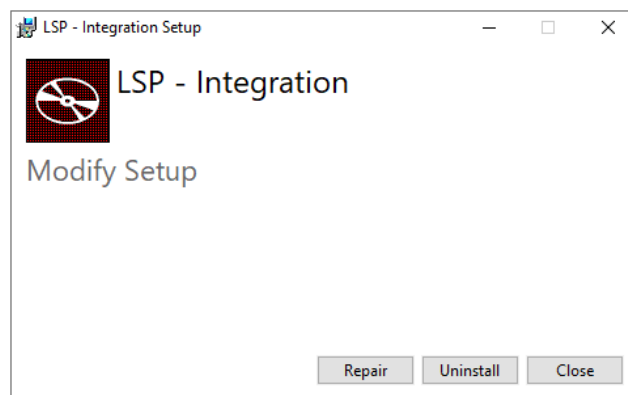
C•CURE Hardware Tree

This chapter explains how to use the C•CURE 9000 Hardware Tree Pane.

Hardware Tree Pane

The Hardware tree is an objects container facilitating objects display, management, and navigation of hierarchical data structures.

The hardware framework allows integrators to configure and incorporate hardware related objects. Before using the integration, the integrator must configure the following objects:

- LSP NetLink object – root object representing NetLink device containing Netink specific settings.
- LSP Power Supply object – NetLink child object representing power supply device
- LSP M8 Controller object - NetLink child object representing M8 Controller device
- LSP SD Controller object - NetLink child object representing SD Controller device
- LSP SD Output object – M8 Controller child object representing SD Output device
- LSP M8 Output object – M8 Controller child object representing M8 Output device

Figure 7 shows the Hardware Tree.

Figure 7: Hardware Tree
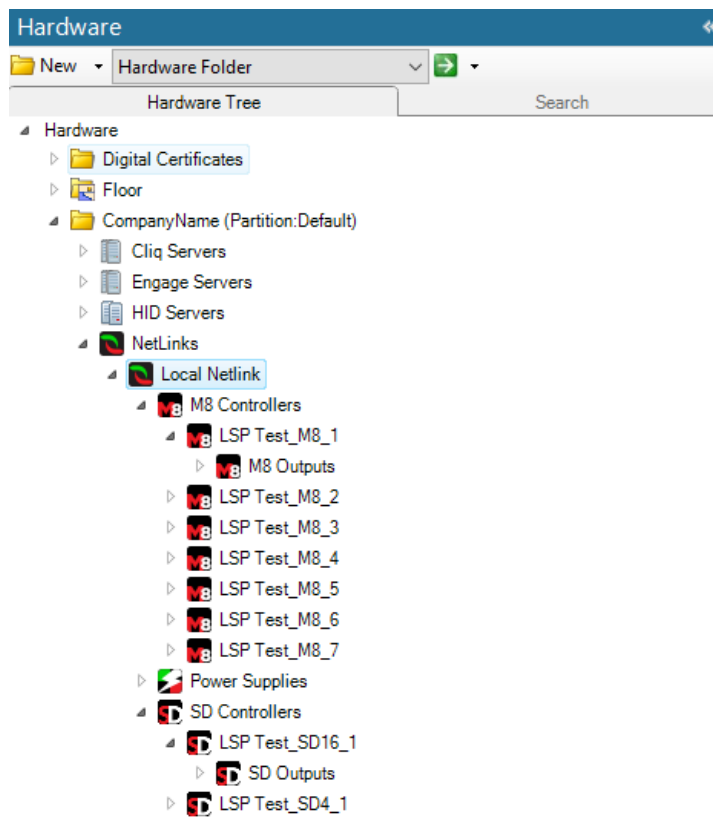
4

C•CURE NetLink Editor

This chapter explains how to use the NetLink Editor to configure NetLink objects in C•CURE 9000.

LSP NetLink Overview

The NetLink object represents the LSP NetLink in the C•CURE 9000 database.

You configure NetLink Objects using the NetLink Editor.

NetLink Editor Tabs

The NetLink Editor consists of three tabs:

- General Tab
- Triggers Tab
- State images Tab

Accessing the NetLink Editor

This section explains how to access the NetLink Editor.

To Access the NetLink Editor

- In the **Hardware Pane** of the Administration Workstation, select **LSP** folder and then respectively **NetLink** object based under **LSP NetLinks** folder.
- Right click and select **Edit** from the context menu.

Creating NetLink Object

This section describes how to create a NetLink Object.

To Create NetLink Object

- In the **Hardware Pane** of the Administration Workstation, select **LSP** folder and then right click on **LSP NetLinks** folder.
- Select **New**
- Configure the following settings

Option name	Details
NetLink Url	NetLink website url
NetLink Local IP	Read only - specifies local NetLink IP address
User name	NetLink user name (default: admin)
Password	NetLink user password (default: admin)
Listener IP address	Required for event communication to be opened on C•CURE side. Represents the socket listener IP address.

| Listener TCP port | Required for event communication to be opened on C•CURE side. Represents the socket listener TCP port |
| Diagnostic Mode Enabled | If enabled allows LSP events tracing to be recorded in Windows application log file. |

- Complete configuration by pressing **Connect** and then **Save/SaveAndClose** button
- Once the object is saved all child objects such as: Power Supplies, M8 Controllers and M8 Outputs will be created automatically

> Please be advised that the Listener IP and TCP port should be opened on firewalls to be accessible for NetLink device. UDP ports are not supported by integration so can be blocked on the firewall.

Deleting NetLink Objects

This section describes how to delete a NetLink Object.

> Please be advised that deleting NetLink objects won't affect linked objects such as: C•CURE events, C•CURE journal messages. Even though the NetLink object is not present anymore C•CURE objects remain in place so the C•CURE operator still possesses a look into historical data and events.

To Delete NetLink Objects

- In the **Hardware Pane** of the Administration Workstation, select **LSP** folder and then respectively **NetLink** object based under **LSP NetLinks** folder.
- Right click and select **Delete** from the context menu.
- Confirm the delete operation by pressing the Yes button
- In the next window press the OK button.

General Tab

The General Tab enables users to get basic information about the LSP NetLink object.

Figure 8: General Tab

General Tab Definitions

Table 3 provides fields and buttons definitions on the General Tab.

Table 3: General Tab Definitions

Term	Definition
Name	NetLink name up to 50 characters long.
Description	Text description of the NetLink that helps in object identification. The text is for information only.
Enabled	If disabled stops processing updates incoming from NL device as well as all child objects.

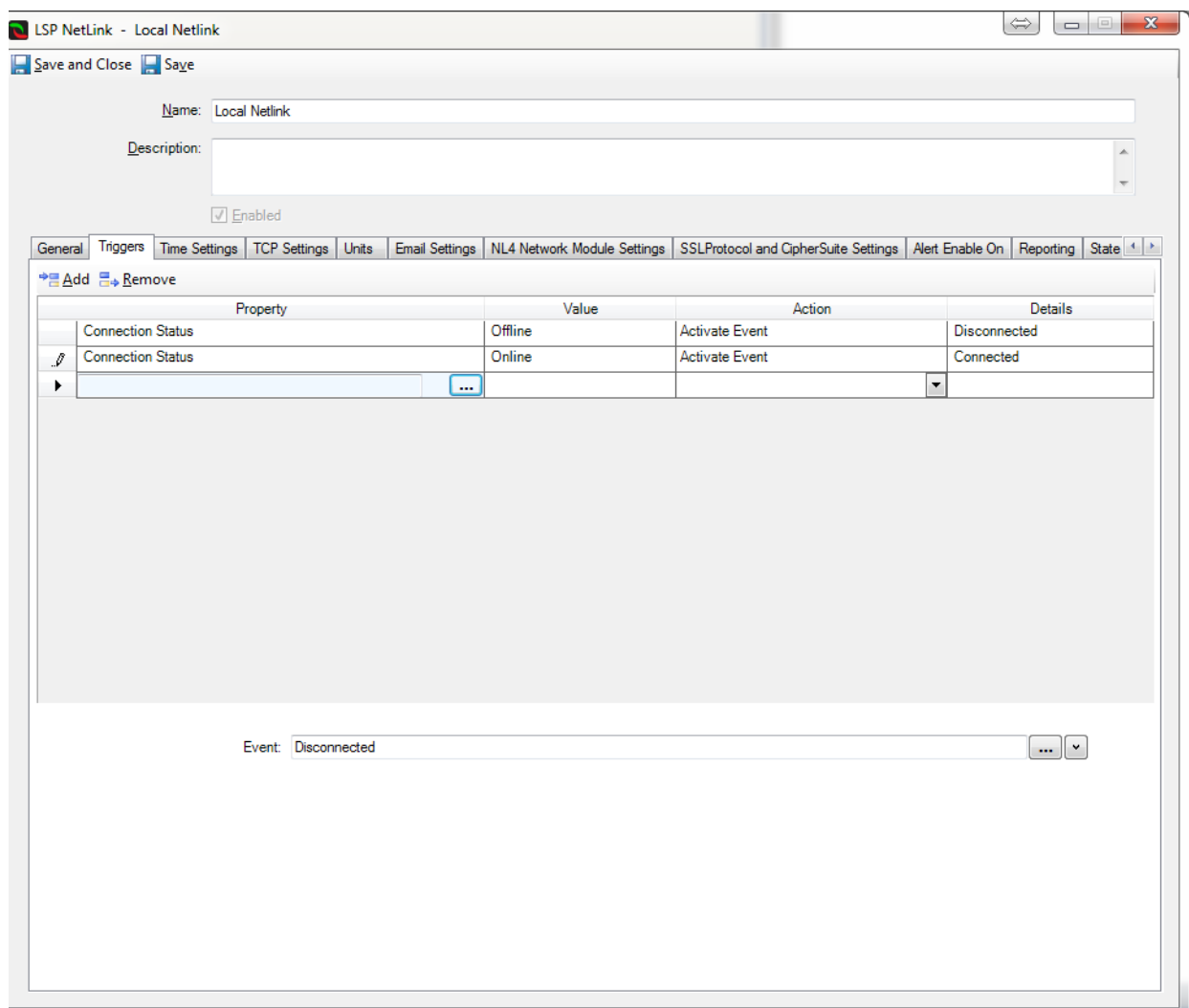| Term	Definition
NetLink URL	NetLink website url.
NetLink Local IP	NetLink local IP address. It is required if NetLink and C•CURE server are located in different network environments. This value may be provided by an LSP administrator.
User Name	Specifies NetLink user name
Password	Specifies NetLink user password.
Server IP Address	Specifies socket listener IP address
Server TCP Port	Specifies listener TCP port.
Diagnostic Mode Enabled	Specifies whether event details are to be tracked and recorded in Windows application log.
Site ID	NetLink Site ID(read only)
Date	NetLink date (read only)
Time	NetLink time (read only)
Version	NetLink Firmware version (read only)
Enclosure Temperature	NetLink enclosure temperature (read only)
External Temperature	NetLink external temperature (read only)
Battery 1 Discharge Current (Amps)	NetLink Battery 1 Discharged Current (read only)
Battery 2 Discharge Current (Amps)	NetLink Battery 2 Discharged Current (read only)
External Event	NetLink Event1 (read only)
ADC1Reading	NetLink ADC1Reading (read only)
ADC2Reading	NetLink ADC2Reading (read only)
Control1	NetLink Control1

Term	Definition
Control1	NetLink Control2
Service Due	NetLink Service Due (read only)

Triggers Tab

The Triggers Tab enables users to specify C•CURE alerts to be triggered against object property change.

