

nLight ECLYPSE™

nLight Explorer Edge Application

User Reference Guide



Contents

nLight Explorer User Reference Guide.....	3
OVERVIEW.....	4
DEVICES.....	5
PROFILES.....	6
SYSTEM LOGS.....	7
SETTINGS.....	10

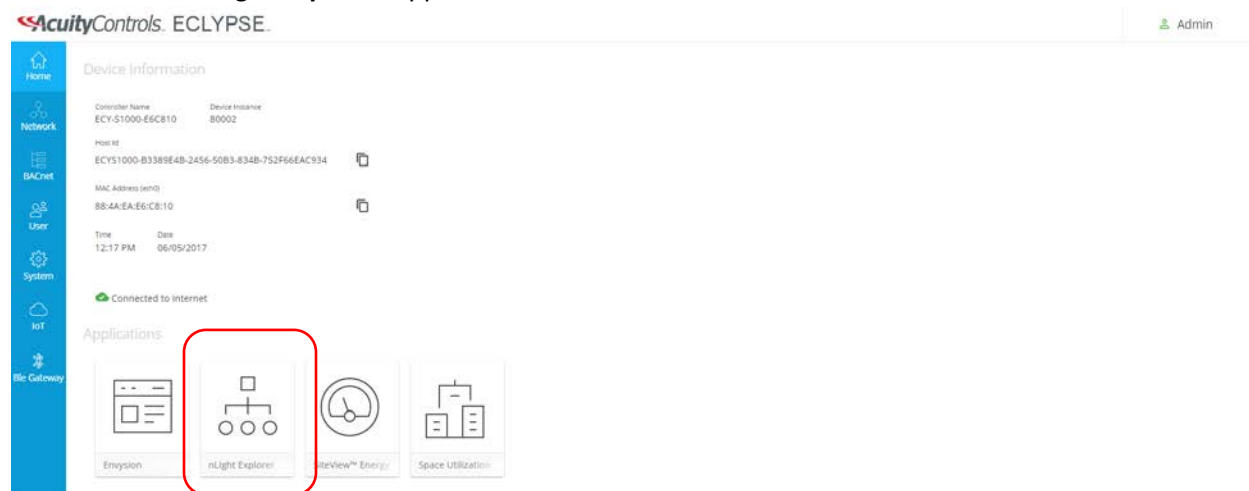
nLight Explorer User Reference Guide

Every nLight ECLYPSE™ is equipped with a series of Edge Applications. **nLight Explorer** is one of these applications, and it provides a view into the nLight system of connected devices to review overall system health, event logs, system hierarchy and device specific information. Specific nLight ECLYPSE controller parameters can be set within this application, in addition to system profile control. The full feature-set of this application is described in the following user reference guide.

Accessing **nLight Explorer** starts by logging into the nLight ECLYPSE controller.



Then select the **nLight Explorer** Application.



OVERVIEW

The screenshot shows the nLight Explorer interface. The sidebar on the left contains navigation icons for Overview, Devices, Profile, Logs, and Settings. The main content area is titled 'nLight Explorer' and shows a user profile 'admin'. The 'Online Devices' section displays a table with 4 devices. The 'Offline Devices' section shows 0 devices and a 'Clear All' button. The 'Errored Devices' section shows 0 devices.

Serial Number	Label	Parent	Port
01084969	nIO-EZ-PH	00FAFD9B	3
01068FD5	nWSX-LV-DX	00FAFD9B	3

“Online Devices” Section:

The “Online Devices” section provides a list of all nLight devices that are currently communicating with the nLight ECLYPSE. A total number of devices is located at the top of the section, and the devices can be sorted based on parent device (e.g. bridge), port number, device label and serial ID.

“Offline Devices” Section:

The “Offline Devices” section provides a list of all nLight devices that are no longer communicating with the nLight ECLYPSE. These devices could be offline because they were purposefully removed, or due to a communication error that can occur for a variety of reasons. If devices are determined to be purposefully removed with no intent to reconnect to the nLight ECLYPSE, selecting “Clear All” will remove these from the nLight ECLYPSE memory. NOTE: These devices can be sorted based on parent device (e.g. bridge), port number, device label and serial ID.

