



Learning Stream Integration Reference Guide

Learning Stream has developed integration options to extract information from Learning Stream and to import limited information into Learning Stream using automated methods. This document is for these programmable interfaces. Additional options are available to import and extract data into Learning Stream using manual (user initiated) methods via the Administrator interface and are not explained in this document.

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Learning Stream Integration

Integration Options

Programmable interfaces are available to export:

- Payment Data – automated and manual payments
- User Data – history information for a specific registrant
- Event Data – registration information for a specific event
- Registration Data – application registration information-based parameters
- Attendance Update – mark a registration as attended
- Single Registration – detailed information for a single registration

A programmable interface is available to import information for:

- Database Update – add, update or make inactive database registrants

API Call Limits

API calls are limited to 60 per minute and 1,000 per hour. Additional calls over these limits will result in an error being returned. This limit applies to the sum of all API calls.

Setting up Integration

The options to set up integration are located under
Application > Integration > API Setup

Enabled	Interface	IP Security Filter	Security Key	History
☐	Payment Data (XML Export)	--None--	[36BFDB90-9C08-41B3-A6B3-784E853BA604].6	(View Access Log)
☐	User Data (XML Export)	--None--	[36BFDB90-9C08-41B3-A6B3-784E853BA604].6	(View Access Log)
☒	Event Data (XML Export)	SEC Board of Direct..	[36BFDB90-9C08-41B3-A6B3-784E853BA604].6	(View Access Log)
☒	Registration Data (XML Export)	SEC Board of Direct..	[36BFDB90-9C08-41B3-A6B3-784E853BA604].6	(View Access Log)
☒	Database Update (Insert/Update/Delete API)	Home Office	[36BFDB90-9C08-41B3-A6B3-784E853BA604].6 (click here to configure)	(View Access Log)
☒	Attendance Update	SEC Board of Direct..	[36BFDB90-9C08-41B3-A6B3-784E853BA604].6	(View Access Log)

Enabled – This checkbox turns on/off access to the selected interface for your account.

Interface – Name of the type of interface (required parameters/output detailed below)

Security Filter – Optional. Allows you to restrict access to a specific IP address range(s)



to prevent unauthorized access to your data. Security filters are defined under Application > Integration > Security Filters.

Security Key – Required. A key value that must be posted with your request to prevent unauthorized access to your data. Maximum length allowed is 250 characters.

History – Clicking this link will bring up an audit log showing the access history of the selected interface. Details include the date/time, parameters supplied for the request and the IP address.

For security reasons it is highly recommend that the IP restrictions be used in your integration.

Calling the APIs

The APIs in Learning Stream can be called via a simple form post and data is returned via page output.

Example:

```
<form name="call_api"
action="https://reg.learningstream.com/reg/reg_abc_payment_data.aspx?aid=JTC100"
method="post" target="">
<input name="security_key" type="hidden" value="23wsfksdf02329rfs1fsj" />
<input name="start_date" type="hidden" value="03/15/2016" />
<input name="end_date" type="hidden" value="4/15/2016" />
</form>
```

Terms

user_id

The field name user_id represents a registration key that is specific for a single registration for a single event. The field name user_id and registration_key are used to represent the same value in different integrations.

{account_code}

This represents your organizations account code within the Learning Stream solution. Do not include the "{" or closing "}" symbols in the URL.



Payment Data Extract

Overview

The payment extract will provide detailed payment information for all payments that occur during the date range provided.

Requirements

In order to retrieve payment information from the Learning Stream application, all required values will need to be posted to this API URL:

https://reg.learningstream.com/reg/reg_abc_payment_data.aspx?aid={accountcode}

Name	Value	Description
security_key	Assigned Security Key	Unique value to prevent unauthorized access.
start_date	Any valid date, or date and time	Retrieve all payment records after this date.
end_date	Any valid date, or date and time	Retrieve all payment records prior to this date

Output

The following results will be returned in XML format

<payment_data> - This is the main root node for all the payment records

<error> - This will display any errors that occur, invalid key, invalid dates, no records found, etc

<payment_record> - Main node to designate each record

<transaction_id> - Unique value to identify transaction

<user_id> - Unique value to identify a registration for a specific event

<first_name> - First name of registrant

<last_name> - Last name of registrant

<event_code> - The Event Code under the General tab of the Event Setup page

<title> - The Event Title under the General tab of the Event Setup page

<transaction_date> - Date of the transaction in MM/DD/YYYY format

<transaction_time> - Time of the transaction in HH:MM:SS AM(PM) format

<transaction_type> - Numeric value to designate type of transaction. See table below

<amount> - Numeric value of the transaction

<registrant_sid> - Internal ID that identifies a unique database user in the Learning Stream system

