

Advanced Integration Guide

A guide for LGL customers, technical consultants,
and software service creators



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Introduction

Little Green Light (LGL) has over a dozen built-in integrations. But what if you're interested in connecting LGL with a software service for which there isn't already an integration? This is where advanced integrations come in.

There are four advanced methods for integrating third-party software services with Little Green Light:

1. Custom Integrations (webhooks endpoint)
2. LGL API
3. Zapier
4. Permanent Links (based on LGL scheduled reports)

Note: These integrations are all for the Little Green Light database, not for the LGL Forms service.

The four approaches vary in terms of the technical knowledge required to implement each one and how much data you can read from and write to a Little Green Light account.

Advanced integrations at a glance

	Software skill required	Read from LGL?	Write to LGL?	# of fields that can be synced
Custom Integrations	Medium-high		✓	Virtually all fields
LGL API	High	✓	✓	Most fields
Zapier	Medium-low		✓	Most fields
Permanent Links	Medium	✓		Virtually all fields

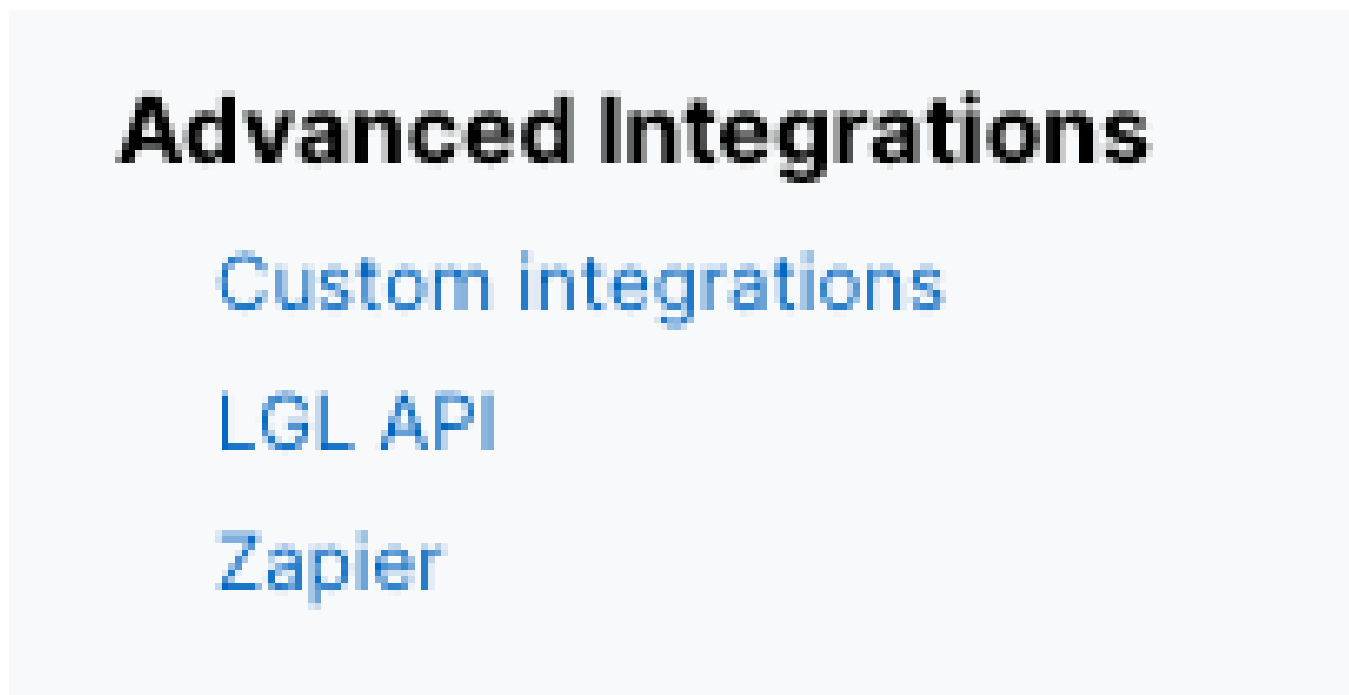
Tips

If you're considering creating an advanced integration with LGL, here are some helpful tips:

