Controlling Your
Lightcloud System

RAB® | Controls

Lightcloud Application

Lightcloud

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Getting Started with Lightcloud

This guide is designed for Administrative Users to setup and manage a Lightcloud system with the Lightcloud Application. Standard Users should refer to the Quick Start Guide.

We are here to help! Every Lightcloud System comes with unlimited technical & user support for 10 years, so give us a call at 1 (844) - LIGHTCLOUD
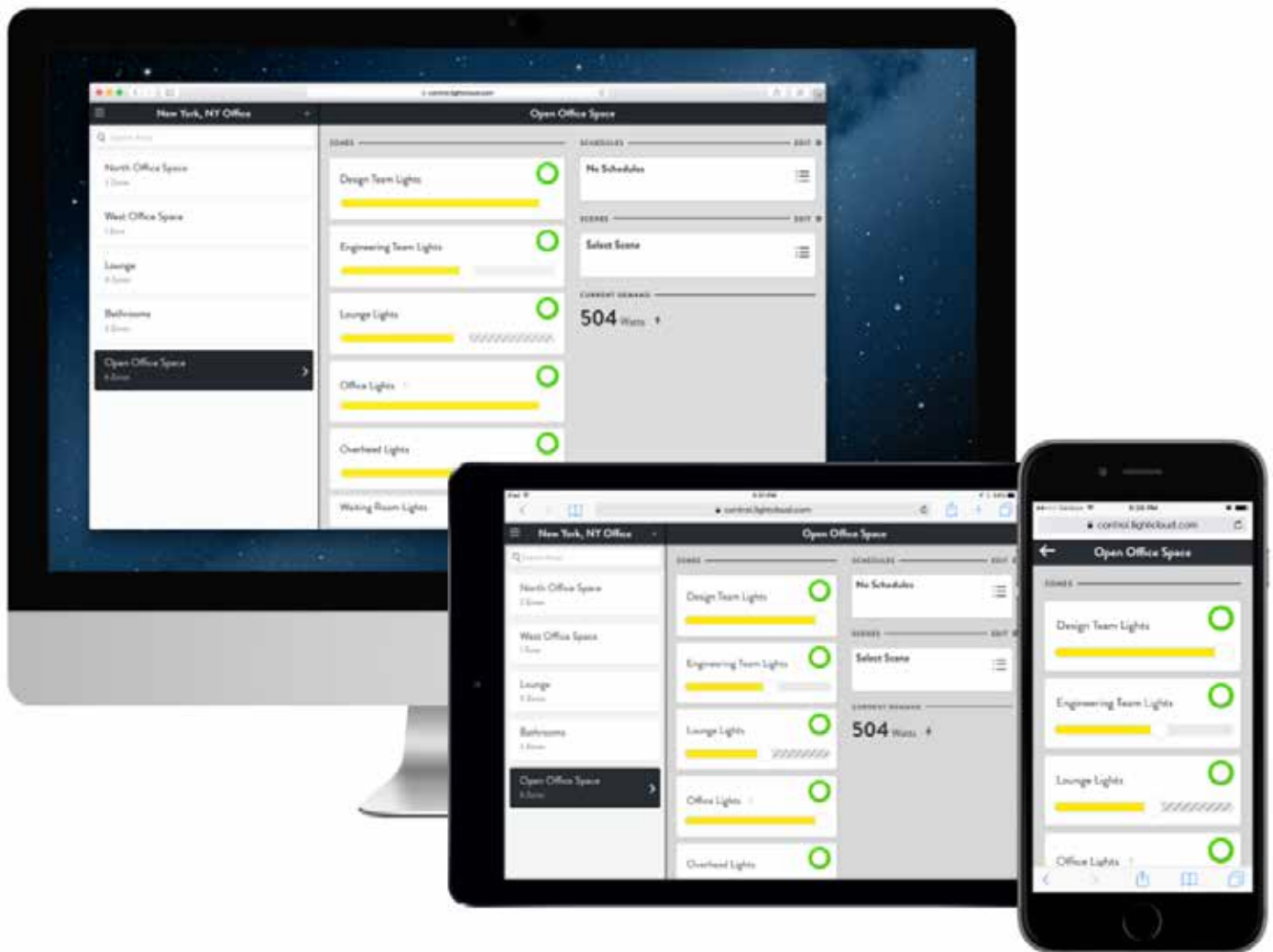
Table of Contents

Lightcloud Application

The Lightcloud web application gives you control of all system capabilities and settings from most desktop and smartphone browsers.

To start using the Lightcloud Application, visit: CONTROL.LIGHTCLOUD.COM

Navigating the Application
The Application has 6 main sections

Devices: Edit individual Device Settings such as the Device Mode, Power Up State, or Zone Name. *To learn more, go to page 5.*

Organize: Assign devices to Areas. Areas are generally created by room for indoor applications. Outdoor lighting can be grouped together or segmented by the location or type of lighting. *To learn more, go to page 7.*

Control: The Control view makes it easy to quickly turn your Zones on and off, dim, and activate Scenes. *To learn more, go to page 8.*

Energy: The Energy view gives you a complete look at the energy consumption of your Site and its Areas, allowing you to quickly discover patterns of usage and potential for energy savings. *To learn more, go to page 9.*

Scenes: A collections of Zone states and dim levels, and can be used to set multiple Zones to specified levels simultaneously. The Scenes view contains all the scenes for a Site and allows the user to create, manage, and activate them. Scenes can also be activated by Schedules and Automations. *To learn more, go to page 10.*
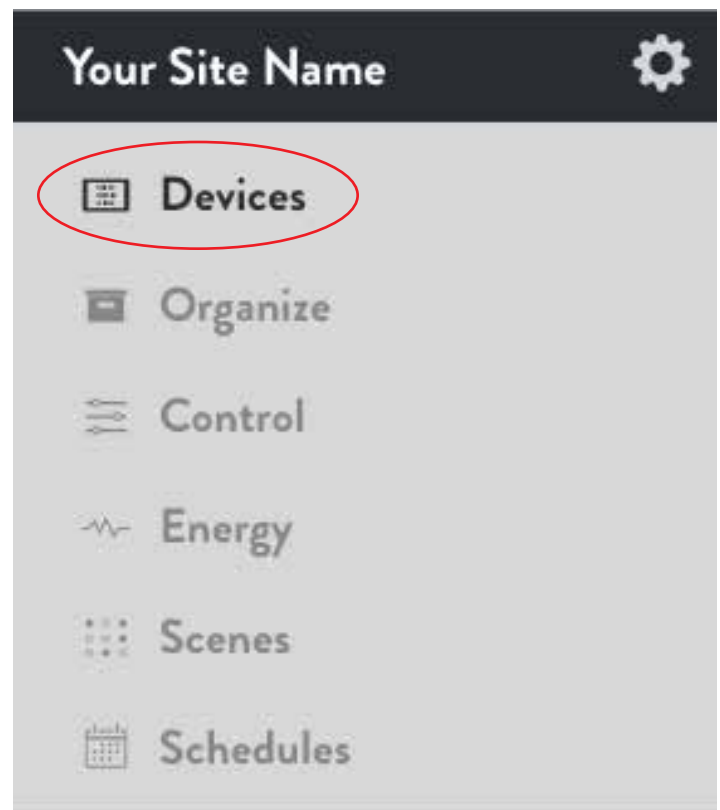
Schedules: Activate, edit, or create new schedules. *To learn more, go to page 11.*

Change Sections
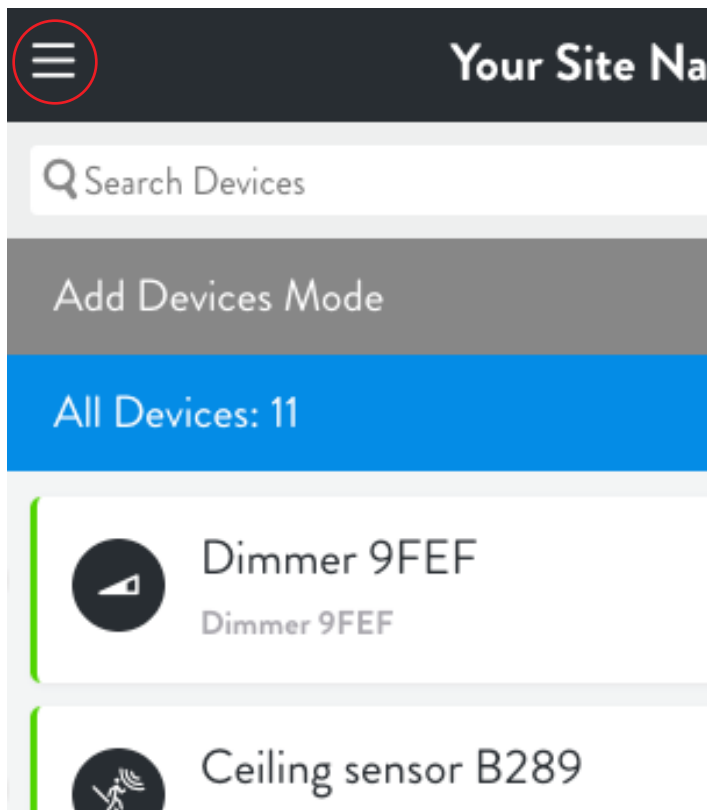
Select the Menu   Select the Section

Devices

You can configure all the Lightcloud Devices in a Site via the Devices view: for example, timeout settings for Sensors; Zone settings for Controllers.

To locate specific devices, you can search for devices by name, Device ID or Zone Name in the search bar at the top, or filter which Devices are displayed.

To filter devices, select the blue Filter panel to change what Devices are displayed. For each Device Type, the device count is displayed on the right.


Add or Upgrade Devices
To add or upgrade devices, call 1-(844)-LIGHTCLOUD or email support@lightcloud.com.