Figure 9 shows the Triggers Tab.

Figure 9: Triggers Tab

Triggers Tab Definitions

Table 4 provides fields and buttons definitions on the Triggers Tab.

Table 4: Triggers TabDefinitions

Term	Definition
Property	Specifies LSP NetLink property.
Value	Specifies property value.
Action	Action to be taken when property is changed.
Details	C•CURE event name.
Connection Status trigger	Allows an event to be triggered in case of Netlink connectivity and network issues. NetLink devices status is changed whenever the device goes online or offline.
ADC1 Exceeds Upper Limit	Allows an event to be triggered when ADC1 Exceeds Upper Limit is reached.
ADC1 Under Low Limit	Allows an event to be triggered when ADC1 Under Low Limit is reached.
ADC2 Exceeds Upper Limit	Allows an event to be triggered when ADC2 Exceeds Upper Limit is reached.
ADC2 Under Low Limit	Allows an event to be triggered when ADC2 Under Low Limit is reached.
Event1	Allows an event to be triggered when Event 1 gets Active or Inactive
External Temperature Beyond Limit	Allows an event to be triggered when External Temperature Beyond Limit is reached
Hall Sensor1 Current Exceeds Upper Limit	Allows an event to be triggered when Hall Sensor1 Current Exceeds Upper Limit is reached.
Hall Sensor1 Current Under Low Limit	Allows an event to be triggered when Hall Sensor1 Current Under Low Limit is reached.
Hall Sensor2 Current Exceeds Upper Limit	Allows an event to be triggered when Hall Sensor2 Current Exceeds Upper Limit is reached.

Term	Definition
Hall Sensor2 Current Under Low Limit	Allows an event to be triggered when Hall Sensor2 Current Under Low Limit is reached.

Time Settings Tab

The Time Settings Tab enables the user to modify NetLink time settings.

Figure 10 shows the Time Settings Tab.

Figure 10: Time Settings Tab

Time Settings Tab Definitions

Table 5 provides fields and buttons definitions on the Time Settings Tab.

Table 5: Time Settings TabDefinitions

Term	Definition
Date	LSP NetLink current date.
Time	LSP NetLink current time.
Time Zone	LSP NetLink current time zone
Submit	Submits changes provided in Date/Time settings
NTP Server 1	IP address of the primary NTP server
NTP Server 2	IP address of the secondary NTP server

TCP Settings Tab

The TCP Settings Tab enables the user to modify NetLink TCP settings.

Figure 11 shows the TCP Settings Tab.

Figure 11: TCP Settings Tab

TCP Settings Tab Definitions

Table 6 provides fields and buttons definitions on the TCP Settings Tab.

Table 6: TCP Settings TabDefinitions

Term	Definition
IPV4 Settings	
IP Address	IP address
Net Mask	IP net mask
Gateway IP Address	Gateway IP address
DNS0 IP Address	IP address of the primary DNS server
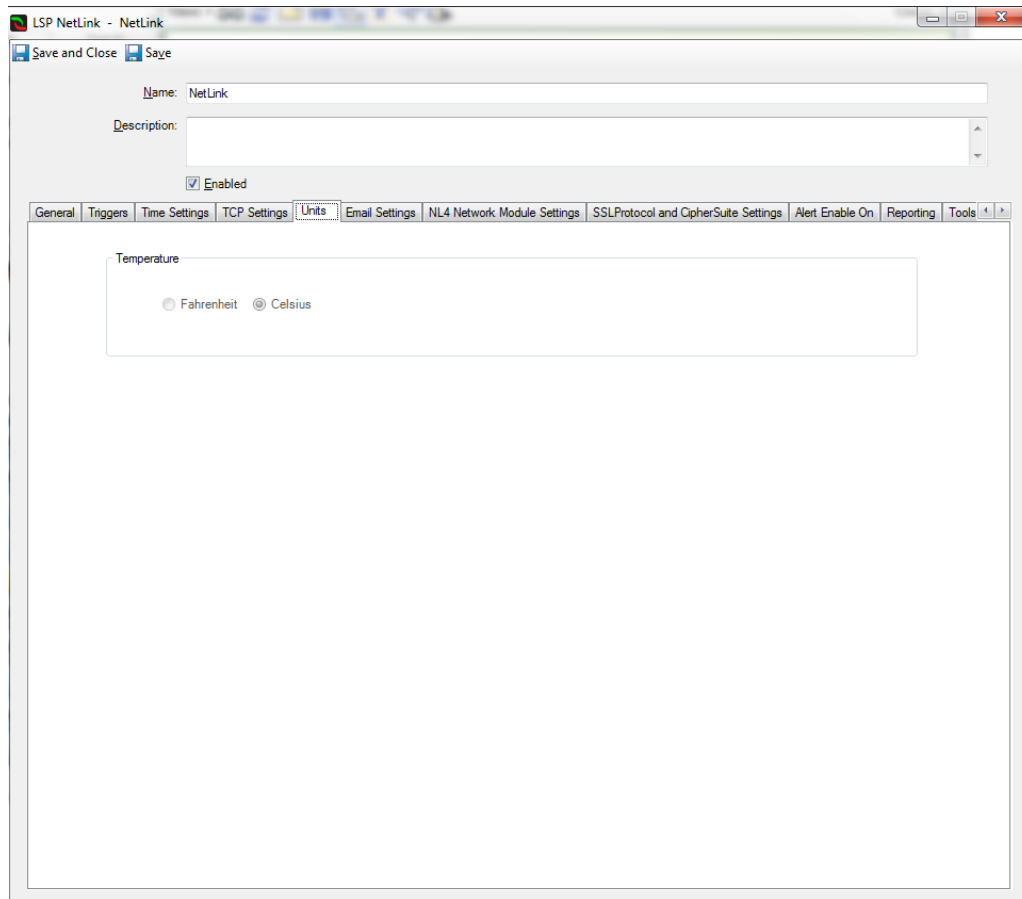
DNS IP Address	IP address of the secondary DNS server
IPV4 & IPV6 Settings	
IP Address	IP address (A NetLink reboot is required if this address is changed)
Net Mask/Bit Mask	IP bit mask
Gateway IP Address	Gateway IP address
DNS0 IP Address	IP address of the primary DNS server
DNS IP Address	IP address of the secondary DNS server
General Settings	
DHCP Enabled	Specifies if DHCP is enabled (A NetLink reboot is required if enabling DHCP)
HTTP Disabled	Specifies if HTTP is disabled
Reboot Netlink for the changes to take effect	Reboots NetLink module to apply new TCP settings

Units Settings Tab

The Units Settings Tab enables users to view NetLink Temperature Units settings (read only)

Figure 12 shows the Units Settings Tab.

Figure 12: Units Settings Tab

Units Settings Tab Definitions

Table 7 provides fields and buttons definitions on the Units Settings Tab.

Table 7: Units Settings TabDefinitions

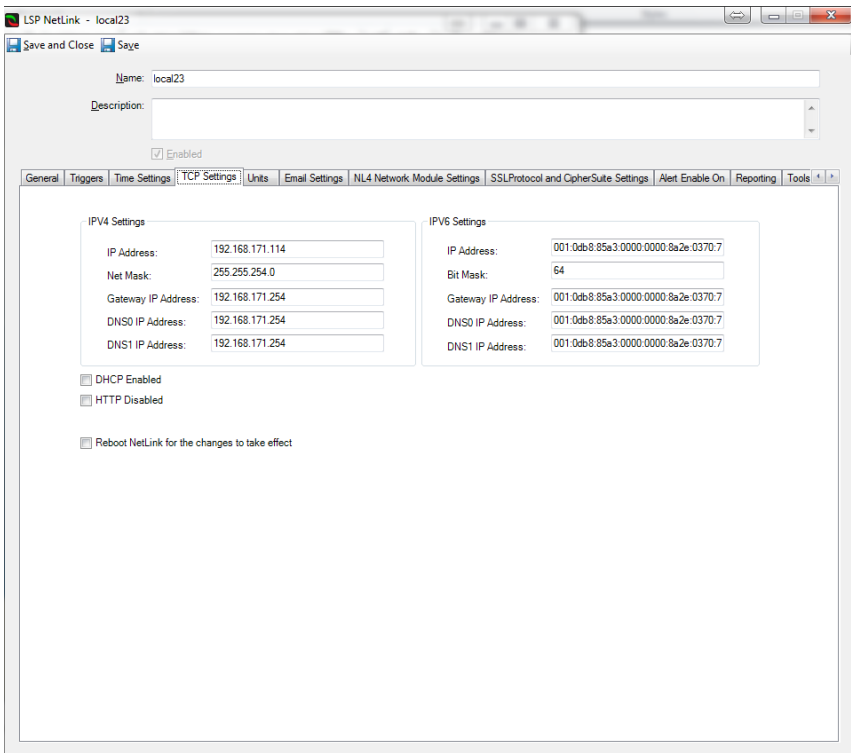| Term	Definition
Fahrenheit	Fahrenheit temperature unit.
Celsius	Celsius temperature unit.

Email Settings Tab

The Email Settings Tab enables users to modify NetLink Email settings.

Figure 13 shows the Email Settings Tab.

Figure 13: Email Settings Tab

Email Settings Tab Definitions

Table 8 provides fields and buttons definitions on the Email Settings Tab.

Table 8: Email Settings TabDefinitions

Term	Definition
E-Mail Address 1	Specifies primary email address
E-Mail Address 2	Specifies secondary email address
E-Mail Address 3	Specifies third email address
E-Mail Address 4	Specifies fourth email address
Sender SMTP Server	SMTP server IP address
Sender E-Mail	Sender e-mail address
Sender E-Mail Password	Sender password
Authentication	Authentication type
Send Period	Send period

NL4 Network Module Settings Tab

The NL4 Network Module Settings Tab enables users to modify NetLink NL4 Network Module settings.

Figure 14 shows the NL4 Network Module Settings Tab.

