



Convio Open Development Program Integration Guidelines

Overview

This document is provided to guide prospects who wish to develop product integrations to Convio's Open platform using the available API interfaces. The intended audience is a developer or other similar technical resource, working with either Convio's Luminate Online marketing product, Luminate CRM, or Convio Common Ground. Included are document references, community links, best practices, and tips.

The Convio Open Development Program is the official partner program for recognized vendors that develop integrations with one or more Convio products. If you wish to apply to become a Convio Open Partner, please fill out this submit form: <http://www.convio.com/our-partners/become-a-partner.html> . You can learn more about the Convio Open Development Program here: <http://open.convio.com/program/> .

Development and Test System

You will be provided access to a temporary system for the purposes of fulfilling the integration development work on the Convio open platform utilizing our existing published interfaces. The details will be provided in a separate email by the Convio Open Development Program Partner Manager.

Force.com Technology Platform

Convio's CRM offerings (Luminate CRM and Common Ground) are built upon the Force.com platform that is offered by Salesforce.com. Convio is a Salesforce Foundation partner and is currently the only nonprofit vendor licensed by Salesforce to offer a CRM solution leveraging their CRM platform targeting the nonprofit market. Salesforce offers a rich set of APIs and their own Apex language to develop integrations- documentation, community, and reference links are provided below. Flavors of the Force.com APIs available beyond native Apex code to develop custom integrations include the following:

- REST APIs
- SOAP APIs
- Bulk APIs
- Metadata APIs

We encourage Open partners to list their developed integration applications on the Salesforce AppExchange, which can provide greater visibility to vendors to reach a wider audience.

Other Convio products such as Luminate Online are build upon Convio's own technology platform, and Convio offers a fully documented and supported set of APIs to develop custom integrations to this platform as well. There are two flavors of Convio Open APIs offered for Luminate Online- REST and SOAP based.

Typical Integration Guidelines

We encourage potential Open partners to develop rich and compelling integration experiences that will be beneficial and productive for our common clients. At a minimum, we would like to see seamless authentication and updated constituent profile information demonstrated. We encourage you to do more and we are happy to guide you during the design phase of your integration.

It is assumed that prospects wishing to develop integrations to the Convio platform have the necessary skills and experience to learn and use a new API interface. Beyond the reference documentation made available for download, there are not any training classes offered to learn the product if you are not yet a partner, although you can attend a Convio public training class for a fee. Technical support is limited for Open prospects, so you need to be willing to invest the time to research product functionality, troubleshoot errors, and resolve problems largely unassisted.

It is important to decide and document a set of basic use cases that will guide your integration development efforts. A use case can be thought of as a documented workflow from beginning to end that one or more stakeholders would participate in to achieve some task or business result. A documented use case scenario must be a common or frequent activity performed by clients in order for it to be of value and relevance. It is suggested at least three (3) use cases are provided in your submit form that you will receive from Convio.

Once you have decided on your use cases to develop, Convio will work with you to set up a time to demonstrate the prototype integration and discuss further. During this stage, we place more emphasis on the functionality and usability of the integration rather than the finished look.

For Convio Common Ground and Luminate CRM Integrations

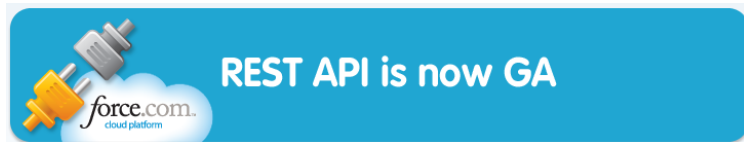
For Open prospects developing integrations to Convio Common Ground or Luminate CRM, the underlying platform for this product is Force.com. There is a wealth of data and resources available to developers wishing to develop an integration to this platform. They are as follows:



DeveloperForce main website: <http://developer.force.com/>

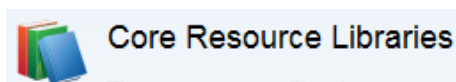
DeveloperForce online documentation of their APIs, other integration documentation:

- <http://wiki.developerforce.com/index.php/Integration>



Specific link to the newly available Force.com REST API:

- <http://developer.force.com/REST>



Core resource libraries:

- <http://developer.force.com/coreresources>

Community discussion boards for developers:

- <http://boards.developerforce.com/sforce/?category.id=developers>

Other partner / technical resources:

- http://sites.force.com/partners/PP2Page?p=P_PartnerResources

Introduction to developing commercial apps on Force.com

- http://wiki.developerforce.com/index.php/Introduction_to_Developing_Commercial_Apps_on_Force.com

SalesForce AppExchange



It is encouraged by Convio that Open Partners who develop integrations to work with Convio Common Ground or Luminate CRM, also complete the necessary steps to have their application officially registered with the SalesForce AppExchange, located at <http://sites.force.com/appexchange/gettingStarted> . This will not only make your application available to a wider audience, but also it offers an additional measure of confidence to clients considering downloading and installing your packaged integration. Salesforce provides the following material to assist developers to prepare for a security review of their submitted applications located at http://wiki.developerforce.com/index.php/Security_Review .

Common Ground Integrations

Your Convio Open Development Program Manager will provide you directions on how to access a temporary instance of Convio Common Ground for integration development and testing efforts. Please note that only one instance per company/organization is provided, but can be shared by multiple developers. Also the time for your automated email notification to arrive upon completing the trial form can be up to 10 minutes. By default the trial period for a Common Ground test instance is 30 days, but this can be extended by the Convio Open Development Program Manager

Recording your Organization ID

For your trial version of Common Ground, you should copy down the value of your Organizational ID so we can more easily locate your particular instance should you need the expiration period extended. Note that any trial version of Salesforce that goes beyond 30 days of the expiration date without being renewed is automatically expunged and the data cannot be retrieved.

Under Setup, go to Administration Setup, and then under Company Profile click on “Company Information”. Look for the field that has the Organization ID displayed:

The screenshot shows the Salesforce Administration Setup interface for the organization 'Convio'. The left sidebar contains navigation menus for Personal Setup, App Setup, and Administration Setup. The 'Administration Setup' menu is expanded, and 'Company Profile' is selected. The 'Company Information' sub-menu is also selected. The main content area displays the 'Company Information' page for 'Convio'. The 'Organization Detail' section is visible, showing various fields such as Organization Name, Primary Contact, Division, Address, Fiscal Year Starts In, Newsletter, Admin Newsletter, Hide Notices About System Maintenance, Hide Notices About System Downtime, Phone, Fax, Default Locale, Default Language, Default Time Zone, Currency Locale, Used Data Space, Used File Space, API Requests, Last 24 Hours, Restricted Logins, Current Month, Salesforce.com Organization ID, and Organization ID. The 'Salesforce.com Organization ID' field is highlighted with a red box, showing the value '00DA00000009Lnm'.

Organization Detail	
Organization Name	Convio
Primary Contact	Doug Fierro
Division	
Address	11501 Domain Drive Austin, TX 78758 US
Fiscal Year Starts In	January
Newsletter	<input checked="" type="checkbox"/>
Admin Newsletter	<input checked="" type="checkbox"/>
Hide Notices About System Maintenance	<input type="checkbox"/>
Hide Notices About System Downtime	<input type="checkbox"/>
Phone	(512) 807-3773
Fax	
Default Locale	English (United States)
Default Language	English
Default Time Zone	(GMT-08:00) Pacific Daylight Time (America/Los_Angeles)
Currency Locale	English (United States)
Used Data Space	763 KB (0%) View
Used File Space	106 KB (0%) View
API Requests, Last 24 Hours	0 (5,000 max)
Restricted Logins, Current Month	0 (0 max)
Salesforce.com Organization ID	00DA00000009Lnm
Organization ID	

Configuring API Access

The API within Common Ground is already enabled out of the box. You will need to designate a user account that the API will use that has the proper credentials, and setting up security access.

1. For the SFDC user account, it is recommended to set up a user as a System Administrator that also has a Common Ground license. Without the CG license access, the user won't be able to see any CG objects.

Assign / verify Common Ground licenses as follows:

Select 'Setup' , then under 'App Setup' select 'View Installed Packages'. You will see the package name 'Convio Common Ground' installed. Under the action column, select 'Manage Licenses':

Personal Setup

- ▶ My Personal Information
- ▶ Email
- ▶ Import
- ▶ Desktop Integration
- ▶ My Chatter Settings

App Setup

- ▶ Customize
- ▶ Create
- ▶ Develop
- ▶ Deploy

[View Installed Packages](#)

Critical Updates

Administration Setup

Installed Packages

On Force.com AppExchange you can browse, test drive, download environment. [Learn More about Installing Packages.](#)

Apps and components are installed in packages. Any custom app not deployed to your users. This allows you to test and customize features in setup or as a group by clicking Deploy.