Device Settings

Go to Devices, select the device, then select Edit
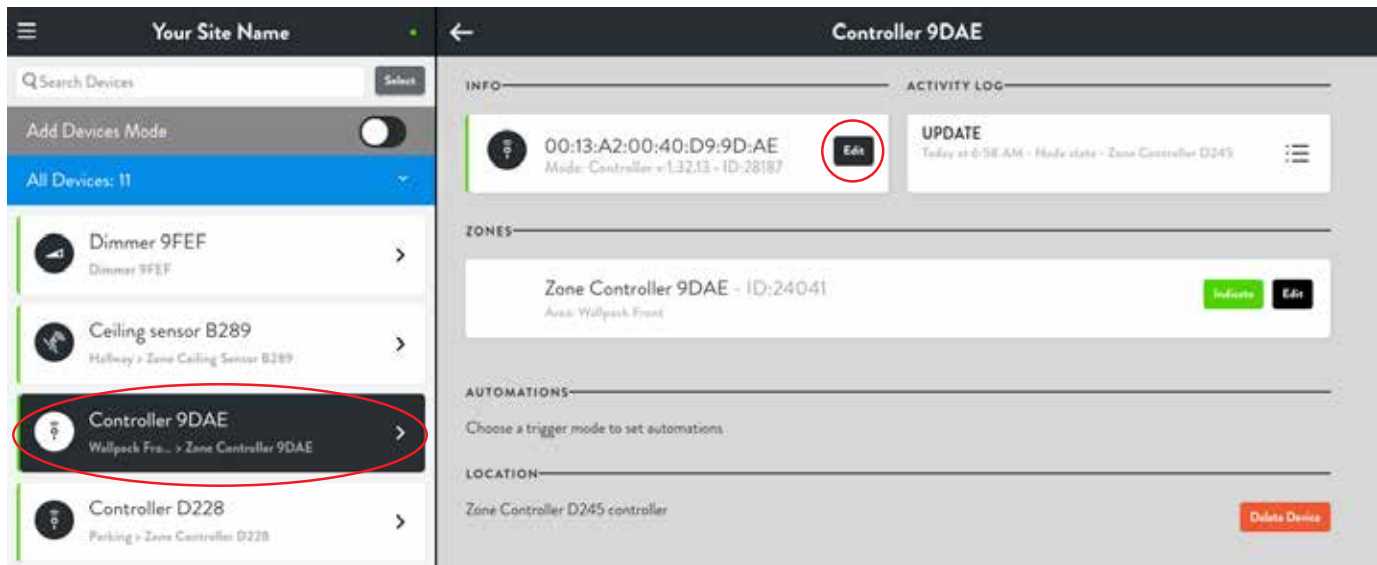
The Device Settings window allows you to change any aspect of a device's behavior. In the Controller example, you can see there are multiple modes, as well as options for soft dimming and power monitoring.
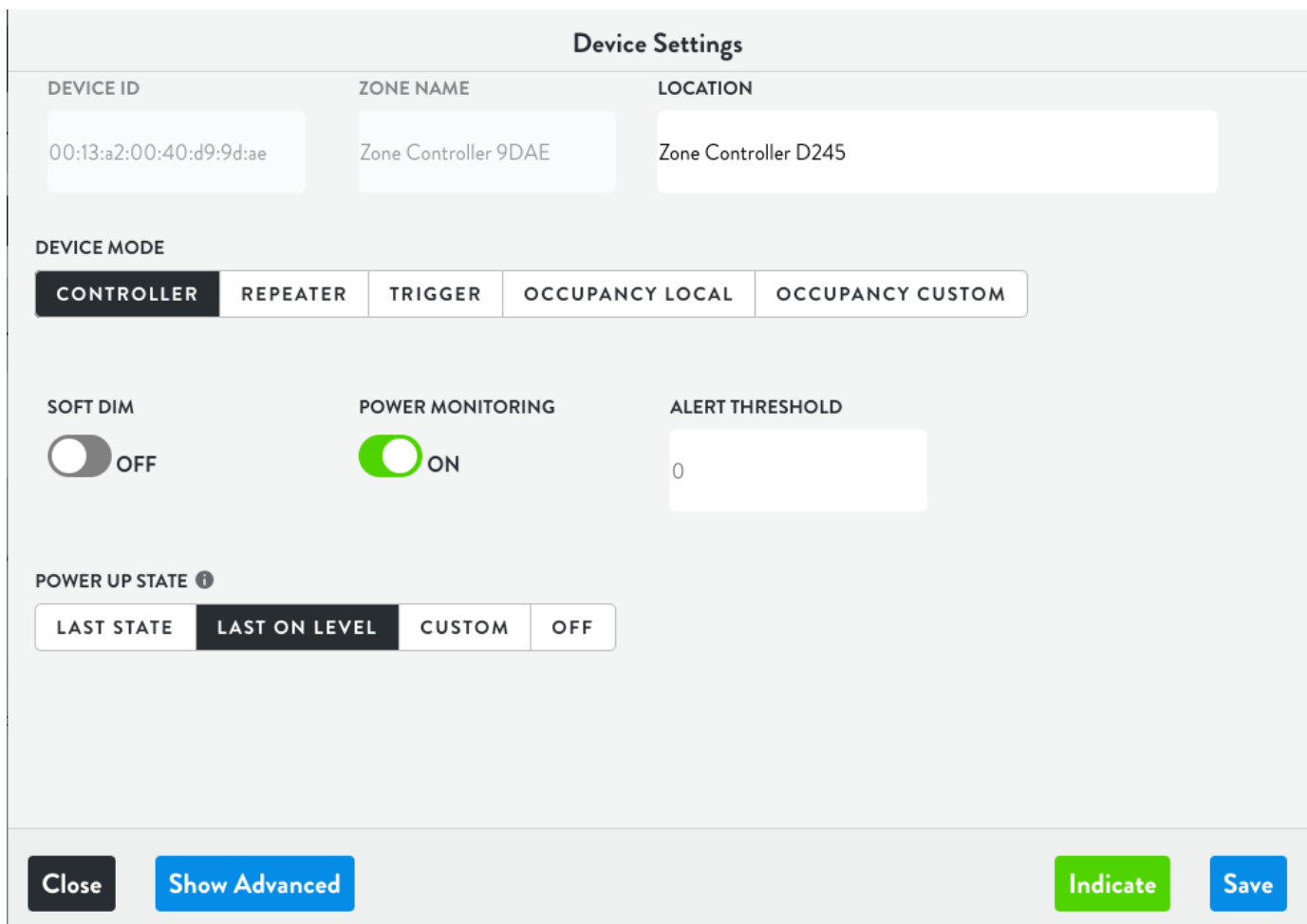
Organize

Your system should have been organized by Area at the time of commissioning. If Zones weren't assigned or you'd like to reassign the Zones to different or new Areas, this can be accomplished easily at any time.

Unassign a Zone from an Area: Select the Area, then select the circle next to each Zone you'd like to unassign. When selected, the circle will be highlighted green. Select Unassign and Confirm.
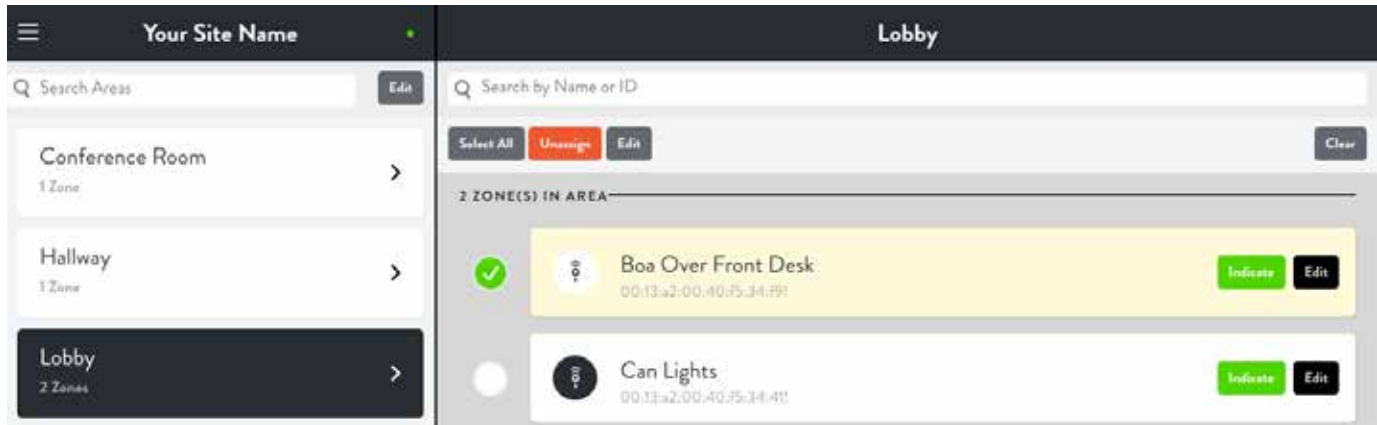

Assign Zone to an Area: In order to Assign a Zone to an Area, it must be unassigned. If a Zone is already assigned to an Area, please unassign the Zone before attempting to assign the Zone.