Figure 14: NL4 Network Module Settings Tab
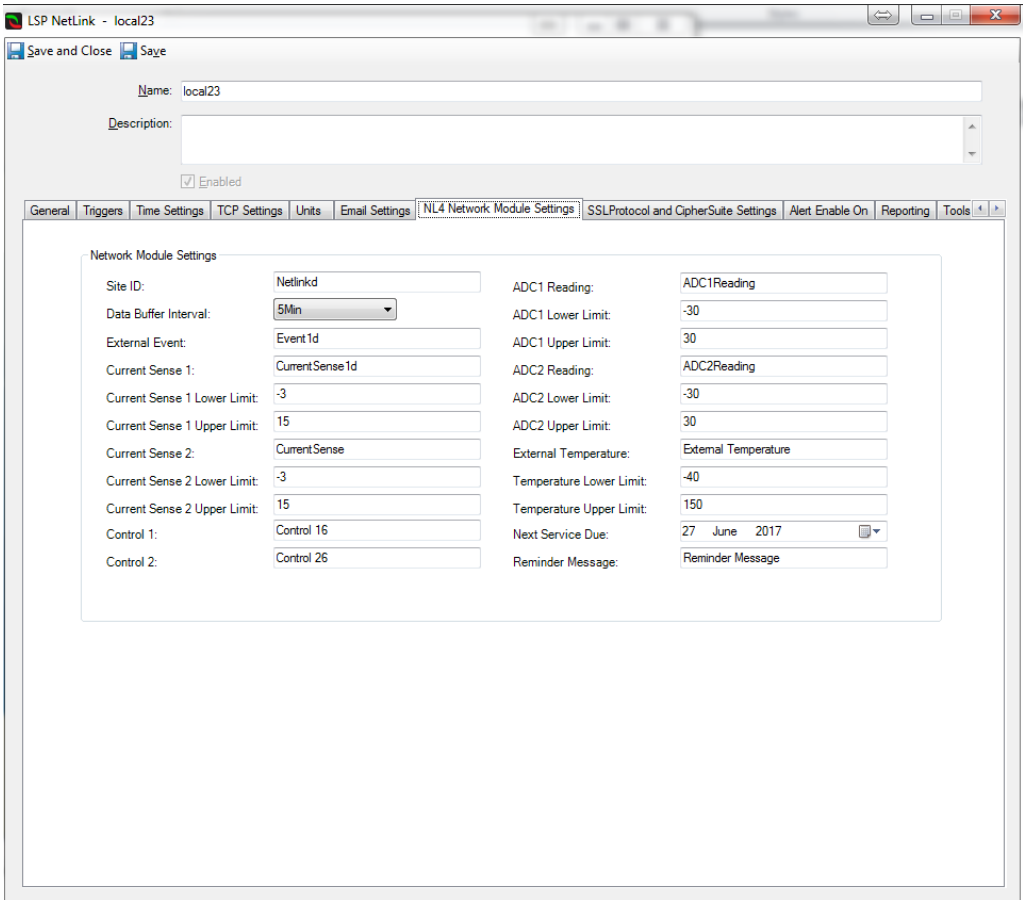
NL4 Network Module Settings Tab Definitions

Table 9 provides fields and buttons definitions on the NL4 Network Module Settings Tab.

Table 9: NL4 Network Module Settings TabDefinitions

Term	Definition
Site ID	Specifies the site ID
Client ID	Specifies the client ID

Password Lockout	Specifies how much time the user will be locked out of the device in case he fails the password three times.
Data Buffer Interval	Specifies data buffer interval
External Event	Specifies external event name
Current Sense 1	Specifies current sense 1 name
Current Sense 1 Lower Limit	Specifies current sense 1 lower limit value
Current Sense 1 Upper Limit	Specifies current sense 1 upper limit value
Current Sense 2	Specifies current sense 2 name
Current Sense 2 Lower Limit	Specifies current sense 2 lower limit value
Current Sense 2 Upper Limit	Specifies current sense 2 upper limit value
Control 1	Specifies control 1name
Control 2	Specifies control 2name
ADC1 Reading	Specifies ADC1 Reading name
ADC1 Lower Limit	Specifies ADC1 Lower Limit value
ADC1 Upper Limit	Specifies ADC1 Upper Limit value
ADC2 Reading	Specifies ADC2 Reading name
ADC2 Lower Limit	Specifies ADC2 Lower Limit value
ADC2 Upper Limit	Specifies ADC2 Upper Limit value
External Temperature	Specifies external temperature name
Temperature Lower Limit	Specifies temperature lower limit value

Temperature Upper Limit	Specifies temperature upper limit value
Next Service Due	Specifies next service due date
Reminder Message	Specifies reminder message value

NLX Network Module Settings Tab

The NLX Network Module Settings Tab enables users to modify NetLink NLX Network Module settings.

Figure 15 shows the NLX Network Module Settings Tab.

Figure 15: NLX Network Module Settings Tab

NLX Network Module Settings Tab Definitions

Table 10 provides fields and buttons definitions on the NLX Network Module Settings Tab.

Table 10: NLX Network Module Settings TabDefinitions

Term	Definition
Site ID	Specifies the site ID
Client ID	Specifies the client ID
Password Lockout	Specifies how much time the user will be locked out of the device in case he fails the password three times.
Data Buffer Interval	Specifies data buffer interval
External Event	Specifies external event name
Current Sense 1	Specifies current sense 1 name
Current Sense 1 Lower Limit	Specifies current sense 1 lower limit value
Current Sense 1 Upper Limit	Specifies current sense 1 upper limit value
Current Sense 2	Specifies current sense 2 name
Current Sense 2 Lower Limit	Specifies current sense 2 lower limit value
Current Sense 2 Upper Limit	Specifies current sense 2 upper limit value
Current Sense 3	Specifies current sense 3 name
Current Sense 3 Lower Limit	Specifies current sense 3 lower limit value
Current Sense 3 Upper Limit	Specifies current sense 3 upper limit value
Current Sense 4	Specifies current sense 4 name
Current Sense 4 Lower Limit	Specifies current sense 4 lower limit value
Current Sense 4 Upper Limit	Specifies current sense 4 upper limit value

Control 1	Specifies control 1name
Control 2	Specifies control 2name
ADC1 Reading	Specifies ADC1 Reading name
ADC1 Lower Limit	Specifies ADC1 Lower Limit value
ADC1 Upper Limit	Specifies ADC1 Upper Limit value
ADC2 Reading	Specifies ADC2 Reading name
ADC2 Lower Limit	Specifies ADC2 Lower Limit value
ADC2 Upper Limit	Specifies ADC2 Upper Limit value
External Temperature	Specifies external temperature name
Temperature Lower Limit	Specifies temperature lower limit value
Temperature Upper Limit	Specifies temperature upper limit value
Next Service Due	Specifies next service due date
Reminder Message	Specifies reminder message value

SSL Protocol and CipherSuite Settings Tab

The SSL Protocol and CipherSuite Settings Tab enables users to modify NetLink SSL Protocol and CipherSuite settings.

Figure 16 shows the SSL Protocol and CipherSuite Settings Tab.

Figure 16: SSL Protocol and CipherSuite Settings Tab

SSL Protocol and CipherSuite Settings Tab Definitions

Table 11 provides fields and buttons definitions on the SSL Protocol and CipherSuite Settings Tab.

Table 11: SSL Protocol and CipherSuite Settings TabDefinitions

Term	Definition
Select Certificate	Pressing this button will open a local directory to select an SSL certificate to use. Once selected, the certificate path will appear in the field to the left.
Upload	Uploads the selected certificate
Certificate Password	Password field for SSL certificate with **Use Default Certificate** checkbox.
SSL Options	Specifies which SSL option to configure for the NetLink object. **Normal** uses SSLv3, **High** uses TLSv1.1 TLSv1.2, and **User** specifies a custom SSL setting.
SSL Protocol	Displays the SSL Protocol to be used. This field is read-only if **Normal** or **High** are selected in the **SSL Options**.
Cipher Suite	Displays the Cipher Suite settings used according to the SSL Option configured. This field is read-only if **Normal** or **High** are selected in the **SSL Options**.

44
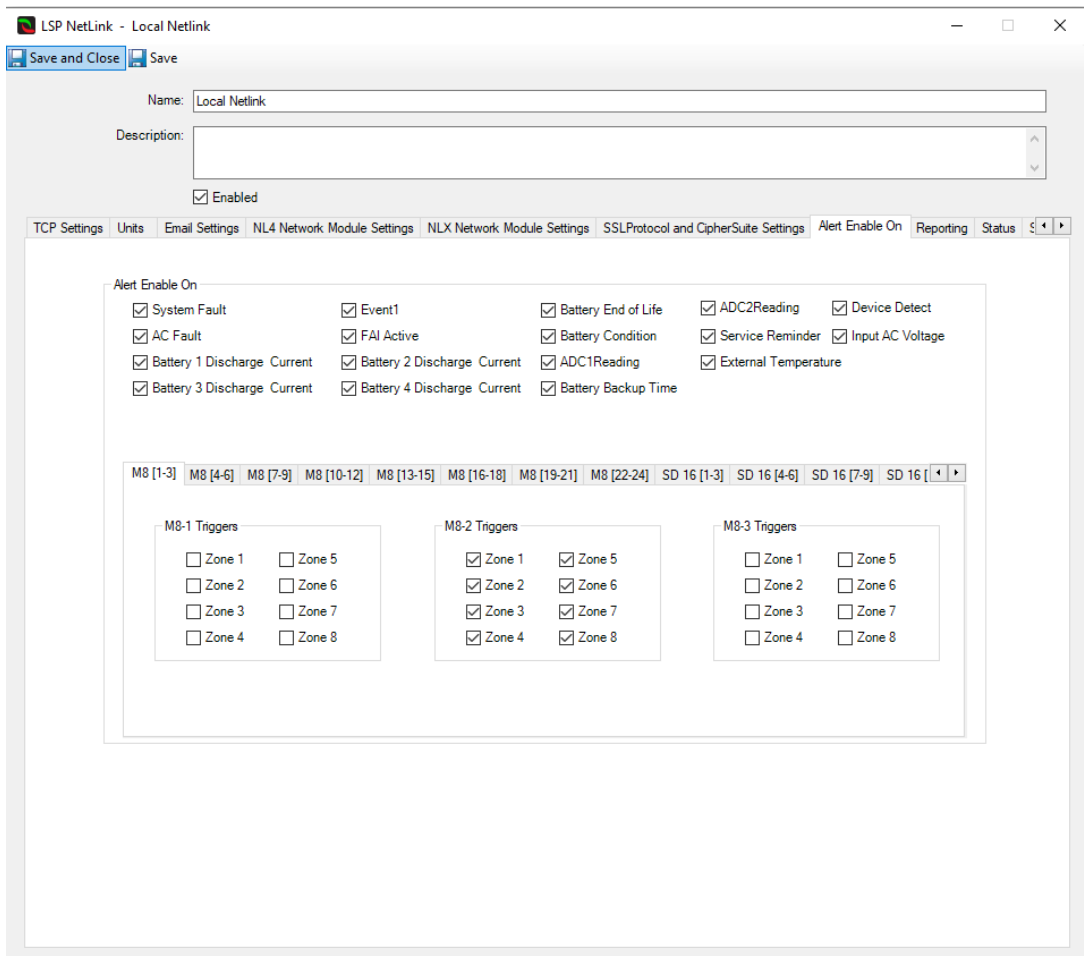
Alert Enable On Tab

The Alert Enable On tab allows users to enable or disable C•CURE alerts based on incoming LSP events.

The following C•CURE alerts can be enabled or disabled from this tab: **System Fault, AC Fault, Battery 1 Discharge Current, Battery Backup Time, External Event, FAI Active, Battery 2 Discharge Current, Battery End Of Life, Battery Condition, ADC1 Reading, ADC2 Reading, Service Reminder, External Temperature** and **Device Detect.**

Individual Zones from the M8 and SD16 Controllers can also be enabled or disabled from this tab.

Figure 17 shows the Alert Enable On Tab.

Figure 17: Alert Enable On Tab

Reporting Tab

The Reporting tab allows users to enable or disable C•CURE alerts based on incoming LSP status changes on NL
and FP objects.