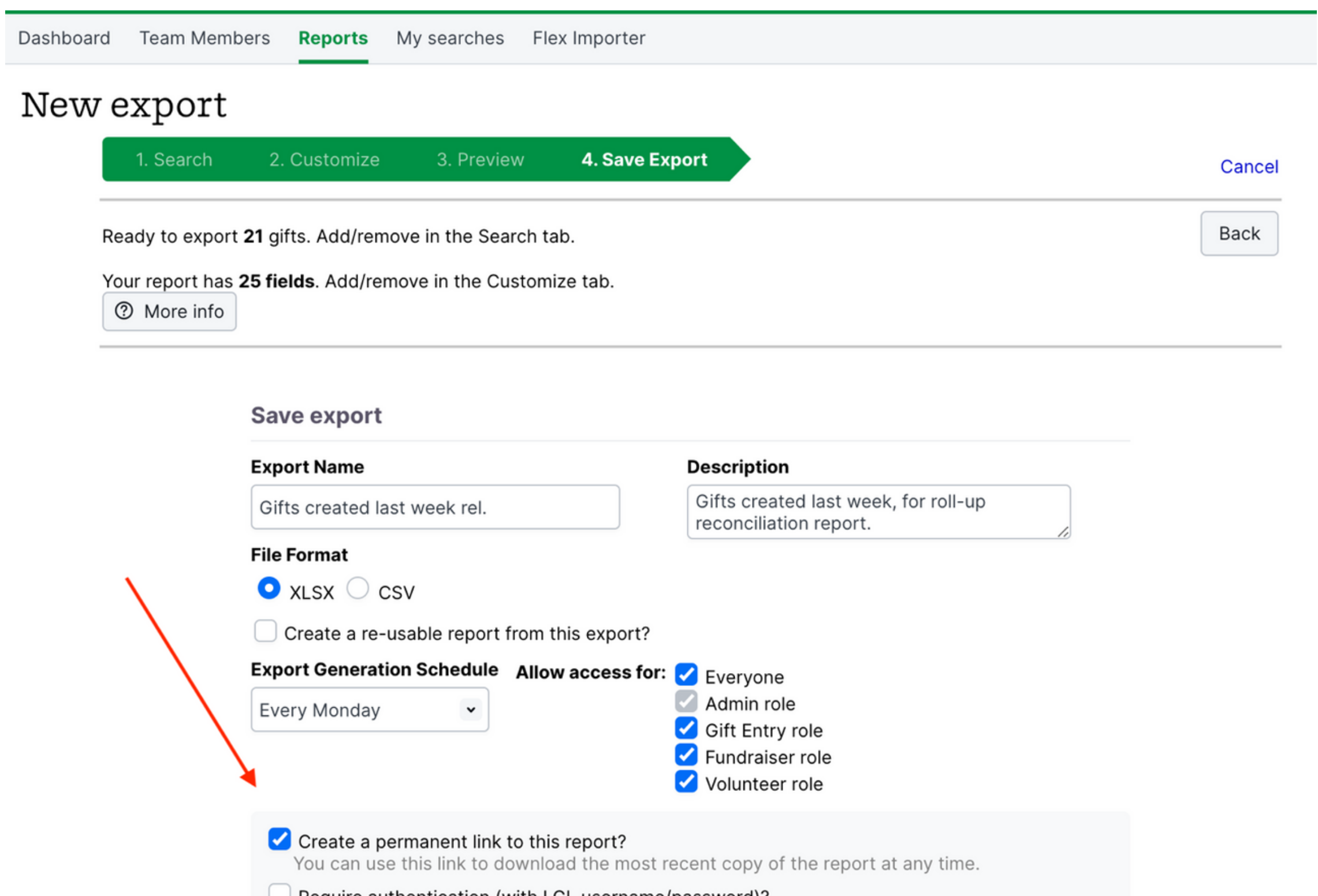
- **Technical questions - The first stop is our documentation:**
 - Custom Integrations
 - LGL API
 - Zapier
 - Permanent Links
- **Contacting technical support:** Write to support@littlegreenlight.com or use the help request form in your or your client's LGL account. If there are questions requiring software development expertise, we'll loop in an LGL software developer.
- **LGL Affiliate Program:** This program is open to consultants and software creators who serve nonprofits. It's a free program that lets you pass along a \$200 referral credit to new customers you bring to LGL, and you can get a free LGL account for testing and demo purposes.
- **Marketing partnerships:** LGL takes a variety of approaches when it comes to marketing integrated services. Key considerations that LGL takes into account are:
 - Breadth of appeal: How many LGL customers or prospective customers will be interested in the integration?
 - Customer experience: How smooth is the customer experience in terms of setting up the integration and running it day to day?
 - Price: Little Green Light is committed to keeping the total cost for our customers low. We are therefore more inclined to promote organizations that offer services at a low cost and/or provide LGL customers with a meaningful discount
 - To engage with LGL about a possible marketing partnership, email info@littlegreenlight.com

