



SimplySnap and Lutron Athena Integration APP NOTE

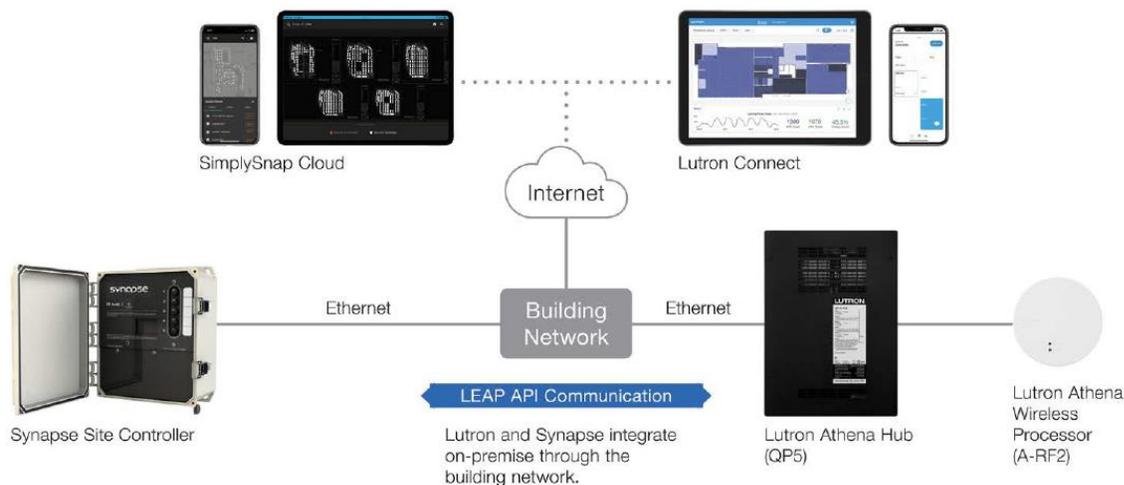
Revision B
February 2026



Integration Overview

The Lutron Athena and SimplySnap integration enables unified control of interior and exterior lighting while allowing each system to operate within its intended domain. Lutron Athena serves as the primary user interface and control platform for interior lighting, while SimplySnap provides long-range, industrial-grade wireless control for exterior site lighting and parking structures. Through this integration, lighting commands initiated in Athena can trigger coordinated exterior lighting behavior in SimplySnap, creating a cohesive, site-wide lighting system without compromising the architecture, scalability, or performance of either platform.

System Information



This integration provides the following control and monitoring functions:

1. Zone-level control of SimplySnap loads from the Lutron Athena App.
2. Monitoring of current commanded light levels of SimplySnap zones within the Athena interface.
3. Control of SimplySnap loads from physical Lutron devices (e.g., Palladiom keypads, Pico remotes).
4. Control of SimplySnap zones via Athena timeclock events and scheduled scenes.



Intended Applications

This integration is intended for projects where:

- Lutron Athena controls interior lighting systems, and
- Synapse SimplySnap controls exterior site lighting, parking structures, or other outdoor luminaires.

For applications outside this scope, consult your Lutron and Synapse representatives to review project requirements and confirm system compatibility.

Integration Requirements

Lutron Equipment

This integration requires a fully functioning Athena system and is compatible with both Athena Edge processors (QP-1L, QP-2L) and Athena wireless processors (A-RF2).

Synapse Equipment

This integration requires a fully commissioned SimplySnap system utilizing an SS450 or CBSSW-450-002 Gateway. The SS-LTRN-001 Lutron Integration License shall be provided and activated as part of the system configuration.

Networking Requirements

Both the Lutron Athena system and the Synapse SimplySnap system must be on the same local network. Communication between the systems occurs locally. While Lutron recommends using DHCP addressing for typical Athena systems, static IP addresses are recommended for the Athena processors being deployed for this integration.

