



# *Generic User Guide*

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## Contents

Finding the latest version of this User Guide.....	11
Corrections/suggestions for this User Guide.....	11
REDCap Overview.....	12
Definition .....	12
Helpful Terms.....	12

REDCap Project .....	21
Create a New REDCap Project.....	21
Project Title .....	21
Purpose of this project .....	21
For a video overview of the different project types,.....	21
Project notes (optional).....	21
Start project from scratch or begin with a template.....	21
Your Project's unique ID .....	22
Navigating from within a Project .....	22
Project Access .....	22
Project Status .....	23
Project Transitions.....	23
Project Setup.....	24
Step 1 on the Project Setup page: Main project settings .....	24
Use longitudinal data collection.....	24

Use surveys in this project .....	24
Modify project title, purpose, etc.....	24
Step 2 on the Project Setup page: Design your data collection instruments .....	25
Navigating to Online Designer .....	25
Data Collection Instruments .....	26
Quick Guide to Instrument Design .....	26
Note on CSV files .....	26
Online Designer.....	27
Designing within an instrument .....	30
Shared Library .....	54
Smart Variables .....	55
Step 3 on the Project Setup page: Enable Optional Modules and Customizations .....	55
Repeatable or Repeating instruments.....	55
Auto-numbering for records (on Project Setup page).....	58
Work-around for starting record numbering with a number other than 1 .....	58
Manually assign a record identifier .....	59
Scheduling module (longitudinal only).....	59
Randomization module.....	59
Designate an email field for sending survey invitations.....	59
Additional Customizations on the Project Setup page .....	60
Step 4 on the Project Setup page: Set up project bookmarks .....	66
Step 5 on the Project Setup page: User Rights and Permissions .....	67
User Rights .....	67
Data Access Groups .....	67
Adding a user to your project (Add a user to your project) .....	67
Customizing User Rights .....	70
User Roles .....	70
Step 6 on the Project Setup page: Test Your Project Thoroughly .....	71
Purpose of Testing.....	71
Quick Guide to adding test data.....	71
Adding test data .....	72
Adding test data for surveys .....	73
Design Tip: test on the type of device that your participants will be entering data.....	74
Allow plenty of time for project development and testing .....	74

Step 7 on the Project Setup page: Move Your Project to Production.....	74
How to move your project to Production mode .....	75
Advantage of being in production mode .....	76
Making Design Changes in Production .....	76
Project status change .....	76
Surveys .....	77
There are 3 main spaces within REDCap that you will work to design/manage your survey:.....	77
Survey Wizard .....	77
Quick Guide to Survey Setup .....	78
Enable Surveys within the project.....	78
Enable Your Instrument as a Survey.....	79
Field function in Surveys.....	81
Stop Action.....	81
Enabling Repeating Instruments for a Survey Instrument.....	82
Survey Design tip: Validation check error messages.....	83
Survey Design tip re: User Access .....	83
Survey Login.....	84
Survey Settings.....	86
Survey Status.....	86
Basic Survey Options in Survey Settings .....	86
Survey Design Options.....	86
Survey Customizations in Survey Settings .....	87
Survey Design Tip: Using Descriptive Text field as a section sub-heading .....	88
Survey Access in Survey Settings.....	90
Survey Termination Options in Survey Settings .....	92
Survey Inactive Comparison.....	95
Best practices for Survey Settings if collecting PHI (Protected Health Information) .....	96
To change an instrument from a survey back into a data entry form (reverting a survey to a data entry form).....	96
Survey Notifications (Survey notification emails) .....	97
Survey Delivery options .....	97
Public Survey Link.....	98
Viewing Survey Invitations.....	113
Best practices for collecting anonymous data via Surveys .....	114
Testing the survey .....	115

Codebook.....	115
Collapse/expand instruments in Codebook.....	116
Making changes to your project with the Data Dictionary.....	117
Download the Current Data Dictionary.....	117
Download the Data Dictionary.....	118
Design tip: create snapshot of instruments when in Development mode.....	119
Edit the Data Dictionary.....	120
Data dictionary in Excel .....	120
Data dictionary in Notepad.....	120
Things you can/can't do in the Data Dictionary.....	121
Saving the Data Dictionary.....	122
Upload Data Dictionary .....	122
Viewing Data Dictionary history.....	123
Other Functionality .....	123
Move to inactive status (production only): .....	123
Move to production status / Move to production status (archived only):.....	123
Copy the project:.....	123
Delete the project (development only):.....	124
Erase all data (development only):.....	124
Archive the project:.....	124
Add Data .....	124
What to know about data entry.....	124
Save options for data entry .....	124
View Data.....	125
View individual record.....	125
Design Tip for Viewing Records.....	126
Search Records.....	127
Record Status Dashboard .....	127
Viewing Aggregate Data .....	128
Printing PDFs of your data .....	128
Printing PDFs of one record across all instruments.....	128
Printing PDF of one instrument for a record.....	129
Note about printing PDFs of blank instruments .....	129
Change data.....	130

Edit records (edit response).....	130
Delete Records .....	131
Delete record rights.....	131
Applications .....	133
Alerts & Notifications .....	133
To create an Alert using Alerts & Notifications.....	133
Calendar (for longitudinal projects only).....	139
Data Exports, Reports and Stats.....	139
Create Custom Report .....	140
Design tip: Survey Timestamps .....	142
Managing and Using Your Reports .....	143
Reports and Data Exports with Repeating Instruments and Events .....	144
Export Data .....	145
Data Import Tool .....	148
Import Template.....	148
Importing to Checkbox Fields.....	148
Importing to Date and DateTime Fields.....	148
Importing to Data Access Groups.....	148
Calculated Fields.....	148
Upload File .....	148
Importing Data for Data Access Groups .....	149
Data comparison Tool.....	149
Note: Data Comparison Tool and Repeating Instruments.....	150
Logging.....	150
Field Comment Log.....	151
File Repository.....	151
User Files.....	151
Data Export Files.....	152
Upload New File .....	152
Data Access Groups (DAGs) .....	152
Create a Data Access Group.....	152
E-signature and Locking Management.....	154
Data Quality .....	155
Execute Rules .....	155

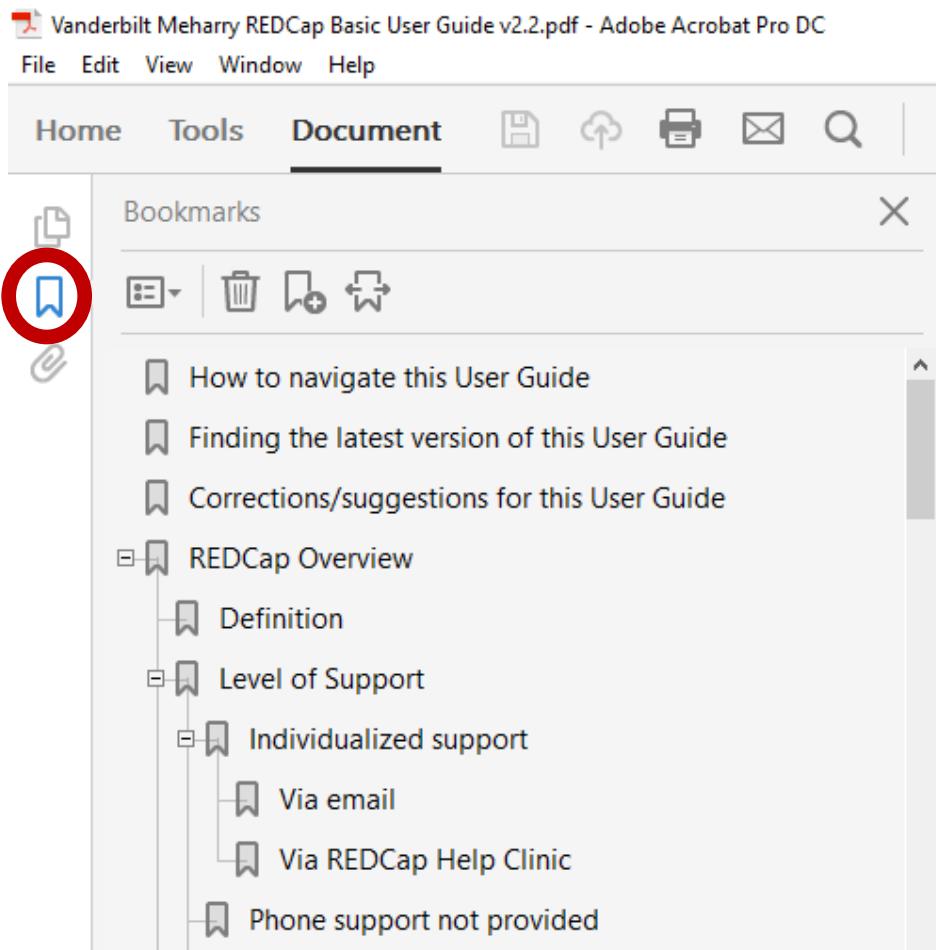
Discrepancies .....	156
Add a New Rule .....	156
Real Time Execution .....	156
API .....	157
Knowledge required to set up API.....	157
To use API on a REDCap project .....	157
API Documentation .....	157
REDCap Mobile App .....	157
REDCap Mobile App Help.....	157
To determine if the Mobile App is necessary for your project, consider this information: .....	158
MyCap.....	158
REDCap Mobile App vs. MyCap.....	159
External Modules .....	159
Definition .....	159
Disclaimer.....	160
For more information on External Modules .....	160
To see what external modules are available.....	160
To request an external module to be enabled.....	160
To configure an external module .....	160
Reporting bugs in external modules.....	160
Double Data Entry – Data Comparison Tool .....	160
Further customizations to your REDCap project.....	161
Longitudinal Projects.....	161
Project Setup.....	161
Enable your project as a longitudinal project .....	161
Design instruments.....	161
Enabling Repeating Instruments and Events in a Longitudinal Project .....	161
Design your Event Grid .....	162
Scheduling.....	166
Enable Scheduling module.....	166
Create a Schedule .....	167
Automatic Generation of Schedules .....	168
View or Edit Schedule .....	168
Calendar.....	168

Calendar Events.....	168
Exporting Longitudinal Data.....	169
Longitudinal Reports .....	170
Importing Data for Longitudinal Projects .....	170
Public Survey Links within a Longitudinal Project.....	170
Additional Tools In REDCap .....	171
eConsent.....	171
Setting up eConsent .....	171
Content of e-Consent survey .....	171
Viewing eConsent documents.....	171
Editing e-Consent documents .....	171
Updating your e-Consent form .....	172
Twilio .....	187
Converting an Outlook Distribution List into a Participant List .....	190
Modifying a participant list to include identifiers.....	195
Requesting a Feature .....	197

Additional Training/Support Resources .....	197
Instructional text within REDCap .....	197
Help & FAQ within REDCap.....	197
Training Videos.....	199

## How to navigate this User Guide

- You can use Ctrl+F to search for a keyword within this User Guide
- You can click on the Bookmark icon to find the section you would like to jump to:



- There are some embedded hyperlinks, referencing other sections of the User Guide. If you click on the link, it will bring you to that section of the User Guide.

### Add a New Rule

Add a new rule by entering a description of the rule and the calculation expression. Then click **Add**.

Num1 should be $\geq$ Num2	[num1] < [num2]	<input type="checkbox"/>
<b>Add</b>	<b>Enter descriptive name for new rule</b> (e.g., Participants below age 18)	<b>Enter logic for new rule</b> (e.g., [age] < 18) <a href="#">How do I use special functions?</a>
		Execute in real time on data entry forms <input type="checkbox"/>

For more information on calculation expressions see [Calculated Fields](#). Remember that data quality rule expressions must evaluate to True or False.

# REDCap Overview

## Definition

REDCap = Research Electronic Data Capture

REDCap is a secure, web-based application for building and managing online surveys and database. You can think of it as a tool to collect and disseminate data.

For a brief video overview of REDCap, [see this link](#). It is 4 minutes in length. You can access the video from the Home or My Projects tab by clicking on Training Videos. If you are in a REDCap project, look on the left-hand navigation bar under the Help & Information section at the bottom of the navigation bar.

A more detailed video overview of REDCap [can be found here](#). It is 14 minutes in length.

## Helpful Terms

**Data Collection Instrument** – a form or survey created for capturing data. Similar to a sheet or tab within an Excel Workbook.

**Record** - Similar to a row in an Excel sheet.

**Record ID** – a unique identifier for each record in your database.

**Record Status Dashboard** – a table that lists all existing records and their status for every data collection instrument

**Data Dictionary** – a spreadsheet containing the data entry fields for your project

**Variable** – the name of the field or answer choice that is stored in the database

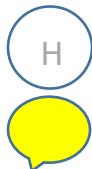
**User** – a person who is given access to a REDCap project (e.g. can login to REDCap and go into the project.) If you are the creator of a REDCap project, you are a user on that project. Anyone else you add to the project is a user on the project.

**Participant** – a person who completes a survey. This person does not see other participants' survey results because they are not logging into REDCap to enter their results.

**Survey** – data collection instrument that can be completed by someone who is not a user on a REDCap project.

**Project** - Similar to an Excel workbook. Contains the instruments that will capture your data. All instruments within a project are tied together.

**Field Comment** - Users with access to data entry forms may leave one or more comments on any field on a data collection instrument by clicking on the field comment, after which the balloon icon will stay lit up to signify that comments exist for that field for this record.



## REDCap Project

You can think of a REDCap project as being analogous to a project database file from Microsoft Access: the terms ‘project’ and ‘database’ are essentially synonymous. Similarly, an Excel Workbook is analogous to a REDCap project, with the different instruments within a REDCap project being similar to the different tabs or sheets within an Excel workbook.

## Create a New REDCap Project

Once logged into REDCap, click on the Create New Project tab



### Project Title

Enter a short and descriptive title for your project. This can be changed later, if needed.

### Purpose of this project

Use the drop down and select the purpose:

- **Practice/Just for Fun** – use this if you are creating a practice project
- **Operational Support** – use this for tracking specific department information processes
- **Research** – if this is an IRB approved project, you must enter your PI information, your IRB # and specify the type of research you are doing
- **Quality** – use this for any projects that help with goals and performance improvement
- **Other** – if you choose this option, please specify the purpose

For a video overview of the different project types, [please see this link](#). It is 3 minutes in length. You can access the video from the Home or My Projects tab by clicking on Training Videos. If you are in a REDCap project, look on the left-hand navigation bar under the Help & Information section at the bottom of the navigation bar.

### Project notes (optional)

Enter any notes or comments regarding the use or purpose of the project.

### Start project from scratch or begin with a template

If one of the templates appears to match the type of work you are doing, select it from the list. You will be able to customize and make any changes you wish. To follow along with this user guide, select “Create an empty project (blank state)”. Once ready, click Create Project.

**Create a new REDCap Project**

You may begin the creation of a new REDCap project on your own by completing the form below and clicking the Create Project button at the bottom.

**Project title:** Demo  
Title to be displayed on project webpage

**Purpose of this project:** Practice / Just for fun ▾

**Project notes (optional):**  
Comments describing the project's use or purpose for documentation purposes only.

**Start project from scratch or begin with a template?**

Create an empty project (blank slate)  
 Use a template (choose one below)

**Choose a project template** (comes pre-filled with fields, forms/surveys, and other settings)

select template	Template title (sorted by title)	Template description
<input type="radio"/>	E-consent - Permission & Assent and Consent	Permission & Assent and Consent. Procedures include record review and data sharing.
<input type="radio"/>	E-consent - Permission & Assent and Consent of Parent	Permission & Assent and Consent of Parent (dependent on child's enrollment). Procedures are blood collection, survey, and record review.
<input type="radio"/>	E-consent - Permission & Assent with Adult Addendum	Permission & Assent and Adult Addendum. Procedures include record review and data sharing.
<input type="radio"/>	E-consent - Permission but No Assent and Consent of Parent	Permission but No Assent and Consent of Parent (dependent on child's enrollment); Procedures include blood collection, randomization, survey, data collection.
<input type="radio"/>	E-consent - Provider Participants	

**Create Project** **Cancel**

## Your Project's unique ID

Each project has a project ID number (PID.) When you are within a project, you can see pid=xxxx in the URL (xxxx being your project's unique id.)

## Navigating from within a Project

Once you are in a REDCap project, you will notice that the screen is divided into two parts:

1. The left-hand navigation menu, which you will always have access to when you are within a project
2. Your workspace, which is the area on the right. This is where you will be designing your project, entering data, viewing data, etc.

Your project itself is a series of webpages, made up of the different components of the left-hand navigation bar and your workspace. All of these pages are tied together via that unique PID.

You can click any of the buttons on the left-hand navigation bar or on your workspace and stay within the project. The only exceptions are:

**My Projects** – this button is essentially like hitting the escape key. It will take you out of your project to the page that lists all of your projects (the tab called “My Projects”)

**The REDCap logo** – this button will take you out of your project to the My Projects tab

You will notice that as you click on any of the buttons on the left-hand navigation menu or do any work in your workspace, your PID will be somewhere in the URL. **You can right-click on any of the links within your project and open that page on a new tab.**

## Project Access

By default, a project is private. No one can access your project unless you add them as a user to the project.

Access to individual projects is coordinated **by the project owner** (the user who created the project) via the project's User Rights module. **REDCap administrators do not add users to projects.**

## Project Status

A REDCap project can exist in one of four status categories at any given time:

### 1. *Development*

A project in the design, setup and testing phase. No real data is entered. By default, a project is in Development mode when it is created.

### 2. *Production*

Real data is being collected. Alterations to project configuration and setup are possible but should be infrequent and minor. A project is in Production mode only when a user on the project moves it to production. This is the final step on the Project Setup page.

### 3. *Inactive*

The project is essentially complete. Most functionality is disabled – including access to individual records – but data can still be exported.