The following C•CURE alerts can be enabled or disabled from this tab:

NL Reporting

**Battery 1 Discharge Current, Battery 2 Discharge Current, Battery 3 Discharge Current, Battery 4 Discharge
Current, ADC1 Reading, ADC2 Reading, Event 1, Enclosure Temperature,** and **External Temperature.**

FP Reporting

**Model Number, System Fault Status, AC Fault Status, FAI Status, FAI Latch Status, FPO Output Voltage,
Battery Voltage, Battery Charge Current, FPO Runtime, Battery Runtime, System Fault Total, Battery State of
Charge** and **AC Fault Total.**

Figure 18 shows the Reporting Tab.

Figure 18: Reporting Tab
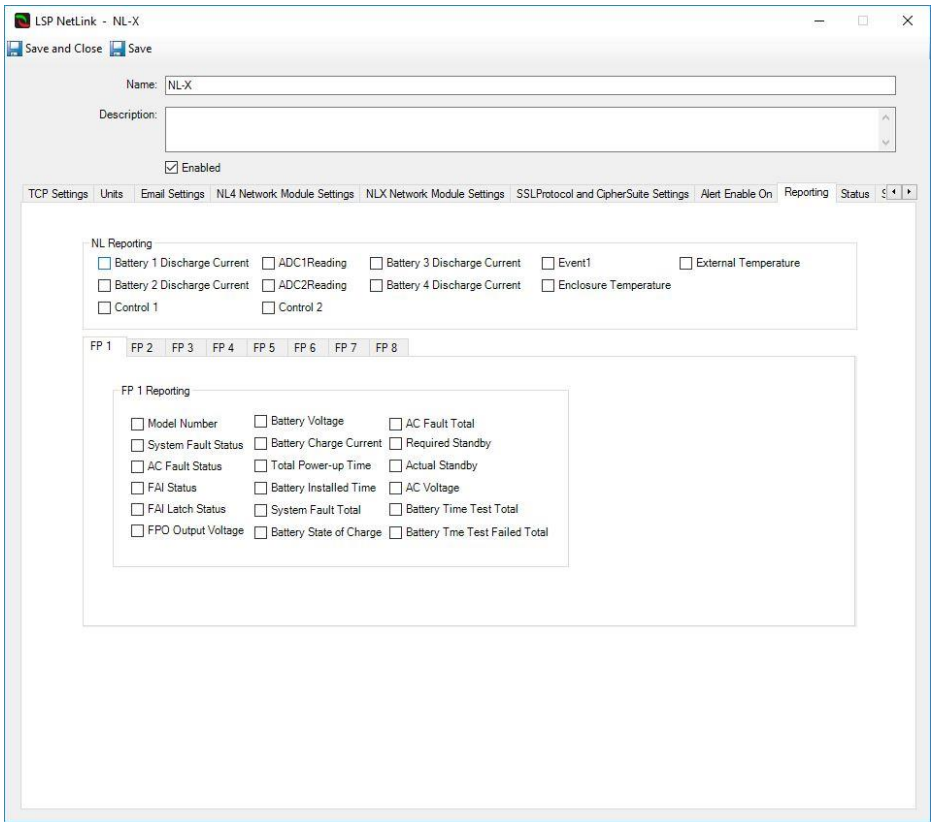
Status Tab

The status tab shows the Online Status, System Fault Status, Power Supply Status, each M8 output Status and Each SD Outputs Status, see Figure 19.

Figure 19: Status Tab
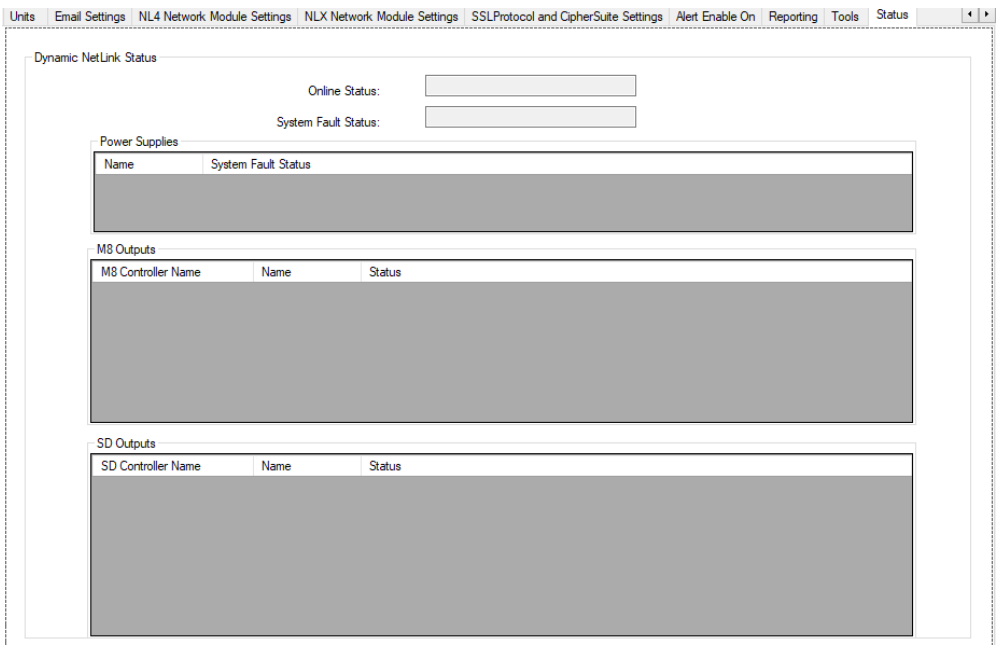
Status Tab Definitions

Table 12 shows the fields and buttons definitions on the Status Tab.

Table 12: Status Tab Definitions

Term	Definition
Online Status	Specifies NetLink connection status
System Fault Status	Specifies NetLink overall status
Power Supplies Table	Presents a list of power supply objects along with individual states
M8 Outputs Table	Presents a list of M8 Output objects along with individual states
SD Outputs Table	Presents a list of M8 Output objects along with individual states

State images Tab

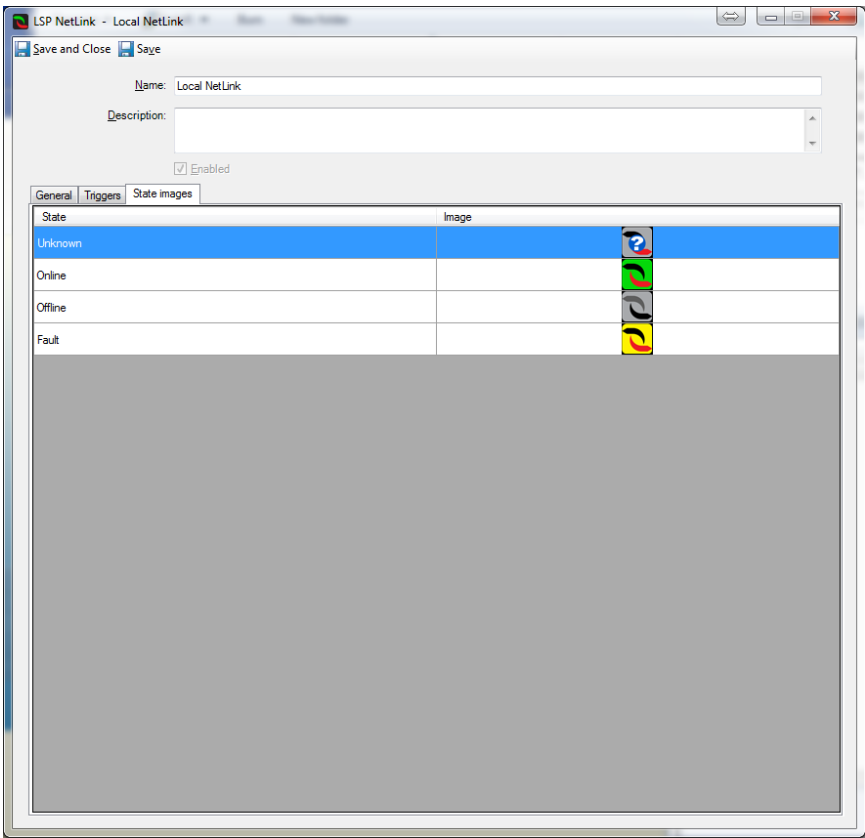State Images Tab provides information about object states options. It also provides state to icon mapping to be reflected on the map object of the Monitoring Station.

Figure 20 shows the State Images Tab.

Figure 20: State Images Tab

State Images Tab Definitions

Table 13 provides fields and buttons definitions on the State Images Tab.

Table 13: State Images Tab Definitions

Term	Definition
State	Indicates LSP NetLink object state.
Image	Indicates LSP NetLink object state image.

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C•CURE Power Supply Editor

This chapter explains how to use the Power Supply Editor to configure Power Supply object in C•CURE 9000.

Power Supply Overview

The Power Supply object represents the LSP Power Supply in the C•CURE 9000 database.

You configure the Power Supply Object using the Power Supply Editor.

Power Supply Editor Tabs

The Power Supply Editor consists of three tabs:

- General Tab
- Triggers Tab
- State Images Tab

Accessing Power Supply Editor

This section explains how to access the Power Supply Editor.

To Access the Power Supply Editor

- In the **Hardware Pane** of the Administration Workstation, select **LSP** folder and then respectively **NetLink** object based under **LSP NetLinks** folder.
- Navigate to Power Supplies folder, expand and select respective Power Supply object
- Right click and select **Edit** from the context menu.

Creating Power Supply Object

There is no option to create a power supply object manually. The Power Supply object is configured automatically during NetLink configuration.

Deleting Power Supply Object

There is no option to delete a power supply object manually.

General Tab

The General Tab enables users to get basic information about the power supply object.

Figure 21 shows the General Tab.

Figure 21: General Tab

General Tab Definitions

Table 14 shows the fields and buttons definitions on the General Tab.

Table 14: General Tab Definitions

Term	Definition
Name	Power supply name up to 50 characters long.
Description	Text description of the power supply that helps in object identification. The text is for information only.
Enabled	If disabled stopes processing updates incoming from FPO device
Model	Power supply Model (read only)
Input Voltage	Power supply input voltage (read only)
Output Voltage	Power supply output voltage (read only)
AC Fault Status	Power supply AC fault status (read only)
System Fault Status	Power supply system fault status (read only)
Battery Voltage	Power supply battery voltage (read only)
Battery Charging Current	Power supply battery charging current (read only)
Battery Discharge Time	Power supply cattery discharge time (read only)
Battery Fault Detected	Power supply battery fault detected (read only)
FAI Status	Power supply FAI status (read only)
FAI Latch	Power supply FAI latch (read only)
AC Fault Detected	Power supply AC fault detected (read only)
System Fault Detected	Power supply system fault detected (read only)
Total Battery Installed Time	Power supply total battery installed time (read only)

Term	Definition
Battery State of Charge	Power supply battery state of charge (read only)
Total Power-up Time	Power supply total power-up time (read only)
Battery Replacement Date	Power supply battery replacement date (read only)
Rate Battery Life	Power supply rate battery life
Rate Battery Capacity	Power supply rate battery capacity
Battery Status Enabled	Power supply battery status enabled (read only)
Battery Test Status	Power supply battery test status (read only)
Last Battery Test Date	Power supply last battery test date (read only)
Required Battery Runtime	Power supply required battery runtime date/time
Actual Battery Runtime	Power supply actual battery runtime date/time (read only)
Battery Test Performed	Power supply battery tests performed (read only)
Battery Test Failed	Power supply battery tests failed (read only)

Battery Settings Tab

The Battery Settings Tab provides information about battery test schedule options.