“Errored Devices” Section:

The “Errored Devices” section provides a list of devices that are currently displaying an error. There are a variety of device conditions that will cause it to show in this section – a description of the condition will be shown under the “Reason” section. Devices can be sorted based on parent device (e.g. bridge), port number, device label and serial ID.

DEVICES

The screenshot displays the nLight Explorer interface. At the top, it shows 'All Devices: 41' and buttons for 'Rediscover Devices' and 'nECY Reboot'. The main area features a tree view of devices under 'Port 1'. The tree includes 'nBRG-8 <00D51E4E>' (1), 'Guard Bollard Front' (1), 'Guard Bollard Back' (1), 'Guard Outside' (1), 'Guard RR' (2), 'Guard Inside' (3), 'Inside station <00C6E5ED>' (1), 'nPODM-DX <00D4C0C9>', 'nPODM-DX <00D4C1DE>', 'nGWY2 GFX' (1), and 'Port 4' (1). A detailed view of the 'Inside station <00C6E5ED>' device is shown on the right, with the following information:

Device ID	00C6E5ED
Label	Inside station
Model	nPP16-D
Date Code	3215
Firmware	F369C002Z-029

This page represents a tree structure of the nLight system devices connected to the nLight ECLYPSE. This tree structure is set up in the following manner:

- The total number of system devices is the value displayed next to “All Devices”. This includes both online and offline devices.
 - NOTE: Selecting “Rediscover Devices” will initiate a controller rediscovery of all system devices, and selecting “nECY Reboot” will reset the control and initiate a full rediscovery.
- The tree is laid out based on system hierarchy, with 3 wired ports displaying with the number of devices connected to each port in parenthesis. If wireless devices are also present in the system, these will display under an additional port.
- Selecting any port with sub-devices will expand the tree to display these devices. In the case of bridge devices, which have 8 available ports, each port with connected devices will display, also with the number of connected devices in parenthesis.
- Once a section of the tree is fully expanded, the end control devices will be displayed based on their model name and serial ID by default, or user provided label. Selecting a device will provide additional information about that device (e.g. model name, device label, firmware revision and product date code).
 - NOTE: A red exclamation point indicates that a device has lost communication with the nLight ECLYPSE.

PROFILES

Profile Name	Status	Set
Dim10Pct	active	<input checked="" type="checkbox"/>
OverrideOff	inactive	<input type="checkbox"/>

This page provides a list of all system profiles created through the nLight SensorView software. These are typically triggered by a scheduled event or manual system input. From this page, the current state of the profile can be viewed (active or inactive), and the profile can be manually run by selecting the checkmark next to the profile.

NOTE: Adjusting the operation of a system profile requires connection to the system with the SensorView software tool.

LOGS

The screenshot shows the 'Logs' section of the nLight Explorer interface. The table contains the following data:

Timestamp	Level	Source	Description
2018-07-16 22:46:41	info	system	nLight-Air USB dongle not detected.
2018-07-16 22:46:26	info	system	Initial device status received and processed.
2018-07-16 22:46:22	info	system	BACnet device status collection started.
2018-07-16 22:46:22	info	system	MQTT/BACnet device polling engine is enabled on start-up.
2018-07-16 22:46:17	info	system	Initial discovery completed.
2018-07-16 22:46:13	info	discovery	Device discovery plateaued, online devices:4, elapsed time 0m:33s.
2018-07-16 22:45:57	info	discovery	Add device 0072CF75 on port 1 of parent 00F8029D.
2018-07-16 22:45:54	info	lan	LAN link up and physically connected.
2018-07-16 22:45:53	info	discovery	Add device 00F0AC5A on port 1 of parent 00F8029D.
2018-07-16 22:45:51	info	discovery	Add device 011C4C45 on port 3 of parent 00F8029D.
2018-07-16 22:45:50	info	discovery	Add device 00FAE5BB on port 1 of parent 00F8029D.
2018-07-16 22:45:41	info	system	Successfully opened nLight port 3.
2018-07-16 22:45:41	info	system	Successfully opened nLight port 2.
2018-07-16 22:45:41	info	system	Successfully opened nLight port 1.
2018-07-16 22:45:40	info	system	Device event broadcast handling is disabled on start-up.
2018-07-16 22:45:40	info	system	Wireless device support is disabled.
2018-07-16 22:45:40	info	system	MQTT/BACnet profile forwarding enabled on start-up.
2018-07-16 22:45:40	info	system	Gateway site ID: 00000000-0000-0000-0000-000000000000
2018-07-16 22:45:40	info	system	MQTT broker connection status: Connection Accepted.
2018-07-16 22:45:39	info	system	nLight-Air device support enabled.
2018-07-16 22:45:39	info	system	ngwinetd v5.22.80079 application build #1198 05-22-2018 09:30:00
2018-07-16 22:45:39	info	system	Gateway application start-up.