Select the blue Unassigned Zone button, Select the circle next to each Zone you'd like to assign. When selected, the circle will be highlighted green. Select Assign and Confirm. Choose or a create an Area.
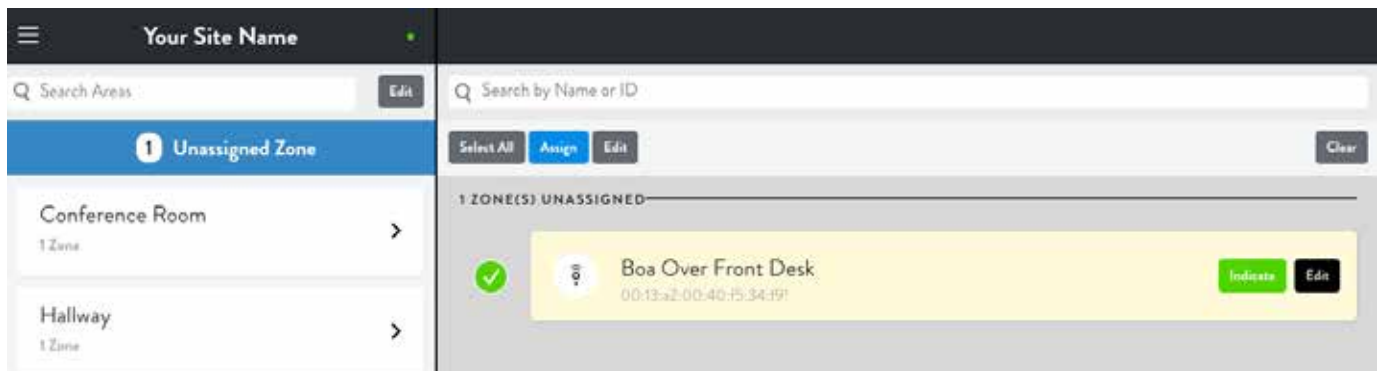
Edit Area Name: To edit the Area Name, select Edit next to the Search Areas bar, select the Area you'd like to rename, then select rename, and save your changes.
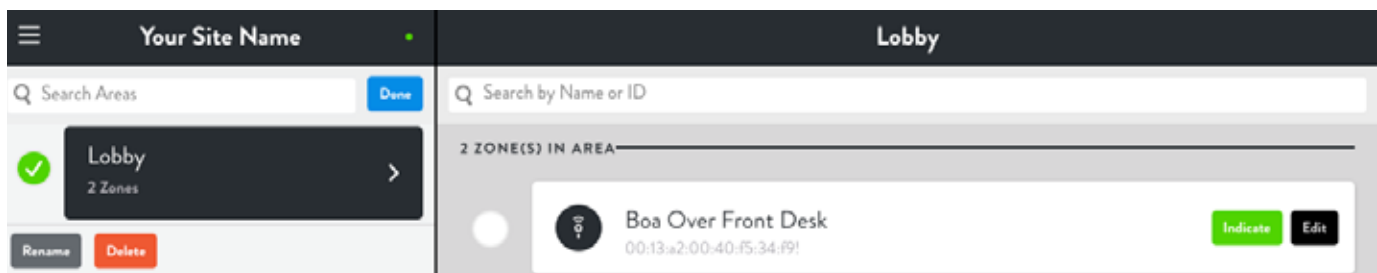
Control

The Control view makes it easy to quickly turn your Zones on and off, dim, and set Scenes. Control is organized by Areas. To control a device, select the device Area.

Zone On/Off: Clicking the circle to the right of the Zone toggles the device on and off. If the circle is outlined in green, the Zone is currently on. If the circle is outlined in white, then the Zone is currently off. To dim a Zone, drag the dimming circle.

Scenes: Area scenes can be controlled from the Control view. Select the Area, select Select Scene, and choose All On or All Off. To control additional Scenes, go to the Scenes view.

Current Demand: Indicates how many watts the current Area is using now. The lightning bolt icon indicates that all Zones in this area are using active power measurement, so you can be sure that the total is accurate. If one or more Zones are not collecting power measurements, a warning icon will appear, indicating that the total may not be accurate.

Energy Usage: Provides a simplified glance at power usage over the past week, compared with usage for the previous week. Click "View All" to see the full Energy view.
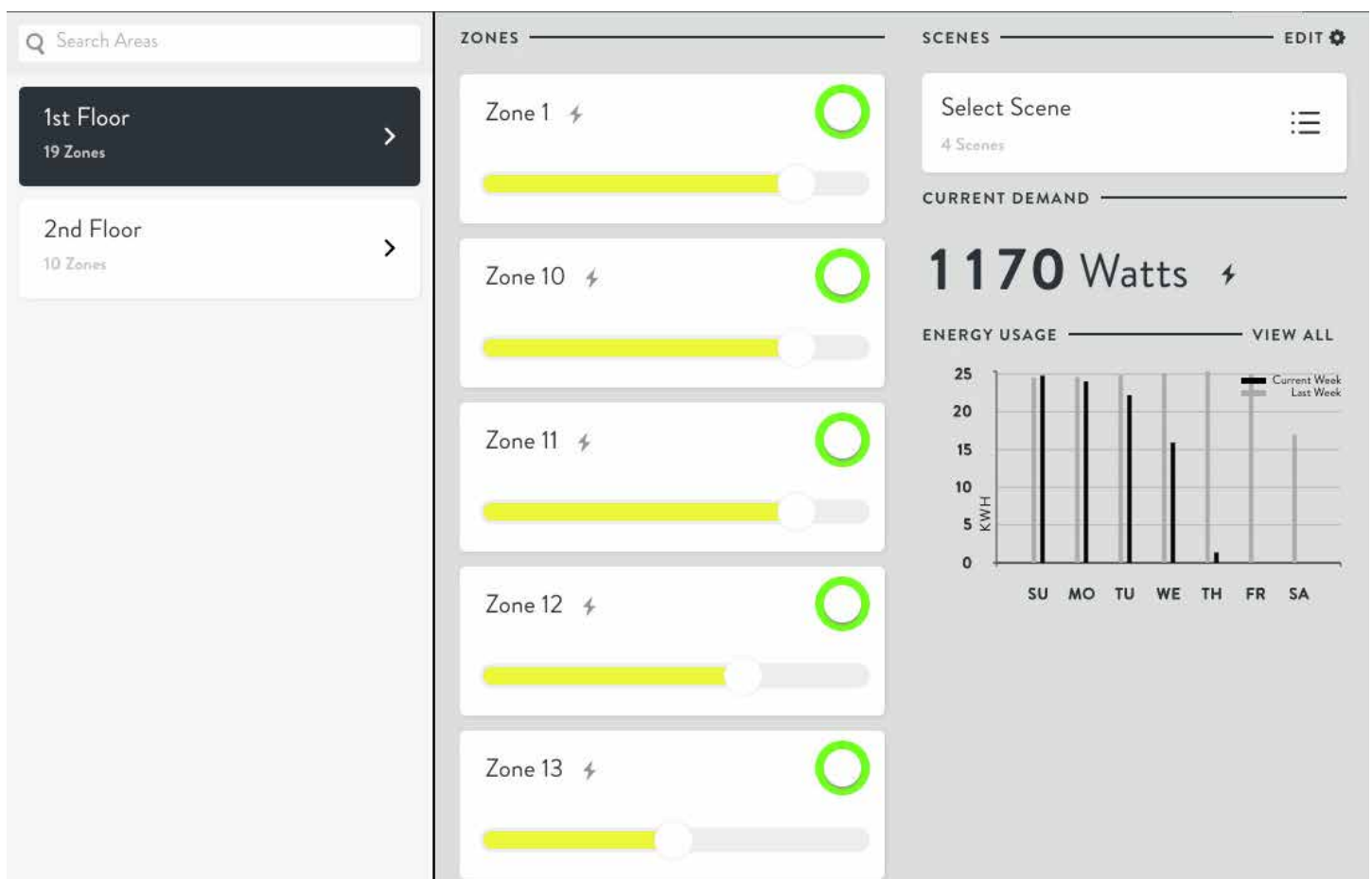
Energy Power Monitoring

The Energy view gives you a complete look at the energy consumption of your Site and its Areas, allowing you to quickly discover patterns of usage and potential for energy savings. Energy is organized by Area.

Zone Details: To view the energy usage for a specific Zone, select the Zone's Area, then Scroll to the Zone under Energy by Zone. Devices that do not have Power Monitoring enabled will show an exclamation-mark icon, as they will not be able to collect usage data. Click the arrow next to any Zone to display its On/Off and Dim Level history for that Zone. The graph on the bottom allows you to zoom in and out, down to the minute.

Energy Reports: downloaded from the bottom of the Zone list.
- **Usage CSV:** Usage data in CSV format.
- **Monthly Energy Report:** Provides a comprehensive overview of energy usage in PDF format.
- **15 Minute Energy Report (must be enabled):** Provides extra-detailed minute-by-minute usage history in CSV format.

Scenes

Scenes are collections of Zone states and dim levels, and can be used to set multiple Zones to specified levels simultaneously. The Scenes view contains all the scenes for a Site and allows the user to create, manage, and activate them. Scenes can also be executed by Schedules and Automations.

**Filter List:** Scenes can be filtered by selecting the blue Filter button.

Activate Scene: Select the circle next to each scene. Unlike Zones, scenes can't be toggled on and off. To turn a scene off, you would need to create another scene with the off state.

Add Scene: Click the plus icon at the bottom right of the scenes list. Select Add Zones, select the Zones that you'd like to control with the scene. Set the Zone state (on or off) and dim level. Select Save, then name the scene.

Edit Scene: Select the edit button in the top left corner of the section.

Demand Response: Indicate that this scene is to used for Demand Response purposes.