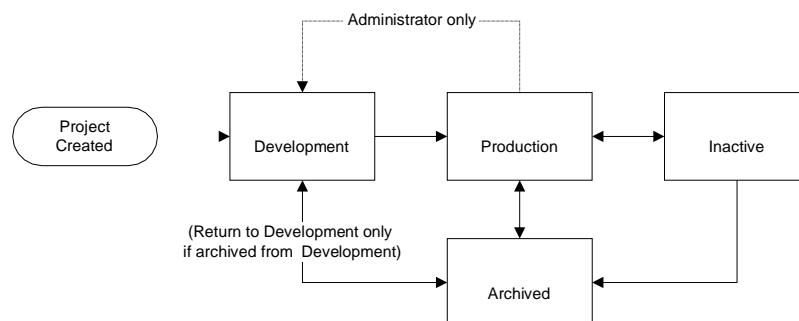
### 4. *Archived*

As for inactive projects, functionality is limited. Moreover, the project is no longer shown in the **My Projects** list unless the **Show Archived Projects** option is selected.

## Project Transitions

Transitions of project status may be accomplished only by users that have Project Design and Setup permissions. See User Rights.

A project need not necessarily progress through these categories in sequence. Indeed, some projects – such as “Practice” projects – may never reach production; others may be archived directly once the Production phase is complete. The diagram below illustrates the allowed transitions:



## Project Setup

You must have Project Design & Setup permissions to perform actions on the Project Setup page. Permissions are set in the User Rights of the project and is unique to each user on the project.

### Step 1 on the Project Setup page: Main project settings

Select your data collection type:

Use longitudinal data collection

By default, a project created by empty slate (not a template) is a classic data collection project. If you wish it to be configured to collect data longitudinally, you could click the enable button in this first section on the Project Setup page. To determine if your project should be classic or longitudinal, consider this comparison:

#### Classic Project

- Each data collection instrument can only be administered once to a participant
- Can include surveys
- Calculations and piping expressions use simplified syntax
- All data for a participant is exported as a single record
- Arms not supported

#### Longitudinal Project

- Each data collection instrument can be administered multiple times at events
- Can include surveys
- Calculations and piping expressions use more complex syntax
- Data for a participant is exported in multiple records
- Project may have multiple arms

Use surveys in this project

Click Enable if your project will contain surveys. {Reminder – per the Helpful Terms above, you would enable surveys if the person entering the data is someone who is not a user on the project. For instance, if a research participant is entering the data about themselves.}

Modify project title, purpose, etc.

Click this icon if you would like to change your project title or purpose.

The screenshot shows the 'Project Setup' page with the 'Main project settings' tab selected. At the top, there are two 'Enable' buttons: one for 'Use longitudinal data collection with repeating forms?' and another for 'Use surveys in this project?'. Below these buttons is a link to a video titled 'VIDEO: How to create and manage a survey'. At the bottom of the section, there is a button labeled 'Modify project title, purpose, etc.'.

Once you are finished with your main project settings, click “I’m done!” This will serve as a visual check mark that this section is completed. **Note:** You can always go back and change your settings while in Development mode.

The screenshot shows the 'Project Setup' tab selected in the top navigation bar. The 'Main project settings' section contains two 'Enable' buttons, a 'VIDEO' link, and a 'Modify project title, purpose, etc.' button. A large green checkmark icon with the text 'Complete!' is displayed above the 'Not complete?' link. A red arrow points from the bottom right towards the 'Complete!' button.

## Step 2 on the Project Setup page: Design your data collection instruments

**Online Designer:** Click Online Designer to start building your data collection instrument(s)

**Data Dictionary:** Alternatively, you may upload your data dictionary via an Excel csv file in order to build your data collection instruments. **Note:** This is considered an advanced step and should not be used unless you are an experienced user.

The screenshot shows the 'Project Setup' tab selected in the top navigation bar. The 'Design your data collection instruments' section includes a 'Not started' link with a red X icon, a 'I'm done!' button, and a 'Go to' dropdown menu with 'Online Designer' and 'Data Dictionary' options. Below this, there is a note about pre-built instruments and a link to the 'Check For Identifiers' page.

## Navigating to Online Designer

You can access the Online Designer via the Designer link on the left-hand navigation bar under Project Home and Design:

The screenshot shows the REDCap navigation bar. The 'Project Home and Design' section is expanded, showing 'Project Home', 'Project Setup', 'Designer' (which is highlighted with a red box), 'Dictionary', and 'Codebook'. Other links like 'My Projects' and 'REDCap Messenger' are also visible.

## Data Collection Instruments

The term “instrument” is synonymous with “form” in referring to a discrete page on which data is entered and viewed in fields. In this context the terms “field” and “variable” are also essentially synonymous.

REDCap provides two methods for creating and editing data collection instruments: using the online designer [and via upload of a data dictionary file that is composed in CSV \[^\]](#) format, typically using Microsoft Excel.

For a video introduction to Instrument Development, [please see this link](#). It is 6 ½ minutes in length. You can access the video from the Home or My Projects tab by clicking on Training Videos. If you are in a REDCap project, look on the left-hand navigation bar under the Help & Information section at the bottom of the navigation bar.

## Quick Guide to Instrument Design

These instructions are for a Classic project created from scratch (not a template)

1. Click on **Designer** (on the left-hand navigation bar)
2. Click on **Choose Action** and select ‘rename’
  - a. give the instrument a name specific to its purpose (rather than leaving it the default ‘My First Instrument’)
3. Click on the ‘add field’ button
  - a. Decide on the field type from the drop-down list. The type of data you are collecting determines which field type to choose.
    - i. If choosing ‘text box’, consider using the validation drop-down to restrict how the data is entered (e.g. for an email address, date, zip code, etc)
  - b. In the box ‘Field label’ type the question as you wish it to appear to the person who is filling out the form/survey
  - c. In the variable name box, put a short ‘nickname’ for your question
  - d. If your question involves choices, enter 1 choice per line in the choices box
    - i. Yes/no and true/false questions come with the choices pre-set
  - e. If you are collecting protected health information, you can mark the field as an identifier
  - f. If you want the person completing the form to not be able to save/submit without answering the question, mark the field as required
4. Repeat the above steps until you have all the questions in the instrument
5. If your instrument needs to be a survey, follow the [Quick Guide for Survey Setup](#)

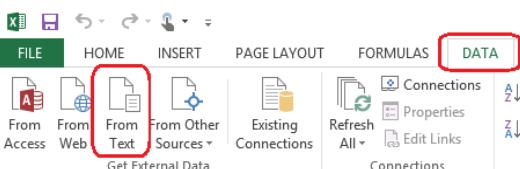
## Note on CSV files

A CSV file is simple plain text with one record per line and columns delimited with a comma – i.e. each individual value in each record is separated by a comma (CSV is an acronym for “Comma-Separated Values”). On Windows computers CSV files are set to open using Excel by default, and Excel will generally use the commas to separate the values into columns, but **a CSV file is NOT an Excel file**.

**Beware Excel's not-so-helpful automatic data formatting:** it can cause you to lose format information from CSV data such as leading zeros and specific date formatting...

	A	B	C
1	recid	date_of_birth	phone_number
2	1	22-03-1990	412341234
3	2	30-10-1985	312341234

It may be preferable to open your CSV file in Excel not by double-clicking on the file in the usual way, but by opening a blank Excel worksheet and using the import wizard: on the Data tab in the ribbon is the option **From Text**.



This method enables you to specify that you want Excel to treat some (or all) of your columns as text, thus displaying the data exactly as it appears in the source file, not using Excel's opinion of what you want to see.

### Online Designer

The Online Designer lists the instruments that exist in a project and provides functions for manipulating them at the instrument level (as opposed to the manipulation of items within an instrument). You can access Online Designer by clicking on the word 'Designer' on the left-hand navigation bar (under Project Home and Design) or by clicking on the Online Designer button on the Project Setup page.

Instrument name	Fields	View PDF	Enabled as survey	Instrument actions	Survey-related options
Demographics	21			Choose action	+ Automated Invitations
Baseline Data	18			Choose action	+ Automated Invitations
Pain Management Survey - PRE	17			Choose action	+ Automated Invitations
Intervention Data	21			Choose action	+ Automated Invitations
Pain Management Survey - POST	17			Choose action	+ Automated Invitations
Study Completion	5			Choose action	

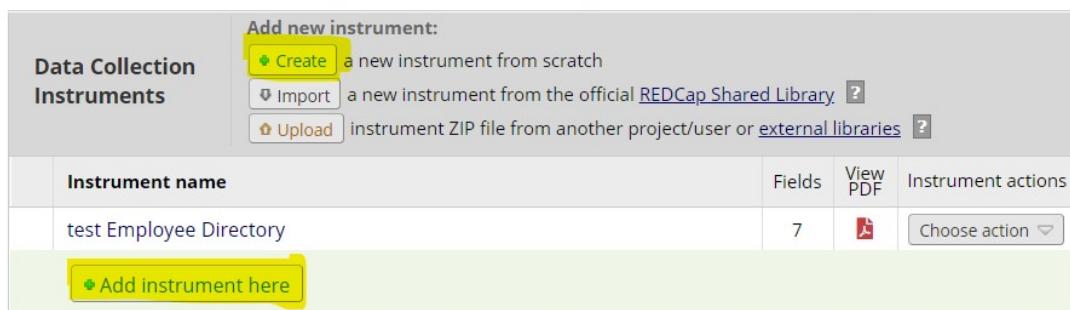
## Create a New Form

1. Click **Create**
2. Click **Add instrument here** in the position in the list where the new form is to be created (this can be changed later)
3. Assign a name and click **Create**
4. Add variables to the form. The new form will NOT be saved until at least one variable has been added.



[Create snapshot of instruments](#) [VIDEO: How to use this page](#)  
Last snapshot: never [?](#)

The Online Designer will allow you to make project modifications to fields and data collection instruments very easily using only your web browser. NOTE: While in development status, all field changes will take effect immediately in real time.



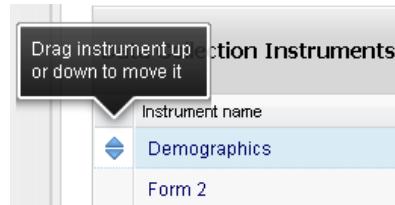
Instrument name	Fields	View PDF	Instrument actions
test Employee Directory	7		<a href="#">Choose action</a>

## Delete a Form (in Online Designer)

1. Click the **Delete** button (under Actions) for the relevant form
2. Confirm the deletion. The form will be removed along with all of its variables

## Reorder Forms (Move instruments) in Online Designer

1. Position your mouse cursor over the left-hand end of the form's row
2. Click and drag the row to a new position



## Caution on moving instruments

If you have surveys in your project and wish to use the public survey link, your survey needs to be the first instrument in the project, as seen in the image below:

Instrument name	Fields	View PDF	Enabled as survey	Instrument actions
Demographics Survey	5			<a href="#">Choose action</a>
Data Entry Form	0			<a href="#">Enable</a> <a href="#">Choose action</a>

If the data entry form is first, as in the image below...

	Instrument name	Fields	View PDF	Enabled as survey	Instrument actions
	Data Entry Form	1			
	Demographics Survey	4			

...your public survey link will be disabled.

Also keep in mind [branching logic](#), [piping](#) and [calculations](#) when moving instruments. For instance, say you plan on entering data into Data Entry Form A, positioned as the first instrument within your project, which will then be piped into Data Entry Form B, positioned as the second instrument within your project. If you move Data Entry Form B to be the first instrument and enter the data into that form first, the field into which your piping should be seen on Data Entry Form A will not have a value.

Additionally, if you have a survey queue or auto-continue enabled, check to see how re-ordering the instruments impacts those features.

Finally, it's a good idea to check the Survey Settings to see if you need to adjust the wording of the survey instructions and/or confirmation emails (if you have that enabled.) To get to Survey Settings, click on Designer on the left-hand navigation bar under Project Home and Design.

Please note that if you change the first survey (e.g. move survey B to come before Survey A), that changes the public survey link. If you had created a custom public survey link before moving the survey, that custom public survey link will no longer be valid. Any participant who clicks on the old survey link will get the message: **Thank you for your interest, but you are not a participant for this survey.** To solve this problem, delete the custom public survey link and then create it again.

#### [Rename a Form in Online Designer](#)

REDCap will begin your project with a data collection instrument titled "My First Instrument". You will want to change the title so that it is reflective of the data you are collecting in it.

1. Click the **Rename** button (under Actions) for the form
2. Enter the new name and click **Save**

The Online Designer will allow you to make project modifications to fields and data collection instruments very easily using only your web browser. NOTE: While in development status, all field changes will take effect immediately in real time.

## Designing within an instrument

To begin building your data collection instrument, click on the instrument name.

*Design tip: add test records as you are designing your instrument.*

This helps ensure that the instrument is coming along as you wish it to. Because your REDCap project is a series of webpages, you can have the Online Designer open on one browser tab, and then have the Add/Edit records open on another browser tab. Simply toggle back and forth between the two tabs to switch from design to adding test data.

*Design Tip: Participant-Identifying Data*

Think very carefully about exactly what confidential, participant-identifying data is required in your project. It is recommended that identifying information be kept separate from other project data, which can be done – in descending order of security by ensuring all identifying fields (see [Check For Identifiers](#)) are on separate forms to other data, and that access to these forms is restricted to the minimum set of users

### Record Identifier

As in any database, your project records must be uniquely identifiable. REDCap projects must all define a “record identifier” field as the first field on the first form

In any changes you make to your project’s data collection forms it is essential that the record identifier field remain the first field of the first form.

The record identifier field cannot be deleted; however, you may rename this field by clicking on the pencil icon.

### User-generated record identifier or auto-numbered identifier

The record identifiers can be automatically sequentially-generated (auto-numbered) or user-entered.

A good example of a user-entered identifier would be the patient’s MRN. That’s because an MRN is unique, and the record identifier needs to be unique. A bad example would be a participant’s last name since there can be several individuals with the same last name (e.g. Smith, Jones, etc.).

[VIDEO: How to use this page](#)

### Ready to add fields

You may now begin adding fields to your data collection instrument below using the Online Designer. Alternatively, you may build your fields in the Data Dictionary (offline method) by clicking its tab above.

This module will allow you to create new data collection instruments/surveys or edit existing ones. Changes may be made by either using the [Online Designer](#) or [Upload Data Dictionary](#) (see tabs above), in which you may use either method or both. The Online Designer may help you get some initial fields/forms built quickly or to make quick edits, but using the Data Dictionary file may be more helpful if you will be adding a large number of fields for this project.

This page allows you to build and customize your data collection instruments one field at a time. You may add new fields or edit existing ones. New fields may be added by clicking the [Add Field](#) buttons. You can begin editing an existing field by clicking on the [Edit](#) icon. If you decide that you do not want to keep a field, you can simply delete it by clicking on the [Delete](#) icon. To reorder the fields, simply drag and drop a field to a different position within the form below. NOTE: While in development status, all field changes will take effect immediately in real time.

[Return to list of Data Collection Instruments](#)

Current instrument: **Demographics** [Preview instrument](#)

Variable: record\_id

Record ID

NOTE: The field above is the record ID field and thus cannot be deleted or moved. It can only be edited.

[Add Field](#) [Add Matrix of Fields](#)

*Add Fields to Your Data Collection Instruments (add questions to your data collection instruments) via Online Designer*

1. Click [Add Field Here](#) [Add Field Here](#)

2. The Add New Field dialog opens

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will automatically be appended to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(5 min\)](#).

Field Type: [Multiple Choice - Drop-down List \(Only One Answer\)](#)

Field Label

Variable Name (utilized during data export)  Enable auto naming of Variable based upon its Field Label? ONLY letters, numbers, and underscores

Required?  No  Yes \* Prompt if field is blank.

Identifier?  No  Yes Does the field contain identifying information (e.g., name, SSN, address)?

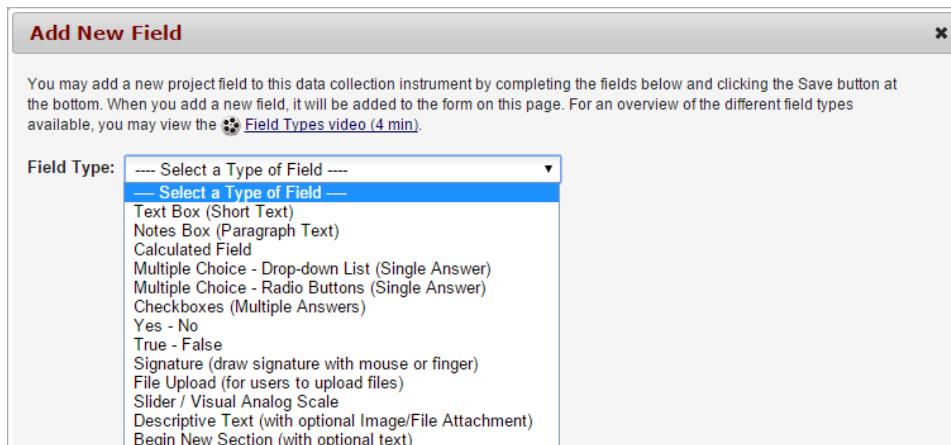
Custom Alignment: Right / Vertical (RV)  Align the position of the field on the page

Field Note (optional)  Small reminder text displayed underneath field

Looking for Branching Logic? Try clicking the  icon for this field after clicking the Save or Cancel button below.

[Save](#) [Cancel](#)

3. Select one of the several field types available:



4. Enter your field elements (see further info below)
5. Click the save button

#### Choosing a field type

In general, it is best to select a field type that will collect data in a quantitative manner. For instance, select one of the multiple choice field type options and provide a list of choices rather than selecting the text box or notes box field type and letting the person enter their own text. This prevents typos and ensures consistent data collection. Quantitative questions will yield graphical and statistical results.

If collecting alpha-numeric text, add validation when possible to restrict the type of text entered.

Validation for these data points are available in the text box field type:

Date  
Email  
Integer  
Number  
Phone (North America)  
Time  
Zip code (US)

#### Field Elements

Once you have selected your field type, these are some of the elements available to you:

- **Field Label:** This is where you would format your question or data field.
- **Field Annotation:** This is primarily used for you to enter action tags and explanatory notes. These notes will not appear on your data collection instrument or survey.
- **Variable Name:** This is the name of your Field Label that is stored in the database and can be used in reports, exports and analysis. The variable names may contain letters, numbers and underscores but no spaces or special characters. If you decide to change the name of a variable prior to moving your project into production, you must change it everywhere that it is being used such as calculations, branching logic, etc.
- **Required:** Indicate if your field is going to be required. The default setting for all fields is set to No.
- **Identifier:** Indicate if your field is an identifier. All fields that could potentially identify a person should be marked as an identifier, regardless of who will be accessing your data. Especially for

Research projects, you will want to mark identifying fields appropriately. This way, if you need to de-identify data, you can do so easily.