Figure 22 shows the Battery Settings Tab.

Figure 22: Battery Settings Tab

Table 15 shows the fields and buttons definitions on the Battery Settings Tab.

Table 15: Battery Settings Definitions

Term	Definition
Scheduled Battery Date	Currently scheduled battery test date
Scheduled Battery Time	Currently scheduled battery test time
Schedule Battery Date	Allows users to provide new scheduled battery test date
Schedule Battery Time	Allows users to provide new scheduled battery test time
Repeat test interval	Specifies repeat test interval value

Triggers Tab

The Triggers Tab enables users to specify C•CURE alerts to be triggered against object property changes.

Triggers Tab.

Figure 23: Triggers Tab
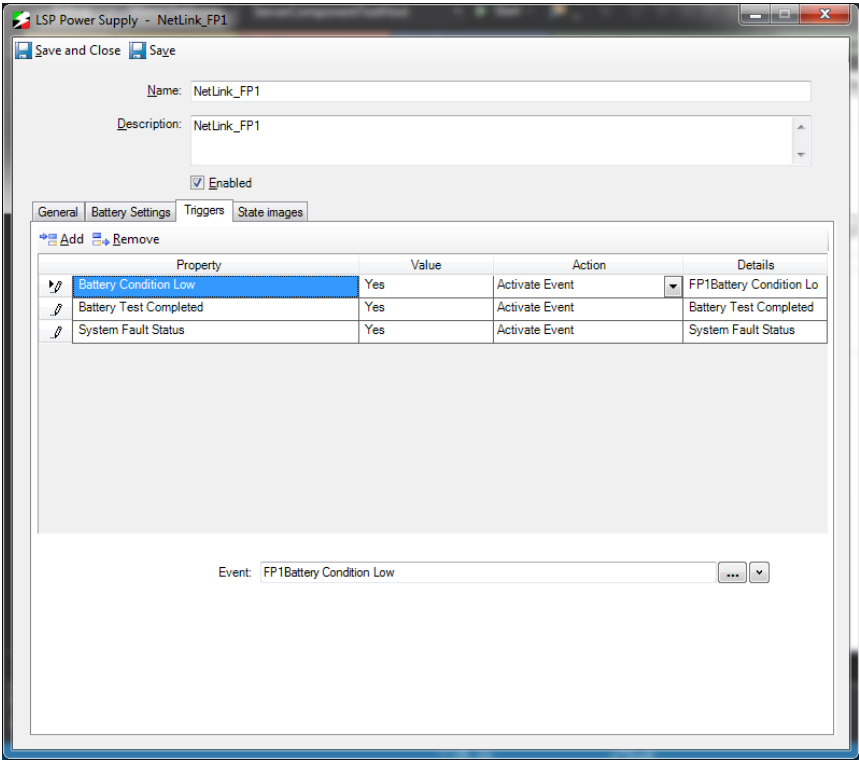
Triggers Tab Definitions

Table 16 shows the fields and buttons definitions on the Triggers Tab.

Table 16: Triggers TabDefinitions

Term	Definition
Property	Represents LSP alert type.
Value	LSP alert state (Active, Inactive)
Action	Action type to be taken when property value is set accordingly (options: Activate event, Deactivate event).
Details	C•CURE Event name
AC Fault Status trigger	Allows event to be triggered when LSP AC Fault Status event is raised
Battery Condition Low	Allows event to be triggered when Battery Condition is low
Battery End of Life Reached	Allows event to be triggered when Battery End of Life is reached
Battery Test Completed	Allows event to be triggered when Battery Test is completed
FAI Status	Allows event to be triggered when LSP FAI Status event is raised
System Fault Status	Allows event to be triggered when System is faulted
Battery Backup Time Failed	Allows event to be triggered when LSP Battery Backup Time Failed event is raised

State Images Tab

State Images Tab provides information about object states options. It also provides state to icon mapping to be reflected on map object of the Monitoring Station.

Figure 24 shows the State Images Tab.

Figure 24: State Images Tab
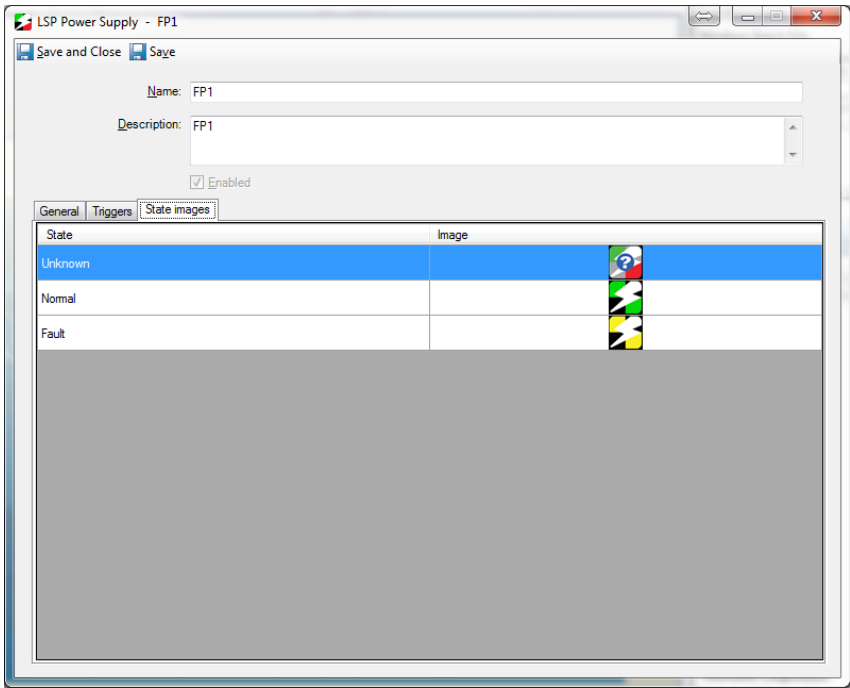
State Images Tab Definitions

Table 17 shows the fields and buttons definitions on the State Images Tab.

Table 17: State Images TabDefinitions

Term	Definition
State	Indicates power supply object state
Image	Represents state image.

6

C•CURE 9000 M8 Controller Editor

This chapter explains how to use the M8 Controller Editor to configure a M8 Controller object in C•CURE 9000.

LSP M8 Controller Overview

The M8 Controller object represents the M8 Controller in the C•CURE 9000 database.

The M8 Controller Object is configured using the M8 Controller Editor.

LSP M8 Controller Editor Tabs

The LSP M8 Controller Editor contains one tab:

- General Tab

Accessing M8 Controller Editor

This section explains how to access the LSP M8 Controller Editor.

To Access M8 Controller Editor

- In the **Hardware Pane** of the Administration Workstation, select **LSP** folder and then respectively **NetLink** object based under **LSP NetLinks** folder.
- Navigate to **M8 Controllers** folder, expand and select respective **M8 Controller** object
- Right click and select **Edit** from the context menu.

Creating M8 Controller Objects

There is no option to create an M8 Controller object manually. M8 Controller objects are configured automatically during NetLink configuration.

Deleting M8 Controller Objects

There is no option to delete M8 Controller objects manually.

General Tab

The General Tab enables user to modify M8 Controller object settings.
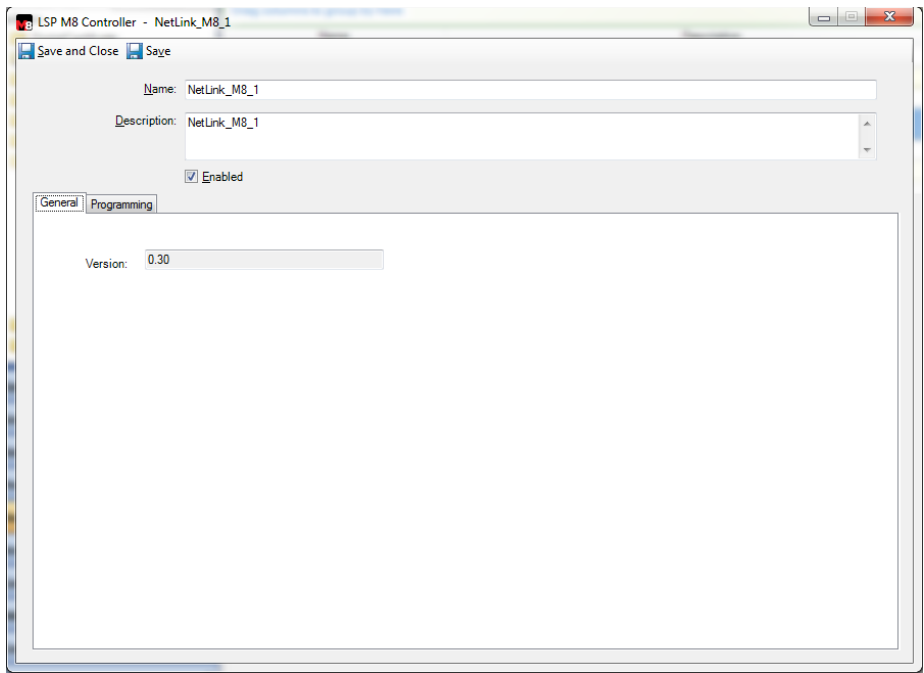
Figure 25 shows the General Tab.

Figure 25: General Tab

General Tab Definitions

Table 18 shows the fields and buttons definitions on the General Tab.

Table 18: General Tab Definitions

Term	Definition
Name	M8 Controller name up to 50 characters long.
Description	Text description of the M8 Controller that helps with object identification. The text is for information only.
Enabled	If disabled stops processing updates incoming from controller device
Version	M8 Controller version

Programming Tab

The Programming Tab enables user to modify M8 Controller outputs settings.

Figure 26 shows the General Tab.

Figure 26: General Tab

Programming Tab Definitions

Table 19 shows the fields and buttons definitions on the General Tab.

Table 19: Programming Tab Definitions

Term	Definition
Control Input Type	Allows users to specify input type.
Output Load Type	Allows users to specify load type.
Unlock on FAI Activation	Allows users to unlock output on FAI Activation
Unlock on AC Loss	Allows users to unlock output on AC loss
Email Alert on Fault	Allows users to enable or disable email alerting

Term	Definition
Voltage Lower Limit (V)	Allows user to specify voltage lower limit
Voltage Upper Limit (V)	Allows user to specify voltage upper limit
Current Lower Limit (A)	Allows user to specify current lower limit
Current Upper Limit (A)	Allows user to specify current upper limit

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C•CURE 9000 M8 Output Editor

This chapter explains how to use the M8 Output Editor to configure a M8 Output object in C•CURE

9000.

LSP M8 Output Overview

The M8 Output object represents the M8 Output in the C•CURE 9000 database.

You configure M8 Output Objects using the M8 Output Editor.

LSP M8 Output Editor Tabs

The LSP M8 Output Editor consists of three tabs:

- General Tab
- Triggers Tab
- State Images Tab

Accessing M8 Output Editor

This section explains how to access the LSP M8 Output Editor.