Where to find these integration options in your LGL account:

Three of these integrations can be found in your LGL account in Settings > Integration Settings:



You can access the fourth advanced integration in the Reports area in your LGL account. When you set a “generation schedule” on a report, you’ll find the option to save that scheduled report to a Permanent Link:



The screenshot shows the "New export" interface in the LGL account. The top navigation bar includes "Dashboard", "Team Members", "Reports" (highlighted), "My searches", and "Flex Importer". Below the navigation bar is the "New export" section, which includes a progress bar with four steps: "1. Search", "2. Customize", "3. Preview", and "4. Save Export" (highlighted). A "Cancel" button is located to the right of the progress bar. Below the progress bar, there are two status messages: "Ready to export 21 gifts. Add/remove in the Search tab." and "Your report has 25 fields. Add/remove in the Customize tab." A "Back" button is located to the right of the second message. Below the status messages is the "Save export" section, which includes the following fields and options:

- Export Name:** Gifts created last week rel.
- Description:** Gifts created last week, for roll-up reconciliation report.
- File Format:** XLSX CSV
- Create a re-usable report from this export?
- Export Generation Schedule:** Every Monday
- Allow access for:** Everyone, Admin role, Gift Entry role, Fundraiser role, Volunteer role
- Create a permanent link to this report? You can use this link to download the most recent copy of the report at any time.
- Require authentication (with LGL username/password)?

A red arrow points to the "Create a permanent link to this report?" checkbox.

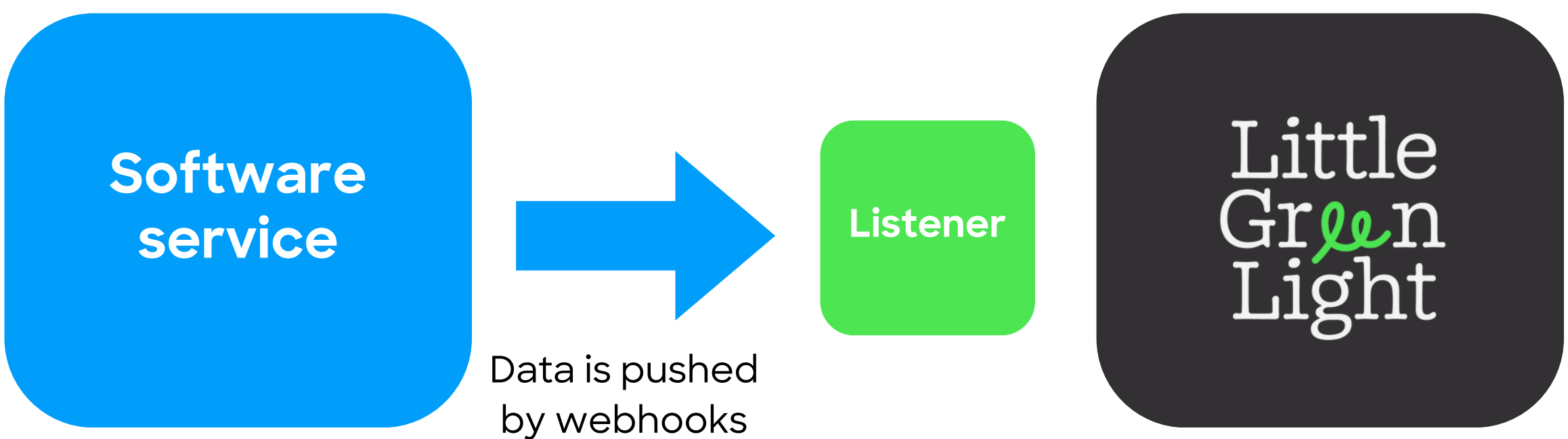
**DETAILED
DESCRIPTIONS
OF EACH
INTEGRATION**