- To be HIPAA-compliant there are 18 pieces of information that must be marked as *Identifiers* in a project.
  - Name
  - Fax number
  - Phone number
  - E-mail address
  - Account numbers
  - Social Security number
  - Medical Record number
  - Health Plan number
  - Certificate/license numbers
  - URL
  - IP address
  - Vehicle identifiers
  - Device ID
  - Biometric ID
  - Full face/identifying photo
  - Other unique identifying number, characteristic, or code
  - Postal address (geographic subdivisions smaller than state)
  - Date precision beyond year
- **Custom Alignment:** Select the alignment for your field. The default setting is Right/Vertical.
- **Field Note:** Use this field to enter any notes, reminders or instructions for the person entering data.

#### Design Tip re: variable names

Variable names must be unique across your project. A best practice is to name your variables descriptively. For example, if you collect multiple dates in a project, provide each with a variable name to identify how the date relates to the project (visit date, screen date). This enables data exports (which utilize variable names) to have clear identifying information, differentiating variables from each other.

#### Action Tags

Action Tags are an excellent way to customize the data entry experience for surveys and forms. They are special terms that begin with the '@' sign that can be placed inside a field's Field Annotation when adding or editing a field. Each action tag has a corresponding action that is performed for the field when displayed on data entry forms and survey pages. You can use as many as you want for a single field, but if you do use more than one tag for a field, make sure to put a space or line break between them. Because the action tags are used as part of the Field Annotation, they are not displayed anywhere on the page. To start using Action Tags, navigate to the Online Designer in a project, and when adding or editing a field, add the tag into the Action Tag/Field Annotation text box in the Edit Field popup.

For a list and definition of all action tags [see this link](#). You can also take an online tutorial at this link: <https://is.gd/ActionTagDemo>

Please note that Action Tags are case-sensitive. If you choose to manually type the action tag into the Action Tag box (rather than clicking on the Action Tag link and clicking on the 'add' button), you'll want to write the Action Tag in all caps. If you were to type @hidden-survey, for instance, REDCap would not

recognize that syntax. It needs to be @HIDDEN-SURVEY. Likewise, if you are referencing a variable name in an action tag (like you might when using the Default action tag), you need to make sure the variable name is in all lower-case.

### Text box field elements

For Text Box fields you have this additional element:

**Validation:** For the field type Text Box (Short Text) you have the opportunity to select a validation. If you would like to indicate how data in this field should be entered, use the drop down and select an option.

### Multiple choice fields additional element:

**Choices:** Enter the pre-determined choices for the question, one per line:

The screenshot shows the 'Add New Field' dialog box. At the top, it says 'Add New Field'. Below that, there's a note about adding a new project field. The 'Field Type:' dropdown is set to 'Multiple Choice - Drop-down List (Single Ans)'. The 'Field Label' input field is empty. To the right, there's a 'Variable Name' input field and a checkbox for 'Enable auto naming of variable based upon its Field Label?'. Under 'How to use', there are 'Smart Variables' and 'Piping' buttons. In the 'Choices (one choice per line)' section, there's a text area where multiple lines of text can be entered; this area is highlighted with a red box. There's also a 'Copy existing choices' link. Below this, there's a checkbox for 'Enable auto-complete for this drop-down?' and a link 'How do I manually code the choices?'. The 'Action Tags / Field Annotation (optional)' section is shown below, with a note about learning more at the bottom. At the bottom right are 'Save' and 'Cancel' buttons.

### Examples of field types

#### Design Tip: Selecting the Field Type

In order to determine which field type you want, think about the type of data you wish to collect. In general, data is more actionable if it can be captured quantitatively vs. qualitatively. Think of it as better to ask close-ended questions vs. open-ended questions.

So, think about the question you are asking and see if it can be structured in a way that is close-ended. For example, if you are creating an employee directory, you could have a field in the directory that asks who the employee's supervisor is. Technically you could leave that as an open-ended question. But if it's a short list of supervisors, it would be better to make it a multiple-choice question and list all the potential supervisors as the choices for that question.

#### Collecting Alphanumeric text

If you need the person entering data to enter alphanumeric text (rather than selecting from a pre-determined choice), you can select either the Text Box or Notes box as your field type.

If the text that will be entered is brief, select text box. If you want to allow more room for a response, select the notes box. You'll see that the two options look different on the data entry form or survey because the Notes box is bigger.

If you want the text to fit a certain format (like a date, email address, phone number, etc.) choose the Text Box field type. This will allow you to add validation, forcing the person entering data to enter data in the prescribed format.

### Text Box (Short Text)

This field can be used to capture alphanumeric text. Use the Validation drop down whenever possible to restrict how data should be entered.

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Text Box (Short Text)

Field Label: Enter your first name: [How to use Piping](#)

Variable Name (utilized during data export): first\_name  Enable auto naming of variable based upon its Field Label? ONLY letters, numbers, and underscores

Validation? (optional): **None**

Field Annotation (optional): [Learn about Action Tags](#)

Explanatory notes - not displayed on any page: [ ]

Enable searching within a biomedical ontology: -- choose ontology to search --

Required?  No  Yes \* Prompt if field is blank

Identifier?  No  Yes Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment: Right / Vertical (RV)

Field Note (optional): Small reminder text displayed underneath field

**Save** **Cancel**

### Design tip re: collecting names

When collecting a person's name, it is best to create two separate fields: one for first name and one for last name. This helps with sorting records.

### Validation Types

Date  
email address  
Integer  
Number  
phone number (North America)  
time  
Zip code (US)

Text Box (Short Text) with a validation of Date (M-D-Y)

The below example is a text box field with range checks (minimum and maximum fields). The field is marked as required and includes a field note.

How it appears in Online Designer:

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: **Text Box (Short Text)**

**Field Label** [How to use Piping](#)  
Date of Visit:

**Variable Name** (utilized during data export)  
**visit\_date**  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

**Validation?** (optional) **Date (M-D-Y)**  
Minimum: 01-01-2015  
Maximum: 12-31-2018  
- or -  
Enable searching within a biomedical ontology [\[?\]](#)  
-- choose ontology to search --

**Required?**\*  No  Yes  
\* Prompt if field is blank

**Identifier?**  No  Yes  
Does the field contain identifying information (e.g., name, SSN, address)?

**Custom Alignment** Right / Vertical (RV)  
Align the position of the field on the page

**Field Note** (optional) between 2015-2018 are accepted!  
Small reminder text displayed underneath field

**Save** **Cancel**

How it appears to person entering data:

**Date of Visit:**  [Today](#) M-D-Y  
\* must provide value  
Only dates between 2015-2018 are accepted!

Text Box (Short Text) with a validation of Email

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: **Text Box (Short Text)**

**Field Label** [How to use Piping](#)  
Enter your email address:

**Variable Name** (utilized during data export)  
**email\_address**  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

**Validation?** (optional) **Email**  
- or -  
Enable searching within a biomedical ontology [\[?\]](#)  
-- choose ontology to search --

**Required?**\*  No  Yes  
\* Prompt if field is blank

**Identifier?**  No  Yes  
Does the field contain identifying information (e.g., name, SSN, address)?

**Custom Alignment** Right / Vertical (RV)  
Align the position of the field on the page

**Field Note** (optional)  
Small reminder text displayed underneath field

**Save** **Cancel**

### Text Box (Short Text) with a validation of Number (allows decimals)

**Edit Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Text Box (Short Text)

Field Label: What is your weight (in kg): [How to use Piping](#)

Variable Name (utilized during data export): weight  Enable auto naming of variable based upon its Field Label? ONLY letters, numbers, and underscores

Validation? (optional): Number

Minimum:

Maximum:

Field Annotation (optional): [Learn about Action Tags](#)

Explanatory notes - not displayed on any page:

Enable searching within a biomedical ontology  -- choose ontology to search --

Required?  No  Yes \* Prompt if field is blank

Identifier?  No  Yes Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment: Right / Vertical (RV) Align the position of the field on the page

Field Note (optional): Small reminder text displayed underneath field

**Save** **Cancel**

As a general rule, it is helpful to specify a range when using number validation.

Text Box (Short Text) with a validation of Integer (a whole number)

This field has range checks (minimum and maximum fields), is marked as required and includes a field annotation.

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Text Box (Short Text)

Field Label: What is your age: [How to use Piping](#)

Variable Name (utilized during data export): age  Enable auto naming of variable based upon its Field Label? ONLY letters, numbers, and underscores

Validation? (optional): Integer

Minimum: 13

Maximum: 18

Field Annotation (optional): [Learn about Action Tags](#)

We are only collecting data from patients who are between 13-18 years of age.

Explanatory notes - not displayed on any page:

Enable searching within a biomedical ontology  -- choose ontology to search --

Required?  No  Yes \* Prompt if field is blank

Identifier?  No  Yes Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment: Right / Vertical (RV) Align the position of the field on the page

Field Note (optional): Small reminder text displayed underneath field

**Save** **Cancel**

As a general rule, it is helpful to specify a range when using integer validation.

## Notes Box (Paragraph Text)

This kind of field is helpful when you want to capture qualitative data and want the person entering the data to have a good bit of space in which to enter it. You'll see that it is a bigger box than a Text Box field.

The screenshot shows the 'Add New Field' dialog box. The 'Field Type' dropdown is set to 'Notes Box (Paragraph Text)'. The 'Field Label' section contains the text 'List all of the medications you are currently taking:' and a 'How to use Piping' link. The 'Variable Name' is 'medications' with the note 'ONLY letters, numbers, and underscores'. The 'Required?' option is set to 'No'. The 'Identifier?' option is set to 'No'. The 'Custom Alignment' is 'Right / Vertical (RV)'. The 'Field Note' section is empty. At the bottom are 'Save' and 'Cancel' buttons.

## Calculated Field

This field can perform real-time calculations based on the data from other fields. For an example, you could create a calculation based off of the birth date field and visit date field in order to find out how old the participant was at the time of visit.

The screenshot shows the 'Add New Field' dialog box. The 'Field Type' dropdown is set to 'Calculated Field'. The 'Field Label' section contains the text 'Calculation between Start Time and End Time (in hours):' and a 'How to use Piping' link. The 'Variable Name' is 'calculation' with the note 'ONLY letters, numbers, and underscores'. The 'Required?' option is set to 'No'. The 'Identifier?' option is set to 'No'. The 'Custom Alignment' is 'Right / Vertical (RV)'. The 'Field Note' section is empty. The 'Calculation Equation' is 'datediff([end\_time],[start\_time],"h")'. At the bottom are 'Save' and 'Cancel' buttons.

So, to make use of a calculated field, you must have two or more other fields created, from which the calculated field will make its calculations. The fields from which the calculated field pulls must be text box fields validated as a number, integer or date.

**Calculation results must be numeric**, not text, Boolean or date/datetime. ***It is strongly recommended that you do not use "today" in calculated fields for age.*** This is because every time you access and save the instrument, the calculation will run. So if you calculate age as of today, a year later when you access the instrument to review or make updates, the age as of "today" will also be updated (+1 yr). A best practice is to calculate age utilizing a field collected in the course of the study (e.g. a fixed date such as screening date, enrollment date).

#### [Build My Calc](#)

If you need help writing your calculations, go [to this link](#) and provide the information requested. That link is an online, interactive tutorial designed to help you build your REDCap calculation one step at a time. The framework of the calculation is provided, and you fill in the blanks. How many blanks, and what kind of information is needed will depend on the calculation you want to build. As you specify the different elements, you can see them being added to the calculation in real time at the bottom of the page.

#### [Design Tip: calculated field](#)

When entering calculations, the syntax in your formula is very important. Note the difference between using square brackets -- used to designate REDCap variables and event names -- and round brackets or parentheses, which are used to group mathematical expressions. Variable names in the project can be used as variables in the equation, but you must place [ ] square brackets around each variable. Be sure that you follow the mathematical order of operations when constructing equations. Pay attention to open and closed quotation marks and brackets and parentheses.

#### [Multiple Choice –](#)

##### [Design tip: drop-down list or radio buttons?](#)

Resolving this question comes down partly to personal preference but consider also who and how the data entry forms are used. As a suggestion:

- Radio groups are best for survey forms, or on data entry forms for infrequent data entry users, because all potential choices are displayed on the form
- Drop-down lists are preferred for data entry forms because you can tab to/through fields and select options using keyboard input (e.g. y/n if your labels are "Yes" / "No") or numeric keypad (e.g. 1/0 if your labels are "1 Yes" / "0 No")

There can also be an argument for using radio buttons where data entry users are inexperienced (i.e. mouse- heavy): selecting an option from a radio group is one click with a mouse, rather than the two clicks (or press- select-release) for a drop-down list. But experienced computer / data entry users are likely to prefer the mouse-free usage afforded by drop-down lists.

#### [Multiple Choice Drop Down List \(Single Answer\)](#)

This field will display your answer choices as a drop-down list. This is helpful when you have a long list of choices and want to save screen space.

When a field contains multiple answer choices, you must give each answer choice a raw value. If you do not, REDCap will automatically assign them for you.

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: **Multiple Choice - Drop-down List (Single Answer)** [How to use Piping](#)

Field Label: What is your favorite flavor of ice-cream? [How to use Piping](#)

Variable Name (utilized during data export):  ONLY letters, numbers, and underscores  Enable auto naming of variable based upon its Field Label?

**Raw values for choices were added automatically**

The choices listed below did not appear to have a raw value listed but only had a label, so a raw value has been provided for them automatically. If you are not satisfied with these auto generated values, you may change them before saving your changes for this field. The choices in the 'Choices' text box have automatically been modified to reflect these changes.

1 was set as the raw value for Chocolate  
 2 was set as the raw value for Strawberry  
 3 was set as the raw value for Vanilla  
 4 was set as the raw value for Butter Pecan  
 5 was set as the raw value for Mint Chocolate Chip

Enable auto-complete for this drop-down [How do I manually code the choices?](#)

Field Annotation (optional) [Learn about Action Tags](#)

Explanatory notes - not displayed on any page [?](#)

**Save** **Cancel**

### Auto-complete for drop-down choice

REDCap has an auto-complete feature for drop-down fields. When this is enabled, it allows the participant or data entry person to type in a couple of the characters of the answer choice and a list of matching options will appear. For an example, if I typed in Van, Vanilla would automatically appear. This is very helpful when you have a drop-down field that contains a large amount of possible answer choices.

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: **Multiple Choice - Drop-down List (Single Answer)** [How to use Piping](#)

Field Label: What is your favorite flavor of ice-cream? [How to use Piping](#)

Variable Name (utilized during data export):  favorite ice cream ONLY letters, numbers, and underscores  Enable auto naming of variable based upon its Field Label?

Required?  No  Yes \* Prompt if field is blank

Identifier?  No  Yes Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment: Right / Vertical (RV) Align the position of the field on the page

Field Note (optional):  Small reminder text displayed underneath field

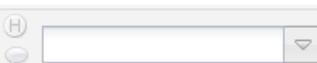
Enable auto-complete for this drop-down [How do I manually code the choices?](#)

Field Annotation (optional) [Learn about Action Tags](#)

Explanatory notes - not displayed on any page [?](#)

**Save** **Cancel**

What is your favorite flavor of ice-cream?



### Multiple Choice – Radio Buttons (Single Answer)

This field will display your answer choices as radio buttons. This means that all the answers are visible on the screen. This option is good if your list of potential answers is short.

**Edit Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Multiple Choice - Radio Buttons (Single Answer) [How to use Piping](#)

**Field Label** What is your favorite flavor of ice-cream? [How to use Piping](#)

**Choices (one choice per line)** [Copy existing choices](#)

1. Chocolate  
2. Strawberry  
3. Vanilla  
4. Butter Pecan  
5. Mint Chocolate Chip

How do I manually code the choices?

**Variable Name** (utilized during data export)  
favorite\_ice\_cream  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

**Required?**  No  Yes  
\* Prompt if field is blank

**Identifier?**  No  Yes  
Does the field contain identifying information (e.g., name, SSN, address)?

**Custom Alignment** Right / Vertical (RV) Align the position of the field on the page

**Field Note (optional)** Small reminder text displayed underneath field

**Field Annotation (optional)** [Learn about Action Tags](#)

Explanatory notes - not displayed on any page [?](#)

**Save** **Cancel**

- Chocolate
  - Strawberry
  - Vanilla
  - Butter Pecan
  - Mint Chocolate Chip
- [reset](#)

## Multiple Choice Checkboxes (Multiple Answers)

This field will display your answer choices as check boxes and will allow more than one answer.

**Note:** a field note that states “Check all that apply”.

**Edit Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Checkboxes (Multiple Answers) [How to use Piping](#)

**Field Label** What is your favorite flavor of ice-cream? [How to use Piping](#)

**Choices (one choice per line)** [Copy existing choices](#)

1. Chocolate  
2. Strawberry  
3. Vanilla  
4. Butter Pecan  
5. Mint Chocolate Chip

How do I manually code the choices?

**Variable Name** (utilized during data export)  
favorite\_ice\_cream  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

**Required?**  No  Yes  
\* Prompt if field is blank

**Identifier?**  No  Yes  
Does the field contain identifying information (e.g., name, SSN, address)?

**Custom Alignment** Right / Vertical (RV) Align the position of the field on the page

**Field Note (optional)** Check all that apply Small reminder text displayed underneath field

**Field Annotation (optional)** [Learn about Action Tags](#)

Explanatory notes - not displayed on any page [?](#)

**Save** **Cancel**

<b>What are your favorite flavors of ice-cream?</b>	<input type="checkbox"/> Chocolate <input type="checkbox"/> Strawberry <input type="checkbox"/> Vanilla <input type="checkbox"/> Butter Pecan <input type="checkbox"/> Mint Chocolate Chip
<b>Check all that apply</b>	

### Coding Suggestions for Multiple Choice questions

#### *Unknown/Missing value*

Code responses that represent an unknown type value with a number that is obviously out of normal range for any variable code or text response that makes sense or is missing.

Example: Has the patient tested his/her blood sugar levels every day this week?