<registrant_id> - Database ID for the registrant

Value	Transaction Type
1	Check
2	Credit Card Payment
3	Cash
5	Credit Card Refund
6	Comp
7	ABC Credit
9	Other

Example Output

```

<payment_data>
  <error></error>
  <payment_record>
    <transaction_id></transaction_id>
    <user_id>C672F82E373E4118B009ED3F5375D0C3_755</user_id>
    <first_name>Mike</first_name>
    <last_name>Wegner</last_name>
    <event_code></event_code>
    <title>Annual Event</title>
    <transaction_date>10/22/2007</transaction_date>
    <transaction_time>4:54:56 PM</transaction_time>
    <transaction_type>3</transaction_type>
    <amount>-18.00</amount>
    <registrant_sid>1</registrant_sid>
    <registrant_id>230AB</registrant_id>
  </payment_record>
  <payment_record>
    <transaction_id></transaction_id>
    <user_id>B631EB35BCCD44B984A53BE5C49AA161_758</user_id>
    <first_name>Ron</first_name>
    <last_name>Smith</last_name>
    <event_code></event_code>
    <title>Annual Event</title>
    <transaction_date>12/5/2007</transaction_date>
    <transaction_time>10:23:34 AM</transaction_time>
    <transaction_type>2</transaction_type>
    <amount>-15.00</amount>
    <registrant_sid>2</registrant_sid>
    <registrant_id>6456544</registrant_id>
  </payment_record>
  <payment_record>
    <transaction_id></transaction_id>
    <user_id>BD62DAE431AB4D74B8B5AA74F1E3341D_760</user_id>
    <first_name>Todd</first_name>
    <last_name>Chandler</last_name>
    <event_code>CTYMCE</event_code>
    <title>Todd's Event</title>
    <transaction_date>12/5/2007</transaction_date>
    <transaction_time>10:29:18 AM</transaction_time>
    <transaction_type>3</transaction_type>
    <amount>-5.00</amount>
    <registrant_sid>3</registrant_sid>
    <registrant_id>65464s</registrant_id>
  </payment_record>
</payment_data>

```



User Data

Overview

Basic information for a specific registration for a specific event based on the user id provided.

Requirements

In order to retrieve information from the Learning Stream application for an individual user, all required values will need to be posted to this API URL:

https://reg.learningstream.com/reg/reg_abc_user_data.aspx?aid={accountcode}

Name	Value	Description
security_key	Assigned Security Key	Unique value to prevent unauthorized access.
user_id	Unique value to identify user for a specific registration for a specific event.	References <user_id> returned from payment query.

Output

The following results will be returned in XML format

<user_record> - This is the main root node for the user record

<error> - This will display any errors that occur, invalid key, no user id, no record found, etc

<first_name> - First name of registrant

<last_name> - Last name of registrant

<event_code> - The Event Code under the General tab of the Event Setup page.

<address_line1> - First line of address data provided with registration.

<address_line2> - Second line of address data provided with registration.

<city> - City provided for the address as part of registration.

<state> - State abbreviation provided for the address as part of the registration.

<zip_code> - Zip code provided for the address as part of registration.

<phone_number> - Phone number provided with registration.

<email_address> - email address provided with registration.

<attended> - Indicates if registrant attended event.

<registrant_sid> - Internal ID that identifies a unique database user in the Learning Stream system.

<registrant_id> - Database ID for the registrant



Example Output

The following is an example of the XML output

```
<user_record>
  <error></error>
  <first_name>Mike</first_name>
  <last_name>Wegner</last_name>
  <event_code>TME</event_code>
  <address_line1>4350 Brownsboro Road</address_line1>
  <address_line2>Suite 209</address_line2>
  <city>Louisville</city>
  <state>KY</state>
  <zip_code>40207</zip_code>
  <phone_number>502-896-1127</phone_number>
  <email_address>mwegner@learningstream.com</email_address>
  <attended>Yes</attended>
  <registrant_sid>1</registrant_sid>
  <registrant_id>2038428</registrant_id>
</user_record>
```

Event Registration Data

Overview

Provides basic registration information for registrants of a specific event based on an event code that is supplied. The event code must be unique.

Requirements

In order to retrieve event information from the Learning Stream application, all required values will need to be posted to this API URL:

https://reg.learningstream.com/reg/reg_abc_event_data.aspx?aid={accountcode}

Name	Value	Description
security_key	Assigned Security Key	Unique value to prevent unauthorized access.
event_code	Code used to uniquely identify an event. If more than one event has the same event code, an error occurs	The Event Code under the General tab of the Event Setup page.
event_key	Unique event key	Internally assigned alpha/numeric event key.