To Access M8 Output Editor

- In the **Hardware Pane** of the Administration Workstation, select **LSP** folder and then respectively **NetLink** object based under **LSP NetLinks** folder.
- Navigate to **M8 Outputs** folder, expand and select respective **M8 Output** object
- Right click and select **Edit** from the context menu.

Creating M8 Output Objects

There is no option to create M8 Output objects manually. M8 Output objects are configured automatically during NetLink configuration.

Deleting M8 Output Object

There is no option to delete M8 Output objects manually.

General Tab

The General Tab enables users to modify M8 Output object settings.
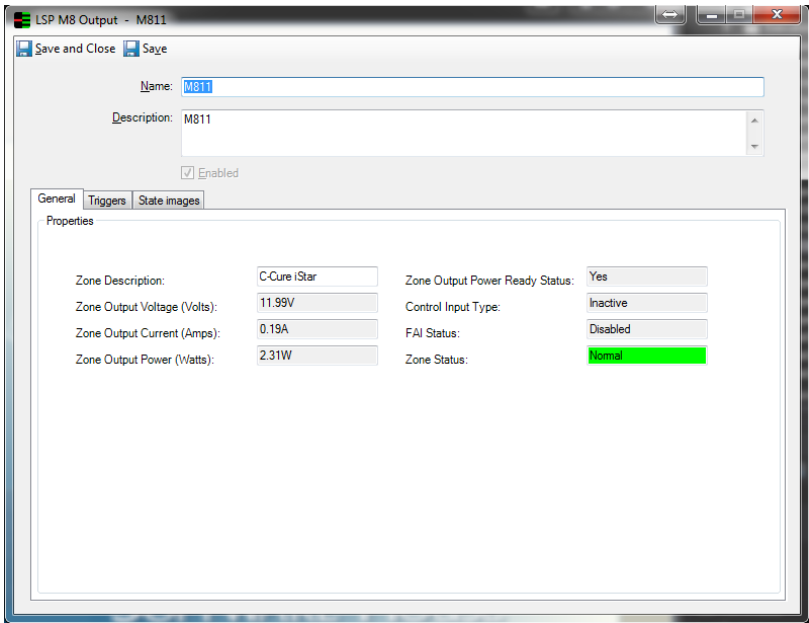
Figure 27 shows the General Tab.

Figure 27: General Tab

General Tab Definitions

Table 20 shows the fields and buttons definitions on the General Tab.

Table 20: General Tab Definitions

Term	Definition
Name	M8 Output name up to 50 characters long.
Description	Text description of the M8 Output that helps in object identification. The text is for information only.
Enabled	If disables stopes processing updates incoming from output device
Zone Description	M8 Output zone description
Zone Output Current	M8 Output zone output current
Zone Output Voltage	M8 Output zone output voltage
Zone Output Power	M8 Output zone output power

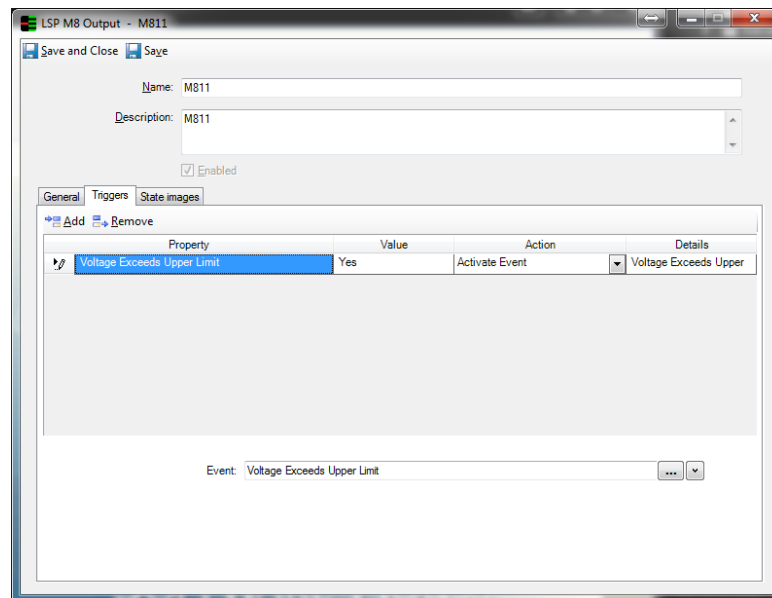| Term	Definition
Zone Output Power Ready Status	M8 Output zone output power ready status
Control Input Type	M8 Output control input type
FAI Status	M8 Output FAI status
Zone Status	M8 Output zone status

Triggers Tab

Triggers M8 Output enables users to specify C•CURE alerts to be triggered against object property changes.

Figure 28 shows the Triggers Tab.

Figure 28: Triggers Tab

Triggers Tab Definitions

Table 21 provides fields and buttons definitions on the Triggers Tab.
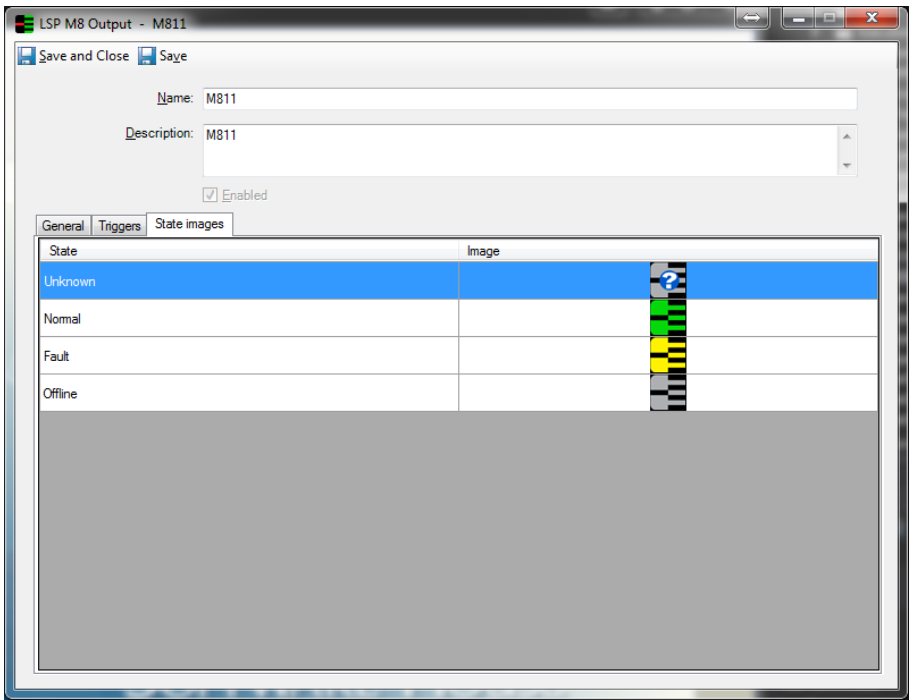
Table 21: Triggers Tab Definitions

Term	Definition
Property	Represents LSP alert type.
Value	LSP alert state (Active, Inactive)
Action	Action type to be taken when property value is set accordingly (options: Activate event, Deactivate event).
Details	Action name
Current Exceeds Upper Limit	Allows event to be triggered when LSP Current Exceeds Upper limit is raised
Current Under Low Limit	Allows event to be triggered when LSP Current Under Low Limit is raised
FAI Status	Allows event to be triggered when FAI Status gets changed
Power Ready	Allows event to be triggered when Power Ready event is raised
Voltage Exceeds Upper Limit	Allows event to be triggered when LSP Voltage Exceeds Upper Limit is raised
Voltage Under Low Limit	Allows event to be triggered when LSP Voltage Under Low Limit is raised

State Images Tab

The State Images Tab provides information about object states options. It also provides state to icon mapping to be reflected on the map object of the Monitoring Station.

Figure 29 shows the State Images Tab.

Figure 29: State Images Tab

State Images Tab Definitions

Table 22 provides fields and buttons definitions on the State Images Tab.

Table 22: State Images Tab Definitions

Term	Definition
State	Indicates M8 Output object state
Image	Represent state image

8

C•CURE 9000 SD Controller Editor

This chapter explains how to use the SD Controller Editor to configure a SD Controller object in C•CURE 9000.

LSP SD Controller Overview

The SD Controller object represents the SD Controller in the C•CURE 9000 database.

The SD Controller Object is configured using the SD Controller Editor.

SD 4 and SD 16 both have the same editor with the SD 4 having less programming options.

LSP SD Controller Editor Tabs

The LSP SD Controller Editor contains one tab:

- General Tab

Accessing SD Controller Editor

This section explains how to access the LSP SD Controller Editor.

To Access SD Controller Editor

- In the **Hardware Pane** of the Administration Workstation, select **LSP** folder and then respectively **NetLink** object based under **LSP NetLinks** folder.
- Navigate to **SD Controllers** folder, expand and select respective **SD Controller** object
- Right click and select **Edit** from the context menu.

Creating SD Controller Objects

There is no option to create an SD Controller object manually. SD Controller objects are configured automatically during NetLink configuration.
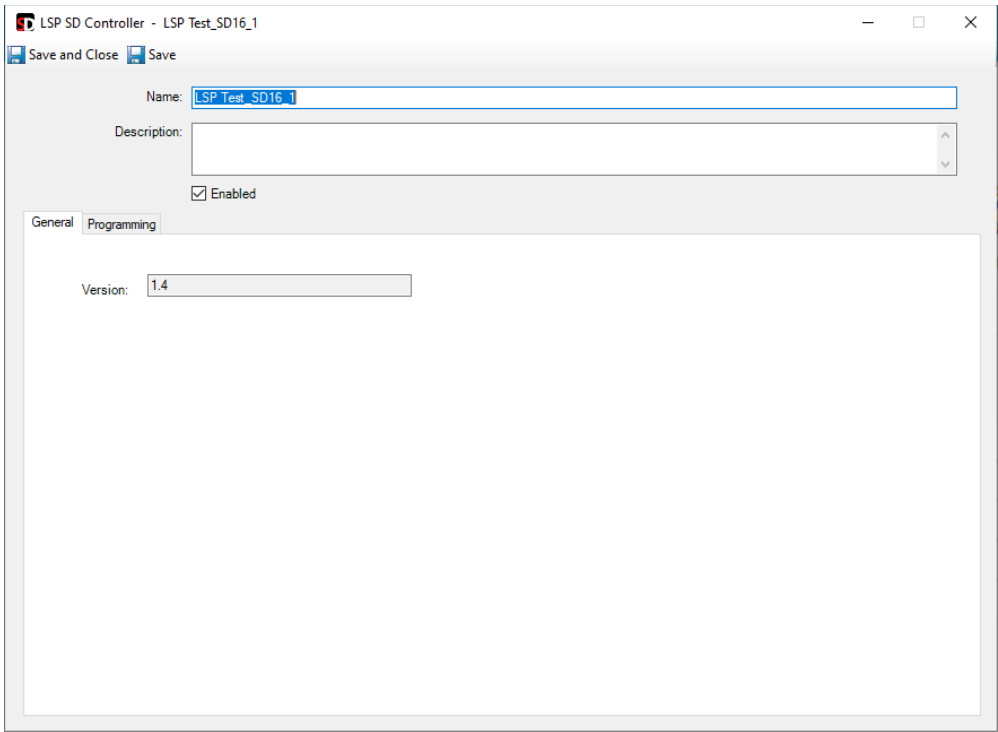
Deleting SD Controller Objects

There is no option to delete SD Controller objects manually.