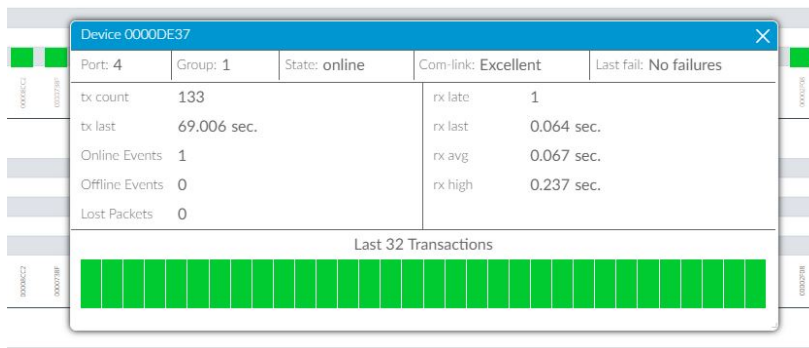
This page provides a system event log. This will include information about the addition and removal of devices, timed-based system actions and events, and indications of firmware updates. Each log file provides a brief description of the event, as well as a time stamp when the event occurred. Logs can be sorted and filtered to easily navigate. Additionally, selecting "Download CSV" allows the user to export the log files in CSV format for further review.



For nLight systems that include nLight Air wireless devices, the "Air Network Data" section provides additional analytics regarding the communication stability between the nLight ECLYPSE and nLight Air devices. Selecting this option provides the following:

- An "online event" bar chart: This shows the number of recent "successful" transactions for each Air end device. (A "successful" transaction means that the nLight ECLYPSE sent a command to an Air device, and received an acknowledgment or response from that device.)
- An "offline event" bar chart: This chart displays the number of times the nLight Air devices were determined to be offline by the nLight ECLYPSE since the devices last power up.
- A "lost packet" bar chart: This displays the number of recent "unsuccessful" communications with the individual nLight Air devices. (An "unsuccessful" communication means that the nLight ECLYPSE did not receive an acknowledgment or response to a command.) Please note that dropped packets do not necessarily indicate long-term communication issues between the nLight ECLYPSE and an nLight Air device; it is normal to see a small number of dropped packets. If this number is continuously greater than 10, troubleshooting of the wireless communication between the nLight ECLYPSE and those nLight Air devices may be required. Also note, this only reflects the communications between the nLight ECLYPSE and nLight Air devices, not between local devices (e.g. wired switches, sensors, fixtures, power packs).

In the "Air Network Data", one has the ability to filter based on each nLight Air "group" (as assigned in the CIAIRity mobile application during initial start-up), instead of viewing all devices at one time. If there are a large number of Air devices on the network, there will be multiple pages of devices.



Selecting any individual nLight Air device will bring up a window with additional debugging data for that device. In addition to running counts of successful and unsuccessful transactions and time statistics for transaction times, there is a graphical display of the most recent transactions (green for successful transactions, red for unsuccessful transactions). Up to 32 transaction results can be displayed (less if there are fewer transactions to that particular device).

Multiple individual device windows can be opened at a single time to compare device debugging data.

If no nLight Air devices are connected to the nLight ECLYPSE, selecting the "Air Network Data" will show "No data available."