Refer to the Lutron Commercial Lighting Control System IT Implementation Guide (p/n 040453) at lutron.com for more information about networking requirements for the Athena system.

Refer to the Synapse Wireless IT and Networking Security White Paper for detailed information on how the SimplySnap Gateway interfaces with the customer's network: [IT-and-Networking-Security-White-Paper.pdf](#)

Where SimplySnap Cloud is deployed, refer to the Synapse Wireless IT and Networking Security Questions White Paper for cloud-specific networking and security considerations: [IT-and-Networking-Security-White-Paper.pdf](#)



Scope of Work

Recommendations

With respect to the integration, it is the responsibility of all parties to ensure that a customer-approved Sequence of Operation (SoO) is defined and provided prior to integration activities. The Lutron–SimplySnap integration must be implemented in accordance with the approved SoO. Projects without a clearly defined SoO may experience delays in commissioning and integration validation.

For commissioning responsibilities, the local Lutron representative or Lutron field engineer is responsible for startup of the Lutron system and for configuring the Lutron database as required to support the integration and defined SoO. Similarly, the Synapse commissioning agent is responsible solely for commissioning the Synapse SimplySnap system in accordance with the same SoO.

The integration pairing process requires a physical button press at the device level. Coordination between Lutron, Synapse, and the customer is required to facilitate this step during commissioning.

Sample Sequence of Operation – Parking Lot Lighting

The following sequence of operations is provided as a representative example only. It illustrates a typical site configuration using photocell control, timeclock scheduling, and occupancy sensing; however, actual project configurations may vary. For project-specific questions, contact Synapse or Lutron.

- Parking lot luminaires shall be controlled by the SimplySnap system using local timeclock scheduling and photocell-based dusk/dawn operation.
- Lighting control shall be organized into zones that are shared between SimplySnap and Lutron Athena, enabling coordinated control across both systems.
- Control scenes associated with these zones shall be defined consistently and made available in both systems.
- At dusk, luminaires shall turn ON to a configured light level; at dawn, luminaires shall turn OFF automatically.
- After normal business hours, luminaires shall dim to 30% based on the local SimplySnap schedule.
- Occupancy detection shall raise affected luminaires to 80% after-hours periods and return them to the 30% dim level after a configurable timeout.



- Any light level changes made to a Synapse zone by the Synapse system will be reflected in the Lutron App. Any changes made to a Synapse SimplySnap zone by the Lutron Athena system will be reflected in the Synapse SimplySnap interface.
- Athena users may manually override lighting levels using shared scenes through the Lutron Athena interface. Upon completion of the override, control shall return to normal automated operation.
- In the event of a loss of supervisory or integration-level control, the SimplySnap system shall continue to operate using its local timeclock and photocell logic, ensuring uninterrupted dusk/dawn and scheduled lighting behavior.

Integration Configuration

Recommendation

To ensure successful deployment of the Lutron Athena and SimplySnap integration, the following steps shall be completed:

- A coordination meeting shall take place between the customer, Synapse, and Lutron to confirm the project scope and review the approved Sequence of Operations (SoO).
- The customer, working with Synapse, shall define the SimplySnap lighting zones within the SimplySnap system.
- The customer shall identify which SimplySnap zones will be integrated with the Lutron Athena system.
- Synapse or the customer shall provide Lutron local commissioning agent with a list of the SimplySnap zones to be integrated.
- Lutron shall create corresponding zones within a single area of the Lutron Athena database. This area shall be named **“Synapse Exterior Lighting.”**
- Once the area, zones, and scenes have been fully configured in Lutron Designer, Lutron shall generate an Integration Report from the Athena system and provide this report to Synapse. The Integration Report serves as the authoritative source for all required identifiers used in the integration, including:
 - Static IP address of the Lutron Athena processor
 - MAC address of the Lutron Athena processor
 - Area HREF
 - Zone HREF(s)
 - Scene HREF(s) associated with the integrated zones
 - *Note: Only one Lutron Athena processor is required per integrated system.*