- 1, Yes
- 0, No
- 7777, Don't know
- 8888, Refused
- 9999, Missing

#### *Reverse Coding*

If questions have reverse scoring, code the selections according to the value unless otherwise specified. Here is an example, where #4 is coded normally and #5 is reversed:

4. Made me need someone to reposition me.

- 0, Never true for me
- 1, Rarely true for me
- 2, Sometimes true for me
- 3, Often true for me
- 4, Very often true for me

5. Helped me keep my muscles exercised.

- 4, Never true for me
- 3, Rarely true for me
- 2, Sometimes true for me
- 1, Often true for me
- 0, Very often true for me

## Yes – No

This field will display Yes and No as radio button answer choices. Those are pre-populated by REDCap and cannot be altered.

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: **Yes - No**

Field Label [How to use Piping](#)  
Do you like ice-cream?

Choices (not modifiable)  
1, Yes  
0, No

Variable Name (utilized during data export)  
  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

Required?  No  Yes  
\* Prompt if field is blank

Identifier?  No  Yes  
Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment **Right / Vertical (RV)**  
Align the position of the field on the page

Field Note (optional)  
Small reminder text displayed underneath field

**Save** **Cancel**

Do you like ice-cream?

Yes  
 No

[reset](#)

Note: the default setting for Yes/No questions is ‘1’ for the choice ‘yes’ and ‘0’ for the choice no. If you have other fields in your project that contain yes or no choices, you will want the choices to align the same. For instance, if you have a question with the choices yes, no, maybe, you would want the choice labels to be 1, 0, 2 to be consistent. Your statistician will thank you!

## True – False

This field will display True and False as radio button answer choices.

**Edit Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: **True - False**

Field Label [How to use Piping](#)  
You hate ice cream!

Choices (not modifiable)  
1, True  
0, False

Variable Name (utilized during data export)  
  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

Required?  No  Yes  
\* Prompt if field is blank

Identifier?  No  Yes  
Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment **Right / Vertical (RV)**  
Align the position of the field on the page

Field Note (optional)  
Small reminder text displayed underneath field

**Save** **Cancel**

You hate ice cream!

True  
 False

[reset](#)

### Signature (draw signature with mouse or finger)

This field will allow the participant to add their signature digitally using their mouse or the finger (if using a tablet or touch screen device). It is sometimes called a digital signature or e-signature.

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min.\)](#).

**Field Type:** Signature (draw signature with mouse or finger)

**Field Label** [How to use Piping](#)  
 Sign your name:

**Variable Name** (utilized during data export)  
 signature  
 ONLY letters, numbers, and underscores  Enable auto naming of variable based upon its Field Label?

**Required?**  No  Yes  
 \* Prompt if field is blank

**Identifier?**  No  Yes  
 Does the field contain identifying information (e.g., name, SSN, address)?

**Custom Alignment** Right / Vertical (RV)   
 Align the position of the field on the page

**Field Note (optional)**  
 Small reminder text displayed underneath field

[Save](#) [Cancel](#)

Sign your name:  [Add signature](#)

### File Upload (for users to upload files)

This field gives the participant the ability to upload a file or image

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min.\)](#).

**Field Type:** File Upload (for users to upload files)

**Field Label** [How to use Piping](#)  
 Please upload a picture of you eating ice cream:

**Variable Name** (utilized during data export)  
 picture\_eating\_icecream  Enable auto naming of variable based upon its Field Label?

**Required?**  No  Yes  
 \* Prompt if field is blank

**Identifier?**  No  Yes  
 Does the field contain identifying information (e.g., name, SSN, address)?

**Custom Alignment** Right / Vertical (RV)   
 Align the position of the field on the page

**Field Note (optional)**  
 Small reminder text displayed underneath field

[Save](#) [Cancel](#)

Please upload a picture of you eating ice cream  [Upload document](#)

### Slider Visual Analog Scale

This field gives you a scale with three answer choices. If you select “Display number value (0-100)”, it will code the answer given.

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: **Slider / Visual Analog Scale**

Field Label: [How to use Piping](#)  
How often do you eat ice cream?

Labels displayed above slider:

- Left-hand label (if any): Once a Year
- Middle label (if any): Every Six Months
- Right-hand label (if any): Once a Month
- Display number value (0-100)?

Variable Name (utilized during data export)  
how\_often\_eat\_icecream  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

Required?\*  No  Yes  
\* Prompt if field is blank

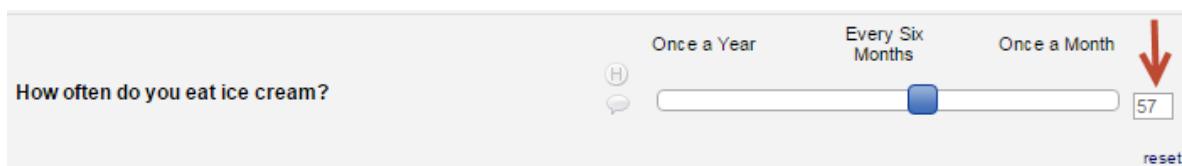
Identifier?  No  Yes  
Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment Right / Vertical (RV)   
Align the position of the field on the page

Field Note (optional)  
Small reminder text displayed underneath field

Field Annotation (optional) [Learn about Action Tags](#)  
Explanatory notes - not displayed on any page

**Save** **Cancel**



Be sure to test how your data results look when using this field type. Even if you set a number for the labels, those are not the values assigned to the data entered. All data is on a 1-100 scale.

### Descriptive Text (with optional Image/File Attachment)

This field will allow you to add text such as instructions or additional information. It also gives you the option to add an image as a link or as an inline image.

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: **Descriptive Text (with optional Image/Video/Audio/File Attachment)**

Field Label: [How to use Piping](#)  
The sundae is a sweet ice cream dessert. It typically consists of one or more scoops of ice cream topped with sauce or syrup, and in some cases other toppings including sprinkles and whipped cream.

Variable Name (utilized during data export)  
sundae\_image  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

Optional file attachment, image, audio, or video:

Embed an external video (provide video URL)   
e.g. <https://youtube.com/watch?v=E1cCuVIMupz0>,  
<https://vimeo.com/62730281>, <http://example.com/movie.mp4>

Display format of video:  Inline  Inside popup  
- or -

Attach an image, file, or embedded audio  
[wallpaper-ice-cream-sundae.jpg](#)

Display format of attachment on page:  
 Link  
 Inline image  
 Audio file (play in embedded player on page)  
(Images wider than 600 pixels will be downsized to fit page.)

**Save** **Cancel**

Link:

The sundae is a sweet ice cream dessert. It typically consists of one or more scoops of ice cream topped with sauce or syrup, and in some cases other toppings including sprinkles and whipped cream.

Attachment:  [wallpaper-ice-cream-sundae.jpg](#) (0.19 MB)

Inline Image:

The sundae is a sweet ice cream dessert. It typically consists of one or more scoops of ice cream topped with sauce or syrup, and in some cases other toppings including sprinkles and whipped cream.



Because the content of a descriptive text field takes up the entire horizontal space, it makes a nice divider on the page. You can use that as an alternative to the 'Begin New Section' option, if you wish.

[Begin New Section \(with optional text\)](#)

This field is used as a section header. You can add text or leave blank.

**Add New Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the  [Field Types video \(4 min.\)](#).

Field Type: [Begin New Section \(with optional text\)](#)

Field Label  [How to use Piping](#)

Demographic Information

Field Annotation (optional)  [Learn about Action Tags](#)

Explanatory notes - not displayed on any page 

As a general rule, it is helpful to provide instructional text in headers. Example: *Headache Disability: The following questions try to assess how much the headaches are affecting day-to-day activity. Your answers should be based on the last three months. There are no "right", or "wrong" answers so please*

*put down your best guess.*

#### Cautions/advice when adding ‘Begin New Section’

- You cannot have two ‘begin new section’ field types in a row.
- You cannot have ‘begin new section’ as the last field of an instrument
- REDCap will automatically merge ‘begin new section’ with a matrix if the matrix follows the begin new section field.
- When building an instrument that will have a lot of section headers, add a dummy field first, so that the section headers aren’t last

#### Design Tip: When it is useful to add a “Begin New Section” field

if the instrument is a survey and you want to break the survey up into several pages, you need to insert “Begin New Section” so that REDCap knows where to end/start a new page. Having a survey on multiple pages helps to break up the survey ad prevents the participant from having to scroll down a long page to submit.

#### Matrix of Fields

If you have a group of questions that all have the same answer choices, you can create a Matrix of Fields. Instead of clicking Add Field, you would click Add Matrix of Fields. You would add an optional header, your field labels and variable names, indicate which fields are required, add your answer choices and select whether these fields should be a single answer (radio button) or multiple answers (checkboxes). If you would like only one answer choice to be selected per column, enable ranking. You must also give your matrix a group name.



**Add Matrix of Fields**

You may add or edit a matrix (i.e. grid) of project fields on this data collection instrument by completing the fields below. By providing all necessary info below and clicking Save, the new matrix of fields will be added to the form on this page. A Field Label and Variable name must be provide for each field in the matrix, and you must also set the Choices (i.e. matrix column headers) and answer format (Single Answer vs. Multiple Answers) for the entire matrix. [View a matrix example](#) or [Read more about matrix fields](#) on the Help & FAQ.

<b>Matrix Header Text (optional)</b> How often do you eat the following flavors of ice cream?																																																		
<b>Matrix Rows</b> Each row represents a different field with its own label and variable name.																																																		
<table border="1"> <thead> <tr> <th>Field Label</th> <th>Variable Name <small>ONLY letters, numbers, and underscores</small></th> <th>Required?*</th> <th>Field Annotation</th> <th><input type="checkbox"/> Enable auto naming of variable based upon its Field Label?</th> </tr> </thead> <tbody> <tr> <td>Chocolate</td> <td>choc</td> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td></td> </tr> <tr> <td>Strawberry</td> <td>straw</td> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td></td> </tr> <tr> <td>Vanilla</td> <td>van</td> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td></td> </tr> <tr> <td>Butter Pecan</td> <td>butpec</td> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td></td> </tr> <tr> <td>Mint Chocolate Chip</td> <td>mintcc</td> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td></td> </tr> <tr> <td colspan="5"><a href="#">Add another row</a></td> </tr> </tbody> </table>					Field Label	Variable Name <small>ONLY letters, numbers, and underscores</small>	Required?*	Field Annotation	<input type="checkbox"/> Enable auto naming of variable based upon its Field Label?	Chocolate	choc	<input type="checkbox"/>	<input type="text"/>		Strawberry	straw	<input type="checkbox"/>	<input type="text"/>		Vanilla	van	<input type="checkbox"/>	<input type="text"/>		Butter Pecan	butpec	<input type="checkbox"/>	<input type="text"/>		Mint Chocolate Chip	mintcc	<input type="checkbox"/>	<input type="text"/>		<a href="#">Add another row</a>															
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1. Never 2. Rarely 3. Sometimes 4. Often 5. Always		Matrix group name: <input type="text" value="icecream matrix"/> <small>What is a matrix group name?</small>																																																
<a href="#">Save</a> <a href="#">Cancel</a>																																																		
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Enter the configuration information for your matrix:

- Matrix Header Text: a section header to appear above the matrix
- Matrix Rows: these are the fields that are incorporated within the matrix
- Matrix Column Choices: the response values and labels shared by each field in the matrix
- Answer Format: radio buttons or check boxes?
- Ranking: with a radio button matrix you may opt for ranking. Ranking ensures no two fields in the matrix can have the same selected value for a column.
- Matrix Group Name: a unique reference for the matrix

You'll notice that when adding a matrix field via Online Designer, you do not see the option for adding a Field Note, like you would for a regular field. What you can do is download the data dictionary of your project and add your field note into column G, which is the column for Field Note.

### Customizing Field Labels

Simple HTML may be implemented in field labels. It may also be used to clarify or highlight information. Examples: `<u>text</u>` for underline, `<i>text</i>` for italicize, `<div><span style='color:red;'>text</span></div>` to color red and highlight the interviewer instructions.

The screenshot shows a REDCap survey titled "BRFSS 2009 Section 11: Tobacco Use". It includes fields for "Study ID" (Liz), "11.1 Have you smoked at least 100 cigarettes in your entire life?", and "11.5 Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all?". There are also notes and interviewer instructions.

To learn more about HTML formats, [see this link](#). It is an interactive online survey that provides information using HTML in REDCap.

#### [Edit/Copy/Move/Delete a Field](#)

**Edit:** To edit a field, click on the pencil icon

**Copy:** To copy a field, click on the double paper icon

**Move:** To move a field, click on the paper with pointer icon

**Delete:** To delete a field, click on the red X icon

The screenshot shows a list of ice cream flavors: Chocolate, Strawberry, Vanilla, Butter Pecan, and Mint Chocolate Chip. A red arrow points to the edit icon (pencil) next to the first item, "Chocolate".

#### [Stop Actions for Survey](#)

When an instrument is enabled as a survey, an additional option is included in the toolbar at the top of the field: the Stop Actions for Survey button, which appears as a stop sign. This feature allows you to prevent a participant from moving forward with a survey, based on how they answer a question. For instructions on how to set up Stop Actions for Surveys, [please see this section](#) of this User Guide.

#### [Add Branching Logic](#)

Branching logic is used when you have a field/question that you only want to be visible when a specific answer is given to a previous question.

For an example, you might ask the below question:

The screenshot shows a question "What is your favorite kind of ice cream?" followed by a list of options: Chocolate, Strawberry, Vanilla, and Other. The "Other" option is selected, which triggers the visibility of the question.

You'll note that one of the choices is 'other.' If someone makes the choice 'other', you might want to ask a follow-up question to find out what this other ice cream flavor is. But you only want the follow-up question to appear if the answer to the previous question is the choice "Other". To do this, you would create the follow-up question:

If other, please specify

You would then, **on the follow-up question**, click on the double green arrows.

You will now see this logic builder:

**Add/Edit Branching Logic**

Branching Logic may be employed when fields/questions need to be hidden under certain conditions. If branching logic is defined, the field will only be visible if the conditions provided are true (i.e. show the field only if...). You may specify those conditions in the text box below for the Advanced Branching Logic Syntax or by choosing the Drag-N-Drop Logic Builder method, which allows you to build your logic in a much easier fashion by simply dragging over the options you want. You may switch back and forth between each method if you wish, but please be aware that since the advanced logic allows for greater complexity, it may not be able to be switched over to the Drag-N-Drop method if it becomes too complex.

Choose method below for the following field: **other\_text - If other, please specify**

Advanced Branching Logic Syntax [\(How do I use the advanced syntax?\)](#)

Show the field ONLY if...

— OR —

Drag-N-Drop Logic Builder

Displaying field choices for the following data collection instrument:  
Form 1 Set Up As A Survey ▾

Field choices from other fields  
(drag a choice below to box on right)

fav_icecream = Chocolate (1)
fav_icecream = Strawberry (2)
fav_icecream = Vanilla (3)
fav_icecream = Other (4)
icecream = Chocolate (1)
icecream = Strawberry (2)
icecream = Vanilla (3)
icecream = Other (4)
icecream_other = (define criteria)

Drag and Drop

Show the field ONLY if...

ALL below are true  
 ANY below are true

icecream = Other (4)

Clear logic

Save Cancel

You would then click on the Drag-N-Drop Logic Building option and scroll through the list of field choices until you find the choice that should trigger this question (the follow-up question) to appear. In this example, you would select 'icecream = Other (4)'. You then click on that choice and drag the field into the box on the right. Click Save once finished.

The field now indicates that branching logic exists.

Variable: other\_text Branching logic: [icecream] = '4'

If other, please specify

This means that the question "If other, please specify" will now appear to the person entering data only if they select the answer 'other' to the previous question.

You can have multiple elements to your branching logic. In other words, it could be a combination of answers to many different questions that can make a field appear.

## Testing your branching logic

Determining your branching logic can sometimes be tricky, especially if there are multiple fields that contribute to the branching logic. That's why it is very important to test out your logic to make sure it is behaving the way you want it to.

To test your branching logic, add a test record (via Add/Edit Records on the left-hand navigation bar) and see if the questions appear/are hidden the way you wish them to. If you are using branching logic on a survey, open a survey and see if the questions appear/are hidden the way you wish them to Applying branching logic to multiple questions. If the branching logic is on the first survey in your project, you can go to Survey Distribution Tools and click on Open public survey and enter test data there.

If you want to apply the same branching logic to multiple questions, it is sometimes easier and faster to use the Data Dictionary to accomplish this. Using the Data Dictionary allows you to copy and paste the branching logic into multiple fields very quickly.

To do this, you would:

1. Create the branching logic within one of the fields via Online Designer
2. Go to your Data Dictionary (when you are in Online Designer, scroll up to the top of your page to see the tab for Data Dictionary)
3. Download the current Data Dictionary
4. Save your data dictionary somewhere on your computer – be sure to note where you have saved the file
  - a. Be sure to keep the data dictionary in .csv format – do not convert it to an Excel workbook!
5. Open the data dictionary and find the cell that contains your branching logic
6. Copy the branching logic and paste it into the branching logic cells of the other questions for which you wish to apply it to
7. Save your data dictionary
8. Go back to the Data Dictionary page within your REDCap project
9. Click on 'choose file' and find the file location of your updated data dictionary
10. Click on upload file

Note: if you are making these changes while in Production mode, you will need to enter draft mode first, perform the above steps and then click on the "Submit Changes for Review" on the Data Dictionary page.

For more information on how to use the Data Dictionary, go [to this section](#) of this User Guide.

## Caution on variable names in branching logic

While in development mode, you do have the ability to change a variable name. Please note that if that variable is used in branching logic elsewhere, REDCap will NOT automatically change the variable name in the branching logic.

## Branching logic across instruments

In our example, a question is asked in survey 1 "Do you have type 2 diabetes?" This question has the variable name type2diabetes and the potential answers are yes or no. The raw value for yes is 1 and no is 0. Then there is survey 2 where the question is asked "Do you take medication for your diabetes?" The variable name is takediabetesmeds, the answers are yes or no and the raw value for yes is 1 and no is 0.

To set up branching logic so that the question “Do you take medication for your diabetes?” only appears in survey 2 when the person answers ‘yes’ to the question “Do you have type 2 diabetes?” in survey 1...