Depending on the links next to an installed package, you can take

To remove a package, click **Uninstall**. To manage your package l

Action	Package Name	Publisher
Uninstall Manage Licenses	Convio Common Ground	Convio, Inc.

Description
Convio Common Ground cc

From there you can add or remove licensed CG users:

Convio Common Ground

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Package Name	Convio Common Ground	Publisher	Convio, Inc.
Status	Trial	Allowed Licenses	2
Expiration Date	12/29/2010	Used Licenses	1

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other **All**

Licensed Users					Add Users	Remove Multiple Users
Action	Full Name ↑	Role	Active	Profile		
Remove	Fierro, Doug		<input checked="" type="checkbox"/>	System Administrator		

To view what packages an existing user is licensed to use, that is displayed on the user's detailed profile. On the left navigation bar under Administration Setup, drill down to Manager Users -> Users and select a user's full name link, and then scroll down to the 'Managed Packages'. You can see all the packages that user is licensed to use:

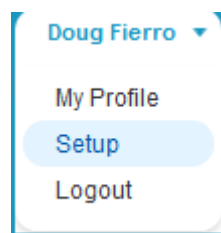
Managed Packages				Assign Licenses	Managed Packages Help ?
Action	Package Name	Status			
Remove	Convio Common Ground	Trial	12/29/2010		

- To set up access security for the designated user account that will access the API, there are two options:

- generate a security token
- update the IP whitelist range to include the trusted network

To generate a security token:

- While logged in as the designated API user account, go under setup menu for that user:



- b. On the left navigation bar, under “Personal Setup” expand the section for “My Personal Information” and then click on the link “Reset My Security Token”. Then click on the button ‘Reset Security Token’ :

Personal Setup

- My Personal Information
 - Personal Information
 - Change My Password
 - Reset My Security Token**
- My Groups
 - Change My Display
 - Grant Login Access
 - Calendar Sharing
 - Reminders
 - Record Type Selection
- Email
- Import
- Desktop Integration
- My Chatter Settings

Reset Security Token [Help for this Page](#)

Clicking the button below invalidates your existing token. After resetting your token, you will have to use the new token in all API applications.

When accessing salesforce.com from outside of your company's trusted networks, you must add a security token to your password to log in to the API or a desktop client such as Connect for Outlook, Connect Offline, Connect for Office, Connect for Lotus Notes, or the Data Loader.

Your security token is tied to your password and subject to any password policies your administrators have configured. Whenever your password is reset, your security token is also reset.

For security reasons, your security token is delivered to the email address associated with your account. To reset and send your security token, click the button below.

Reset Security Token

To add a new IP address to the whitelist:

- a. Go to the setup selection for the user, then on the left navigation bar under “Administration Setup”, expand the section for “Security Controls” and click on “Network Access” :

Administration Setup

- Manage Users
- Company Profile
- Security Controls**
 - Sharing Settings
 - Field Accessibility
 - Password Policies
 - Session Settings
 - Network Access**

Certificate and Key Management

Single Sign-On Settings

View Setup Audit Trail

Expire All Passwords

Delegated Administration

Remote Site Settings

HTML Documents and Attachments Settings

- b. Enter the IP address for the application or system that will be integrating with Common Ground via the API.

Network Access

[Help for this Page](#) ?

The list below contains IP address ranges from sources that your organization trusts. Users logging in to salesforce.com with a browser from trusted networks are allowed to access salesforce.com without having to activate their computers.

Trusted IP Ranges New					
Action	Start IP Address ↑	End IP Address	ISP	Organization	Geography
Edit Del	69.48.252.130	69.48.252.254			
Edit Del	209.163.168.192	209.163.168.255			

The standard SFDC enterprise WSDL will provide access to all data objects, including Common Ground objects defined by the nonprofit organization.

Luminate CRM Integrations

Partner access to Luminate CRM test systems is anticipated at the end of 2011. Please consult with the Open Development Program Manager for details. Many of the Salesforce API integration setup steps for Common Ground will also apply to Luminate CRM, but keep in mind these are two distinct products developed separately, and as such an integration developed for one of these CRM solutions will not necessarily work for the other. If you are a partner prospect, please work with your Convio Open Development Program Manager to determine which Convio product integration is appropriate for your application on the Force.com platform, as Common Ground and Luminate CRM are not only separate products, but they also target different market segments.

