



Did you know that Blackbaud Luminate Online<sup>®</sup> can work with Raiser's Edge Online Express to streamline advanced transaction processing?

blackbaud<sup>®</sup>  
**DEVELOPERS'  
CONFERENCE**  
June 15–17, 2021

LUMINATE ONLINE<sup>®</sup>/ TEAMRAISER<sup>®</sup> TRACK

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*Session Host: Heather McLean*



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- Providing direct support to answer questions regarding Customization specifications, features, intended usage, and Error correction and troubleshooting processes to Your Non-Authorized Users



# Hello! I'm

Glen Hutson

*Pronouns: He / Him / His*

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**BASED IN: DALLAS, TEXAS**

**AT BLACKBAUD: 14+ YEARS**

In my time here at Blackbaud I've had the privilege of working with customers in both the evaluation and implementation of our Solutions. Throughout my time here, I've worked to identify and find answers to both unique and recurring customer needs, several of which will be covered today.



## What I am not.... a full-time developer

- This Conference is for the wide range of developers from the no/low-code to experts.
- Degree in Computer Science, though before web-based applications were really taking off
- Trial / error, Google, and lots of visits to [w3schools.com](https://www.w3schools.com) and [stackoverflow.com](https://stackoverflow.com)
- “Hum a few bars” and I can take it from there
- Power Automate really helped in filling in some of those pieces.
- The approach today is demonstrating a number of proofs of concept: actual implementation approaches may vary.



# Overall Challenges

Luminate Online is a powerful platform with strengths in communication, personalization, dynamic content, and extensibility. Combined with Raiser's Edge NXT, you have a complete online/offline system. However, there are a few areas that at times needs some additional TLC, including:

- True “Bill me Later” pledges / pledge payments
- Events with Guests
- Memberships
- Multi-Currency
- Full Giving History



# Today's Discussion

- Today's discussion will cover how to utilize Online Express forms to supplement the capabilities of Luminate Online while maintaining the personalization options we're used to.
- Online Express Forms are used due to their customization accessibility, availability in all markets, and the ability to natively handle different currencies.
  - By leveraging Online Express, some options are available for those still on The Raiser's Edge 7.
- These scenarios will involve a “standard RELO” integration between Luminate Online and Raiser's Edge NXT.
  - Key focus in the LO Member ID = RENXT System Record ID
  - This may be modified for other integration scenarios depending on how RENXT System Record ID is stored in Luminate Online



# Pre-Requisites

At a minimum you will need:

- Access to Online Express Forms (Donation, Events, and Membership)
- Familiarity with editing / updating JavaScript code
- Familiarity with Luminate Online S-Tags

For additional features you will need:

- Knowledge of SKY API and retrieving gift, membership, and constituent information
  - Power Automate is leveraged for this discussion





# Fundamentals: OLX Powered “Bill Me Later” Pledge

- An option already used by some, further extended by using S-Tags for personalization.
- Lesson learned in the process: how to “wait” for the OLX form to load.
- Needed:
  - OLX Form with only “Bill me Later” Enabled
  - (Optional) Gift Attribute for collecting the LO Member ID as a second check. This would typically be hidden from the constituent but shown in this example.

# Fundamentals: OLX Powered “Bill Me Later” Pledge

- Relevant fields filled in via S-Tags
- Luminate Online Member ID would normally be hidden
- Works with email auto-login

## Pledge

## Gift Preferences

Luminate Online   
Member ID

## Designation

Designation:

## Donor Information

Name:

Email:

Country:

Address:

City:

State & zip:

**SUBMIT PLEDGE**



# Fundamentals: OLX Powered “Bill Me Later” Pledge

```
<script>
/* The below periodically checks to see when the OLX form (or specifically, the submit button) has been rendered
to then go through and fill out the rest. */

var checkExist = setInterval(function() {
  if ($('#bboxdonation_btnSubmit').length) {

    //Put Auto-fill/replacement items here
    $('#bboxdonation_giftattributes_ctl00_txtAttrib').val([[S1:member_id]]);
    $('#bboxdonation_billing_txtFirstName').val('[[S1:first_name]]');
    $('#bboxdonation_billing_txtLastName').val('[[S1:last_name]]');
    $('#bboxdonation_billing_txtEmail').val('[[S1:primary_email]]');

    var HomeAddress = '[[S1:home_street1]]\n[[S1:home_street2]]\n[[S1:home_street3]]';
    //Confirmed blank lines for empty street2/3 won't update RE Constituent Record

    $('#bboxdonation_billing_billingAddress_txtAddress').val(HomeAddress);
    $('#bboxdonation_billing_billingAddress_txtCity').val('[[S1:home_city]]');
    $('#bboxdonation_billing_billingAddress_ddState').val('[[S1:home_stateprov]]');
    $('#bboxdonation_billing_billingAddress_txtZip').val('[[S1:home_zip]]');

    clearInterval(checkExist);
  }
}, 100); // check every 100ms
</script>
```

# OLX Powered “Bill Me Later” Pledge - Hybrid

Take it to the next level:

- Start with a Luminate Online Donation form with dynamic gift ask amounts
- Use that to fill-in (and hide) the gift amount on an overlaid OLX donation form.

## Robert, Pledge Today!

\*Enter A Gift Amount:

\$260.00  \$300.00  \$340.00

Designation

Designation: Annual Fund

Billing Address

Name: Robert  Hernandez

Email:

Country: United States

Address: 425 S Wabash Ave

City: Chicago

State & zip: IL  60605-1208

**SUBMIT PLEDGE**



# OLX Donation Forms - Notes

- Examples here focused on Pledges
- Can be used for Credit Card / Direct Debit and Recurring / Installment Gifts
- This can be useful if your Luminate Instance is tied to (for example) Canadian Dollars, but also want a donation form for native USD donations.
  - Appropriate BBMS accounts/configurations and Raiser's Edge currency conversion considerations required, but outside the scope of this conversation.



# OLX Powered Pledges – Pledge Fulfillment

We've discussed making the initial pledge, but what about pledge fulfillment? This is where SKY API (facilitated in this case by Power Automate) comes into play.

Let's start backwards, first you'll need:

- LO embedded OLX donation form with all possible funds you want to allow for online pledge payments
- An understanding on how *Magic Links* work in OLX (think LO's Donation Form URL Setters)
  - Key item here will be "BBFund" which pre-sets the selected fund using the Fund's System Record ID, but that fund will have to be an available choice on the form.

# OLX Powered Pledges – Pledge Fulfillment

- Next, you'll need a Power Automate flow that pulls all outstanding pledges from Raiser's Edge NXT.
- The trigger will be *When a HTTP request is received*, and the response will be a table containing outstanding pledges.
- The only thing the HTTP *GET* request needs is the System Record ID of the Constituent.
- The table will include a "Pay" link that passes to the OLX embedded form the native BBFund and custom fund description and custom balance amount.

The image shows a screenshot of the Power Automate interface. The top section is a trigger named "When a HTTP request is received". It is configured with the following settings:

- HTTP GET URL:** `https://prod-142.westus.logic.azure.com:443/workflows/caa3aa5c397442...`
- Request Body JSON Schema:** A text area containing a JSON schema definition: `{}`
- method:** `GET`
- relativePath:** (Empty)
- Hide advanced options:** (Expanded)

A downward arrow with a plus sign indicates the flow continues to the next step, "Initialize variable - RENXTSystemRecordId". This step is configured as follows:

- triggerOutputs()['queries']['SystemRecordId']** (Expression)
- Name:** `RENXTSystemRecordId`
- Type:** `String`
- Value:** `SystemRecordId` (with a search icon and a close button)