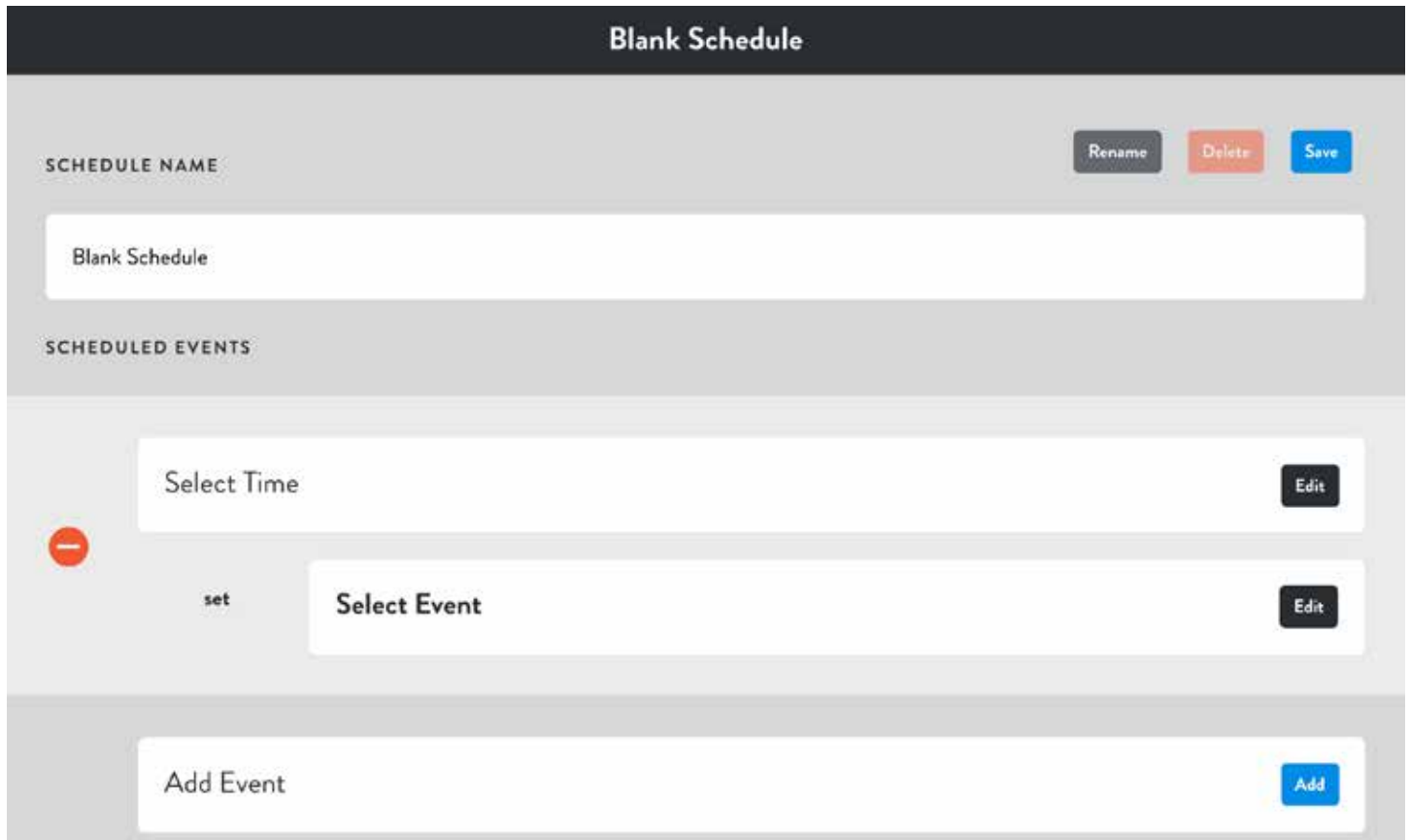**Advanced Settings:** Set a Fade In/Out time for a Zone to use when it changes state.
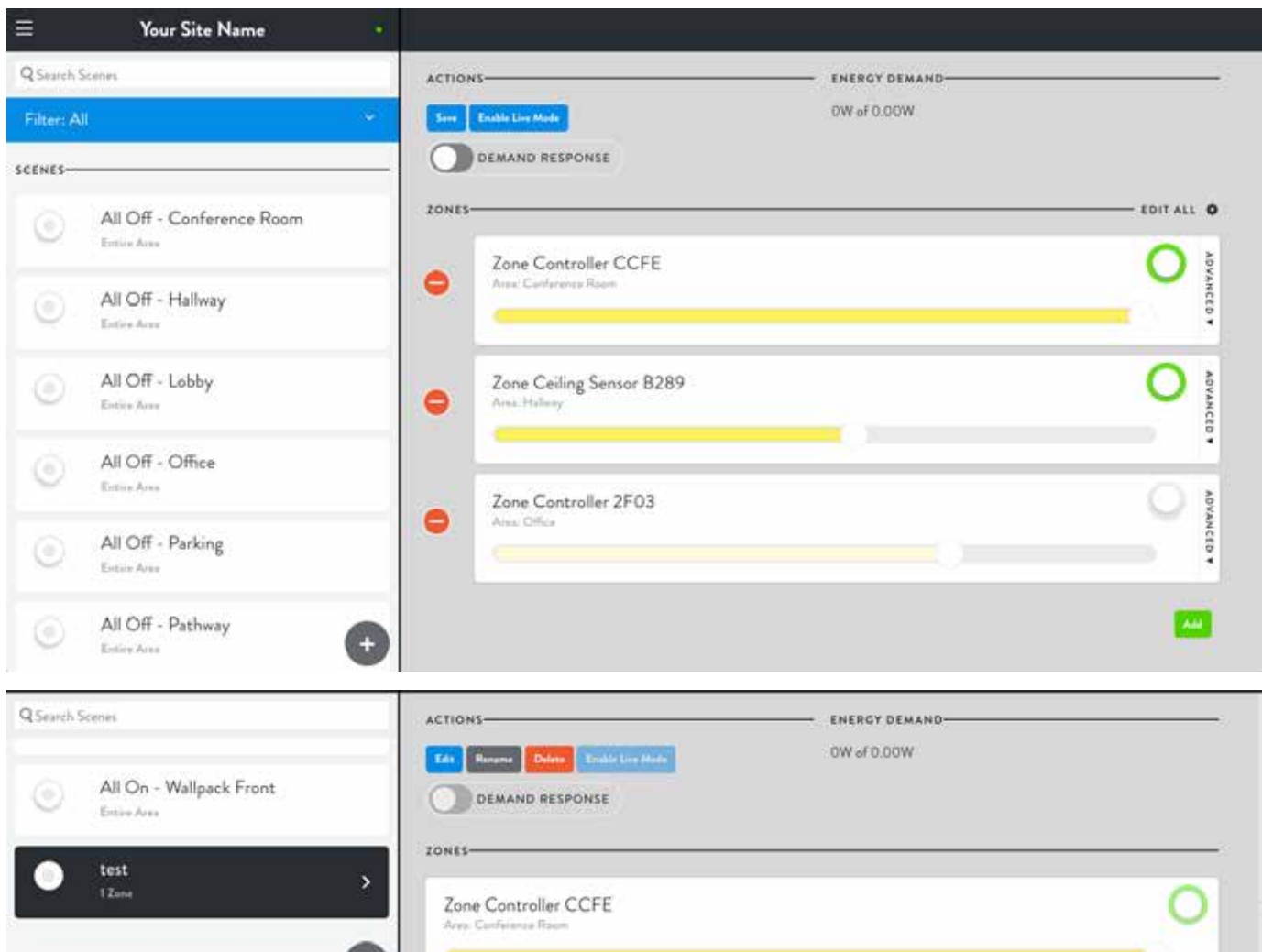
Schedules

Schedules allow users to specify dates, times and recurrence patterns for changing the settings of your lighting zones.
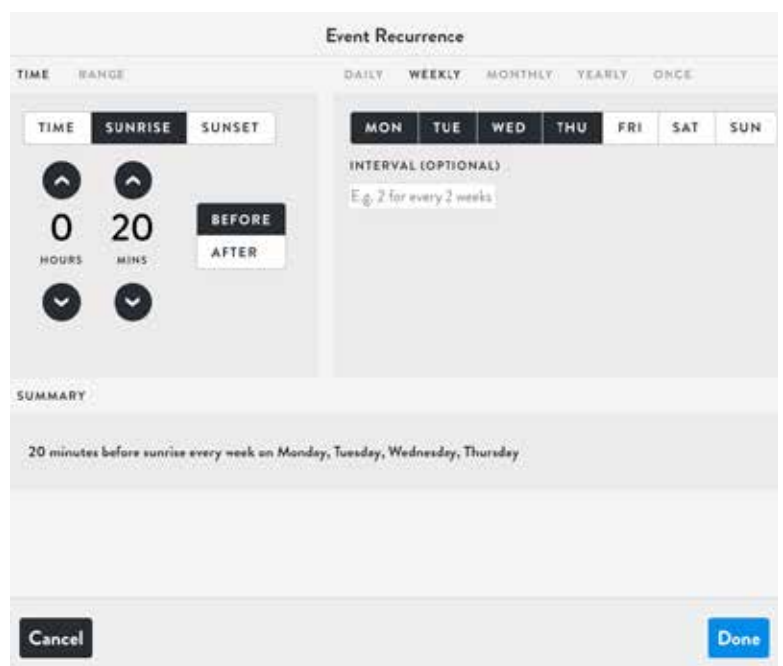
You will start with a blank schedule by default.

Choose a name for your schedule, such as Weekly Schedule.

Next, select the time and recurrence for your schedule. Select Edit next to Select Time.

Schedules can be at a certain time or relative to sunrise and sunset times, calculated automatically according to the location of your Site.

By default, schedules recur daily. The recurrence can be adjusted for days of the week, days of the month, days of the year, or for a single occurrence.