1. In Online Designer, click on Survey 2
2. Go to the field “Do you take medication for your diabetes?”
3. On that field, click on the green arrows to access the branching logic.
4. Click on the button next to Drag-N-Drop Logic Builder.
  - a. When you do that, you will see a drop-down box that lists all your instruments.
5. Select the instrument from which you want to base your branching logic. In our example, we want to access survey 1.
  - a. You will now see all the variables (questions) that are in that instrument (in our example, survey 1.)
6. You can scroll until you see the question type2diabetes = Yes (1) and type2diabetes = No (0) in the list.
7. Click on type2diabetes = Yes (1) and drag it to the box on the right
8. Click save

You now have branching logic on the question “Do you take medication for your diabetes?”. It will now only appear in survey 2 if the person answers yes to the question “Do you have type 2 diabetes?” in the first survey.

#### Add Piping Logic

Piping gives you the ability to insert answers and place it in various places within REDCap.

For an example, in the below example there is a field that asks the participant “What kind of ice cream do you like?” Next is a field that asks the participant “How often do you eat \_\_\_\_ ice cream?” Piping logic is included in the second question so that it will insert the answer from the first question.

#### Before:

What kind of ice cream do you like?

Chocolate  
Strawberry  
Vanilla

reset

How often do you eat \_\_\_\_\_ ice cream?

Once a week  
Twice a week  
Three times a week

reset

Once the participant answers the first question, the answer is then inserted into the next question.

#### After:

What kind of ice cream do you like?

Chocolate  
Strawberry  
Vanilla

reset

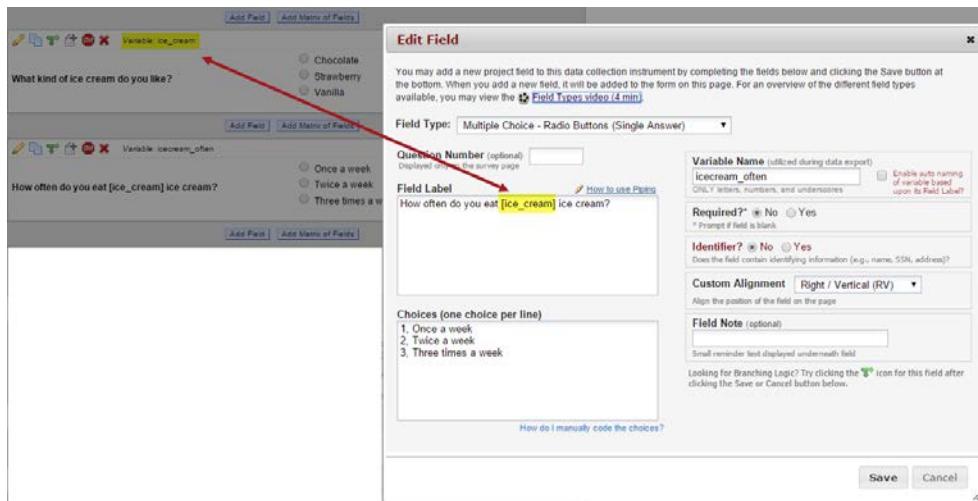
How often do you eat Chocolate ice cream?

Once a week  
Twice a week  
Three times a week

reset

To add piping, add the variable name of the field you want to pipe in. The variable name must be inserted into square brackets [ ]. Note: if the variable you want to use for piping is not adjacent, consider

opening the [Codebook](#) on one tab and do your design on another tab. This way you can easily reference the variable name in the Codebook. You can use the **ctrl+F** function to search through the Codebook.



Piping can be used in many different places in REDCap such as:

- Field Label
- Field Note
- Section Header
- Matrix field column headers
- Option labels for multiple choice fields (radio, drop-down, checkbox)
- Slider field labels (i.e. text displayed above slider bar)
- Survey instructions and acknowledgement Text
- Survey invitation emails sent via Participant List or Automated Invitations - both in the subject line and in the message body

#### Note about Piping in Longitudinal projects

If your project is longitudinal and you want to pipe in data from an event *that is not the current event*, you need to pre-pend to the variable the appropriate unique event name also enclosed within square brackets, e.g. [unique\_event\_name][variable\_name]. Unique event names can be found by going to Project Setup/Define My Events. You will see an events table, and the last column shows you the Unique event name, which is automatically generated by REDCap.

#### Piping tutorial

To see an online demonstration of piping, please click on this link: <https://is.gd/PipingTutorial>

#### Add styling with HTML and CSS

Additional styling can be added to certain elements in your project using HTML tags with CSS styles. Examples include:

- Field labels
- Section headings and descriptive text fields
- Survey welcome and thank you messages
- Survey invitation emails

This guide will not become a web programming manual: you can find good references for HTML and CSS at w3schools.com, and Google is always your friend. Nevertheless, some examples of the types of formatting that can be applied are included below. First a section header, then two field labels:

### Demographics Information

Confidential

Demographics Information<br />

```
<div style="width:100%; color:#FFF; background-color:#F00; padding:5px; position:relative; top:-5px; left:-5px;">Confidential</div>
```

Full Name

<div class="green">Full Name</div>

Date of Birth

### Date of Birth

Here is a selection of text styles:

small and red

**bold, large and green**

blue monospace

normal in a white box

<p style="font-weight:normal;">Here is a selection of text styles:</p>

<p style="color:red; font-size:75%;">small and red</p>

<p style="color:green; font-weight:bold; font-size:150%;">bold, large and green</p>

<p style="color:blue; font-family: monospace;">blue monospace</p>

<p style="display:block; padding:5px; border:1px black solid; background-color:white; ">normal in a white box</p>

To learn more about HTML formats, [see this link](#). It is an interactive online survey that provides information using HTML in REDCap.

### Shared Library

The REDCap Shared Library is a repository of validated data collection instruments that can be downloaded and used in your REDCap projects.

To access the REDCap Shared Library your project must be in Development (not Production) mode. You can access the library via two locations:

1. The Project Setup tab – see the Design your data collections instruments section
2. The Online Designer page – there is a button to import button

You can download any instrument from the library into your REDCap project.

If your project is in production status, you can also upload data collection instruments that you have created to the Shared Library. They will then be available for download by other REDCap users around the world.

Note: Do not share copyrighted material unless you are the owner.

## Smart Variables

### Definition

In REDCap Field Notation, variable names always point to data fields in the project. However, another type of entity exists called 'Smart Variables' that allow you to reference information other than data fields. Smart Variables are context-aware and thus adapt to many different situations in which they can know who the current user is, what event is currently being viewed, whether or not an instrument is being viewed as a survey or data entry form, etc. In this way, Smart Variables are dynamic (and thus 'smart') because they adapt to the current context in which they are used. Smart Variables are easily distinguishable from field variable names because Smart Variables will have dashes and colons whereas field variable names cannot.

Smart Variables can be used...

- On their own - e.g., `[record-dag-name]`
- In conjunction with field variables - e.g., `[previous-event-name][weight_measurement]`
- In conjunction with other Smart Variables - e.g., `[previous-event-name][survey-url:prescreening_survey]`

For more information on Smart Variables, [please see this page.](#)

## Step 3 on the Project Setup page: Enable Optional Modules and Customizations

The third box on the Project Setup page lists several optional modules that you can enable for your project:

### Enable optional modules and customizations

Enable	– Repeatable instruments <a href="#">?</a>
Enable	– Auto-numbering for records <a href="#">?</a>
Enable	– Scheduling module (longitudinal only) <a href="#">?</a>
Enable	– Randomization module <a href="#">?</a>
Enable	– Designate an email field for sending survey invitations <a href="#">?</a>
Enable	– Clinical Data Pull from eStar <a href="#">?</a>
Enable	– Twilio SMS and Voice Call services for surveys <a href="#">?</a>

[Additional customizations](#)

### Repeatable or Repeating instruments

You can repeat a data collection instrument or a single predefined event dynamically and as often as you wish. This is useful when collecting data for multiple visits, concomitant medications, adverse events, or repetitive surveys (weekly, monthly, etc.) There is no need to pre-define a maximum number of repetitions, and the feature works in either classic or longitudinal projects.

Classic projects (i.e., in which the longitudinal module is not enabled) can utilize repeating instruments as a simple way of enabling longitudinal data collection.

#### *Enabling Repeatable Instruments*

Navigate to Project Setup, Optional Modules. Click **Enable** for Repeatable instruments.

Enable optional modules and customizations	
<input type="checkbox"/> Enable	<input checked="" type="radio"/> Repeatable instruments <a href="#">?</a>
<input type="checkbox"/> Enable	<input checked="" type="radio"/> Auto-numbering for records <a href="#">?</a>
<input type="checkbox"/> Enable	<input checked="" type="radio"/> Scheduling module (longitudinal only) <a href="#">?</a>
<input type="checkbox"/> Enable	<input checked="" type="radio"/> Designate an email field to use for invitations to survey participants <a href="#">?</a>

 **Tip:** In *longitudinal* projects, you may repeat instruments **and** events:

Enable optional modules and customizations	
<input type="checkbox"/> Enable	<input checked="" type="radio"/> Repeatable instruments and events <a href="#">?</a>

Use the checkbox to indicate which data collection instrument may be repeated.

Repeat this instrument?	Instrument name	Custom label for repeating instruments (optional) <a href="#">?</a>
<input checked="" type="checkbox"/>	Adverse Event Collection	[adverse_event]
<input type="checkbox"/>	Demographics	
<input type="checkbox"/>	Physical	
<input type="checkbox"/>	Study Termination	

Add an optional custom label. Variables allow you to pipe collected data from the form to label one instance of the form from other repeated instances.

#### *Data Entry for a Repeating Instrument*

During Data Entry, click **Save & Add New Instance** to create another instance of the instrument immediately.

**Adverse Event Collection**

Adding new Study ID 1156092

Study ID	1156092
What is the Adverse Event?	Headache
When did the Adverse Event start?	2017-03-01 Today Y-M-D
Is the AE ongoing?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Form Status	
Complete?	<input type="checkbox"/> Incomplete <input checked="" type="checkbox"/>
Lock this record for this form?	
<input type="checkbox"/> Lock <small>If locked, no user will be able to edit this record on this form. Privileges unlocks it.</small>	
<input type="button" value="Save &amp; Exit Form"/> <input type="button" value="Save &amp; Stay"/> <input style="outline: 2px solid red; border-radius: 10px; border: none; background-color: #e0f2e0; color: black; font-weight: bold; padding: 2px 10px; margin-left: 10px;" type="button" value="Save &amp; Add New Instance"/> <input type="button" value="Save &amp; Go To Next Form"/>	

To add a new instance of the instrument *after data entry*, click the **+ sign** from Data Collection or on the Record Home Page beside the form you want to repeat. Only Repeating instruments display the + sign.

**Data Collection**

- [Edit instruments](#)
- [Record Status Dashboard](#)
  - View data collection status of all records
- [Add / Edit Records](#)
  - Create new records or edit/view existing ones
- [Study ID 01149903 Select other record](#)

Data Collection Instruments:

- [Adverse Event Collection \(1 / 3\)](#)

**Tip:** Include variable names in your custom labels. This will pipe collected data into the label name, distinguishing one instance of an instrument from another.

**Record Home Page**

The grid below displays the form-by-form progress of data entered for the currently selected record. You may click on the colored status icons to access that form/event.

[Choose action for record](#)

Study ID 1145098

Data Collection Instrument	Status
Adverse Event Collection	
Demographics	
Physical	
Study Termination	

Repeating Instruments

Adverse Event Collection
1  Headache
2  Fatigue
<a href="#">+ Add new</a>

Physical
1
<a href="#">+ Add new</a>

The Physical instrument has **no** custom labels in this example. Open the form to see the data inside.

**Legend for status icons:**

- Incomplete (Red)
- Incomplete (No data saved) (Grey)
- Unverified (Yellow)
- Many statuses (All same) (Green)
- Complete (Green)
- Many statuses (Mixed) (Blue)

#### Viewing Repeating Instrument Status Icons

The Record Status Dashboard includes a legend specifying both individual instrument status icons, as well as icons for the repeating instances of an instrument. A single dot indicates a single instrument containing data. The “stacked” icons indicate multiple instances of the instrument.

**Record Status Dashboard (all records)**

Displayed below is a table listing all existing records/responses and their status for every data collection instrument (and if longitudinal, for every event). You may click any of the colored buttons in the table to open a new tab/window in your browser to view that record on that particular data collection instrument. Please note that if your form-level user privileges are restricted for certain data collection instruments, you will only be able to view those instruments, and if you belong to a Data Access Group, you will only be able to view records that belong to your group.

Displaying record "1145098" through "14019901" of 3 records

Displaying: Instrument status only | [Lock status only](#) | [All status types](#)

Study ID	Adverse Event Collection	Demographics	Physical	Study Termination
1145098				
01149903				

**Adverse Event Collection**

1		Dizziness
2		Nausea
3		Headache
<a href="#">+ Add new</a>		

**Legend for status icons:**

- Incomplete (Red circle)
- Incomplete (no data saved) (Grey circle)
- Unverified (Yellow circle)
- Many statuses (all same) (Yellow, Green, Red circles)
- Complete (Green circle)
- Many statuses (mixed) (Blue circle)

Click directly on the “stack” to reveal the status icons belonging to the various instances of the instrument.

## Auto-numbering for records (on Project Setup page)

Auto-numbering will automatically be enabled for your project, unless you are using a project template that does not have it enabled. With auto-numbering enabled, you will see this when you navigate to the Add/Edit records page:

### Add / Edit Records

You may view an existing record/response by selecting it from the drop-down lists below. To create a new record/response, click the button below.

Total records: 349	
Choose an existing Record ID	<select style="width: 150px;">-- select record --</select>
<a href="#" style="color: green; background-color: #c8f7e4; padding: 5px 10px;">+ Add new record</a>	

This option will remove the ability for users to name new records manually and will instead auto-generate a new unique record name, which will be numerical and will increment from the highest numerical record value in the project. If no records exist, it will begin with '1'.

If you want to create your own record identification, you may disable this feature and manually assign a record identifier.

### Work-around for starting record numbering with a number other than 1

When using auto-numbering you can have your sequence begin with a number other than 1 using the following strategy:

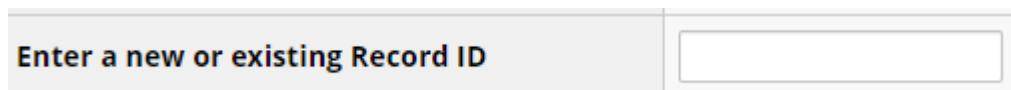
1. With record auto-numbering **disabled via the Project Setup page**, create a dummy record with an identifier one less than your desired start number
2. Enable record auto-numbering on the Project Setup page
3. Create a new record – this will become your first record
4. Delete the dummy record

For example, if you want your first record to be numbered 1001, disable record auto-numbering, add a record with id=1000, enable record auto-numbering, create another new record (id=1001 will be assigned), then delete record 1000.

#### [Manually assign a record identifier](#)

To manually assign the record identifier for your project, go to **Project Setup** and in the section ‘Enable optional modules and customizations’, click on the Disable button next to ‘Auto-numbering for records.’

Now, when you go to Add/Edit records, you will see this (instead of the ‘Add record’ button:



The image shows a user interface element consisting of two adjacent rectangular boxes. The left box is light gray with a dark gray border and contains the text "Enter a new or existing Record ID" in a bold, dark blue font. The right box is white with a thin gray border.

Enter the identifier you wish to use for the record and hit ‘enter.’

Please note: the disable button will not be clickable if you already have records in your project or if the first instrument in your project is a survey.

#### [Scheduling module \(longitudinal only\)](#)

The scheduling module can generate schedules for your project calendar that are auto-generated from project-defined events (e.g., visits, time-points). Scheduling is only available for projects using longitudinal data collection. To enable the scheduling module, your project needs to be enabled as a longitudinal project (under Step 1 on the Project Setup tab.) You can then click the enable button next to the Scheduling module in Step 3 of the Project Setup tab. For further information, see the [Scheduling](#) section of this User Guide. For further information, you can click on the question mark next to the module on the Project Setup page or search the Help & FAQ tab.

#### [Randomization module](#)

Randomization is a process that assigns participants/subjects by chance (rather than by choice) into specific groups, typically for clinical research and clinical trials. This is considered an advanced feature so no further instructions will be available here. For further information, you can click on the question mark next to the module on the Project Setup page or search the Help & FAQ tab.

#### [Designate an email field for sending survey invitations](#)

Enabled for use with Automated Survey Invitations or participant lists built via data entry form. Requires there to be a field within your project that is validated as an email field.

If you have a survey that you would like to have available via a public survey link (e.g. you don't know the email addresses of the potential respondents) but then want to send a subsequent survey to the same respondents, this is a helpful feature. It requires you to request the respondent's email address in the first survey. Then, when you use the ‘designate an email field’ module, you are telling REDCap that the email address captured in that initial survey is the email address that you want the subsequent surveys sent to. When participants complete the first survey, their email addresses will pre-populate the Participant Lists and will allow you to send additional surveys for the same record.

Enabling this feature also automates the sending of survey confirmation emails (rather than relying on the survey participant to enter their email address on the survey completion screen to receive the confirmation email.)

Note: This feature should only be used if it is ok that survey responses are not anonymous.

For further information, you can click on the question mark next to the module on the Project Setup page or search the Help & FAQ tab.

### Additional Customizations on the Project Setup page

#### *Set a custom record label*

This tool assists you in identifying what is contained in a record (most commonly, the name of the person to whom the record belongs) when looking at a list of records (e.g. from the list of records on Add/Edit records or the Record Status Dashboard.) For instance, if you collect a person's name in the project, you could set a custom record label to see that person's name next to the record identifier. This will be visible via the add/edit records and record status dashboard as well as at the top of the form/survey. That way, you don't have to open up the record to see who it belongs to.

To set a custom record label, go to the Project Setup page and under 'Enable Optional Modules and Customizations' click on "Additional Customizations".

The screenshot shows the 'Enable optional modules and customizations' section. It lists several modules with 'Enable' and 'Disable' buttons. The 'Auto-numbering for records' module is checked (green). The 'Designate an email field for sending survey invitations' module is also checked (green). A red box highlights the 'Additional customizations' button at the bottom.