** Either event_code or event_key is required. If event_key is provided the event_code parameter is ignored.

Output

The following results will be returned in XML format

<event_data> - This is the main root node for all the event user records
<error> - This will display any errors that occur, invalid key, no event code, no records found, etc
<user_record> - Main node to designate each record
 <user_id> - Unique value to identify a registration for a specific event
 <registration_sid> - Unique internal identifier for a specific registration for this event
 <first_name> - First name of registrant
 <last_name> - Last name of registrant
 <registration_date> - Date of the registration in MM/DD/YYYY format
 <registration_time> - Time of the registration in HH:MM:SS AM(PM) format
 <last_change_date> - Date of the last change in MM/DD/YYYY format
 <last_change_time> - Time of the last change in HH:MM:SS AM(PM) format
 <registration_status> - Numeric value to designate status of user's registration. See table below



<attended> - Indicates if registrant attended event
<registrant_sid> - Internal ID that identifies a unique database user in the Learning Stream system
<registrant_id> - Database ID for the registrant

Value	Registration Status
0	Pending/Incomplete
1	Confirmed
2	Wait
3	Cancelled

Example Output

The following is an example of the XML output

```
<event_data>
  <error></error>
  <user_record>
    <user_id>5661F20174CA4DDF9314BE90DC52F1E0_831</user_id>
    <registration_sid>29322</registration_sid>
    <first_name>John</first_name>
    <last_name>Chandler</last_name>
    <registration_date>1/22/2008</registration_date>
    <registration_time>11:03:54 AM</registration_time>
    <last_change_date>1/23/2019</last_change_date>
    <last_change_time>4:55:00 PM</last_change_time>
    <registration_status>1</registration_status>
    <attended>Yes</attended>
    <registrant_sid>3</registrant_sid>
    <registrant_id>23422</registrant_id>
  </user_record>
  <user_record>
    <user_id>EB512FC0B67441BF9E1C01A3B1B56248_754</user_id>
    <first_name>Mike</first_name>
    <last_name>Wegner</last_name>
    <registration_date>10/22/2007</registration_date>
    <registration_time>4:50:02 PM</registration_time>
    <last_change_date>1/23/2019</last_change_date>
    <last_change_time>4:55:00 PM</last_change_time>
    <registration_status>3</registration_status>
    <attended>No</attended>
    <registrant_sid>2</registrant_sid>
    <registrant_id>64668</registrant_id>
  </user_record>
</event_data>
```

Registration Data

Overview

Provides basic registration information for registrations that occur during the date range provided.

Requirements

In order to retrieve registration information from the Learning Stream application, all required values will need to be posted to this API URL:

https://reg.learningstream.com/reg/reg_abc_registration_data.aspx?aid={accountcode}

Registration Data Alternate Format – An alternate output format of this API is available. The alternate format version eliminates XML nesting/levels of information which is more suitable for some integrations or when working with Excel. The alternate format can be accessed via the API URL: https://reg.learningstream.com/reg/reg_event_registration_data.aspx?aid={accountcode}

Input name	Value	Description
security_key	Assigned Security Key	Unique value to prevent unauthorized access.
start_date	Any valid date, or date and time	Retrieve all registration records after this date.
end_date	Any valid date, or date and time	Retrieve all registration records prior to this date.
division_name	Optional: Name of a division in Learning Stream	Restricts results to registrations for events with this division assigned.
category_name	Optional: Name of a category in Learning Stream	Restricts results to registrations for events with this category assigned.
event_code	Optional: Code used to uniquely identify an event. If more than one event has the same event code, an error occurs	The Event Code under the General tab of the Event Setup page.
event_key	Unique event key	Internally assigned alpha/numeric event key.

** Either event_code or event_key is required. If event_key is provided the event_code parameter is ignored.



Output

The following results will be returned in XML format

<registration_data> - This is the main root node for all the registration records

<error> - This will display any errors that occur, invalid key, invalid dates, no records found, etc

<registration_record> - Main node to designate each record

<registration_date> - Date of the registration in MM/DD/YYYY format

<registration_time> - Time of the registration in HH:MM:SS AM(PM) format

<last_change_date> - Date of the last change in MM/DD/YYYY format

<last_change_time> - Time of the last change in HH:MM:SS AM(PM) format

<registration_sid> - Internal ID that identifies this unique registration for this event

<registrant_sid> - Internal ID that identifies a unique database user in the Learning Stream system

<registrant_id> - Database ID for the registrant

<login_id> - login id for the database registrant if the registration is associated with the database