Caveat Emptor

Because Convio Common Ground and Luminate CRM introduce additional custom objects and triggers on top of the basic Salesforce.com offering, it is important to understand how this might affect your planned integration. In general, a package application written for Force.com will not always cleanly install or operate in a Convio Common Ground or Luminate CRM environment, without some additional changes or updates. Convio makes available upon request a copy of the Convio Common Ground Object Reference, which details all existing triggers and workflows that exist within the product.

We recommend that clients consider only third party applications that have been reviewed and approved through the Convio Open Development Partner program when considering downloads for your Common Ground or Luminate CRM environment. Such partners are listed on the Convio website under the partner section.

For Convio Luminate Online Marketing Integrations (formerly COM)

Complete reference documentation for Convio's REST-based APIs and SOAP-based Web Services to access Convio Luminate Online (formerly COM) is available at this site: <http://open.convio.com> . Sample code downloads are available for free at this same location.

Please enable API logging when you begin developing your Convio integration. Details for configuring the API logging level are located in the Convio Open API Reference Manual, under the section "Logging API Calls", available for download at <http://open.convio.com> .

1. Single Sign-On

1.1. Registration

- 1.1.1. Users who register on the Convio site must be automatically registered on the partner site.
- 1.1.2. Users who register on the partner site must be automatically registered on the Convio site.
- 1.1.3. Users must be able to log in using the same credentials to either the Convio or the partner site.

1.2. Authentication

- 1.2.1. Users logged in on the Convio site and navigating to the partner site must be automatically logged in on the partner site.
- 1.2.2. Users logged in on the partner site and navigating to the Convio site must be automatically logged in on the Convio site.
- 1.2.3. Tip- be careful mixing domains when making API calls – authenticated sessions established on a non-secure domain are not recognized on secure domains. Be sure you login on the secure domain (<https://secure.convio.net>) vs. the non-secure host site (<http://org.convio.net>) before calling API methods that require a login session. Using redirect URLs can work around this issue if working with a non-Convio domain in the same session.

1.3. Password Changes

- 1.3.1. When a user changes his password on the Convio site, their password must be automatically updated on the partner site.
- 1.3.2. When a user changes his password on the partner site, their password must be automatically updated on the Convio site.

2. User Profile

It is recommended that any custom objects, fields or attributes that are created within Convio to support your integration, that the internal references are uniquely named so as not to have namespace conflicts with potentially other client customizations before or after your integration is enabled.

After a user registers on either site and the registration is propagated to the other site, the details of the user's profile information (name, address, email, etc.) that are common to both sites should be the same on both sites.

When a user updates common profile information (name, address, email, phone, etc.) on either site, the change should automatically propagate to the other site.

3. Group and Interest Assignment and Synchronization

If your integration will synchronize Convio groups or interests to another application or interface outside of Convio, it is recommended that you pair both the name of the interest or group along with the numerical value when displaying for users. So it is more intuitive to see "outdoor interest (1025)" vs. just "1025".

Convio's Open APIs are more restrictive when assigning a user to a group id vs. interest id, because site security is affected by internal group membership. Groups that are tied to interests have no effect on site security permissions and access for an individual. When using the Constituent API, you cannot use the client version (CRConsAPI) to make an anonymous update to add a constituent to a group via the `add_group_ids` parameter. You must instead use the server version (SRConsAPI) from a white-listed server IP address along with valid API admin user credentials. Adding or updating opt-in interests via `add_interest_ids` is supported via CRConsAPI and is not as constrained for use compared to `add_group_ids`.

4. Donations

PCI-DSS Compliance

Convio's payment processing system is PCI-DSS certified. Partner's implementation of any donation or payment processed by Convio must provide a direct, secure connection from the cardholder's browser to Convio. It must not collect, store, proxy, or transmit sensitive cardholder information through any other system or network.

Specifically the donations API data must be sent directly to Convio - the form action must be <https://secure2.convio.net/organization/site/CRDonationAPI>, not, for example, to a script or page such as `donate.php` which then makes a server-side request to the API and parses the resulting XML. You'll need to use redirect URLs (see http://open.convio.com/api/#main.using_redirect_parameters.html) to handle the response.