1. Custom Integrations (webhook endpoint)

Overview

Webhooks are a method by which one software application sends information to another software application. In your LGL account, you can create an “endpoint” to receive the data being sent over via webhooks, which needs to be in a key-value pair form, not standard JSON.

Input via webhooks



FAQ - Custom Integrations (webhooks endpoint)

Software skill required to implement?	Medium-high
Can you write to LGL database?	Yes
Can you read from LGL database?	No
Software services that can use this?	Software services that send webhooks in key-value pair format
Is data logged so user can see the history?	Yes
How many fields can be sync'd?	Virtually all fields
Cost?	No extra cost
Volume limits?	None

Matching

When you set up the webhooks endpoint in your LGL account, you can choose the methods you will allow for matching. LGL will always match directly based on IDs (if either the LGL Constituent ID or External Constituent ID is provided) and by default will match on name + email address. You have the option to allow matching on just name or just email as well.

Key-value pair format only

The LGL webhooks endpoint requires data to be sent in a key-value pair format, not as JSON.

Example

- [Gravity Forms](#)

You can configure your Gravity Forms webhook to send data using the Form format (versus JSON), which is the format required on the LGL end.

The following services have webhooks, but they post data in JSON format and LGL requires that the webhook data be in key-value pair format. A software developer could probably convert the format to the necessary key-value pair format that LGL requires.

- [Stripe](#)
- [Square](#)
- [Facebook](#)
- [MyEmma](#)
- [Eventbrite](#)

Screenshot

Step 1. List the fields that will be coming in as part of the webhooks payload.

Edit custom integration

Custom integration name

GravityForms example

Custom integration fields

```
first_name
last_name
email
phone
company
donation_amount
donation_frequency
date
record_id
```

Step 2. Map that same set of fields to your LGL account fields, including your matching options.

Map Fields

[Integrations](#) > [Org websites with notes](#) > [Map fields](#)

Edit connection for Custom Input

> 1. Import Settings

Record updating preferences

Do not update constituent name information

Record matching preferences

- Match on email address and name
 Match on email address (no name match required)
 Match on name information

Restrict matches by constituent type [?](#)

Gift creation preferences

- Ignore \$0/blank gift records
 Create gift batch? Not recommended if you are importing historical gift data.
 Add gifts to QuickBooks Online sync list?

> 2. Map fields from source

[Appeal and event help](#) [Show](#)

Reset from template

-- select a template --

- Show custom fields for a specific event
- Show custom fields for a specific appeal

Custom Field Name	LGL Field		
first_name	Constituent #1	Field First name	-- add rule --
last_name	Constituent #1	Field Last name	-- add rule --
email	Constituent #1	Field Email address	Record Type / # Email #1 -- add rule --
phone	Constituent #1	Field Phone number	Record Type / # Phone #1 -- add rule --
company	Constituent #1	Field Employer/Organization	-- add rule --
donation_amount	Constituent #1	Field Gift amount	Record Type / # Gift/Goal/Pledge #1
donation_frequency	Constituent #1	Field Gift category	Record Type / # Gift/Goal/Pledge #1
date	Constituent #1	Field Gift date	Record Type / # Gift/Goal/Pledge #1
record_id	Constituent #1	Field -- Do not import --	Copy from prev.

Documentation

[Use custom integrations to send data via webhooks to LGL](#)

2. LGL API

Overview

The Little Green Light API allows third-party software to query, read, and write data to an LGL account. The API is in the early stages of release. At this point, it's still a by-invitation option, but if you are interested in pursuing a possible API integration with LGL we'd love to hear from you.