Enable optional modules and customizations	
Some options below are disabled because they may not be modified once the project is created.	
Enable	● Repeatable instruments <a href="#">?</a>
Disable	● Auto-numbering for records <a href="#">?</a>
Enable	● Scheduling module (longitudinal only) <a href="#">?</a>
Enable	● Randomization module <a href="#">?</a>
Disable	● Designate an email field for sending survey invitations <a href="#">?</a> Field currently designated: <b>attemail</b> ("What is your e-mail address?")
Enable	● Clinical Data Pull from eStar <a href="#">?</a>
Enable	● Twilio SMS and Voice Call services for surveys <a href="#">?</a>
<b>Additional customizations</b>	

You will see an option to add a custom record label:

## Additional customizations

You may use the options below to make customizations to the project. When done, click Save to save your changes.



### [Set a Custom Record Label](#)

You may append other data and/or static text to any record name (e.g., Study ID) as the record is displayed on your data collection instruments, such as inside the drop-down lists when choosing a record and at the top of the page after being selected. Simply provide the text you wish to display below, and place any variable names inside square brackets [ ], after which the data collected for those variables for that record will replace the variable in the text.

Custom Record Label:

Example: if ([last\_name], [first\_name]) were entered, then for record '102' it would display '102 (Doe, Jon)'.

Tick the box and then put the variable names in square brackets that you wish to see next to the record identifier. In the above example, the variable name 'fn' captures the first name and the variable name 'ln' captures the last name.

So instead of this:

**Displaying:** Instrument status only | [Lock status only](#) | ↴

Record ID	Registration Survey	Internal form	Follow-up Survey	Internal form 2	Final survey
1	✓	○	○	○	○
2	✓	○	○	○	○
3	✓	○	○	○	○
4	✓	○	○	○	○
5	✓	○	○	○	○
6	✓	○	○	○	○
7	✓	○	○	○	○
8	✓	○	○	○	○
9	✓	○	○	○	○
10	✓	○	○	○	○

You will see this:

Record ID	Registration Survey	Internal form	Follow-up Survey	Internal form 2	Final survey
1 Bonnie Plunkett	✓	○	○	○	○
2 Kelly Kapoor	✓	○	○	○	○
3 Christy Plunkett	✓	○	○	○	○
4 Mindy Lahiri	✓	○	○	○	○
5 Sam Swarek	✓	○	○	○	○
6 Jake Peralta	✓	○	○	○	○
7 Shawn Spencer	✓	○	○	○	○
8 Andy McNally	✓	○	○	○	○
9 Gus Burton	✓	○	○	○	○
10 Danny Castellano	✓	○	○	○	○

Design Tip: Reference the Codebook when setting the Custom Record Label

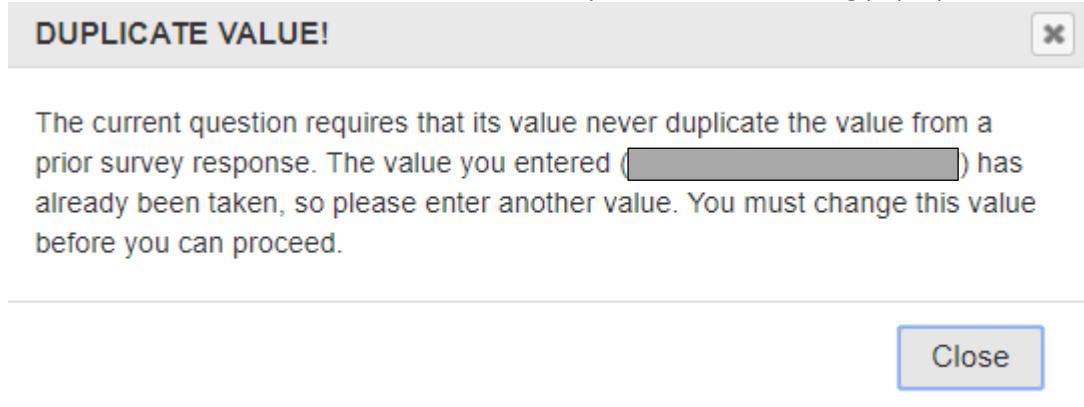
You may decide to set the custom record label sometime after you have designed the project, so you may not remember what you called the variable that you want to see in the record label. In those cases, you can check your Codebook to see what name you gave the variable. You can access your Codebook via the link on the left-hand navigation bar (under Project home and Design).

*Designate a secondary unique field (in Additional Customizations on the Project Setup tab)*

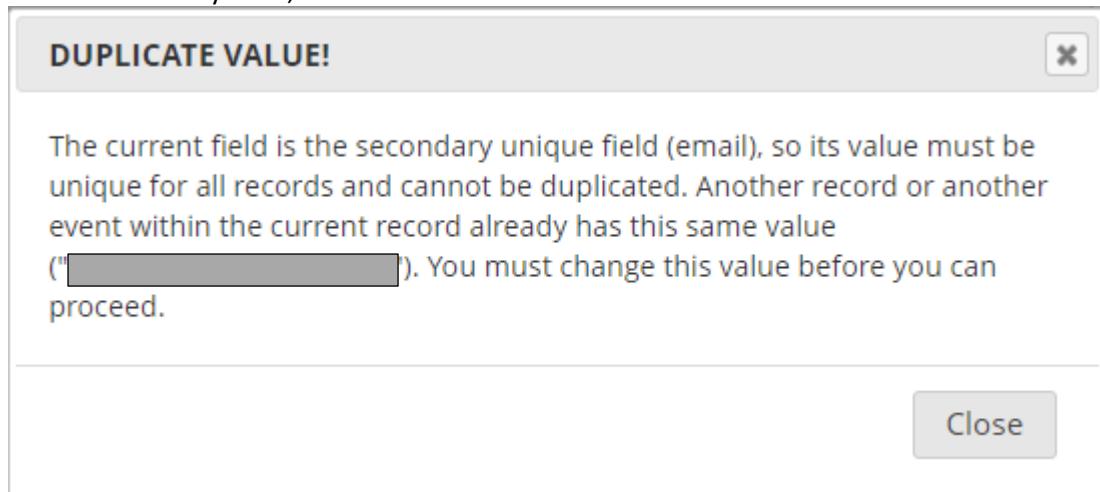
- A field in addition to the primary record identifier for which REDCap will ensure the uniqueness of all values
- Values will also be included alongside the primary record identifier in the [record selection lists](#)

You may designate a **text** field to serve as a unique constraint whose value cannot be duplicated or shared by any other **record** in the project. When a value is entered or imported for the secondary unique field, it will be checked in real time to ensure it is not shared by another record, and if so, it will ask the user to enter another value. This means that if a participant is completing a survey for a

second time in which this feature is enabled, they will see the following pop-up box:



If it is a data entry form, the user will see this:



Note: this feature should be enabled **before** you start collecting real data. That is because if you are already collecting real data and there are duplicates in your project, you cannot enable this feature.

It is not possible to specify that the combination of two or more fields be unique.

*[Order the records by another field \(in Additional Customizations on the Project Setup tab\)](#)*

The default setup is that all records are ordered by their record name (e.g., Study ID) when displayed in the drop-down lists on your data collection instruments, but you may alternatively order the drop-down lists by the values of another field in the project (e.g., last name), if desired. If you wish to order the records by another field, you can select the field by which you wish to order records via this customization.

*[Enable the Field Comment Log or Data Resolution Workflow \(Data Queries\) \(in Additional Customizations on the Project Setup tab\)](#)*

The Field Comment Log (enabled by default) allows users to leave comments for any given field on a data entry form by clicking the balloon icon next to the field.

*[PDF Customizations \(in Additional Customizations on the Project Setup tab\)](#)*

Downloadable PDFs of data entry forms and surveys can be customized. See the options below:

## PDF Customizations

Downloadable PDFs of data entry forms and surveys can be customized using the options below. Note: The options will be applied to ALL instruments in the project.

- 1) Set custom header text to appear at top left of every PDF page (it may be left blank, if desired). Note: Only static text can be entered; thus piping cannot be utilized here.

Default text: *Confidential*

- 2) Display or hide the REDCap logo and website URL at the bottom right of every PDF page?

Display REDCap logo and website URL (default)  
 Hide REDCap logo/URL and instead display the following text: *Powered by REDCap*

- 3) Display or hide the Secondary Unique Field value at the top right corner of the PDF? (This option is only applicable if the Secondary Unique Field is enabled above and is set to be displayed.)

## *Enable the Data History widget for all data collection instruments (in Additional Customizations on the Project Setup tab)*

When enabled, an icon will appear next to every field on a data collection instrument. When the icon is clicked, the history of all data entered into that field for that record will be listed chronologically and will display all previous values, who changed the value at each instance, and the time it was changed.

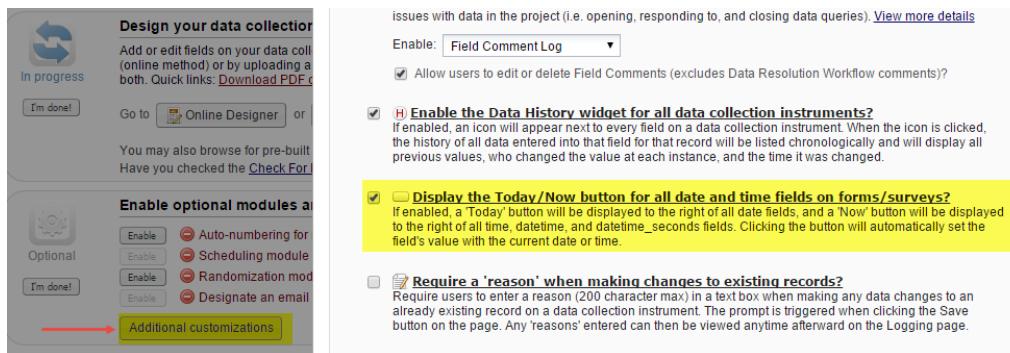
This setting is enabled by default. If you wish to disable the feature, go to Project Setup/Enable Optional Modules and Customizations, click on the Additional Customizations and un-tick the box (you will need to scroll down to see it):

### **Enable the Data History widget for all data collection instruments?**

If enabled, an icon will appear next to every field on a data collection instrument. When the icon is clicked, the history of all data entered into that field for that record will be listed chronologically and will display all previous values, who changed the value at each instance, and the time it was changed.

## *Don't display the Today/Now button for all date and time fields on forms/surveys (in Additional Customizations on the Project Setup tab)*

If you do not wish to have the Today icon appear next to your date fields, you may turn this setting off. Uncheck the box next to "Display the Today/Now button for all date and time fields on forms/surveys".



The screenshot shows the 'Design your data collection' section of the Project Setup interface. It includes sections for 'Field Comment Log' (with a dropdown menu), 'Allow users to edit or delete Field Comments (excludes Data Resolution Workflow comments)?' (checkbox), 'Enable the Data History widget for all data collection instruments?' (checkbox), 'Display the Today/Now button for all date and time fields on forms/surveys?' (checkbox, highlighted with a yellow background), and 'Require a 'reason' when making changes to existing records?' (checkbox).

Note that this is a project-level setting. If you wish to set it for specific fields within the project, you would use the HIDEBUTTON action tag. For more information on Action Tags, [please see this section](#) of the User Guide.

## *Require a 'reason' when making changes to existing records? (in Additional Customizations on the Project Setup tab)*

- With this option selected, the user must enter some text as a "reason for change" each time a

- form is saved – except when the record is initially created
- Users can find this intrusive for longitudinal or multi-form projects as the dialog box appears even when entering new data on a form that is not the first form (i.e. when the record is created)

#### *Data Entry Trigger (in Additional Customizations on the Project Setup tab)*

- Enter a web address and whenever a data entry form or survey record is created or modified. REDCap will post data to the specified URL.

#### *Data Entry Trigger explanation*

The Data Entry Trigger is an advanced feature. It provides a way for REDCap to trigger a call to a remote web address (URL), in which it will send a HTTP Post request to the specified URL whenever *\*any\** record or survey response has been created or modified on *\*any\** data collection instrument or survey in this project (it is *\*not\** triggered by data imports but only by normal data entry on surveys and data entry forms). Its main purpose is for notifying other remote systems outside REDCap at the very moment a record/response is created or modified, whose purpose may be to trigger some kind of action by the remote website, such as making a call to the REDCap API.

For example, if you wish to log the activity of records being modified over time by a remote system outside REDCap, you can use this to do so. Another use case might be if you're using the API data export to keep another system's data in sync with data in a REDCap project, in which the Data Entry Trigger would allow you to keep them exactly in sync by notifying your triggered script to pull any new data from at the moment it is saved in REDCap (this might be more optimal and accurate than running a cron job to pull the data every so often from REDCap).

DETAILS: In the HTTP Post request, the following parameters will be sent by REDCap in order to provide a context for the record that has just been created/modified:

- project\_id - The unique ID number of the REDCap project (i.e. the 'pid' value found in the URL when accessing the project in REDCap).
- instrument - The unique name of the current data collection instrument (all your project's unique instrument names can be found in column B in the data dictionary).
- record - The name of the record being created or modified, which is the record's value for the project's first field.
- redcap\_event\_name - The unique event name of the event for which the record was modified (for longitudinal projects only).
- redcap\_data\_access\_group - The unique group name of the Data Access Group to which the record belongs (if the record belongs to a group).
- [instrument]\_complete - The status of the record for this particular data collection instrument, in which the value will be 0, 1, or 2. For data entry forms, 0=Incomplete, 1=Unverified, 2=Complete. For surveys, 0=partial survey response and 2=completed survey response. This parameter's name will be the variable name of this particular instrument's status field, which is the name of the instrument + '\_complete'.

NOTE: If the names of your records (i.e. the values of your first field) are considered identifiers (e.g. SSN, MRN, name), for security reasons, it is highly recommended that you use an encrypted connection (i.e. SSL/HTTPS) for the URL you provide for the Data Entry Trigger.

## Step 4 on the Project Setup page: Set up project bookmarks

Because your project is a series of webpages, you can technically bookmark any one of those webpages and have it appear on the left-hand navigation menu. This will allow you to get to that page with one click. So, if you find yourself navigating to a particular section of your project over and over again and it is not already on the left-hand navigation bar, you can make it a bookmark so you can get to it in one click. You can also add a bookmark to any other URL outside of REDCap.

To add a bookmark of a page within your project:

- Copy the URL of the page you wish to bookmark (click on the browser bar, select all and copy)
- Right-click on the Project Setup link on your left-hand navigation bar and open link in new tab
- Scroll down to “Set up project bookmarks (optional)” and click on “Add or edit bookmarks”
- Paste the URL into the “Link URL/Destination box”
- Enter the name of the URL into the Link Label box (for instance, Online Designer or Codebook)
- Tick the box “Opens new window”
- Click the “Add” button

Once you have created your first bookmark within your project, you can go to the bookmarks section of your navigation bar and click on the “Edit” button to get to your project bookmarks. It’s only when setting up your first one that you have to go to the Project Setup page to access Bookmarks.

Notes:

- Bookmarks can be re-ordered by clicking and dragging a bookmark record
- Edit buttons (  ) appear when you hover your mouse pointer over a bookmark’s **Link Label** and **Link URL / Destination** values
- Use the delete button (  ) to remove a bookmark
- Link Type
  - **REDCap Project:** choose from the list of REDCap projects that you have permission to access
  - **Simple Link:** a simple URL to, for example, an external web page
  - **Advanced Link:** as with the Simple Link, a URL to, say, an external web page, but REDCap sends additional information (e.g. user and project info) to the target website as a means of verifying the identity of the REDCap user on that external site
- **User Access:** control which users of the current project can see the bookmark. Select either **All users** or select specific users individually by selecting **Selected users**

## Step 5 on the Project Setup page: User Rights and Permissions

### User Rights

In summary, the **User Rights** page enables you to:

- Add and remove access to your project for other REDCap users
- Control which Applications each user can access for your project
- Control the record operations that each user is permitted to perform
  - Create records
  - Rename records (i.e. edit a record id)
  - Delete records
- Control the level of access each user is permitted to each specific data collection form
  - No access
  - Read-only access
  - Full edit access
- Define roles – templates of permissions – to which users may be assigned

### Data Access Groups

A Data Access Group is an arbitrary entity that can be thought of as analogous to a study site. Individual users can be assigned to a single Data Access Group, as can project records. Records that a group user creates are automatically assigned to that group. **A user in a Data Access Group has access only to records that are also assigned to that Data Access Group.**

For example, you as the project owner create a Data Access Group called “Nashville Site”. Your collaborator from another institution has had a REDCap account created for them by the REDCap administrator, and you assign her username to the Nashville Site group. The collaborator can view records that she creates or that you assign to Nashville Site, but not any records that are assigned to other groups, or that are unassigned to any group.

For more information on Data Access Group setup, see [Create a Data Access Group](#) under the Applications section of this User Guide.

### [Adding a user to your project \(Add a user to your project\)](#)

If you would like to grant other users access to your project, click on User Rights on the Project Setup page or on the left-hand navigation bar.

- [!\[\]\(26ce87ff4ca19e7233a4e3cf86750790\_img.jpg\) My Projects](#)
- [!\[\]\(4c79d49cf0289bd66e62ae3cfa92a132\_img.jpg\) REDCap Messenger](#)

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- Project Home and Design** 
- Data Collection** 
- Applications** 

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-  [Alerts & Notifications](#)
-  [Calendar](#)
-  [Data Exports, Reports, and Stats](#)
-  [Data Import Tool](#)
-  [Data Comparison Tool](#)
-  [Logging](#)
-  [Field Comment Log](#)
-  [File Repository](#)
-  [User Rights](#) and  [DAGs](#)
-  [Data Quality](#)
-  [REDCap Mobile App](#)
-  [External Modules](#)

You will see this image in your workspace (area to the right of the left-hand navigation bar):

This screenshot shows the 'User Rights' section of the REDCap interface. At the top, there are three tabs: 'Project Setup', 'User Rights' (which is selected), and 'Data Access Groups'. Below the tabs, a note explains the purpose of the page: granting users access to the project and managing user privileges. It includes sections for 'Add new users', 'Create new roles', and 'Assign new user'.

**Add new users:** Give them custom user rights or assign them to a role.  
Add new user | Add with custom rights  
— OR —  
Assign new user | Assign to role

**Create new roles:** Add new user roles to which users may be assigned.  
Enter new role name | Create role  
(e.g., Project Manager, Data Entry Person)

Enter the person's user name in the Add new user field.