General Tab

The General Tab enables the user to modify SD Controller object settings.

Figure 25 shows the General Tab.

Figure 25: General Tab

General Tab Definitions

Table 18 shows the fields and buttons definitions on the General Tab.

Table 18: General Tab Definitions

Term	Definition
Name	SD Controller name up to 50 characters long.
Description	Text description of the M8 Controller that helps with object identification. The text is for information only.
Enabled	If disabled stops processing updates incoming from controller device
Version	SD Controller version

Programming Tab

The Programming Tab enables the user to modify SD Controller outputs settings.

Figure 26 shows the SD 4 Programming Tab.

Figure 26-1 shows the SD 16 Programming Tab.

Figure 26: SD 4 Programming Tab

Figure 26-1: SD 16 Programming Tab

Programming Tab Definitions

Table 19 shows the fields and buttons definitions on the Programming Tab.

Table 19: Programming Tab Definitions

Term	Definition
Disable on FAI Activation	Allows users to disable output on FAI Activation
Email Alert on Fault	Allows users to enable or disable email alerting

Term	Definition
Voltage Lower Limit (V)	Allows user to specify voltage lower limit
Voltage Upper Limit (V)	Allows user to specify voltage upper limit
Current Lower Limit (A)	Allows user to specify current lower limit
Current Upper Limit (A)	Allows user to specify current upper limit
Cycle Count Limit	Allows user to specify the cycle count limit

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C•CURE 9000 SD Output Editor

This chapter explains how to use the SD Output Editor to configure a SD Output object in C•CURE 9000.

LSP SD Output Overview

The SD Output object represents the SD Output in the C•CURE 9000 database.

You configure D Output Objects using the SD Output Editor.

LSP SD Output Editor Tabs

The LSP SD Output Editor consists of three tabs:

- General Tab
- Triggers Tab
- State Images Tab

Accessing SD Output Editor

This section explains how to access the LSP SD Output Editor.

To Access SD Output Editor

- In the **Hardware Pane** of the Administration Workstation, select **LSP** folder and then respectively **NetLink** object based under **LSP NetLinks** folder.
- Navigate to **SD Outputs** folder, expand and select respective **SD Output** object
- Right click and select **Edit** from the context menu.

Creating SD Output Objects

There is no option to create SD Output objects manually. SD Output objects are configured automatically during NetLink configuration.

Deleting SD Output Object
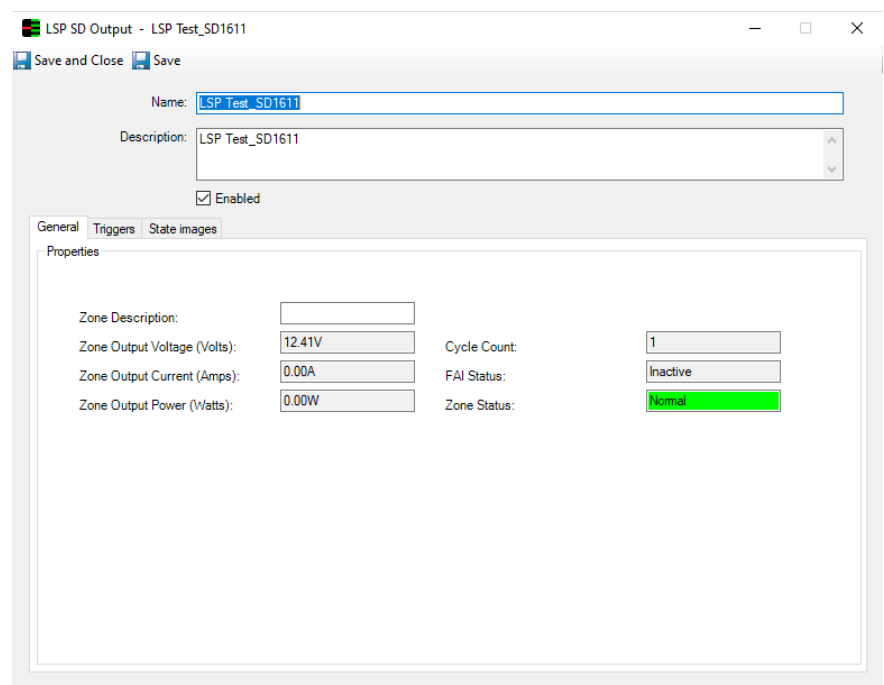
There is no option to delete SD Output objects manually.

General Tab

The General Tab enables users to modify SD Output object settings.

Figure 27 shows the General Tab.

Figure 27: General Tab

General Tab Definitions

Table 20 shows the fields and buttons definitions on the General Tab.

Table 20: General Tab Definitions

Term	Definition
Name	SD Output name up to 50 characters long.
Description	Text description of the SD Output that helps in object identification. The text is for information only.
Enabled	If disables stopes processing updates incoming from output device
Zone Description	SD Output zone description
Zone Output Current	SD Output zone output current
Zone Output Voltage	SD Output zone output voltage
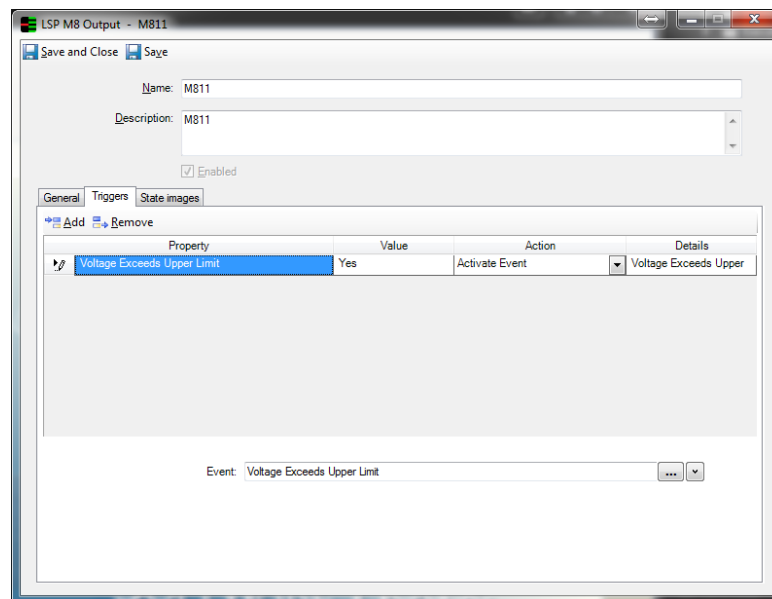
Zone Output Power	SD Output zone output power

Term	Definition
Zone Output Power Ready Status	SD Output zone output power ready status
Cycle Count	SD Output cycle count
FAI Status	SD Output FAI status
Zone Status	SD Output zone status

Triggers Tab

Triggers SD Output enables users to specify C•CURE alerts to be triggered against object property changes.

Figure 28 shows the Triggers Tab.

Figure 28: Triggers Tab

Triggers Tab Definitions

Table 21 provides fields and buttons definitions on the Triggers Tab.
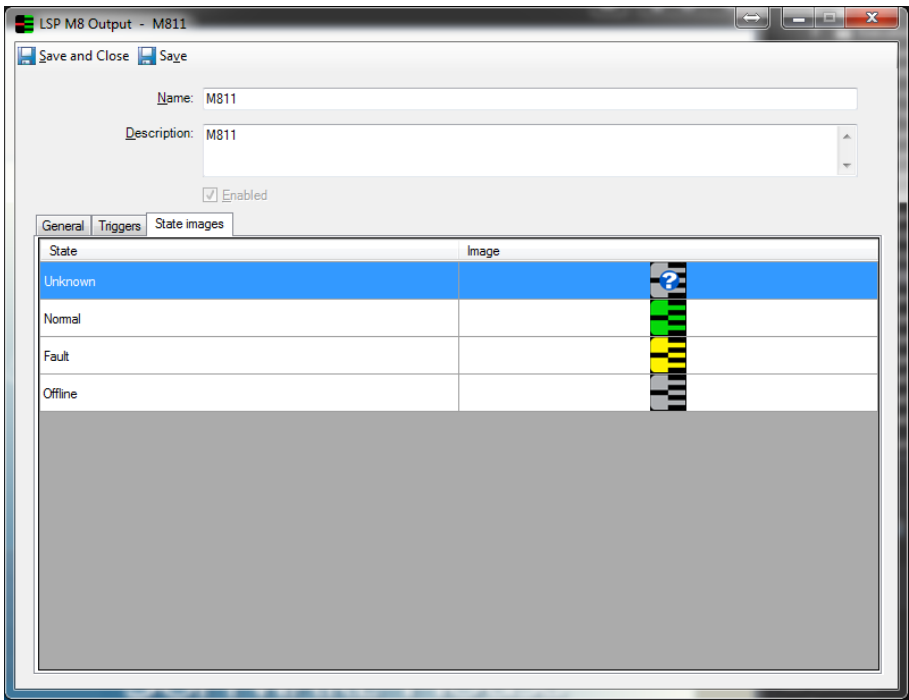
Table 21: Triggers Tab Definitions

Term	Definition
Property	Represents LSP alert type.
Value	LSP alert state (Active, Inactive)
Action	Action type to be taken when property value is set accordingly (options: Activate event, Deactivate event).
Details	Action name
Current Exceeds Upper Limit	Allows event to be triggered when LSP Current Exceeds Upper limit is raised
Current Under Low Limit	Allows event to be triggered when LSP Current Under Low Limit is raised
FAI Status	Allows event to be triggered when FAI Status gets changed
Cycle Limit	Allows event to be triggered when Cycle limit event is raised
Voltage Exceeds Upper Limit	Allows event to be triggered when LSP Voltage Exceeds Upper Limit is raised
Voltage Under Low Limit	Allows event to be triggered when LSP Voltage Under Low Limit is raised

State Images Tab

The State Images Tab provides information about object states options. It also provides state to icon mapping to be reflected on the map object of the Monitoring Station.

Figure 29 shows the State Images Tab.

Figure 29: State Images Tab

State Images Tab Definitions

Table 22 provides fields and buttons definitions on the State Images Tab.

Table 22: State Images Tab Definitions

Term	Definition
State	Indicates SD Output object state
Image	Represent state image

C•CURE 9000 Alerts and Journaling system

This chapter explains LSP alerts handling by the C•CURE 9000 Journaling system.

Journaling Overview

All LSP Alerts triggered in LSP system are automatically forwarded and translated as a C•CURE 9000 Journal message.

C•CURE 9000 Journal messages may be monitored and respectively handled by the operator in the Activity Monitor window of the Monitoring Station. Depending on requirements users are also enabled to setup respective triggers/actions to be taken once an LSP alert comes in. This means C•CURE alerts may be raised accordingly.

Accessing Event Viewer and Activity Monitor

This section describes how to access the Event Viewer and Activity Monitor in Monitoring Station

To Access Activity Monitor

- Login to Monitoring Station
- On top of the Window select one of the available Application Layouts tabs (default: DefaultApplicationLayout)
- Select "Dual phase event acknowledgement layout" to have all available views in place.