FAQ - LGL API

Software skill required to implement?	High
Can you write to LGL database?	Yes
Can you read from LGL database?	Yes
Software services that can use this?	Any that have an open API
Is data logged so user can see the history?	No
How many fields can be sync'd?	Most fields
Cost?	No extra cost
Volume limits?	300 requests in any 5-minute period

Matching

There is no fuzzy matching on the LGL side when you use the API to send data into LGL. In order to write data to a particular constituent record, you need to provide the exact constituent ID. You can run searches using the API and bring back responses, and you could have the user select the correct match from that result list.

Available sets of fields

- Constituent name fields
- Contact info (address, phone, email)
- Constituent categories
- Appeals and Events
- Gifts
- Contact reports
- Memberships
- Volunteering

Examples

The following software services have used the LGL API to create integrations:

- [Landscape](#), software for land trusts and other conservation organizations
- [TrueGivers](#), a data append service with NCOA and deceased data
- [Donorbox](#), a fundraising platform
- [Arcada Labs](#), a software firm that built integrations for WordPress, WooCommerce, and Gravity Forms

Screenshot

Snippet from API documentation: Provide an ID for a constituent and get back all their details

GET /v1/constituents/{id}.json Show Constituent details

Implementation Notes
Show details for the constituent.

Parameters

Parameter	Value	Description	Parameter Type	Data Type
id	<input type="text" value="(required)"/>	Constituent Id	path	integer

Response Messages

HTTP Status Code	Reason	Response Model				
200	Ok	<table border="1"><thead><tr><th>Model</th><th>Model Schema</th></tr></thead><tbody><tr><td></td><td><pre>{ "api_version": 0, "id": 0, "external_constituent_id": 0, "is_org": false, "constituent_contact_type_id": 0, "constituent_contact_type_name": "", "prefix": "", "first_name": "", "middle_name": "", "last_name": "", "suffix": "".</pre></td></tr></tbody></table>	Model	Model Schema		<pre>{ "api_version": 0, "id": 0, "external_constituent_id": 0, "is_org": false, "constituent_contact_type_id": 0, "constituent_contact_type_name": "", "prefix": "", "first_name": "", "middle_name": "", "last_name": "", "suffix": "".</pre>
Model	Model Schema					
	<pre>{ "api_version": 0, "id": 0, "external_constituent_id": 0, "is_org": false, "constituent_contact_type_id": 0, "constituent_contact_type_name": "", "prefix": "", "first_name": "", "middle_name": "", "last_name": "", "suffix": "".</pre>					

Documentation

[Dynamic REST Documentation](#)

[Static REST Documentation](#)

Combination: LGL API and Custom Integration (webhooks endpoint)

For a software service, an ideal integration option could be to combine the LGL API with a Custom Integration (webhooks endpoint). This combination has a number of nice features:

- You can use the API during the setup phase of the integration for a particular customer. For example, you can use the API to pull back values from the user's LGL account so they can customize the mappings between the source software service and LGL.
- You can use the API to help the user match individuals between the source software service and LGL. Little Green Light uses this technique, for example, in our integration with QuickBooks Online.
- But then to push data over to LGL, you can use a webhook to send records to a Custom Integration on the LGL side and get the benefit of a log of the records that have been brought into LGL. The user could also have the option of having those records pause in a review queue in the LGL account before saving.

3. Zapier



Overview

Zapier is "middleware" that sits between two other services, creating a pathway from the Trigger in one software service to the Action in another. Each combination of a Trigger and an Action is called a Zap. As the names suggest, a Trigger is what gets a Zap started, and an Action is what happens on the receiving end.

Little Green Light has created an all-purpose Action called "Import Constituent/Gift Data", which allows you to create or edit a constituent record and, optionally, to add an associated gift record. When you link a software service with a Trigger to LGL's Action, this is called a Zap. Each Zap needs to be created individually; when integrating to LGL using Zapier, it is not possible to apply a template or to automate that step.

FAQ - Zapier

Software skill required to implement?	Medium-low
Can you write to LGL database?	Yes
Can you read from LGL database?	No
Software services that can use this?	Any that have built a Zapier "Action"
Is data logged so user can see the history?	Yes
How many fields can be sync'd?	Most fields
Cost?	Free for a very limited tier. See Zapier Pricing .
Volume limits?	None

Matching

When you set up a Zap, you can choose the methods you will allow for matching. LGL will always match directly based on IDs (if either the LGL Constituent ID or External Constituent ID is provided) and by default will match on name + email address. You have the option to allow matching on just name or just email as well.