- If the person is found, click on their name and then click on Add with custom rights.
- If the person is not found, this either means they do not have access to REDCap or they have not logged into REDCap before. I

**Correct way:** wcteachout      **Incorrect way:** wcteachout@vanderbilt.edu

Once you click Add with custom rights, you will now see a screen similar to this:

This screenshot shows the 'Basic Rights' and 'Data Entry Rights' configuration screen. On the left, under 'Basic Rights', there is a field for 'Expiration Date (if applicable)' and a section for 'Highest level privileges' with checkboxes for 'Project Design and Setup', 'User Rights', and 'Data Access Groups'. Under 'Privileges for data exports', there are four radio button options: 'No Access', 'De-Identified\*', 'Remove all tagged Identifier fields', and 'Full Data Set'. A note explains that 'De-identified' means all free-form text fields will be removed. Other privileges include 'Add/Edit/Organize Reports' (checked) and 'Stats & Charts' (checked). Under 'Other privileges', there is a checked checkbox for 'Survey Distribution Tools'. On the right, the 'Data Entry Rights' section shows a table with four columns: 'No Access', 'Read Only', 'View & Edit', and 'Edit survey responses'. The table lists four surveys: 'Pre-Screening Survey (survey)', 'Participant Info Survey (survey)', 'Participant Morale Questionnaire (survey)', and 'Completion Data (to be entered by study personnel only)'. In the 'Edit survey responses' column, the first three surveys have a checked checkbox, while the last one does not. At the bottom, there is a 'New User Notification' section with a checked checkbox for 'Notify user of their project access via email?'.

	No Access	Read Only	View & Edit	Edit survey responses
Pre-Screening Survey (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
Participant Info Survey (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
Participant Morale Questionnaire (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
Completion Data (to be entered by study personnel only)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>

Choose what you want the user to have access to. Select the appropriate rights and then click Add User.

### Customizing User Rights

The **Basic User Rights** section is a checklist of REDCap modules that the user can access.

In general, users should be given access only to the modules that they require, and no more. This is known as the [Principle of least privilege](#) and acts both to increase the security of your project and to aid usability by removing unnecessary clutter from a user's view.

Note the **Project Expiration Date** field gives you the option of permitting access for a specific period of time. Please note: this is different from an external user's ACCOUNT expiration date.

The **Data Entry Rights** allows you to limit which instruments the user can access and how they will be able to edit data. If the project has surveys enabled, there will be a column for editing survey responses. A project with only data entry form(s) will not have that column. The [Principle of least privilege](#) applies here too

At the bottom of the page are three buttons:

- **Save Changes**
- **Cancel**
- **Remove User:** remove the user from your project

### *Removing a user (remove a user)*

To remove a user from your project, select their name from the User Rights list and click on Edit User Privileges. You can click on the "Remove User" button.

Please note, if you wish to remove a user from your project and that user has been assigned to a role, you must first remove them from the role and then remove them as a user.

An alternative to removing the user is to expire them as a user by putting the last date they should have access to the project in the expiration date field of their user rights.

### User Roles

A **role** is simply a template of user rights. Users assigned to a role are granted the set of rights that the role is configured to have.

### *Create a Role*

You may name and define project-level **user roles** (e.g., Data Manager, Data Entry, Project Manager, etc.), then assign users to the appropriate role. This feature allows you to quickly and consistently designate user privileges by their specific role in the project.

Creating a role is similar to creating a user with custom rights: enter a name for the role (e.g. "Project Manager", "Data Entry" etc.) and click **Create role**.

**Create new roles:** Add new user roles to which users may be assigned.

Configure the rights associated with the role and click **Create role**.

#### Add a New User to a Role

Enter the user's name or username into the "Assign new user" text box, click **Assign to role** and select the role to which the user should be assigned.



#### Change a User's Role

You can change a user's role (or assign an unassigned user to a role) by clicking on the user's name, then clicking **Assign to role** and then selecting the role.

Role name (click role name to edit role)	Username or users assigned to a role (click username to edit or assign to role)	Expiration (click expiration to edit)	Project Design and Setup	Manage Survey Participants	Calendar	Data Export Tool	Data Import Tool
—	luke.stevens (Luke Stevens)	User actions: Edit user privileges Assign to role ▾	✓	✓	✓	Full Data Set	✓
—	luke1 (Luke Stevens)		✗	✓	✓	De-Identifier	✗
Data Entry	[No users assigned]		✗	✓	✗	✗	✗

## Step 6 on the Project Setup page: Test Your Project Thoroughly

It is extremely important to test your project before moving it into production!

#### Purpose of Testing

The purpose of a database - and the function of database software - is to provide your data with structure and integrity that cannot be enforced using unstructured formats such as text files or spreadsheets.

The purpose of testing your database is to ensure that it has the structure and integrity checks that you expect and that it meets your requirements.

#### Quick Guide to adding test data

1. Add test record
  - a. On the left-hand navigation bar click on '**Add/edit records**' and then click 'add new record'
    - i. If it is a project where records are not auto-numbered, enter the record ID into the box to create a new record

- b. Fill out the form with test data; save and exit the form
  - c. Repeat the above steps, answering the questions differently for each test record
2. View data
    - a. On the left-hand navigation bar, click on 'Data Exports, Reports & Stats'
    - b. Click on 'View Report' for report A – All Data
  3. Export data
    - a. If working with a statistician, consider exporting the test data and sending it to the statistician.
    - b. If you might be sharing de-identified data, export the data, trying out the different de-identification options.
  4. Have colleagues enter test data
    - a. If data will be entered by colleagues via a data entry form...
      - i. On the left-hand navigation bar click on User Rights.
      - ii. Enter your colleagues' VUNet ID and click 'edit user privileges'
      - iii. Give them access to the instrument
      - iv. Ask them to login and add test data
    - b. If data will be entered via survey...
      - i. Click on Survey Distribution Tools
      - ii. Click on the clipboard icon to copy the public survey url
      - iii. Go to Outlook and paste the survey link into an email

### Adding test data

Try creating a few test records and enter some data to ensure that your data collection instruments look and behave how you expect, especially branching logic and calculations. You can do this by clicking Add/Edit Records on the left-hand navigation bar.

If you do not have auto-numbering enabled, you will enter the unique for the new record:

**Add / Edit Records**

You may view an existing record/response by selecting it from the drop-down lists below. To create a new record/response, enter a new value in the text box below and hit Tab or Enter. To quickly find a record without using the drop-downs, the text box will populate with existing record names as you begin to type in it, allowing you to select it.

**NOTICE:** This project is currently in Development status. **Real data should NOT be entered** until the project has been moved to Production status.

Total records: 1	
Choose an existing Record ID	select record
Enter a new or existing Record ID	

If you have the auto-numbering feature enabled, you can click 'add record':

Enter test data into the data entry form.

### Adding test data for surveys

If you have surveys, complete the surveys as if you were a participant by using the Public Survey Link. To access the public survey link, click on the Survey Distribution Tools link on the left-hand navigation bar and then Open Public Survey:

If you are not seeing the public survey link, that means you have either not enabled your first instrument as a survey or you have not set up your project to have surveys. You can enable surveys in your project in the first step listed on the Project Setup page. You can enable an instrument as a survey on the Online Designer page. (*You can get to the Online Designer by clicking on the Designer button on the left-hand navigation bar under Project Home and Design.*)

#### Specific things to check for when entering test data

- For continuous fields, such as dates and numbers, that have range validations, test around the boundaries by entering the minimum and maximum values (which should succeed) and then entering values just outside the valid range (which should trigger warnings). For example, if height should be 50 - 250 cm: ensure that 50 and 250 are accepted, and that 49 and 251

trigger a warning message.

- Test that your branching logic is working properly, skipping questions on pregnancy for male participants, for example.
- Check that required fields are marked as such.

Once you have some test records entered, review them by going to your [Record Status Dashboard](#); [create reports](#) and [export your data](#) and view in Excel or one of the statistical analysis packages; review your Stats.

The best way to test your project is to use it as if you were entering real production data, and it is always helpful to have colleagues (especially team members) take a look at your project to get a fresh set of eyes on it.

#### [Design Tip: test on the type of device that your participants will be entering data](#)

Designing a data entry form for use on a phone or tablet does not require many special considerations compared with data entry on a regular computer. Most important is to test your forms using the devices on which they will be used in the field. That way you can hope to identify any areas where you might wish to change.

One thing that can be worth considering is to use dropdown lists rather than text fields for entry of numbers. Even a lengthy dropdown list (one for weight, say, might have 20.0 kg up to 50.0 kg in 100g increments: 31 entries) might be easier for tablet users than a text box where they have to use the mobile keyboard

[Allow plenty of time for project development and testing](#)

[Test test and re-test](#)

#### [Step 7 on the Project Setup page: Move Your Project to Production](#)

When a project is created, its default status is Development mode and any changes are deployed immediately, overwriting or deleting any existing data. This is fine because any data you are entering while in Development mode should only be test data, so it is ok if that data is damaged or deleted. Once you start collecting real data, however, it is always recommended that the project be in Production status.

Moving a project to Production status does three important things:

- It signals the data is real and important
- It makes the data recoverable in case of a data loss
- It creates a snapshot of the data dictionary so that when a database addition or edit is needed, any changes critical to the data are held until REDCap has the chance to review the impact of the change

You are strongly encouraged to test your project thoroughly before you move your project into Production.

#### How to move your project to Production mode

Once you have ensured your project is capturing all of the fields you need and has all of the design elements you want, click on the Move project to production icon.

#### Move Project To Production Status?

Are you sure you wish to leave the DEVELOPMENT stage? If you proceed, the project will be moved to PRODUCTION status so that real data may be collected. If you select the 'Delete ALL data' option below, all current collected data, calendar events, and uploaded documents will be deleted, otherwise all will remain untouched as the project is moved to production.

★ Have you checked the [Check For Identifiers](#) page to ensure all identifier fields have been tagged?

##### Keep existing data or delete?

- Keep ALL data saved so far.
- Delete ALL data, calendar events, documents uploaded for records/responses, survey responses (if applicable), and any logging events pertaining to data collection.

Once in production, you will not be able to edit the project fields in real time anymore. However, you can make edits in Draft Mode, which will be auto-approved or else might need to be approved by a REDCap administrator before taking effect.

[YES, Move to Production Status](#)

[Cancel](#)

You will have the option to delete all the test data you entered with one click. If you enter test data after you are already in production, you will have to manually delete each individual record.

#### *Check For Identifiers*

Also note the [Check for Identifiers](#) step. It is recommended that you perform the check for identifiers to ensure that all fields that contain participant identifiers – or indeed may contain any information that could potentially be used to identify a participant – are marked as identifying fields. This helps to protect confidential data from access by users that are not permitted to view it.

Once in production, you can still make changes to your project design – it will just require a couple extra steps. You can make edits in Draft Mode, which will then need to be approved by a REDCap administrator before taking effect. Many times, these changes are approved automatically and within seconds.

## Advantage of being in production mode

If you make any design changes to your project while in Production, REDCap will check to make sure those changes don't damage/delete your existing data.

### Making Design Changes in Production

When your project is in Production mode, any design changes require that you change the Project Status to Draft Mode. When you access Online Designer, REDCap will prompt you to enter Draft Mode.

Once in draft mode, you can make changes to the design of your instruments. You will then need to submit your changes for review. Prior to submitting the changes, you are encouraged to use "View detailed summary of all drafted changes" to clearly understand the impact of the changes.

The screenshot shows the REDCap Online Designer interface. At the top, there are four tabs: Project Home, Project Setup, Online Designer (which is selected), and Data Dictionary. A yellow banner at the top states: "Since this project is currently in PRODUCTION, changes will not be made in real time." Below this, there are buttons for "Submit Changes for Review" and "Remove all drafted changes". A red circle highlights the link "View detailed summary of all drafted changes". To the right of this link, it says: "Fields to be added: 3 / Total resulting field count: 32" and "Fields to be deleted: 0 / Existing field count: 29". Below the banner, there's a section titled "Details regarding all changes made in Draft Mode:" with a bulleted list of changes. Further down, there's a "KEY for Comparison Table below" which defines colors for changes: White cell = no change, Yellow cell = field changed (Black text = new value, Gray text = current), and Green cell = new project field. A comparison table shows changes for variables like first\_name, last\_name, and smoker. To the right, a modal window titled "Changes Were Made Automatically" displays a green checkmark and the message: "SUCCESS! The changes you just submitted were made AUTOMATICALLY. They were committed immediately and have already taken effect. Thus you will NOT have to wait for a REDCap admin to approve your changes because the changes have already been made. None of your existing data (if any) was affected by your changes." It also includes a link "Why were my changes made automatically?" and a "Close" button.

REDCap will automatically approve your changes for all non-critical post-production changes.

Changes that would result in data damage and/or loss will require written approval by you. The REDCap administrators will send you an email, asking for your confirmation that you do wish to make the changes. The changes will not go into effect until you respond to the email.

### Project status change

Once your project is in production your project status will indicate Production on the left-hand navigation menu. Similarly, when you are on your My Projects page, you will notice that the icon next to your project name is changed from a wrench (for development) to a green box with a checkmark (for production.)

## Status



## Surveys

There are 3 main spaces within REDCap that you will work to design/manage your survey:

# 3 Survey Design Spaces within REDCap

### Online Designer

- Enter your questions in an instrument
- Enable instrument as a survey
- Edit Survey Settings
- Set survey notifications and survey login

### Project Setup

- Enable surveys on project
- Enable 'designate an email field' (if applicable)

### Survey Distribution Tools

- Access survey link
- Communicate with survey participants
- Track survey responses/invitations

## Survey Wizard

For step-by-step guidance about setting up surveys, we highly recommend you use the [Survey Wizard](#). It is an interactive online tool that addresses when to enable survey functionality, what to consider when choosing a survey model, and reviews survey setting options.

## Quick Guide to Survey Setup

# Enable a Survey in 3 Easy Steps!

## 1 Enable “Use surveys in this project” on Project Setup tab

Main project settings

Use surveys in this project? [?](#) [VIDEO: How to create and manage a survey](#)

Use longitudinal data collection with defined events? [?](#)

## 2 Enable instrument as a survey in Online Designer

Data Collection Instruments

Survey options: [Survey Queue](#) [Survey Login](#)

[Survey Notifications](#)

[Upload or download Auto Invitations](#)

Add new instrument:

[Create](#) a new instrument from scratch  
[Import](#) a new instrument from the off...  
[Upload](#) instrument ZIP file from another...

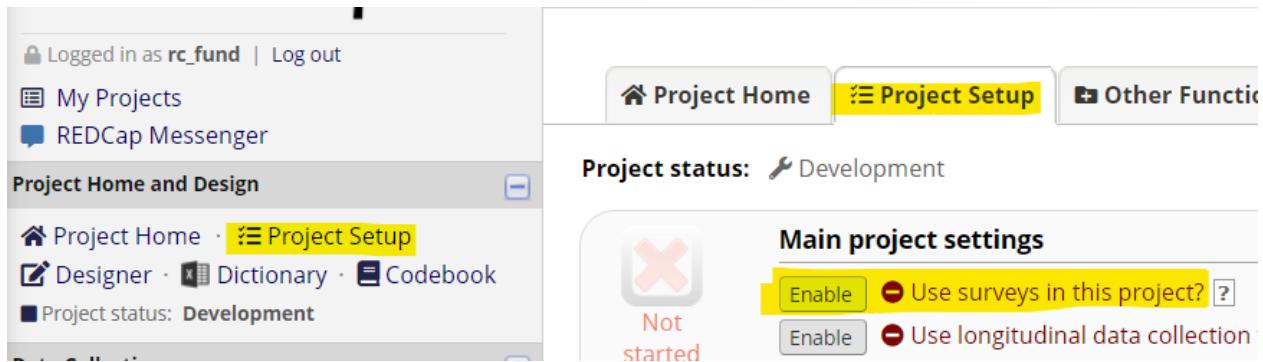
Instrument name	Fields	View PDF	Enabled as survey	Instrument actions
Project	21	<a href="#">View</a>	<input checked="" type="button" value="Enable"/>	<a href="#">Choose action</a>

## 3 Save Survey Settings

+ Set up my survey for data collection instrument "Project"

### Enable Surveys within the project

If you plan to use surveys in your project, you must go to the Project Setup page and click the first option under Main project settings:



The screenshot shows the REDCap interface. On the left, there's a sidebar with links like 'My Projects' and 'REDCap Messenger'. The main area has a header with 'Project Home', 'Project Setup' (which is highlighted in yellow), and 'Other Functions'. Below the header, it says 'Project status: Development'. A large box on the right is titled 'Main project settings' and contains two enable buttons: 'Enable Use surveys in this project?' and 'Enable Use longitudinal data collection'. There's also a note 'Not started' with a red X icon.

If your project is in **Production mode**, the Enable button will be greyed out:

The screenshot shows the REDCap Project Home interface. At the top left, it says "Logged in as rc\_fund | Log out". On the right, there are tabs for "Project Home", "Project Setup", and "Other Functions". Below the tabs, it says "Project status: **Production**". A large green checkmark icon with the text "Complete!" is displayed. To the right, under "Main project settings", there is a note: "Some options below are disabled because they may not be applicable to your project type." It shows two disabled buttons: "Enable Use surveys in this project?" and "Enable Use longitudinal data collection with this project?".

You will need to click on the 'Contact REDCap administrator button' from within your project and request that the project be enabled for surveys.

This screenshot shows the same REDCap Project Home interface as above, but with a yellow highlight box around the "Contact REDCap administrator" button at the bottom left. The button has a blue envelope icon and the text "Contact REDCap administrator".

### Enable Your Instrument as a Survey

Once you have enabled the "Use surveys in this project" setting under Project Setup, you will want to indicate which data collection instruments are going to be used as surveys.

Project Home Project Setup Other Functionality Project Revision History

Project status: Development Completed steps 1 of 7

Main project settings

Use longitudinal data collection with repeating forms? [?](#)

Use surveys in this project? [?](#) [VIDEO: How to create and manage a survey](#)

Modify project title, purpose, etc.

Under Online Designer, click Enable next to the data collection instrument you want to use as a survey.