# OLX Powered Pledges – Pledge Fulfillment

The final piece will be a standard PageBuilder Page that calls on the URL provided by the Flow, passing along the System Record ID [= Luminate Online Member ID]

```
<script type="text/javascript">

    var url = 'https://prod-
142.westus.logic.azure.com/workflows/
api-version=2016-06-01&sp=%2Ftriggers%2Fmanual%2Frun&sv=1.0&sig=
&SystemRecordId=[[S1:member_id]]';

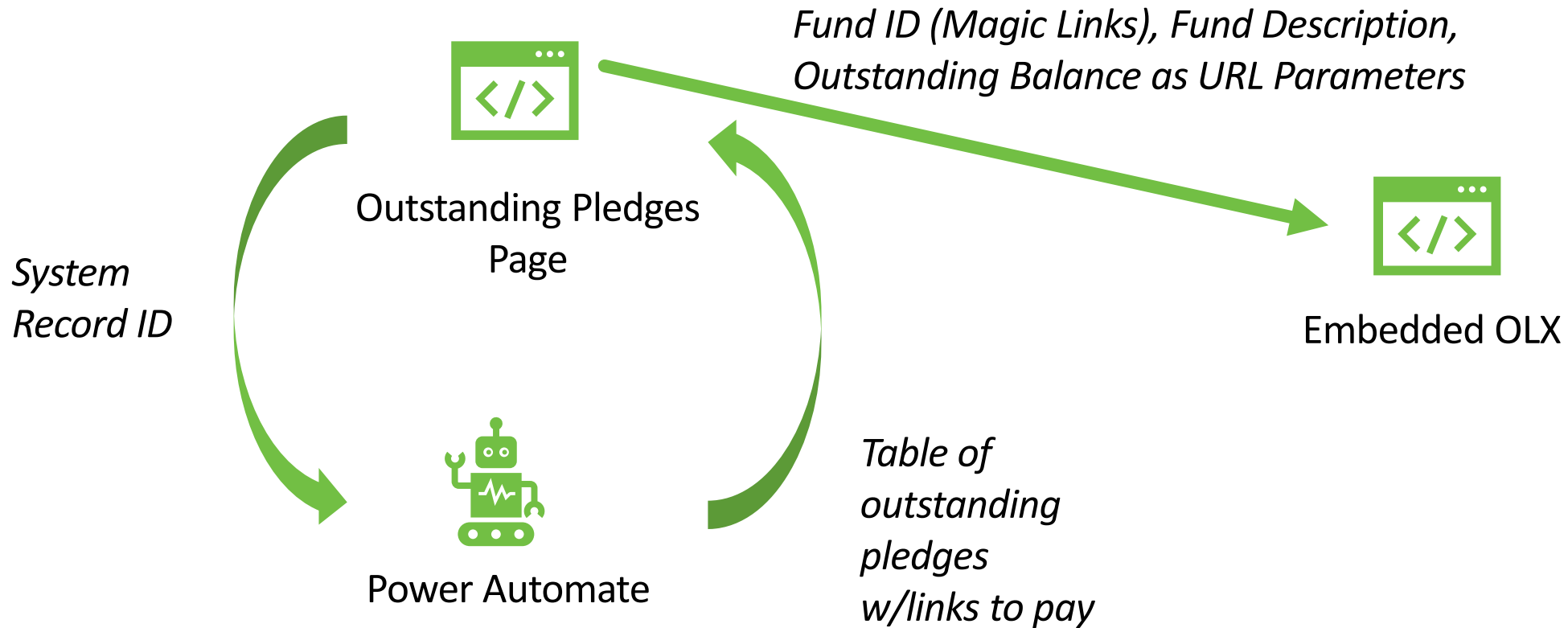
$.get(url, function(data, status){
    document.getElementById("powerResults").innerHTML = data;
});

</script>
<div id="powerResults">Loading Pledges</div>
```

Pledge ID	Pledge Date	Pledge Fund	Pledge Amount	Pledge Balance
35786	Monday, March 1, 2021	Computer Lab Fund	\$500.00	\$500.00
32160	Friday, September 1, 2017	Building Fund	\$10,000.00	\$10,000.00



# OLX Powered Pledges – Pledge Fulfillment



# OLX Powered Pledges – Pledge Fulfillment

- Fund auto-selected via URL/Magic Links and hidden via CSS
- Fund description & balance from URL
- Amount auto-filled in, but editable by constituent.
- TO-DO: Accommodate Installments
- Lesson Learned: Power Automate  
HTML tables aren't that flexible.  
Creating them manually may yield more desirable results.