Available fields

- Constituent name fields
- Contact info (address, phone, email)
- Constituent categories
- Gifts
- Contact Reports
- Memberships
- Class Years
- Notes
- Tasks
- Events
- Volunteering

Examples

There are thousands of applications that have built Triggers or Actions for Zapier, so there's a lot to choose from. The most popular Zaps into LGL are:

- [Donorbox](#), fundraising platform: Add gifts to LGL
- [Givebuttr](#), fundraising platform: Add gifts to LGL
- [Give Lively](#), fundraising platform: Add gifts to LGL
- [Stripe](#), payment processor: Add gifts to LGL
- [Gravity Forms](#), forms: Add gifts to LGL
- [Google Forms](#), forms: Add/update constituents from form submissions

To see if software you want to use has a Zapier Trigger, try doing a web search for your software and Zapier, such as "[Facebook zapier](#)".

Screenshot

This is the top of the screen on which you map the fields that will write to LGL fields:

The screenshot shows a web interface for importing gift data. At the top left is a back arrow and a gear icon. At the top right is a header '2. Import Constituent/Gift Data' with a magnifying glass icon. Below this are several sections, each with a title and a text input field:

- Gift Category**: Input field contains '1. gift category: donation'. Description: 'The gift/pledge/in kind category name. Matching is done by name but new values will be created if they are not present.'
- Gift Date**: Input field contains '1. gift date: 4/22/2020'. Description: 'The date the gift was given'
- Gift Amount**: Input field contains '1. gift amount: 100'. Description: 'The amount of the gift, in-kind donation, pledge, or other type of gift'
- Deposited Amount**: Input field contains 'Type or insert...'. Description: 'The amount actually deposited'
- Campaign Name**: Input field contains 'Type or insert...'. Description: 'The campaign name for the gift. Matching is done by name, but new values will be created if they are not present'
- Fund Name**: Input field is empty.

Documentation

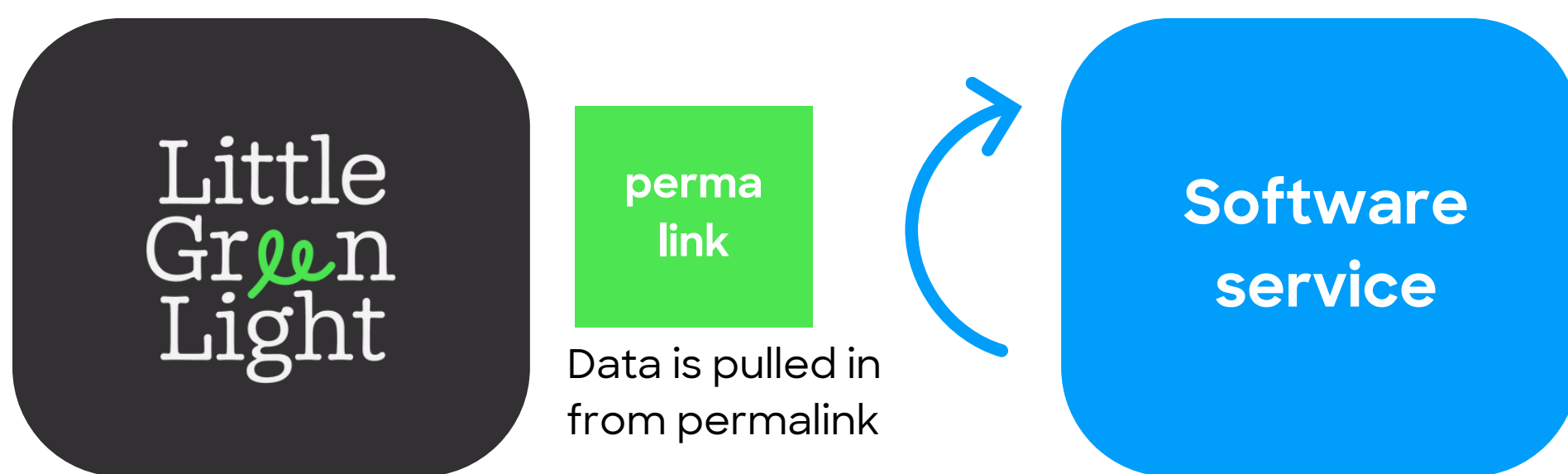
[Using the Zapier integration](#)