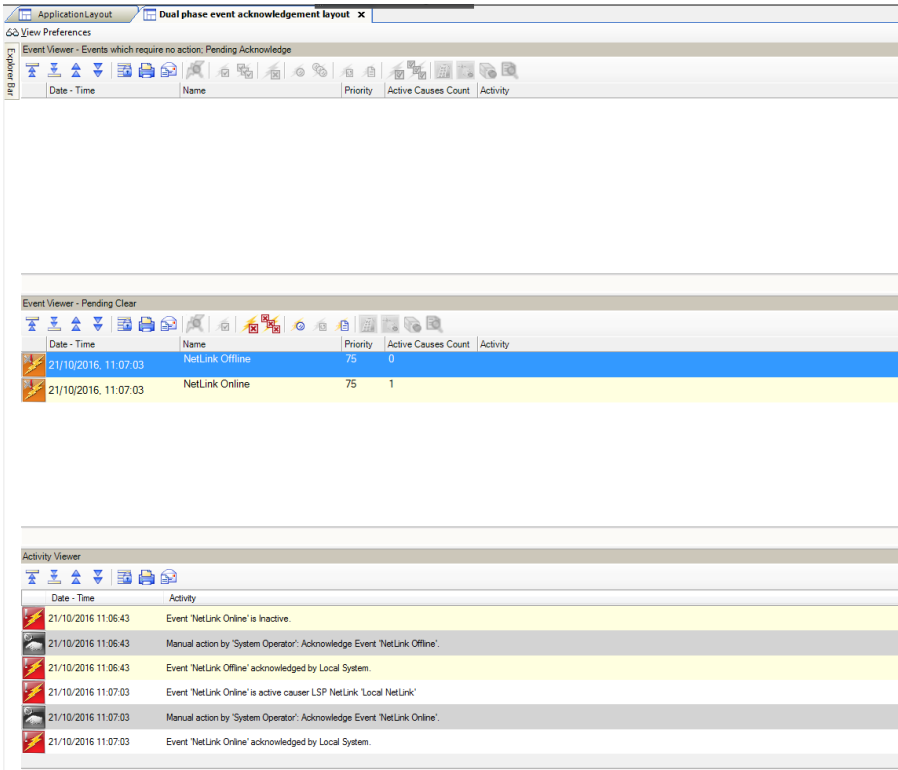Figure 30 shows the Event Viewer along with Activity Monitor window

Figure 30: Activity Monitor
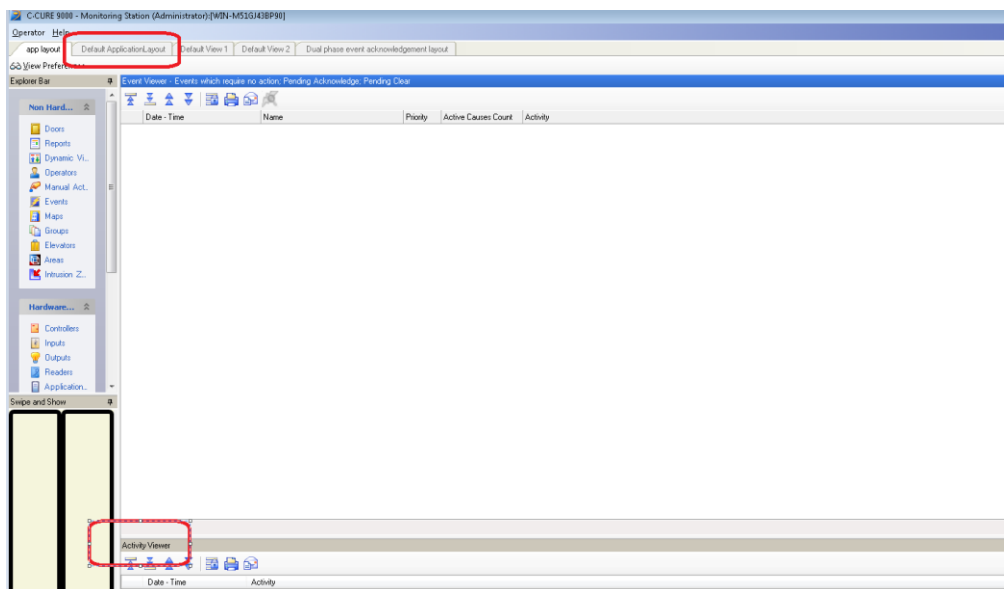
Interpreting Journal Messages

Each journal message provides minimum information enabling users to identify LSP alerts triggered in LSP system. It also provides details about the C•CURE 9000 object owning the journal message. Information about the corresponding object may be accessed by double-clicking on recorded message header, see Figure 31. Alternatively, a user may popup details by right clicking on the message and selecting the **Edit** option from the context menu.

Figure 31: Journal message details

11

C•CURE 9000 LSP Commands

This chapter explains LSP commands.

Table 23 shows the LSP commands descriptions.

Name	Owner	Comment
Reboot System	NL Object	Allows to reboot NL system
Enable All Outputs	NL Object	Allows to enable all M8s outputs
Disable All Outputs	NL Object	Allows to disable all M8s outputs
Reset All Outputs	M8 Object	Allows to reset all M8s outputs
Enable All M8 Outputs	M8 Object	Allows to enable all M8 outputs
Disable All M8 Outputs	M8 Object	Allows to disable all M8 outputs
Reset All M8 Outputs	NL Object	Allows to reset all M8 outputs
Enable M8 Output	M8 Output Object	Allows to enable M8 output
Disable M8 Output	M8 Output Object	Allows to disable M8 output
Reset M8 Output	M8 Output Object	Allows to reset M8 output
Start Battery Test	Power Supply Object	Initialize battery test
Stop Battery Test	Power Supply Object	Stops battery test
Reset AC and System Fault Counters	Power Supply Object	Resets all fault counters

C•CURE 9000 Enterprise Architecture Consideration

This chapter provides guidelines regarding C•CURE 9000 Enterprise Architecture configuration.

Enterprise Architecture Consideration

The Enterprise Architecture provides administrators with the ability to view and manage all aspects of access control and video security from one application - the Administration Workstation on a Master Application Server, or MAS. From this vantage point, you can:

- View and edit LSP objects configured on connected SASs
- Issue commands and monitor alerts for these objects

Because the Connected Program Kit integrations **do not support data synchronization** in an Enterprise Architecture system, an integration can only run on a standalone C•CURE 9000 server or a Satellite Application Server, or SAS within an enterprise. An integration that can run on a system in an Enterprise Architecture must be specifically built to prevent unintended data synchronization with the Master Application Server.

NOTE	The Connected Program Kit is intended to build integrations that can reside on a SAS only. Only the LSP Client integration can be installed on a MAS. Do not install the server integration on a MAS, and ensure that your customers do not install this integration on a MAS.

Installation Order

The LSP installation must be performed in the following way in an Enterprise Architecture:

- Install the LSP integration on the MAS server first
- Install the LSP integration on required SASs
- Ensure all enterprise servers have the same LSP version installed (must be identical)
- If removing or upgrading the integration, perform the above steps in reverse order; uninstall the server version from the SASs first, then remove from the MAS.

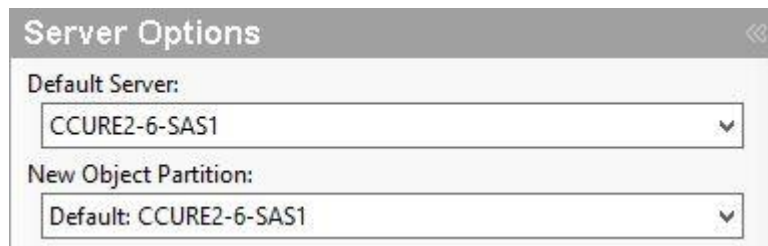| NOTE	The same LSP NetLink configuration on different SASs will be treated as separate objects by the integration. A NetLink object configured on SAS1 will not be visible on SAS2.

MAS and SAS Limitations

- You cannot create an LSP NetLink object on the MAS server.
- You cannot create Global LSP NetLink objects in an enterprise architecture.
- NetLink objects can only be created on a local SAS partition where the integration is installed, and are only visible on this SAS, and the MAS (with the relevant SAS selected in the **Default Server** field.)

Creating a NetLink object on the MAS

When creating a NetLink object on the MAS, a SAS partition where the integration is installed must be selected in the **New Object Partition** field. Creating a NetLink object on the Global or MAS partition is not supported, see Figure 32.

Figure 32: **Default Server** and **New Object Partition** settings on the MAS

To create a NetLink object on a SAS from the MAS

- In **Server Options**, set the **Default Server** and **New Object Partition** to the required SAS.
- Go to the **Hardware Tree** and create an LSP folder if none exists. Right-click this folder, hover to **LSP NetLink** and select **New.** The new NetLink window appears.
- Configure the NetLink object as required, and click **Connect.**
- If connection is successful a pop-up message will appear. Click **Save and Close**. The NetLink will now be visible here and on the relevant SAS.

To view, edit or issue commands to the NetLink object from the MAS, select the relevant SAS from the **Default Server** field and open the NetLink from the **Hardware Tree**.

Creating a NetLink object on a SAS

When creating a NetLink object on a SAS, the local SAS partition must be selected in the **New Object Partition** field. Creating a NetLink object on the Global partition is not supported.

<u>**To create a NetLink object on a SAS**</u>

- In Server Options, set the New Object Partition to the SAS.
- Go to the **Hardware Tree** and create an LSP folder if none exists. Right-click this folder, hover to LSP NetLink and select New. The new NetLink window appears.
- Configure the NetLink object as required, and click **Connect**.
- If connection is successful a relevant pop-up message will appear. Click **Save and Close**. The NetLink will now be visible here and on the MAS, with this SAS set as the **Default Server**.

NetLink, M8, SD
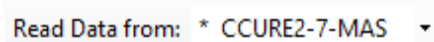# and FP commands in an Enterprise Architecture

Issuing commands for LSP objects in an enterprise architecture works in a similar way to a standalone installation. NetLink objects associated with a SAS server can have commands issued from the local SAS as normal, or from the MAS with the relevant SAS selected in the **Default Server** field. For example, an M8/SD Controller on SAS1 can be re-configured from SAS1's local hardware tree, or from the hardware tree on the MAS, with SAS1 selected in the **Default Server** field.

Journaling and Audit Logs

Journals and Audit logs are viewed as normal on a SAS server, with all SASs reporting to the MAS. The MAS server can display Journal events and Audit logs for all SASs, or each individual SAS.

- To view Journal events and Audit log entries from all SASs on the MAS, open the **Journal** or **Audit Log** from **Options & Tools** and select the MAS in the **Read Data from** field before running, see Figure 32.
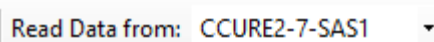
Figure 33: **Read Data from** field set to MAS

Read Data from: * CCURE2-7-MAS ▾

- To view Journal events and Audit log entries from a single SAS on the MAS, open the **Journal** or **Audit Log** from **Options & Tools** and select the required SAS in the **Read Data from** field before running, see Figure 33.

Figure 34: **Read Data from** field set to a SAS

Read Data from: CCURE2-7-SAS1 ▾