AcuityControls nLight nLight Explorer

Overview | Logs | Air Network Data

Devices

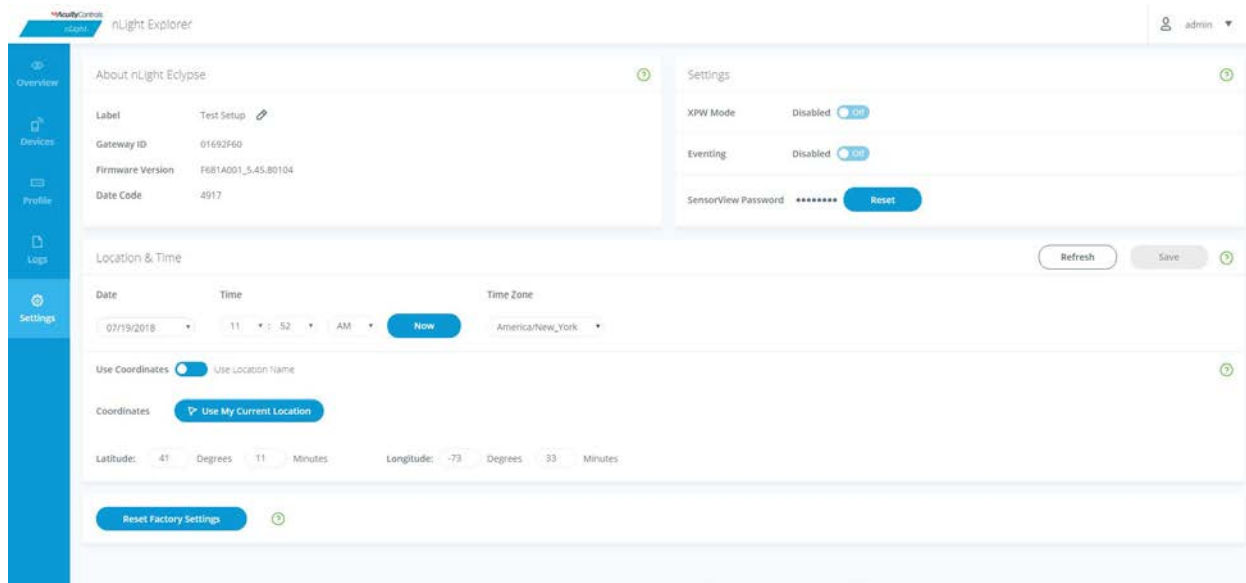
Profile

Logs

Settings

No data available.

SETTINGS



This page provides general overview information about the nLight ECLYPSE, including editable unit label that is visible in SensorView software.

Additionally, this section supports the following settings:

- “XPW Mode” – enable this feature to support discovery of XPoint™ Wireless devices.
- "Eventing" - enabling this feature transitions the connected nLight devices into an "event-based" message model with the nLight ECLYPSE, instead of a polling model. This will speed up the sharing of status data (e.g. occupied/unoccupied, relay on/off, etc.) from the end device to the ECLYPSE, and is typically used for reduced information latencies when supporting a BACnet integration or Space Utilization Edge/Cloud Application.
 - NOTE: This feature is only used with nLight wired (CAT5 connected devices), and it has no affect on nLight Air or XPoint Wireless devices. In order to use the feature, nLight bridges (nBRG) must be updated to firmware version Z-016 or newer, and all nLight devices must be on the latest firmware release. Not every nLight device on a given network may support Eventing; those that do not will continue to operate in polled mode.
- “SensorView Password” – this security feature can be utilized to prevent a user from having programming and system control access from SensorView. This password must match the “Gateway Password” on the SensorView ADMIN tab.
- “Location” provides the user the ability to select the location of the nLight ECLYPSE from a pre-populated list of cities, or through inputting the latitude and longitude of the location. This location is utilized with astronomical time clock control (i.e. sunrise and sunset scheduled events).

Lastly, this page offers a button to “Restore Factory Settings” – selecting this will restore the device label, XPW mode, SensorView password, and location/time-zone settings. Bridge port labels and system profiles/schedules will also be removed. This process can take up to 30 seconds.