What is REDCap API?

The REDCap API (Application Programming Interface) is an interface that allows external program applications to connect to REDCap. Programs talk to the REDCap API over HTTP, the same protocol that your browser uses to visit and interact with web pages. The REDCap API is generally used to automate activities between REDCap and another system.

The REDCap API can be used to (1.) push data from other sources into REDCap, such as electronic health records, other REDCap projects, web-servers, or statistical programs, (2.) automatically pull data from REDCap into statistical software or study dashboards, and (3.) programmatically interface with applications, websites, apps, widgets, and other projects.

The two most common reasons for using the REDCap API are to automatically export data directly into a statistical program (so that statisticians have the most up-to-date data for their analysis) and to use the REDCap Mobile App.

API user-rights are turned off by default for most users. You must have ‘API’ privileges to access API’s and the API playground.

To learn more about APIs:

1. REDCap API Documentation
   
   This documentation resembles a technical instruction manual. If you have programming experience you may be familiar with this style of documentation.

   The documentation for REDCap API can be found:
   
   REDCap I: REDCap I API Documentation
   
   REDCap II: REDCap II API Documentation

   **Note:** You will need to login to REDCap to access these pages.

2. API Playground

   Within each REDCap project, there is an ‘API Playground’ in the left navigation menu which allows you to experiment and observe the range of API functionality without writing code. You can set parameters for different API methods and run the resulting code to see the results. REDCap will generate code in different programming languages (PHP, Perl, Python, Ruby, Java, R and cURL) based on your selection. This code can then be replicated in the program of your choice.