5. TeamRaiser

A sample TeamRaiser registration work flow:

- You may want to ask the user to [login](#) or [create](#) a new constituent record in the system. This is not mandatory; you can register without logging in and the registration will try to match or create the user record, but this is a good opportunity for the user to positively identify themselves or possibly review and update their site registration profile.
- [getParticipationTypes](#) returns information about participation types available for an event. There may be more than one participation type available for a user to select, and since the participation type drives a lot of the subsequent registration workflow you probably want the user to select it first. Even if the event defines only one participation type, you will probably need data, such as survey questions, that are returned by this method.
- Given the event ID and participation type, [getRegistrationDocument](#) returns the template document which must be filled out and passed to [processRegistration](#) to complete the registration process.
- An example contribution exists on the download page of the Convio Open site showing how to use the TeamRaiser registration API. Please visit <http://open.convio.com/downloads/teamraiser-registration-api.html> .

6. Advocacy

You must first create an alert template in the Convio admin interface before accessing it via the Advocacy API.

By default the temporary Luminate Online test system provided to you by Convio has Advocacy delivery turned off, as we do not want partners during testing inadvertently sending members of Congress or the White House test emails. If you wish to preview email messages within Advocacy, please contact the Open Program Manager to have that enabled. You must create a custom target for use when sending any action alerts during testing.

The Advocacy API today does not support web forms that use CAPTCHA .

7. Survey

You must first create a survey template in the Convio admin interface before accessing it via the Survey API.

8. MultiCenter

The REST based API has a “center_id” parameter that can be used to set the center context for an API session. You do not need to modify access permissions for the “API_Administrators” group in order to limit context by a particular center when making API calls.

The Web Services interface is not aware of MultiCenter and does not have the ability to filter or set context based on a particular center.

9. Interactions

Logging

User registrations that come in through the partner site should log appropriate client-defined origin source codes in the constituent profile of the Convio site.

Meaningful user interactions with the partner site should log appropriate client-defined interaction records on the Convio site.

Examples

A contributed example on the open website exists for using custom interactions within Luminate Online. Please visit <http://open.convio.com/downloads/custom-api-example-pet.html> .

10. Debugging

It is recommended to enable API logging when developing the integration to Convio’s Online Marketing product (COM). Details for configuring the API logging level are located in the Convio Open API Reference Manual, under the section “Logging API Calls”, available for download at <http://open.convio.com> .


If you cannot reach the temporary test system provided by Convio online, be sure to check the values of the URLs you are using compared to the values within the document provided to you by Convio to uncover any typographical errors.

Be sure you have the correct API key value and account login password taken directly from the Convio system you are developing against - the samples provided in the documentation will not work with live client sites!

For 403 – Forbidden Status error messages displayed in your browser when attempting to connect to Convio APIs, check the following:

- sending the request from an IP address that is not white listed under Setup/Site Options/Open API Configuration
- passing a login_name/login_password to a Server API that is not a valid API Administrator account
- using an API Administrator account that does not have specific permission for the API being called (SRTeamRaiserAPI and SRDonationAPI are both disabled by default)
- passing login_name/login_password credentials in the URL rather than in the request body

An on-line test console at <http://open.convio.com/system/api/> is provided via the Convio Open website, so you can type in API method values and submit them to a real-time instance of Convio Online Marketing (COM) and view expected return values. A sample screen shot is provided below:



OUR PRODUCTSOUR SERVICESOUR RESEARCHOUR CLIENTSOUR PARTNERSABOUT US

Convio Open

APIsWeb ServicesDownloads

create

Complete the form and submit:

name.first	John
name.last	Doe
email.primary_address	jdoe@doe.com
email.accepts_email	<input type="radio"/> true <input type="radio"/> false <input checked="" type="radio"/> null
member_id	
primary_address.street1	
primary_address.street2	
primary_address.city	
primary_address.state	
primary_address.zip	
no_welcome	<input type="radio"/> true <input type="radio"/> false <input checked="" type="radio"/> null

Submit

Request:

primary_address.street1=&no_welcome=&primary_address.state=&member_id=&name.first=John&email.accepts_email=&primary_address.zip=&name.last=Doe&api_key=open&v=1.0&email.primary_address=jdoe%40doe.com&primary_address.street2=&method=create&primary_address.city=

Response:

<?xml version="1.0" encoding="UTF-8"?>
<createConsResponse xsi:schemaLocation="http://convio.com/crm/v1.0 http://convio.com/crm/v1.0 schema.xsd">
 <cons_id>1009841</cons_id>
 <message>The new constituent was successfully added.</message>
</createConsResponse>