4. Permanent Links (based on LGL scheduled reports)

Overview

Your Little Green Light account has lots of great data in it, but how can you make use of that data in another software application? One method is to export data to a spreadsheet and import that to your other software. But, using scheduled reports and the Permanent Link option, you can automate this. Files written to the Permanent Link location can be used by a third-party software application.

Output via permalink

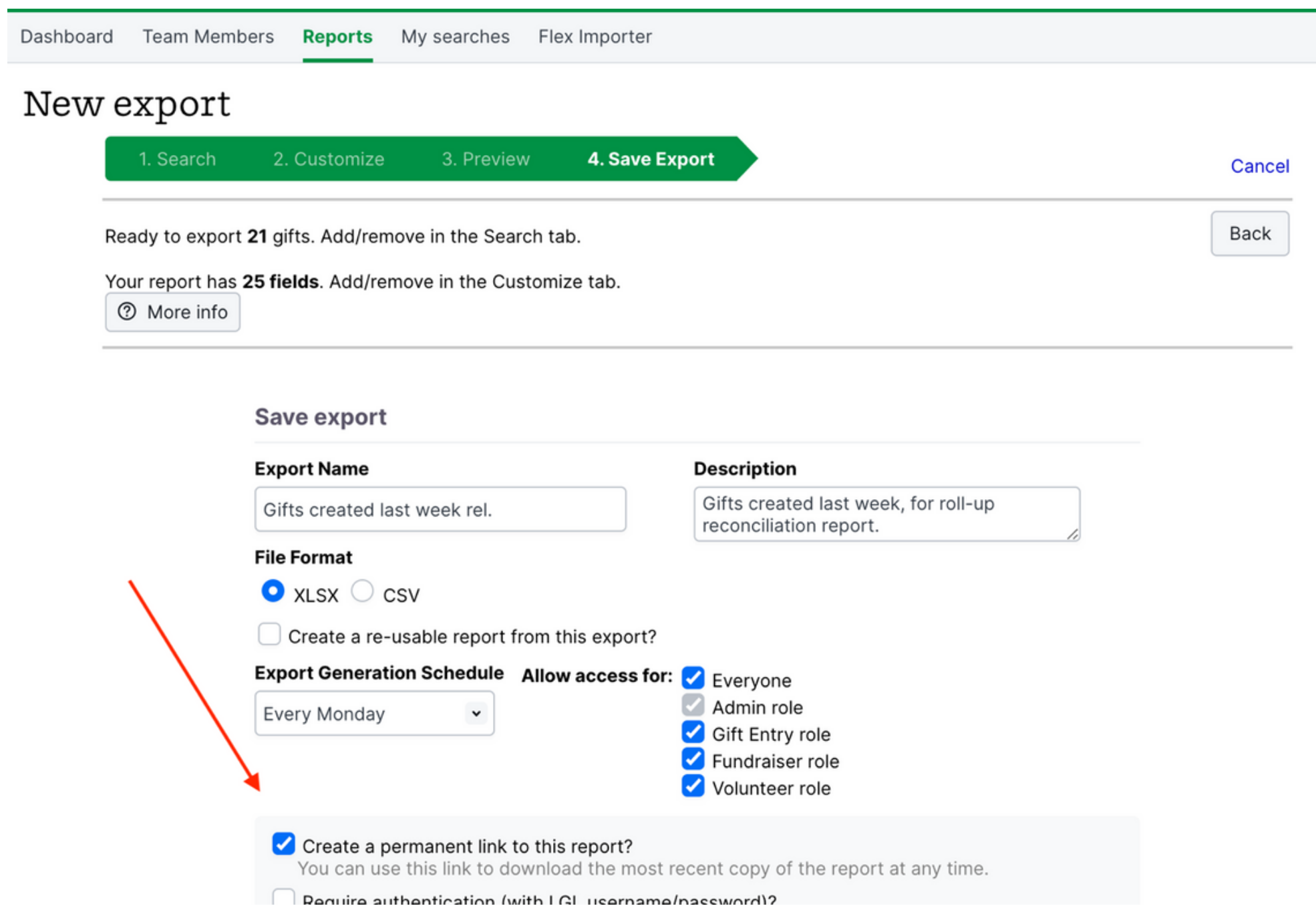


FAQ - Permanent Links

Software skill required to implement?	Medium
Can you write to LGL database?	No
Can you read from LGL database?	Yes
Software services that can use this?	Those that can read from a cloud data table
Is data logged so user can see the history?	Not applicable
How many fields can be sync'd?	Virtually all
Cost?	No extra cost
Volume limits?	None

Select Permanent Link option

When you create a scheduled report in LGL, you have the option to save the report data to a Permanent Link:



The screenshot shows the 'New export' interface in LGL. At the top, there is a navigation bar with 'Dashboard', 'Team Members', 'Reports' (highlighted), 'My searches', and 'Flex Importer'. Below this is the 'New export' section with a progress bar showing steps: 1. Search, 2. Customize, 3. Preview, and 4. Save Export (highlighted). A 'Cancel' button is on the right. Below the progress bar, there are two status messages: 'Ready to export 21 gifts. Add/remove in the Search tab.' with a 'Back' button, and 'Your report has 25 fields. Add/remove in the Customize tab.' with a 'More info' button. The main section is titled 'Save export' and contains several fields: 'Export Name' (text input: 'Gifts created last week rel.'), 'Description' (text area: 'Gifts created last week, for roll-up reconciliation report.'), 'File Format' (radio buttons for 'XLSX' and 'CSV', with 'XLSX' selected), and a checkbox for 'Create a re-usable report from this export?'