<user_id> - Unique value for this specific registration for a specific event

<registration_status> - Text description of the status of the registration

<first_name> - First name provided with registration

<last_name> - Last name provided with registration

<email_address> - email address provided with registration

<address_line1> - First line of address data provided with registration

<address_line2> - Second line of address data provided with registration

<city> - City provided for the address as part of registration

<state> - State abbreviation provided for the address as part of the registration

<zip_code> - Zip code provided for the address as part of registration

<phone_number> - Phone number provided with registration

<event_title> - The Event Title under the General tab of the Event Setup page

<event_start_date> - The Event Start Date under the General tab of the Event Setup page In MM/DD/YYYY format

<event_end_date> - The Event End Date under the General tab of the Event Setup page In MM/DD/YYYY format

<event_code> - The Event Code under the General tab of the Event Setup page

<event_sid> - Unique internally assigned numeric value for this event

<event_key> - Unique internally assigned alpha/numeric GUID for this event

<event_categories> Node for event category names

<category_name> Name(s) of assigned event categories

<attendance> Node for attendance information

<attendance_detail> Node for specific date for this registration

<event_date_sid> Internal unique numeric id for this specific date



<start_date> start date time ET
<end_date> end date time ET (optional)
<attendance_confirmed> Yes or No value
<total_charges> - Numeric value of the total charges for the registration
<total_credits> - Numeric value of the total credits for the registration
<total_payments> - Numeric value of the total payments for the registration (not discounts, etc)
<method_of_payment> - The method of payment chosen when the user registered for the event
<discount_code> - Discount code if one was applied on the registration form (not cart)
<balance> - The registrant's balance due for the registration
<user_id> - Unique Registration key
<invoice_number> - invoice number for the registrant, group or cart
<registration_questions> - node for registration questions
 <question> - node for a specific question
 <id> - internal id for the global question
 <text> - text of the registration question
 <type> - type of question (see reference table below)
 <responses> - node for possible one or more response to the question
 <response> - text of the response
<ce_detail> node for continuing education information
 <ce_earned> node for a specific ce record
 <ce_description> description of the ce setup in Learning Stream
 <ce_type> Type of ce setup
 <ce_value> numeric value of the ce earned
<ce_total_earned> total summary of all ce earned across all types

Results Reference

Registration Status
Incomplete
Confirmed
Wait List
Pending Approval
Approval Declined
Cancelled
Unknown

Method of Payment
No Payment
Purchase Order
Bill Me
External Payment System
Credit Card
ABC Credit



Unknown

Question Type Values
Free form text
Dollar amount
Number
Date
Discount Code
Checkbox response
Radio button response
Quantity response
Pre-defined selection list
File attachment

Example Output

```
<registration_data>
  <error></error>
  <registration_record>
    <registration_date>4/20/2011</registration_date>
    <registration_time>4:34:54 PM</registration_time>
    <last_change_date>1/23/2019</last_change_date>
    <last_change_time>4:55:00 PM</last_change_time>
    <registration_sid>23942</registration_sid>
    <registrant_sid>1</registrant_sid>
    <registrant_id>2038422</registrant_id>
    <login_id>MWegner5511</login_id>
    <user_id>5661F20174CA4DDF9314BE90DC52F1E0_831</user_id>
    <registration_status>Confirmed</registration_status>
    <first_name>Mike</first_name>
    <last_name>Wegner</last_name>
    <email_address>mwegner@abcsignup.com</email_address>
    <address_line1>6060 Dutchmans Lane</address_line1>
    <address_line2>Suite 250</address_line2>
    <city>Louisville</city>
    <state>KY</state>
    <zip_code>40205</zip_code>
    <phone_number>502-454-2850</phone_number>
    <event_title>Annual Event</event_title>
    <event_start_date>5/15/2023</event_start_date>
    <event_end_date>5/16/2023</event_end_date>
    <event_code>ANEVT</event_code>
    <event_sid>20342</event_sid>
    <event_key> 0008-0001-287A3DF7025C4B00856BAB5305F76D0F</event_key>
    <event_categories>
      <category_name>Alumni Events</category_name>
      <category_name>Sporting Events</category_name>
    </event_categories>
    <attendance>
      <attendance_detail>
        <event_date_sid>19155</event_date_sid>
        <start_date>03/01/20 2:00:00 PM</start_date>
        <end_date>03/01/20 3:00:00 PM</end_date>
        <attendance_confirmed>No</attendance_confirmed>
      </attendance_detail>
      <attendance_detail>
        <event_date_sid>19156</event_date_sid>
        <start_date>03/02/20 4:00:00 PM</start_date>
        <end_date>03/02/20 5:00:00 PM</end_date>
        <attendance_confirmed>Yes</attendance_confirmed>
      </attendance_detail>
    </attendance>
    <total_charges>25.00</total_charges>
  </registration_record>
</registration_data>
```