Schedules Continued

Next, specify what action is taken at the set time by selecting Edit to the right of Select Event. A list of Zones by Area and Scenes are provided. Choose the Zones or Scenes you'd like activated by the schedule.
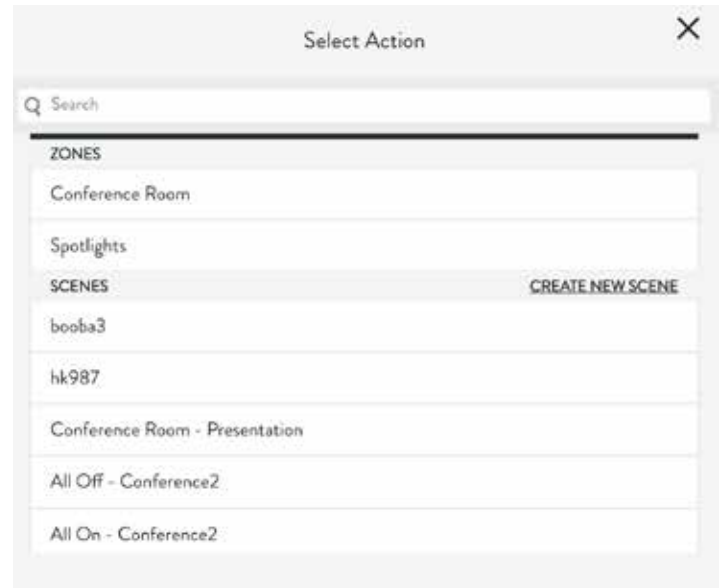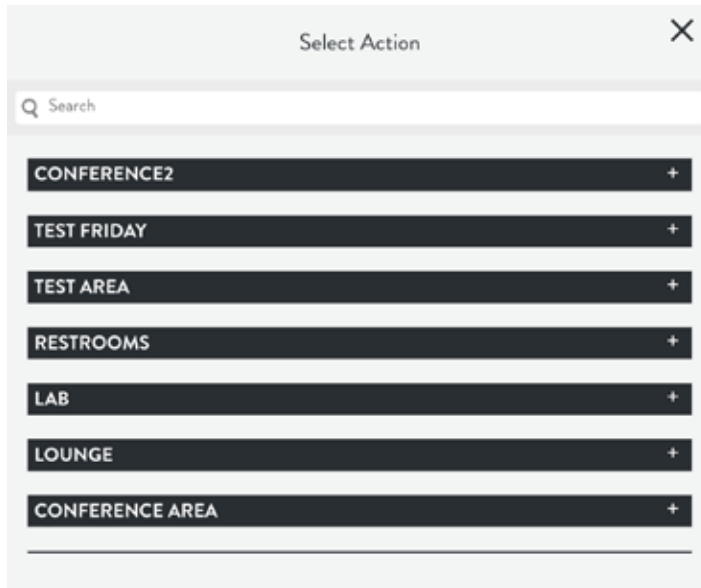
To add additional Events, Select Add to the right of Add Event and follow the same procedures above. When finished, be sure to save your schedule by clicking the blue Save button.
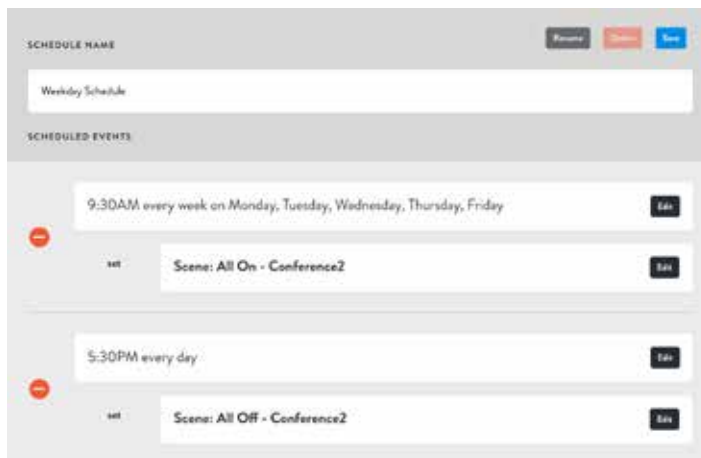
Your schedule will be active by default and appear in the left column of the Schedules view. Clicking the toggle button to the left of the schedule name will deactivate or reactivate it.
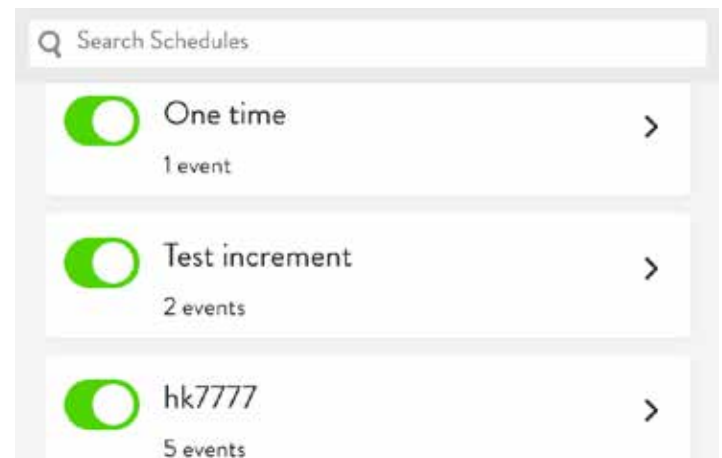
Demand Response

Nowadays, utility companies can contact you during times of peak energy demand and offer you credit if you reduce your consumption. Lightcloud has a Demand Response mode specifically designed to let you respond quickly and save money immediately.

First, set up a scene to tell the system what to do in case of a Demand Response event. Refer to Scenes for more information on scene creation.

Make sure Demand Response is toggled On.

When you receive a Demand Response alert from your utility, turn the Scene On.
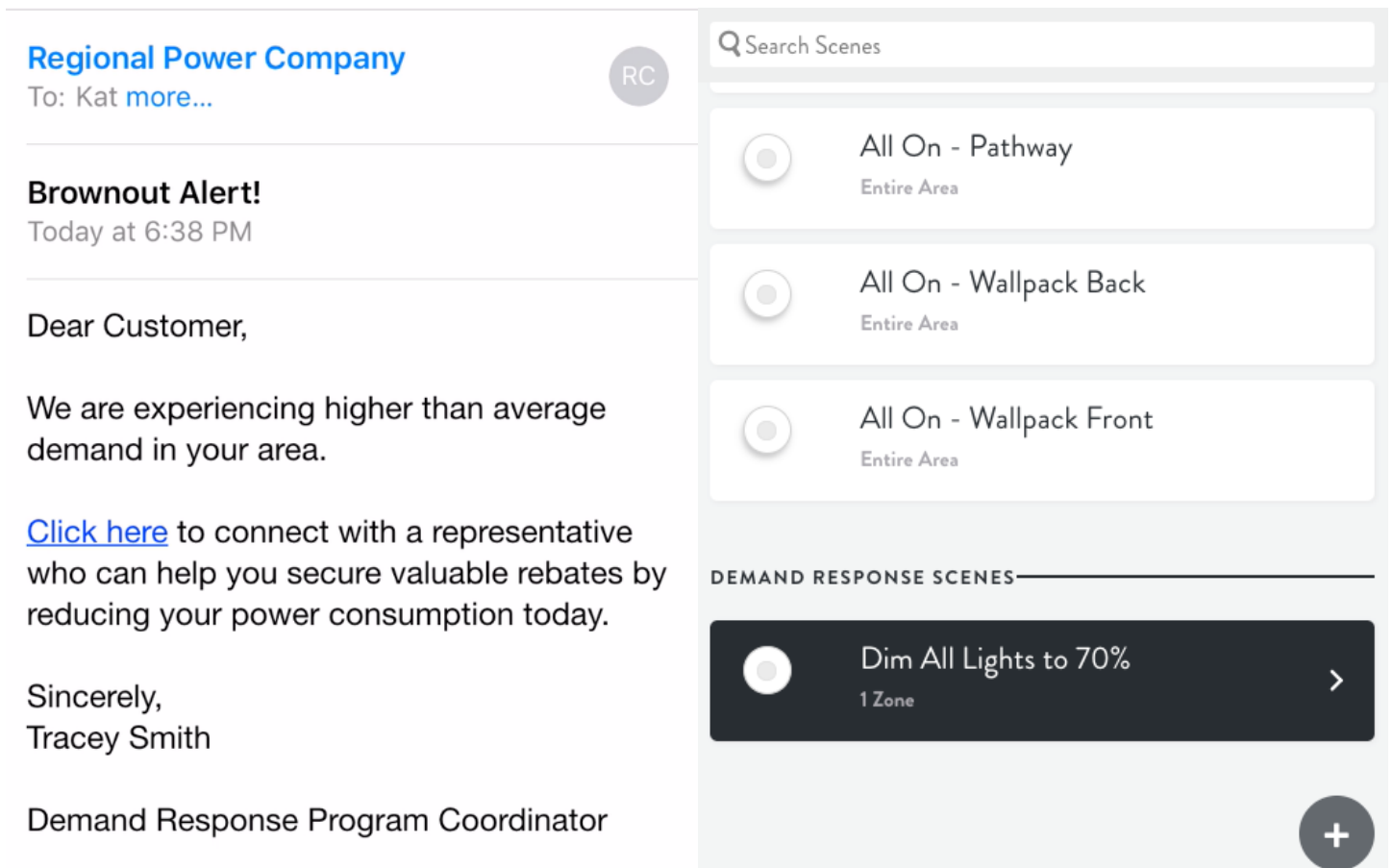
Power Up State

This determines the state devices will return to after a power loss.

Four possible device actions at power up.
Last State: The Zone will enter the last state it was in when it powered down - On or Off only.
Last on Level: Turn the Zone ON at the last level it was at when it powered down.
Custom: Turn the Zone ON at the specified level.
Off: Turn the Zone OFF

Sensor Settings

The Lightcloud Sensor is a wireless PIR motion sensor and closed loop daylight harvester. Being wireless, it can control a load wired to the Sensor or any other Zone in the system.
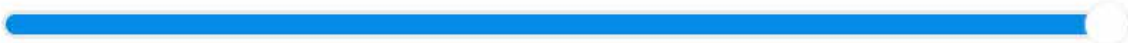
It can function in Occupancy (auto on, auto off) or Vacancy (manual on, auto off) modes, with Occupancy as the default setting.

It's easy to adjust sensitivity and timeout values.