Thank you, Robert, for your pledge payment toward the Computer Lab Fund.

Your current balance is \$500.00. You can pay all at once or a portion.

## Pledge Payment

Amount:

## Donor Information

Name:

Email:

Country:  ▼

Address:

City:

State & zip:  ▼

**SECURE PAYMENT**

# The SKY's the limit

*With those fundamentals taken care of, the other pieces start falling into place...*

# Full Transaction History (online & offline)

## Transaction History for Robert Hernandez

GiftID	GiftDate	GiftAmount	ReceiptAmount	GiftType	GiftFunds
35783	Sunday, April 18, 2021	\$200.00	\$200.00	RecurringGiftPayment	Building Fund
35774	Thursday, March 18, 2021	\$200.00	\$200.00	RecurringGiftPayment	Building Fund
35786	Monday, March 1, 2021	\$500.00	N/A	Pledge	Computer Lab Fund
35721	Wednesday, December 23, 2020	\$50.00	\$25.00	One-Time	Research Fund
35702	Saturday, November 21, 2020	\$60.00	\$60.00	PledgePayment	Technology Fund
35701	Saturday, November 21, 2020	\$40.00	\$40.00	PledgePayment	Technology Fund
35700	Saturday, November 21, 2020	\$100.00	N/A	Pledge	Technology Fund
35698	Friday, November 20, 2020	\$300.00	N/A	Pledge	Computer Lab Fund, Technology Fund
35707	Wednesday, November 18, 2020	\$200.00	\$200.00	RecurringGiftPayment	Building Fund
35706	Sunday, October 18, 2020	\$200.00	\$200.00	RecurringGiftPayment	Building Fund

# Event Registration

- Allows for “native” multiple participant registration.
- Currently only working for fee-based events.

## End Of Year Celebration 2030

Saturday, December 28, 2030  
7:00 PM

	Price	Quantity	Total
Individual (1 registrant)	\$150	1	\$150
		Additional donation:	optional
		<b>Total due:</b>	<b>\$150.00</b>

### Billing Address

Name:

Email:

Country:

Address:

City:

State & zip:

### Individual #1

Register later (The guest can provide this information when checking in to the event)

Same as billing

Name:

Email:

Country:

Address:

City:

State & zip:

### Individual #2

Register later (The guest can provide this information when checking in to the event)

Same as billing

Name:

Email:

Country:

Address:

City:

State & zip:

# “Smart” Membership Forms

## Join Now

Thank you for your interest in becoming a member. You can use the form below to select a membership.

**Social Good - Bronze - \$25.00**

[Give as gift](#)

**Social Good - Silver - \$50.00**

[Give as gift](#)

**Social Good - Gold - \$100.00**

[Give as gift](#)

- Auto-hide lower-tier membership options at renewal time.



## Thank you for being a Silver Member

Your current membership expires on Tue Jan 11 2022. You can use the form below to renew or upgrade your membership.

**Social Good - Silver - \$50.00**

[Give as gift](#)

**Social Good - Gold - \$100.00**

[Give as gift](#)

**Add an additional gift**

**Amount:**  *Current total: \$0.00*

**Billing Address**

**Name:**

**Email:**

**Country:**  ▼

**Address:**

**City:**

**State & zip:**  ▼

# Under Research – “Search” / Directory

This concept uses Constituent (Search) endpoint. "Supports first name, last name, preferred name, former name, alias, email address, phone number, address, or lookup ID. Name combinations, such as first name and last name or preferred name and last name, are valid, but otherwise search only supports one parameter at a time."