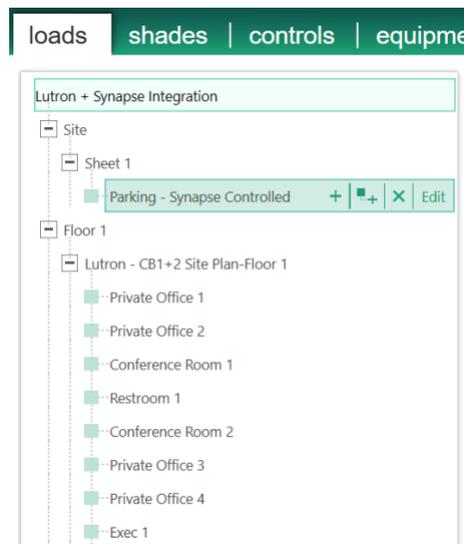


- Using the information provided by Lutron, Synapse shall map SimplySnap zones and scenes to the corresponding Athena zones and scenes and complete the system pairing process.
- After integration parameters have been fully configured in SimplySnap, the Athena commissioning agent shall initiate the integration from the Athena processor by pressing the physical button on the processor.
- Integration functionality may be validated by a Lutron Field Service Engineer, local commissioning agent, or project stakeholders, as required.

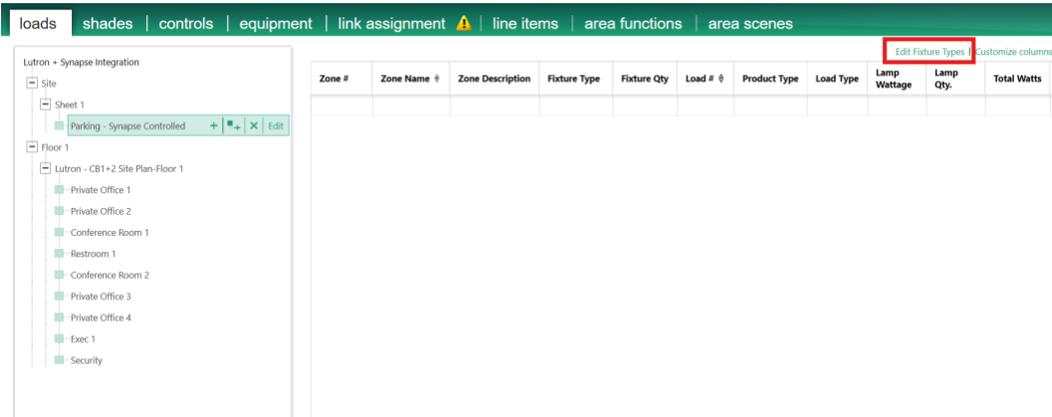
How to Set Up the Lutron Designer + File

Add a Dedicated Area for Synapse Loads

1. Create an area dedicated to Synapse equipment in the Lutron Place. The equipment added will be necessary for functional integration but will not be actual product that needs to be purchased/installed. These devices are called “dummy” devices.

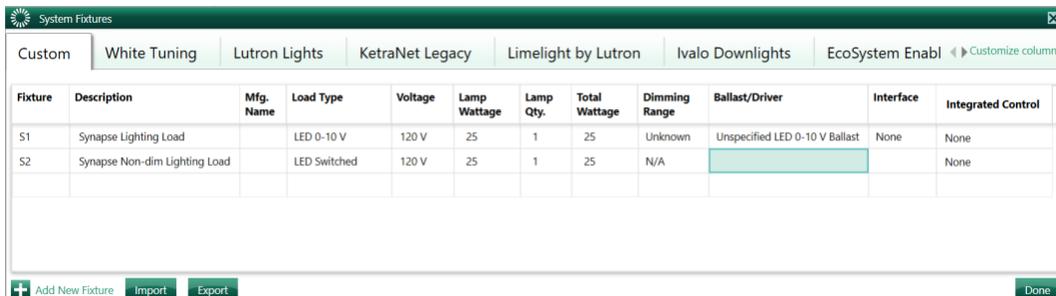


2. In the “loads” tab, select “Edit Fixture Types” in the top right.



3. In the “System Fixtures” window, while in the “Custom” tab, add the Synapse-controlled light fixtures based on the project fixture schedule.