In Vacancy (manual on, auto off) mode, you can also specify a re-entry timeout and blink before timeout. That way, if you're sitting at your desk for a while and the lights go off, they'll go back on when you move a little.
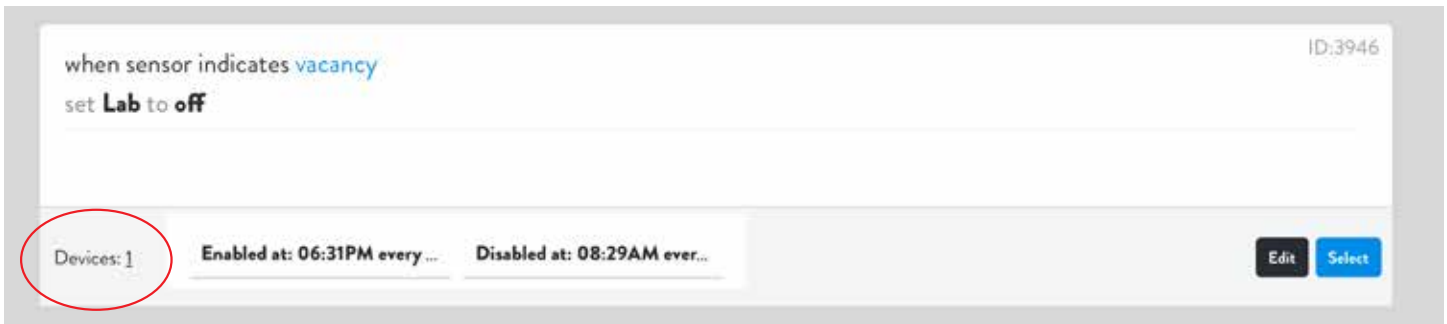
Grouped Sensors Group Vacancy

Sensors can now be grouped together to act like a single Sensor. For example, if a large room has four Sensors, Group Vacancy will keep all of the lights on until all of the Sensors register vacant.
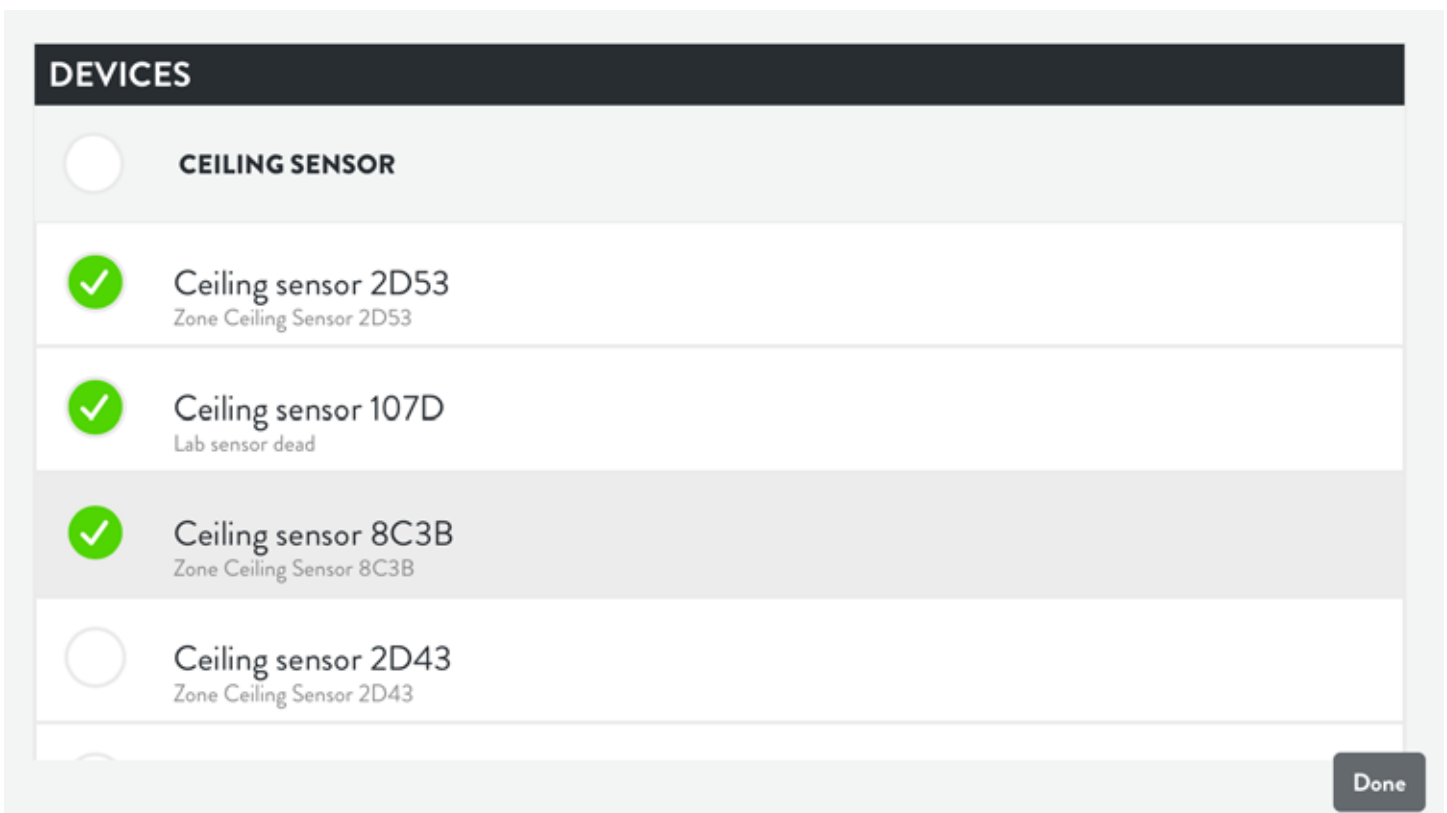
Select a Sensor and select Browse next to Browse All Ceiling Sensor Automations.

Browse All Ceiling Sensor Automations

Browse

Find the vacancy automation that you'd like to group with other Sensors and select Devices.

when sensor indicates vacancy
set **Lab** to **off**

ID:3946

Devices: 1   Enabled at: 06:31PM every ...   Disabled at: 08:29AM ever...   Edit Select

Select the Sensors you'd like to group and Done. Select Save to preserve the new Grouped Vacancy.

DEVICES

CEILING SENSOR

✓ Ceiling sensor 2D53
Zone Ceiling Sensor 2D53

✓ Ceiling sensor 107D
Lab sensor dead

✓ Ceiling sensor 8C3B
Zone Ceiling Sensor 8C3B

Ceiling sensor 2D43
Zone Ceiling Sensor 2D43

Done

Daylighting Daylight Harvesting

The Lightcloud Sensor and Daylight devices are both capable of daylight harvesting. The Sensor is only capable of closed loop daylighting while Daylight can operate in closed or open loop daylighting.

Open loop daylighting: Lights are adjusted based on natural light in the space and doesn't take into account the electric lights.

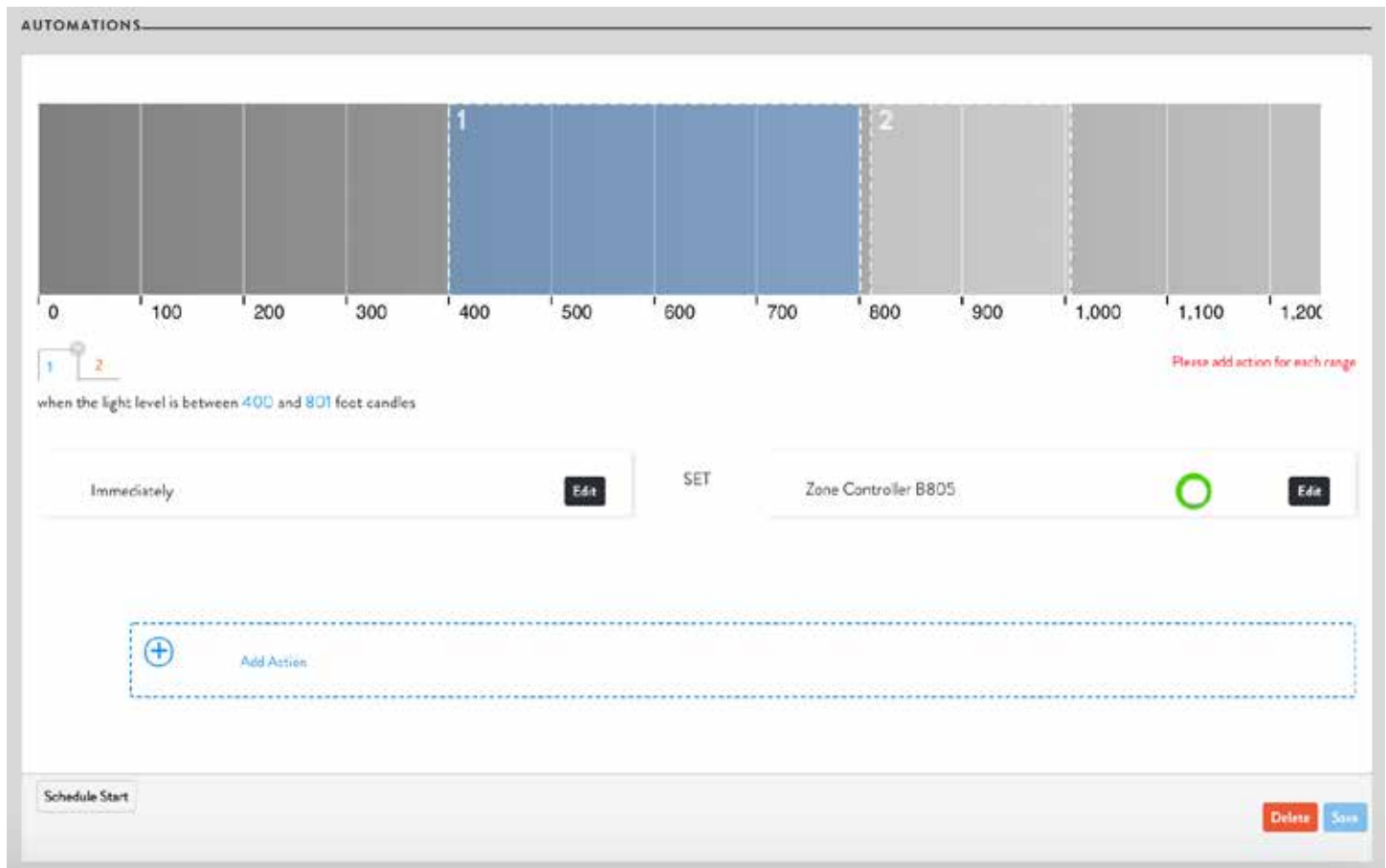**Closed loop daylighting:** Lights are adjusted based on natural and electric lights.