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```
<total_credits>-15.00</total_credits>
<total_payments>-10.00</total_payments>
<method_of_payment>Credit Card</method_of_payment>
<balance>10.00</balance>
<user_id>AB943292ABD2492923G33432</user_id>
<invoice_number>C9492-232</invoice_number>

<registration_questions>
  <question>
    <id>4473</id>
    <text>Alternate Email of Employee</text>
    <type>Free Form Text</type>
    <responses>
      <response>toddc@mail.com</response>
    </responses>
  </question>
  <question>
    <id>19961</id>
    <text>My Favorite Colors</text>
    <type>Checkbox Response</type>
    <responses>
      <response>Red</response>
      <response>Orange</response>
      <response>Green</response>
    </responses>
  </question>
</registration_questions>
<ce_detail>
  <ce_earned>
    <ce_description>Professional Development</ce_description>
    <ce_type>Hours</ce_type>
    <ce_value>1.25</ce_value>
  </ce_earned>
</ce_detail>
<ce_total_earned>14.75</ce_total_earned>

</registration_record>
</registration_data>
```

Database Update

Overview

The database update API can be used to add, update or make inactive database registrants. This option does not register an individual for an event but creates a master record for the registrant.

Requirements

API URL: https://reg.learningstream.com/reg/reg_db_update.aspx

Page must be called using a secure connection (https).

Name	Value	Description
account_code	Account Code	Your customer account code
security_key	Assigned Security Key	Unique value to prevent unauthorized access
db_action	0=insert or update 1=make inactive	Instructs application what to do with information provided
status_update	0=default normal operation 1=make registrant active if currently inactive	Optional parameter Provides option to make inactive registrant records active



Additional input parameters can be configured via the interface by clicking on the {click here to configure} option on the API Setup page. See example below:

Enabled	Field Description	Mapping (Posted Field Name)
☒	Database ID	registrant_id
☒	First Name	first_name
☒	Last Name	last_name
☐	Login ID	login_id
☐	Password	password_value (new registrants only)
☐	Phone Number	phone_number
☐	Email Address	email_address
☐	Address Line 1	address_line1
☐	Address Line 2	address_line2
☐	City	city
☐	State	state
☐	Zip Code	zip_code
☐	Parent ID	parent_id
☐	Employee Division	div_division

In order to determine if the application adds a new record or updates an existing record a key must be used to find the registrant in the Learning Stream database. The two options available are the Database ID or the Email Address. Keep in mind that the value must be unique in Learning Stream for the record. If two people are sharing the same email address like a parent and child, email address cannot be used.

The minimum required fields are always database id, first name and last name. Email address will be required if you are using email address as the key. Any blank information will be recorded as blank information in Learning Stream. If you are updating an existing database record and do not include the address for example, the existing address will be erased when the update is performed.

If you are assigning a relationship (parent/child) you can pass in the key for the parent record so that the relationship will be established when the insert/update is performed. The key for the parent record will use the same criteria as you selected for the record being inserted/updated.

If the call is successful, a simple response of "Success" will be the output.

Error Codes

If an error occurs for any reason the output will be “Error: xxx” where xxx represents one of the following error codes below.

Error Code	Description
101	Account code value is missing
102	Invalid account code
103	Security key is missing
104	Security key is invalid or database integration is not enabled
105	IP address filter failed
106	No field name for registrant_id has been established in the API setup
107	Unique key data is missing
108	First name or Last name is missing
109	The registrant id field must be unique
110	Inserting the new registrant failed
111	Unable to determine the parent registrant
112	Trying to make a registrant inactive that is not in the system
113	Question value is not defined in the list of available options
114	Question value is not defined in the list of available options for custom lists
115	Assigned parent registrant cannot be the same as the registrant being added or updated
116	Login id is already in use
117	Password is required for new registrants
118	Login id or password does not meet minimum criteria

For security reasons, the password field only applies to new records being inserted. Password updates cannot be made via this API.

Updating user defined database questions (global questions assigned to the database setup) can also be updated using this API. Once a global question has been assigned to the database a corresponding field name must be established for the question. This field name is defined when the global question is assigned to the database under:

Application > Database > Database Setup > DB Questions Tab

When assigning the question to the database you must define the Import Header. This import header will act as the field name that is used in this API for the value associated with this question. If you do not create an Import Header value on this page, the question will not display as an option when setting up this API.

Attendance Update

Overview

The Learning Stream Attendance API allows you to mark registrants as attended for a specific event. When the API is called with a registrant's information the API will update the registrant's status to attended. If the event has multiple event dates that are used to track attendance, the API will only update the first date.

Requirements

In order to update attendance information all required values will need to be posted to the API URL below using a secure connection:

https://reg.learningstream.com/reg/reg_abc_attendance_update.aspx?aid={accountcode}

The following values should be posted in hidden input fields to the page above.

Input name	Value	Description
security_key	Assigned Security Key	Unique value to prevent unauthorized access.
user_id	Registration key obtained from the registration data API or another source	This a unique value assigned to each registration for an event

Example Output

The following results will be returned in XML format if the update is a success:

```
<attendance_update>
  <result>success</result>
  <event_title>Introduction to Learning</event_title>
  <first_name>Bob</first_name>
  <last_name>Smith</last_name>
  <error></error>
</attendance_update>
```

The following results will be returned in XML format if the update fails:

```
<attendance_update>
  <result>failure</result>
  <error>{error_message}</error>
</attendance_update>
```

Single Registration Data

Overview

Provides more detailed registration information for a single registration based on the registration_key (user_id) provided. This integration uses the field “registration_key” which is referred to as the “user_id” in other integrations.

Requirements

In order to retrieve registration information from the Learning Stream application, all required values will need to be posted to this API URL:

https://reg.learningstream.com/api/api_single_registration_data.aspx?aid={accountcode}

Input name	Value	Description
security_key	Assigned Security Key	Unique value to prevent unauthorized access.
registration_key	Unique registration key	Unique value assigned to a registration for a specific event. Defined as user_id in other integrations.

Output

The following results will be returned in XML format

<registration> - This is the main root node for the registration record
<error> error code if any
<first_name> - First name provided with registration
<last_name> - Last name provided with registration
<registrant_id> - Database id for the registrant
<event_code> - The Event Code under the General tab of the Event Setup page
<address_line1> - First line of address data provided with registration
<address_line2> - Second line of address data provided with registration
<city> - City provided for the address as part of registration
<state> - State abbreviation provided for the address as part of the registration
<zip_code> - Zip code provided for the address as part of registration
<phone_number> - Phone number provided with registration
<email_address> - email address provided with registration
<attended> - Yes or No value for the first day of the event
<registrant_sid> - Internal ID that identifies a unique database user in the Learning



Stream system

<registration_questions> - node for registration questions
<question> - node for a specific question
 <id> - internal id for the global question
 <text> - text of the registration question
 <type> - type of question (see reference table below)
 <responses> - node for possible one or more response to the question
 <response> - text of the response
<ce_detail> node for continuing education information
 <ce_earned> node for a specific ce record
 <ce_description> description of the ce setup in Learning Stream
 <ce_type> Type of ce setup
 <ce_value> numeric value of the ce earned
<ce_total_earned> total summary of all ce earned across all types

Question <type> Reference Table

Question Type Values
Free form text
Dollar amount
Number
Date
Discount Code
Checkbox response
Radio button response
Quantity response
Pre-defined selection list
File attachment

Error Codes

If an error occurs for any reason the output will be "<error>xxx</error>" where xxx represents one of the following error codes below.

Error Code	Description
101	Account code value is missing
102	Invalid account code
103	Security key is missing, invalid or integration is not enabled
104	Registration key is missing
105	Registration key is invalid or no results found
201	Integration is not using HTTPS
202	Integration is not enabled
203	Issue with the security key
204	IP address is not valid to access this integration



Example Output