- Use the fixture tag designated in the contract documents for the “Fixture” column.
- Under the “Description” column, it is helpful to include information that shows these are Synapse-controlled lights. “Synapse Lighting Load” is a good description.
- Under the “Load Type” column
- Select “LED 0-10 V” for dimmable Synapse lights.
- Select “LED Switched” for non-dim Synapse lights.
- Be sure to include “Lamp Wattage” or “Total Wattage” information. While the Lutron Dashboard will NOT calculate energy information for Synapse loads, it is best practice to ensure this information is as accurate as possible.
- Do NOT select an “Interface”.
- Do NOT select an “Integrated Control”.



4. Close out of the “System Fixtures” window, returning to the “loads” tab. Ensure the Synapse area is selected in the area tree on the left side of the screen.
5. Add zones for each corresponding Synapse SimplySnap Zone that needs to be controlled by the Athena system.
 - Use consistent Zone Names in both the Lutron Designer software and the Synapse SimplySnap software.
 - In the Zone Description column, provide a label that clearly identifies these zones as being controlled by Synapse SimplySnap.
 - Select the correct Fixture Type from the dropdown menu.
 - Update the Fixture Qty column for each zone based on the contract documents/site information.
 - Leave the Emergency column set to “No” for these zones. If any Synapse SimplySnap zones serve as emergency lighting, emergency lighting requirements must be met solely from the SimplySnap system.

Assign Synapse SimplySnap Zones to “Dummy” ESNs

Now that Synapse SimplySnap Zones have been added to the Lutron Designer file, they need to be assigned to ESNs. These ESNs are devices added specifically for the purpose of implementing this integration and are not real, physical devices that need to be shipped to site.

1. Navigate to the “equipment” tab.
2. With the Synapse area selected in the area tree, add (1) QSN2-4T20-S ESN for every (4) zones of Synapse SimplySnap lighting selected.
3. Assign each of the Synapse zones to the ESN(s). The zones MUST be assigned, otherwise they will not be available to the integration.

Assign “Dummy” ESNs to a QS Link

Finally, the ESNs being used in Lutron Designer for the Synapse zones MUST be link assigned to a processor in the project file. If the ESNs are not assigned to a QS link, the zones will not be available for the integration.

1. Navigate to the “link assignment” tab.
2. Select the QS link that will be used for these devices, and then assign the ESNs to this link.
 - a. Be advised that while these ESNs will not physically exist on site, the Lutron system believes they do and therefore they will count against system device limits.



Programming Synapse Scenes Within Designer

1. To allow occupancy or daylighting behavior to be managed on the Synapse side, Lutron Designer must include one or more empty Area Scenes (i.e., scenes with no programmed light levels). These scenes act solely as triggers and do not overwrite light levels, allowing Synapse Wireless to maintain control of occupancy- and daylight-driven dimming behavior.
2. Area Scenes may be created in Lutron Designer as needed to trigger predefined Synapse SimplySnap scenes or zone-level light states. Scene logic (light levels, fades, behaviors) is defined and maintained within the Synapse SimplySnap system.
3. Scene and zone configuration is owned and managed by Synapse SimplySnap. Lutron Athena issues control triggers via programmed Area Scenes, which Synapse interprets and applies to the corresponding SimplySnap scenes or zones. This same model applies whether control is scene-based or zone-based.
4. Timeclock schedules are executed within the Synapse SimplySnap system. Synapse does not listen directly to Lutron timeclocks; instead, time-based changes to scenes or zones are handled natively by SimplySnap and synchronized to the Lutron Athena interface as state updates.