Positioning Daylight
Open loop mode: near a window, facing outwards.
Closed loop mode: in an interior location in a room.

Regardless of whether you're using open loop, closed loop or both, the procedure is easy.

Setup Daylight for Daylighting
Select a range of foot candles. Set when the action takes place. Set the action to take place.

Daylighting Continued

Setup Sensor for Daylighting
1. Set Sensor Mode to Custom: Device Settings » Device Mode » Custom » Save
2. Add Daylight » Add » + Add Zone » Select Zone(s) » Save
3. Configure Foot Candles / Tune Brightness

Set Schedule: Schedule Start » Select Time » Schedule Finish » Select Time » Save

Set Schedule with Occupancy: Add Automation » Select Occupancy/Vacancy » + Add Action » Set Delay » Select Behavior » Daylighting Enable/Disable » Save

High End Trim Max Dim Level

A great way to save energy is to set up a high-end trim for one or more zones.
For example, you can set the max trim to 90% for a zone, so when a user turns the lights all the way up, they can scarcely notice the difference in light levels, but you reap significant energy savings.

Setting this up is easy. Just click on a zone, click Edit, and use the slider to set the max trim. Note that you can pick any value between 1% and 100%. (The default is 100%).

Once you've set the trim for an Area, you can't exceed this level when you set the dim level for this zone.

Fault Notifications Alerts

Lightcloud can send you an email alert whenever a Zone is experiencing irregular energy consumption. Each Zone can be configured for Fault Notification with adjustable thresholds—perfect for a device controlling multiple fixtures.

Set an Alert Threshold in Device Settings. Please note, the alert Threshold is the % change from normal consumption and requires Power Monitoring to be turned on.
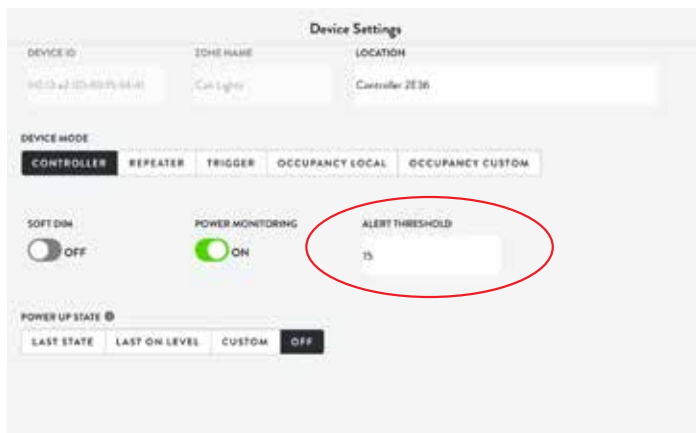
After setting the Alert Threshold, turn on fault detection.
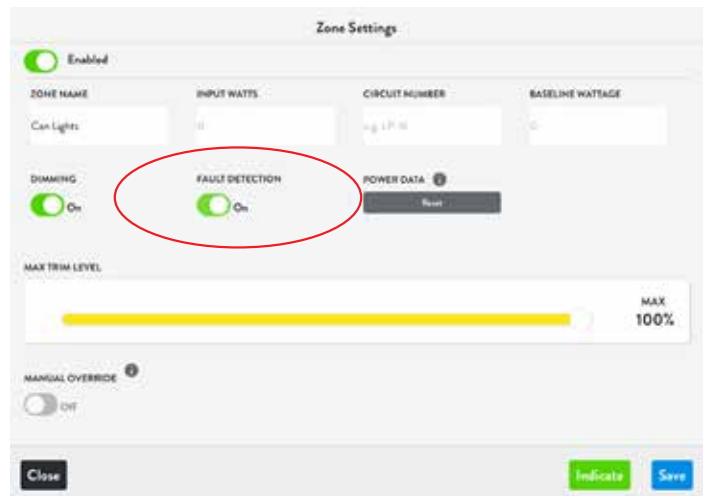
To receive alerts, one or more users or emails needs to be subscribed. To configure alerts, go to Fault Notifications under the settings menu and select users or enter email addresses to receive alerts. Click on Select Sites. Select the Site or Sites the user is subscribing and press Done.
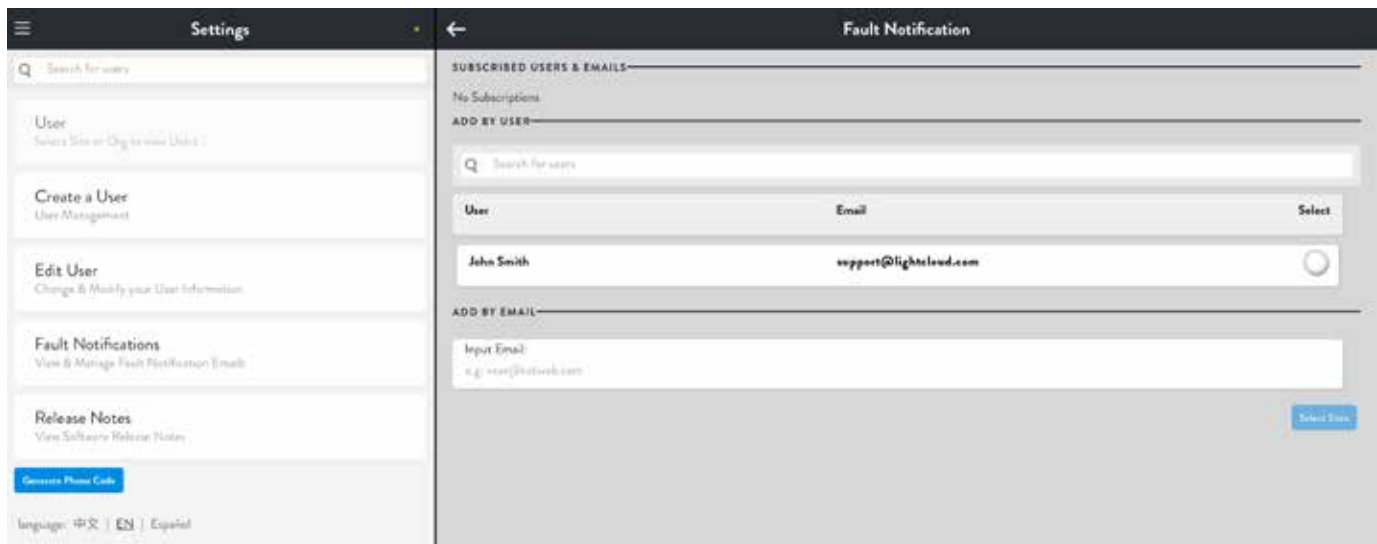
The top of the page will show all subscribed users. To unsubscribe a user, select Delete.

User Management Permissions

Two User Types

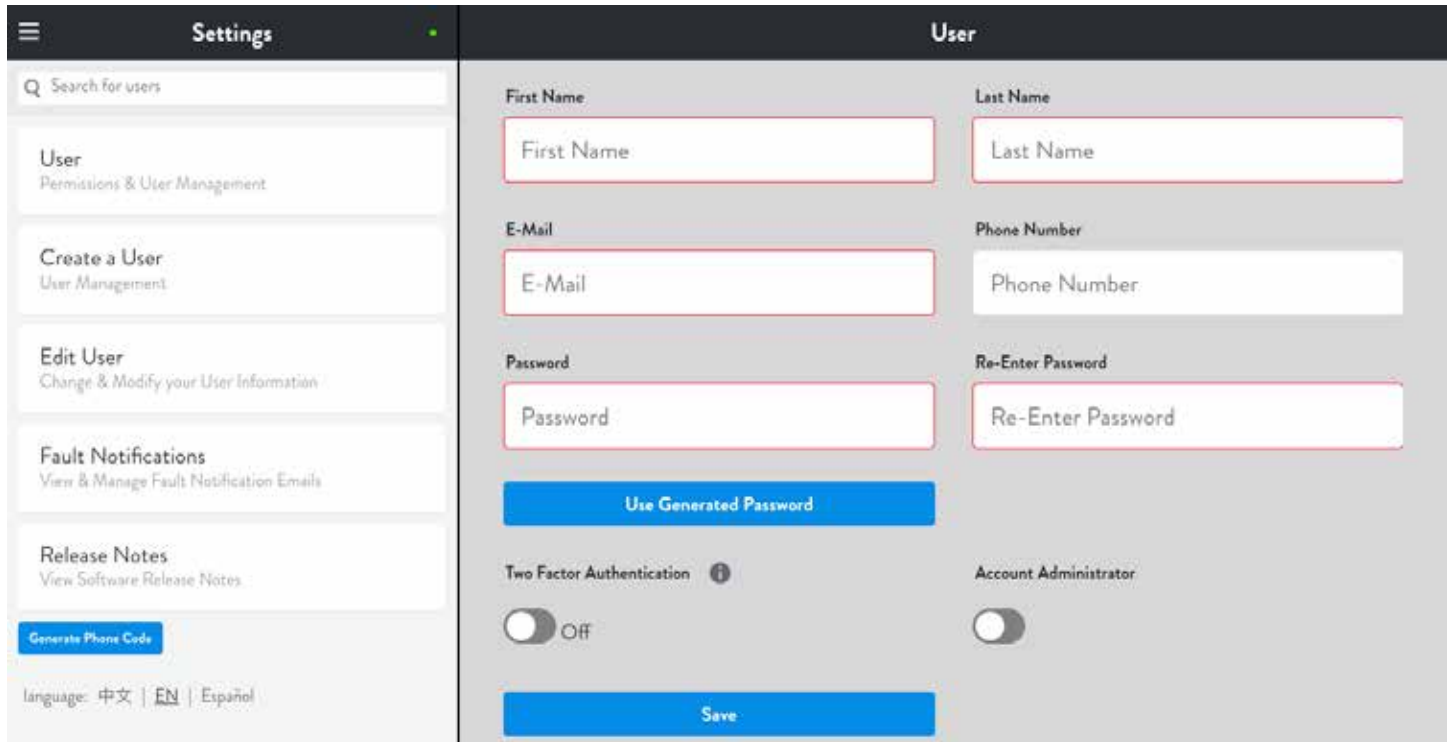**Standard Users:** Have sufficient permissions for personal control of zones and areas, including switching, dimming, scenes and schedules.