```
<registration>
  <first_name>Todd</first_name>
  <last_name>Chandler</last_name>
  <registrant_id>2039A</registrant_id>
  <event_code>ABC123</event_code>
  <address_line1>4801 Sherburn Lane</address_line1>
  <address_line2>STE 211</address_line2>
  <city>Louisville</city>
  <state>KY</state>
  <zip_code>40207</zip_code>
  <phone_number>(502) 111-1127</phone_number>
  <email_address>tchandler@email.com</email_address>
  <attended>no</attended>
  <registrant_sid>80</registrant_sid>
  <registration_questions>
    <question>
      <id>4473</id>
      <text>Alternate Email of Employee</text>
      <type>Free Form Text</type>
      <responses>
        <response>todd@email.com</response>
      </responses>
    </question>
    <question>
      <id>4460</id>
      <text>Employee Division</text>
      <type>Radio Button Response</type>
      <responses>
        <response>Corporate Management Services</response>
      </responses>
    </question>
    <question>
      <id>4462</id>
      <text>Employee Type</text>
      <type>Radio Button Response</type>
      <responses>
        <response>Employee</response>
      </responses>
    </question>
    <question>
      <id>19961</id>
      <text>My Favorite Colors</text>
      <type>Checkbox Response</type>
      <responses>
        <response>Red</response>
        <response>Orange</response>
        <response>Green</response>
      </responses>
    </question>
    <ce_detail>
      <ce_earned>
        <ce_description>Professional Development</ce_description>
        <ce_type>Hours</ce_type>
        <ce_value>1.25</ce_value>
      </ce_earned>
    </ce_detail>
    <ce_total_earned>14.75</ce_total_earned>
  </registration_questions>
</registration>
```

Event Details

Overview

Provides event information including event setup data

Requirements

In order to retrieve event information from the Learning Stream application, all required values will need to be posted to this API URL:

https://reg.learningstream.com/api/api_event_detail.aspx?aid={accountcode}

Name	Value	Description
security_key	Assigned Security Key	Unique value to prevent unauthorized access.
event_code	Code used to uniquely identify an event. If more than one event has the same event code, an error occurs	The Event Code under the General tab of the Event Setup page. Optional.
start_date	Start date of range mm/dd/yyyy	Checks the primary event start date and end date to pull events within the range of parameters provided
end_date	End date of event range mm/dd/yyyy	Start and End dates are optional but both start date and end date are required as parameters if you are selecting events within a data range
event_key	Unique event key GUID	Unique internal alpha numeric GUID assigned to the event Optional

Please note: You must provide either the (1) event code or (2) event_key or (3) date range parameters. If none of the parameters are provided you will receive an error.

Output

The following results will be returned in XML format

```

<events>
  <error> error code if any
  <event_detail> - This is the main root node for the event detail
  <status> - event status (not posted, posted, archived, cancelled)
  <event_key> - unique event key
  <event_sid> - numeric internal id for the event

```



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<title> - event title
<registration_start_date> - date/time of registration start (ET)
<registration_end_date> - date/time of registration end (ET)
<teaser> - teaser description on the event setup general page
<creation_date> - date/time of the event creation (not available for events before 2/10/2020)
<edit_date> - last change date/time
<event_code> - event code on the event setup general page
<division> - division name
<evaluation_form_setup> True or False if eval for is setup
<online_meeting> True or False if online meeting
<online_meeting_type> Blank or Zoom, GoToWebinar, Zoom Webinar
<zoom_user_id> Zoom user id setup in Learning Stream
<location_name> - assigned location name
<event_owner> - name of the assigned user
<event_dates> - all event dates
 <date_information> - container for specific event date/range
 <start_date> - date/time
 <end_date> - date/time
 <date_description> - description entered on the additional dates page
 <event_date_facilitators> - assigned facilitators on the additional dates page only
 <event_date_facilitator_name> - name of the assigned facilitator
<custom_data1> - custom information entered on the event setup advanced page
<custom_data2> - custom information entered on the event setup advanced page
<custom_data3> - custom information entered on the event setup advanced page
<custom_data4> - custom information entered on the event setup advanced page
<custom_data5> - custom information entered on the event setup advanced page
<category> - assigned category(s) for an event
 <category_name> - name of the category assigned
<flex_data> - event flex fields setup on the account defaults page
 <flex_label> - Value of the data in the flex field, label is the name of the field as defined in you setup. Changing the setup in your account will also change the value of this node label.
<event_facilitators> - facilitators assigned at the event level (not specific to an event date)
 <facilitator_name> - name of the facilitator
<event_ce> Event assigned continuing education
 <ce_available> Each assigned ce
 <ce_description> Description/name of the ce
 <ce_type> Unit of measurement for the ce
 <ce_value> Number of available ce units

Example Output:



```
<events>
  <error/>
  <event_detail>
    <status>Posted</status>
    <event_key>0008-0001-287A3DF7025C4B00856BAB5305F76D0F</event_key>
    <event_sid>20324</event_sid>
    <title>Event Detail API Testing</title>
    <registration_start_date>2/1/2020</registration_start_date>
    <registration_end_date>3/1/2020 11:59:00 PM</registration_end_date>
    <teaser><b>Teaser Description</b></teaser>
    <creation_date>2/4/2020 2:06:19 PM</creation_date>
    <edit_date>2/4/2020 2:30:52 PM</edit_date>
    <event_code>api202002</event_code>
    <location_name>Columbus, OH</location_name>
    <event_owner>Todd Chandler</event_owner>
    <event_dates>
      <date_information>
        <start_date>3/1/2020 2:00:00 PM</start_date>
        <end_date>3/1/2020 3:00:00 PM</end_date>
        <date_description>Initial date description</date_description>
        <event_date_facilitators>
          <event_date_facilitator_name>Colin
Powell</event_date_facilitator_name>
          <event_date_facilitator_name>Harry
Truman</event_date_facilitator_name>
        </event_date_facilitators>
      </date_information>
      <date_information>
        <start_date>3/2/2020 4:00:00 PM</start_date>
        <end_date>3/2/2020 5:00:00 PM</end_date>
        <date_description>Second date description</date_description>
        <event_date_facilitators>
          <event_date_facilitator_name>Harry
Truman</event_date_facilitator_name>
        </event_date_facilitators>
      </date_information>
      <date_information>
        <start_date>3/3/2020</start_date>
        <end_date/>
        <date_description/>
        <event_date_facilitators>
          <event_date_facilitator_name/>
        </event_date_facilitators>
      </date_information>
    </event_dates>
    <custom_data1>cd1</custom_data1>
    <custom_data2>cd2</custom_data2>
    <custom_data3/>
    <custom_data4/>
    <custom_data5/>
    <category>
      <category_name>Category XYZ</category_name>
      <category_name>CategoryB</category_name>
      <category_name>Professional Development</category_name>
      <category_name>Schools</category_name>
    </category>
    <flex_data>
      <Cashnet_GL_Number>b</Cashnet_GL_Number>
      <Item_Code_div/>
      <Public_Billing_Code/>
      <School_District>Jefferson County Schools</School_District>
      <Item_Code>c</Item_Code>
      <Additional_Notes><p><strong>Formatted<br></strong></p></Additional_Notes>
      <Special_Instructions/>
    </flex_data>
    <event_facilitators>
      <facilitator_name>Todd Chandler</facilitator_name>
      <facilitator_name>Ron Smith</facilitator_name>
```



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```
</event_facilitators>
<event_ce>
  <ce_available>
    <ce_description>Professional Development</ce_description>
    <ce_type>Hours</ce_type>
    <ce_value>1.25</ce_value>
  </ce_available>
</event_ce>

</event_detail>
</events>
```

Event Evaluation Detail Data

Overview

Output of event evaluation form detail

Requirements

In order to retrieve event evaluation detail from the Learning Stream application, all required values will need to be posted to this API URL:

https://reg.learningstream.com/api/api_eval_detail.aspx?aid={accountcode}

Name	Value	Description
security_key	Assigned Security Key	Unique value to prevent unauthorized access.
event_code	Code used to uniquely identify an event. If more than one event has the same event code, an error occurs	The Event Code under the General tab of the Event Setup page.
event_key	Unique event key	Internally assigned alpha/numeric event key.

** Either event_code or event_key is required. If event_key is provided the event_code parameter is ignored.

Output

The following results will be returned in XML or JSON format

<evaluation_detail_results> - This is the main root node for all the evaluation records

<error> - This will display any errors that occur, invalid key, no event code, no records found, etc

<event_title> Title/Name of event

<event_code> Event code in event setup

<event_key> Internally assigned unique event key

<start_date> First assigned date for the event

<forms> Make form node for all forms

<evaluation_form> Node for a single evaluation form

<form_id> Unique internally assigned for id

<evaluation_question> Node for an evaluation question

<question_id> Internally assigned question id

<question_type> Type of question (see table)

<question_text> Text assigned to the question



<response> node for response(s)

<response_detail> Text of the response/answer

<response_weight> Weight optional assigned

Value	Response Type Description
text	Open ended text question
multiple options	One or more options available to select from (checkbox)
single option	Single option response (radio button or drop down list)

Example Output

The following is an example of the JSON output

```
{
  "evaluation_detail_results":{
    "event_title":"Evaluation Testing",
    "event_code":"evalt1",
    "event_key":"0001-0901-D55070A091604CE98D108136FC0B9E72",
    "start_date":"7/1/2021",
    "forms":{
      "evaluation_form":[
        {
          "form_id":"80",
          "evaluation_questions":[
            {
              "question_id":"26",
              "question_type":"single option",
              "question_text":"Radio Button Question",
              "response":{
                "response_detail":"RB Option Two",
                "response_weight":"2"
              }
            },
            {
              "question_id":"27",
              "question_type":"text",
              "question_text":"Text Response",
              "response":{
                "response_detail":"Johns Text Response",
                "response_weight":"0"
              }
            },
            {
              "question_id":"28",
              "question_type":"multiple options",
              "question_text":"Check Box Question",
              "response":{
                "response_detail":[
                  "CB Option Two",
                  "CB Option Three"
                ],
                "response_weight":[
                  "2",

```

```
        "3"
      ]
    }
  },
  {
    "question_id": "29",
    "question_type": "single option",
    "question_text": "Drop Down Question",
    "response": {
      "response_detail": "DD Option Two",
      "response_weight": "2"
    }
  }
],
},
```