. Below this is the 'Export Generation Schedule' (dropdown menu: 'Every Monday') and 'Allow access for:' (checkboxes for 'Everyone', 'Admin role', 'Gift Entry role', 'Fundraiser role', and 'Volunteer role', all checked). At the bottom, there is a checkbox for 'Create a permanent link to this report?' which is checked, with a sub-note: 'You can use this link to download the most recent copy of the report at any time.' Below this is another checkbox for 'Require authentication (with LGL username/password?)' which is unchecked. A red arrow points from the 'Create a permanent link to this report?' checkbox to the 'Export Generation Schedule' dropdown menu.

Example


You can point a Google Sheet at a Permanent Link to pull in data from an LGL report, and then use Google Sheets to perform calculations, create a chart, or run other manipulations on the data. The formula to pull in data from a cloud-based location like the Permanent Link is:

`=importdata("https://...").`

Screenshot

Example of a Google Sheet that points to a permanent link to pull in the latest data. In this example, we're pulling in a weekly update on active donors, including their giving tier.

<code>=importdata("https://big.littlegreenlight.com/rptlink/9b2cfaae-32a2-227e-8467-e83abc30c114")</code>			
LGL Constituer	Sort Name	TG Amount	TG Tier
942267	Aamon, Sally	1675	\$1,001-\$5,000
942255	Aanestad, Tom	100	Up to \$250
944142	Abbott, Jessica	600	\$501-\$1,000
942225	Abreau, Sally	75	Up to \$250
941995	Adams, Mike and Jane	225	Up to \$250
944932	Addams, Morticia	300	\$251-\$500
945672	Adkins, Tom	100	Up to \$250
941692	Alexander, Sarah	500	\$251-\$500
944527	Allen, Brian	750	\$501-\$1,000
941724	Appleton, Larry	26075	\$25,001-\$50,000
944672	Arthur, Chet	7500	\$5,001-\$10,000
943187	Baden, Gina	600	\$501-\$1,000
943197	Balaski, Lorne	6500	\$5,001-\$10,000
944287	Bard, John	100	Up to \$250
943807	Barlow, James	65	Up to \$250



permanent link URL

Documentation

[Use permanent links to access scheduled report data](#)

Questions or comments?

We welcome any feedback you have on this guide. Please send your thoughts via email to info@littlegreenlight.com. Thanks!