Account Administrators: Have complete control over the Lightcloud System.
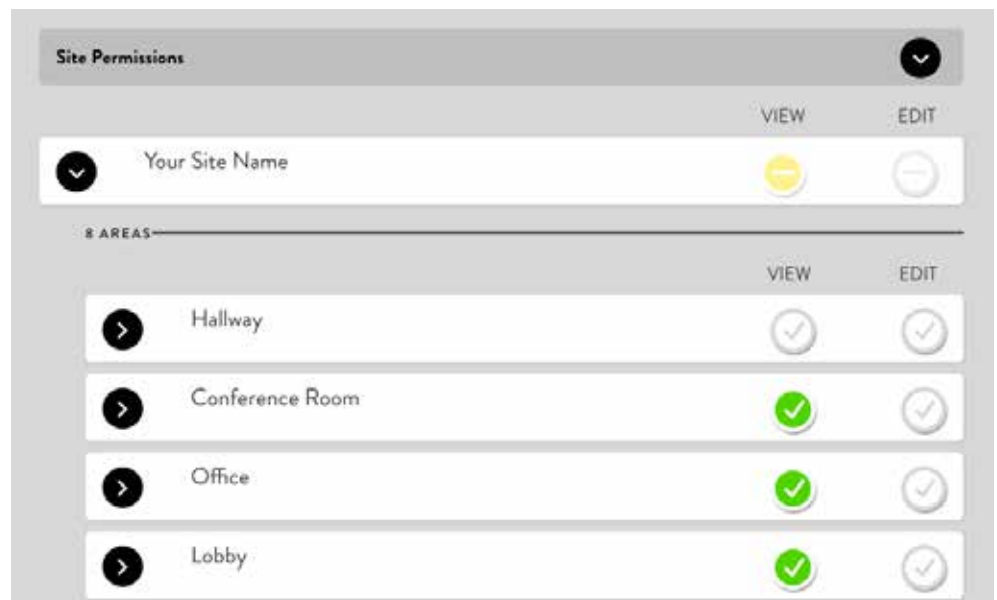
Note: Users can be assigned View or Edit rights.

Settings Menu: Select the gear icon with a circle from the menu.

Create New User: Select Create a User, complete the form, then assign permissions.

Dimmer Settings

Dimmers can be configured to control a collection of up to 15 Zones for local, device to device control. Dimmers can also control Scenes with an unlimated number of Zones.

Dimmer Modes
SWITCH: The Dimmer will turn assign Zones on/off by pressing on the top/bottom of the buttom.
DIMMER: In addition to the switch controls, the Dimmer will dim the assigned Zones by pressing and holding the top/bottom of the button.
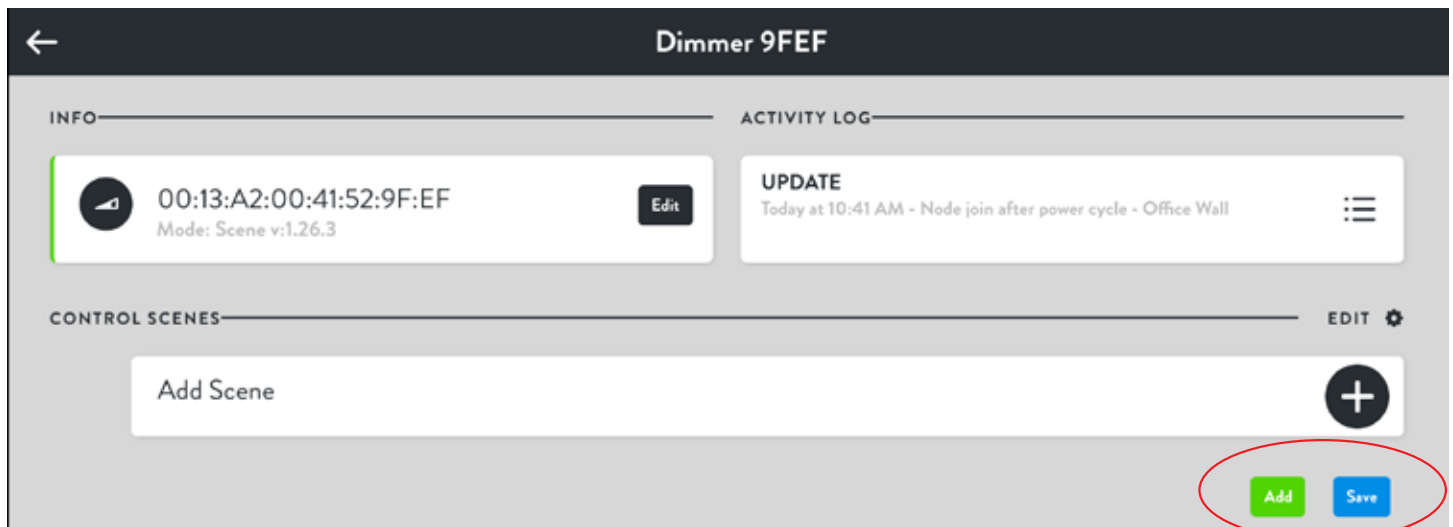**SCENE:** The Dimmer will activate scenes by pressing on the top/bottom of the button.

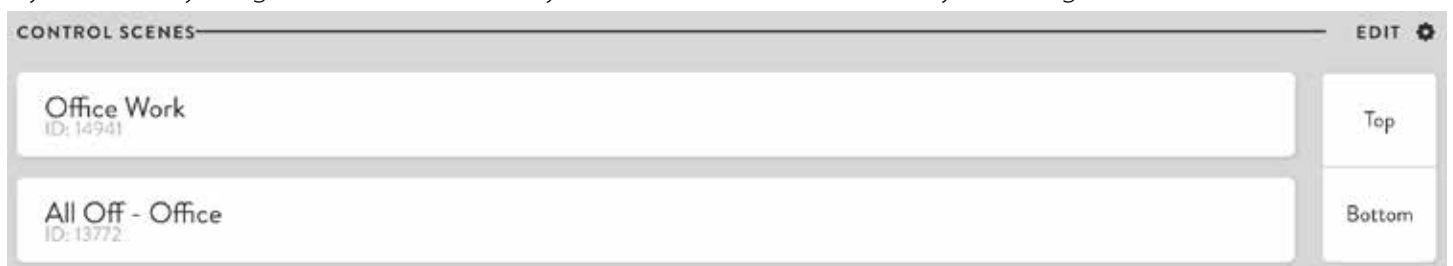To select the mode, got to the Device Settings.

Assign Scenes or Zones
After choosing the appropriate device mode, assign Zones or Scenes by selecting the plus icon.

If you'd already assigned Zones or Scenes, you can add or remove them by selecting Edit.

Glossary

Alert Threshold: Percent the electric draw can drop before we mark the device as faulted. To be alerted if the device faults, set up an alert in Fault Detection.

Area: A collection of Zones usually by location such as room. See Organize on page 4

Automation: An "if-then" statement comprised of one or more Conditions that, when met, cause one or more Actions to take place.

Baseline Wattage: Wattage of old fixture or old usage to monitor energy savings.

Condition: A test as part of an Automation, evaluated upon an event that pertains to it. When the condition is true, the event or action takes place.

Control: See page 4 and 8

Daylighting / Daylight Harvesting: See page 16

Demand Response: Change electric usage in response to a change in the price of electricity. See page 13

Device: An individual Lightcloud hardware product, such as the Controller or Ceiling Sensor.

Device ID: A unique ID that is assigned to Lightcloud Devices. The Device ID cannot be changed.

Event: Any system event, such as a Controller's Zone being switched on, a Ceiling Sensor detecting motion, etc. Events may be used in some cases to trigger Automations.

Input Watts: The amount of energy the device draws. Only needed if power monitoring is disabled.

Fault Detection: Sends an email when the energy draw drops below the threshold.

Max Trim Level: The maximum dimming level assigned to a Zone. See High End Trim on page 18

Notification: The appearance of an Event in the Lightcloud Application.

Power Monitoring: Keep track of the energy consumption of the device. See Energy on page 9

Power Up State: See page 14

Scene: See page 10

Schedule: See page 11

Sensor: A device that gathers data from the environment, such as a Sensor or Daylight.

Glossary Continued

Site: A single Lightcloud installation, such as a parking garage, with one Gateway and one or more Lightcloud Devices.

Two-Factor Authentication (2FA): An extra layer of security for your Lightcloud login that ensures that you're the only person who can access your account, even if someone knows your password. Each time you login on a new device, a unique code will be texted to you. This unique code is required along with your password to login to your user account. 2FA is generally reserved for account administrators or security-sensitive locations.

Zone: A Lightcloud device and the load wired to it. This could be a single fixture or multiple fixtures.

Zone Name: A descriptive name assigned to a Zone. The Zone name can be changed at any time without affecting the system.

WE'RE HERE TO HELP:
1 (844) LIGHTCLOUD
or 1 (844) 544-4825
support@lightcloud.com

Learn More

lightcloud.com

1 (844) LIGHTCLOUD