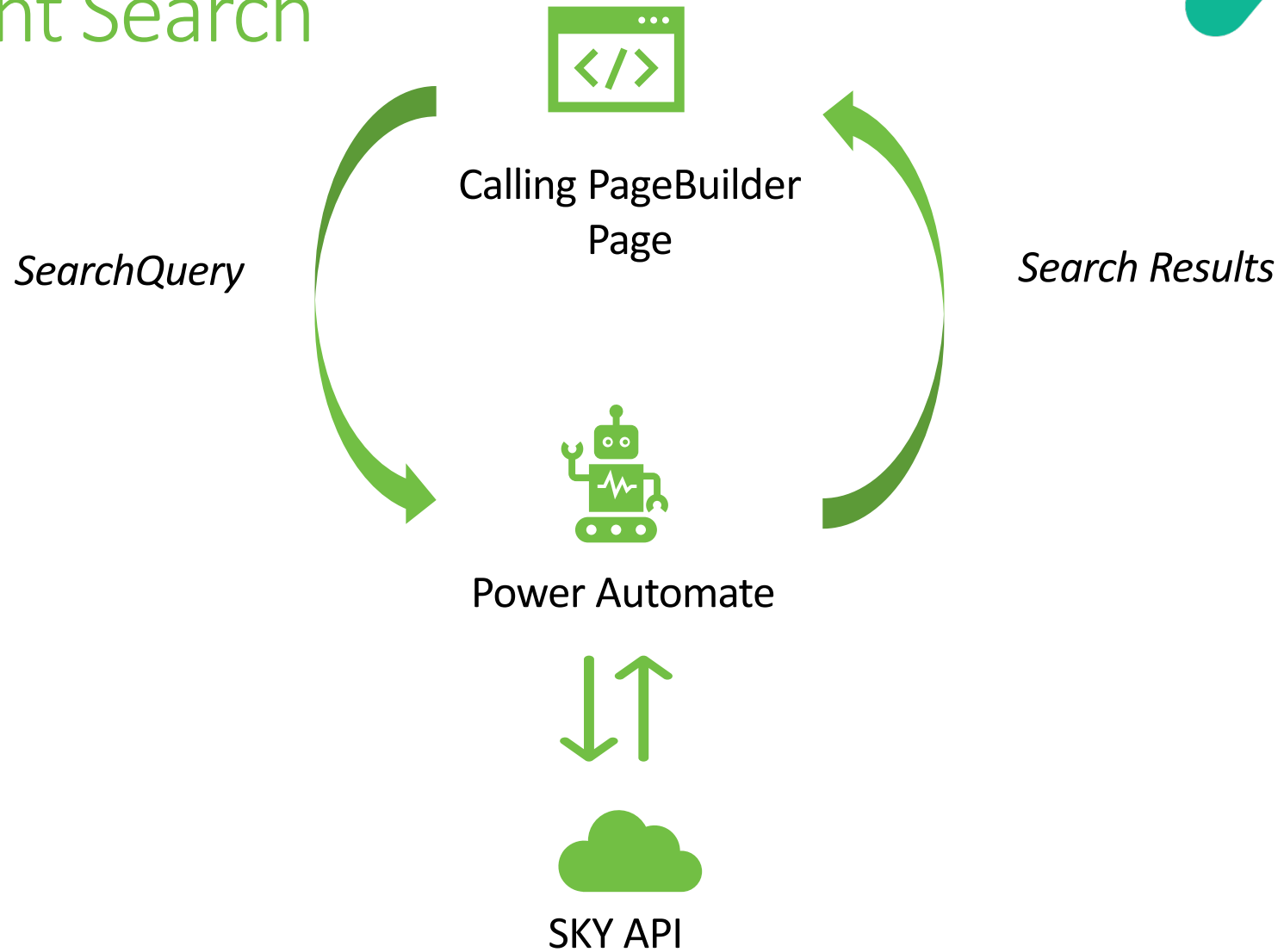
Listed are the initial values returned by the search. Further details about each constituent can be obtained via additional calls.

SearchQuery:

  
  
Search Complete

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# Constituent Search







# Power Automate – Multiple Connections

- In working with multiple environments in Power Automate, it's hard to know which one you're connected to (no way to name the connection)
- One possible solution is creating a custom connector for each environment
- All certified connectors are available on GitHub with instructions on how to create a custom one. The one for Raiser's Edge NXT is at <https://github.com/microsoft/PowerPlatformConnectors/tree/dev/certified-connectors/Blackbaud%20Raiser's%20Edge%20NXT>
- Be careful, Microsoft doesn't like idle custom connectors and can deactivate them if they're silent too long – 60 days. Will have to at least re-save it to kick start it again.



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Thank you!