Project Home Project Setup Online Designer Data Dictionary Codebook

Create snapshot of instruments [?](#) [VIC](#)  
Last snapshot: never [?](#)

The Online Designer will allow you to make project modifications to fields and data collection instruments via web browser. NOTE: While in development status, all field changes will take effect immediately in real time.

Data Collection Instruments	Survey options:	Add new instrument:		
	<a href="#">Survey Queue</a>	<a href="#">Survey Login</a>	<a href="#">Create</a> a new instrument from scratch	<a href="#">Import</a> a new instrument from the office
	<a href="#">Survey Notifications</a>	<a href="#">Upload</a> instrument ZIP file from another		
	Instrument name	Fields	View PDF	Enabled as survey
	Demographics	7	<a href="#">View</a>	<input checked="" type="checkbox"/> Enable
				<a href="#">Choose action</a>

You will then automatically be brought to the page where you can setup Survey Settings. You can leave the default settings or make adjustments. But you must click the 'save changes' button in order for the instrument to convert to a survey. If you navigate away from the page and do not save changes, your instrument will remain a data entry form.

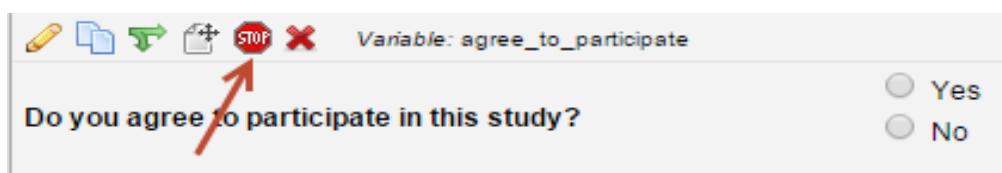
## Field function in Surveys

Field in Online Designer	Survey Settings	Result
Begin New Section	One section per page	Survey split up into multiple pages
Choice question set with Stop Action		Survey will end for participant if they select the specified choice
Validated for email	Confirmation email set to 'yes'	Confirmation email will automatically get sent to participant
Radio buttons and checkboxes (drop-down lists aren't eligible)	Enhanced buttons	Mobile-friendly!
Branching logic	Questions will be custom-numbered	No question numbers next to survey questions
Numbering in field label	Question numbering set to custom	Will see question numbers next to survey questions

### Stop Action

The Stop Survey action will prompt the survey participant to end the survey when a specific answer is given. The stop survey action is available on Drop-down List, Radio Buttons, Multiple Answers, Yes/No and True/False field types.

Once you have created one of the field types listed above and you have your data collection instrument set up as a survey, you will see a stop sign icon.



To add the Stop Survey logic, click on the stop sign icon. The Stop Survey logic box will appear. Select the answer choice that should prompt the survey participant to end the survey and click Save.

In this example, I want the survey participant to be prompted when they click No.

**Set up Stop Actions for this Survey Question**

**STOP Stop Actions (for survey questions only):**  
 The survey participant will be prompted to end the survey when ANY choices checked below are selected for this question on the survey. Stop Actions will not be enabled on the form when viewing in REDCap as an authenticated user, but only become enabled when a participant views this data collection instrument as a survey.

<b>Do you agree to participate in this study?</b> <input type="checkbox"/> Yes	<a href="#">Select All</a>   <a href="#">Deselect All</a>
<input type="button" value="Save"/> <input type="button" value="Close"/>	

Notice that once the Stop Survey logic is setup, text appears next to the answer choice that will end the survey.

Variable: agree\_to\_participate

**Do you agree to participate in this study?**

Yes  
 No [End Survey]

When the participant takes the survey and they answer No, they will receive the following message. The message is hard coded and cannot be changed. The participant can either choose to “End the survey now” which would take them to the Survey Acknowledgment text or they can choose “Continue survey and undo last response”.

**End the survey?**

You have selected an option that triggers this survey to end right now. To save your responses and end the survey, click the button below to do so. If you have selected the wrong option by accident and do not wish to leave the survey, you may click the other button below to continue, which will also remove the value of the option you just selected to allow you to enter it again and continue the survey.

<input type="button" value="End the survey now"/>	<input style="border: 1px solid blue; background-color: #e0f2f1;" type="button" value="Continue survey and undo last response"/>
---	--

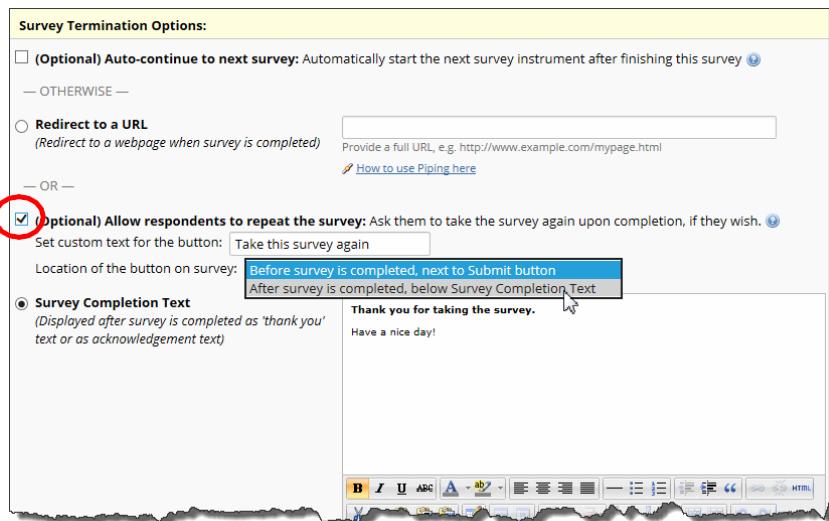
## Enabling Repeating Instruments for a Survey Instrument

A Survey can be set up as a repeating instrument. You need to complete the steps largely in order, however.

- **Enable Surveys for the Project**
- **Build the Instrument (at the very least, name it)**
- From Project Setup, **Enable Repeatable Instruments**. Click **Modify** to select the Survey(s) to

- be Repeated
- From Online Designer, **Enable** the Instrument as a Survey, opening the Survey Settings page
  - From Survey Settings, Survey Termination Options:
    - **Check the Checkbox** to Enable the Survey to be Repeated
    - Add optional custom text to the button
    - Select the location for the Repeat button to appear
  - Click **Save**

You MUST check the box to enable the Repeating feature on the instrument.



For more information about Repeating Instruments, [see this section](#) of this User Guide.

#### Survey Design tip: Validation check error messages

Descriptive Text fields can be useful for displaying an error message of a cross-field validation check. For example:

```
<div class="red" style="font-weight:bold;">Diastolic bp should be less than systolic bp</div>
```

Used with a branching logic expression along these lines:

```
[systolic_bp]<>'' and [diastolic_bp]<>'' and [diastolic_bp]>=[systolic_bp]
```

Produces an outcome like this:

Systolic BP	<input type="text" value="80"/>
Diastolic BP	<input type="text" value="120"/>
<b>Diastolic bp must be less than systolic bp.</b>	

#### Survey Design tip re: User Access

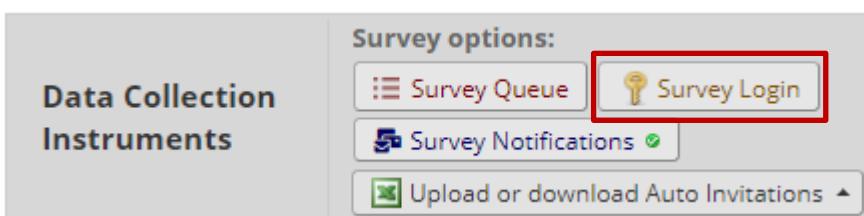
In the User Rights application, you will notice that you can limit a user's access by instrument. So, when designing your project, you might think about breaking up the information that will be entered into separate instruments, in order to restrict access. For example, say you have an application where you collect an applicant's merits, demographics, and scholarship information via survey. If you have a committee reviewing the applications, you may not want them to consider the applicant's demographics

or the fact of whether or not the applicant is requesting a scholarship. In this instance, you could have separate those questions into 3 different surveys. You could enable survey auto-continue, so that the applicant can complete all 3 surveys in one sitting. Then, behind the scenes the committee member would be added as a user to the project but only be given access to view the merits survey.

## Survey Login

You can provide improved security for your surveys with a survey login form, in which respondents will be required to enter some login credentials – their date of birth, for example – in order to begin a survey or (if the "Save & Return Later" feature is enabled) to return to a previously entered survey response.

To enable the Survey Login feature, go to Online Designer and click the **Survey Login** button at the top of the instrument list.



That will open up the Survey Login settings popup:

A screenshot of the 'Survey Login' settings dialog box. At the top, it says 'Survey Login'. Below that, a message states: 'You may enable a Survey Login page on one or more surveys that will force your survey respondents to authenticate (log in) on your surveys before they are allowed to view and complete the survey.' A 'Tell me more' link is provided. The main configuration area has several sections: 'Enable Survey Login?' (set to 'Enabled'), 'Fields to display on the survey login form' (with a dropdown for 'Login field #1' set to 'login\_code "Survey Login Code;"'), 'Customizations for survey login' (including 'Minimum number of fields above that are required for login' set to '1', 'Apply the survey login to all surveys in project?' set to 'All surveys', and a 'Custom error message' box containing 'You have entered the incorrect login code. If you need help, please contact the project owner by calling 816-555-5555.' and 'Thank You.'), 'Security settings for survey login (optional)' (with 'Number of failed login attempts before respondent is locked out for a specified amount of time, which is set below.' set to '3' and '0 = Disabled', and 'Amount of time respondent will be locked out after having failed login attempts exceeding the limit set above.' set to '1 Minutes, 0 = Disabled'), and 'Save' and 'Cancel' buttons at the bottom.

**Login Field # 1:** Use the drop down and select a field from your project. If you would like to add another login field, click the Add another login field link.

**Minimum number of fields above that are required for login:** If you have more than one field that you are using as the login, indicate how many of the fields are required. For an example, you might have three fields but only two of them are required to be answered in order to log in.

**Apply the survey login to all surveys in this project:** Use the drop down and indicate if the survey login should be used for all surveys or if you would like to specify the surveys this will be used for. If you would like to specify which surveys this will be used for, you will need to navigate to survey settings.

**Custom error message:** Enter a custom error message that will be displayed if the participant experiences difficulty logging in.

**Number of failed login attempts:** Enter the amount of login attempts you would like to grant to the participant. If you would like them to have unlimited attempts, enter 0.

**Amount of time participant will be locked out:** Enter the amount of time (in minutes) you would like to have the participant locked out for. If you do not wish to lock them out, enter 0.

When the participant attempts to take the survey, this will receive this log in box:

The dialog box is titled "Survey Login". It contains the text "Survey title: 'My Second Survey'" and instructions: "Before beginning or continuing this survey, you must first log in by successfully entering the correct values below. You must successfully enter a value for the field below. Please note that the login is \*not\* case sensitive." Below this is a form field labeled "Survey Login Code:" with an empty input box. To the right of the input box is a "Log In" button.

If the participant does not enter the correct Login Code, they will receive this message:

The dialog box is titled "Survey Login". It contains the text "Survey title: 'My Second Survey'" and instructions: "Before beginning or continuing this survey, you must first log in by successfully entering the correct values below. You must successfully enter a value for the field below. Please note that the login is \*not\* case sensitive." A red error message box is displayed with the text: "ERROR: The login was not successful because the value entered was not correct. Try again. You have entered the incorrect login code. If you need help, please contact the project owner by calling 816-555-5555." Below the error message is a "Thank You!" message. At the bottom is a form field labeled "Survey Login Code:" with an empty input box and a "Log In" button.

If the participant reaches the maximum number of failed attempts you specified, they will receive this message:

[Close survey](#)

#### ACCESS DENIED!

For security purposes, this survey has been temporarily disabled because it has exceeded the maximum amount of failed login attempts that are allowed within a set period of time (**1 minutes**). After that time, your survey will become active again, after which you may return and log in.

You have entered the incorrect login code. If you need help, please contact the project owner by calling 816-555-5555.

Thank You!

## Survey Settings

Once you enable your data collection instrument as a survey, the “Survey Settings” page will appear.

You can make changes to Survey Settings at any time. To get to the Survey Settings click on the Designer link on the left-hand navigation bar under Project Home and Design.

### Survey Status

A survey can be Active (online) or Inactive (offline). The default setting is online

The screenshot shows a modal window titled "Modify survey settings for data collection instrument "Screening Survey"" with a "Save Changes" button and a "Cancel" button. Under "Survey Status", there is a dropdown menu with three options: "Survey Active" (selected), "Survey Offline", and "Survey Offline". A tooltip for "Survey Active" states: "Participants will not be able to take the survey." A yellow bar at the bottom indicates the survey is currently online.

For a comparison of how this differs from other survey expiration options, [see this section of the User Guide](#).

### Basic Survey Options in Survey Settings

**Survey Title:** The default survey title is the name of the instrument. However, your survey title does not have to be the same name as your instrument. You can change the title here in Survey Settings.

**Survey Instructions:** Enter any instructions you wish to give to the participant. The default instructions are “Please complete the survey below. Thank You!” Oftentimes it is helpful to include a contact email address if the person has questions or the deadline by when you need them to complete the survey.

The screenshot shows a dialog box titled "Set up my survey for data collection instrument "Demographics"" with a "Cancel" button. It contains sections for "Survey Title" (set to "Demographics") and "Survey Instructions" (which reads "Please complete the survey below." followed by "Thank you!"). Below these are rich text editing tools and a link to "How to use Piping here".

## Survey Design Options

**Logo:** Click the Choose File icon and add a logo.

**Size of survey text:** Use the drop down and select Normal, Large or Very Large.

**Font of survey text:** Use the drop down and select the font family you would like to use.

**Survey Theme:** Use the drop down to select a saved survey theme, including a CMH survey theme. Otherwise you may click Customize and change the color of your backgrounds, fonts and buttons. If you would like to use the same color choices at a later date, click the Save custom theme icon.

**Survey Design Options:**

**Logo** (Optional: display an image above the survey title)  
Add new logo: Choose File No file chosen  
(Images wider than 600 pixels will be downsized to fit page.)  
 If using a logo, hide survey title on survey page?

**Size of survey text** Normal

**Font of survey text** Arial

**Survey theme** Default Customize [Exit customization](#)

**Custom survey theme options:**

General: Page Background Color	Survey title and instructions: Text Color	Section headers: Text Color	Survey questions: Text Color
Button Text Color	Background Color	Background Color	Background Color

[Save custom theme](#)

**Survey design preview (sample survey):** [Expand](#)

This is the survey title  
Your survey instructions will go here. The instructions can tell your survey participant about the purpose of the survey once they have completed the survey. Below is a listing of various question types that might be displayed on your survey.  
This is a section header to divide the survey page into sections.  
What is your first name?

## Survey Customizations in Survey Settings

**Survey Customizations:**

**Question Numbering** Auto numbered

**Question Display Format** (One page or multiple pages?) All on one page  
 Display page numbers at top of survey page  
 Hide the 'Previous Page' button (i.e., Back button) on the survey page (prevents respondents from going back to previous pages)

**For 'Required' fields, display the red 'must provide value' text on the survey page?** Yes  
If 'No', then it will NOT display the following text beneath all 'Required' fields: \* must provide value

**Allow survey respondents to view aggregate survey results after completing the survey?** Disabled  
After completing the survey, participants can view ALL responses in aggregate graphical format and/or as descriptive statistics. Also, the individual respondent's answers will be highlighted in the results.

**Text-To-Speech functionality** (Allows text on survey page to be read audibly to participants.) Disabled  
NOTICE: All text that is spoken is sent to a service hosted at Vanderbilt University that utilizes the AT&T Text-to-Speech API service. Be advised that if the survey utilizes piping, for privacy concerns, data piped from identifier fields will \*not\* be sent to the service with the rest of the text but will instead be redacted.

### Question Numbering

REDCap will by default auto number survey questions. The exception is if you have branching logic in your survey. In that case, auto-numbering is disabled and instead your questions are custom-numbered.

### Question Numbering

For custom numbering, each question's number will be blank by default until manually added via the Online Designer or Data Dictionary.

Custom numbered ▾

Question numbers will not display correctly if using auto numbering if some questions have branching logic employed. Question auto numbering has been automatically disabled because some of your survey questions use branching logic.

### Custom numbering of questions in Survey

If you change the setting to custom numbering, question numbers will be removed. If you set your Survey Settings so that your questions are custom numbered, you will see a 'Question Number' box for each field of that survey in Online Designer:

#### Edit Field

You may add a new project field to this data collection at the bottom. When you add a new field, it will be a new row in the table. You may view the  [Field Types video \(4 min\)](#).

**Field Type:**  Text Box (Short Text, Number, Date, etc.)

**Question Number (optional)**   
Displayed only on the survey page

You can enter your custom question number there (or leave it blank.)

### Question Display Format in Survey Settings

**All on one page:** Select this if you would like all of your questions placed on one page.

**One section per page (multiple pages):** Select this option if you would like to break your survey up into sections by your section headers (the yellow banner bars). If you select this option, you can display the page numbers at the top of the survey page and also hide the "Previous Page button".

### Survey Design Tip: Using Descriptive Text field as a section sub-heading

If you want to break up the content of the survey page but don't want the participant to have to go to a new page (which is what a 'Begin New Section' field type will cause), use the descriptive text field instead.

For example, using html coding you could type this as your field label:

```
<div class="blue" style="font-weight:bold;">A descriptive text field used as a  
sub-heading</div>
```

The screenshot shows the 'Edit Field' dialog box. At the top, it says 'Edit Field'. Below that, a note states: 'You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#)'. The 'Field Type' dropdown is set to 'Descriptive Text (with optional Image/File Attachment)'. Other settings include 'Question Number (optional)', 'Field Label' (containing '`<div class="blue" style="font-weight:bold;">This is a descriptive text field used as a sub-heading</div>`'), 'Variable Name (utilized during data export)' (set to 'desc01'), and 'Attach an image or file (optional)'. A note says '(Images wider than 600 pixels will be downsized to fit page?)' with options 'Link' and 'Inline image'. There's also a note about branching logic. At the bottom are 'Save' and 'Cancel' buttons.

**Section 1** (This is a section header with descriptive text. It only provides informational text and is used to divide the survey into sections for organization. If the survey is set to be displayed as "one section per page", then these section headers will begin each new page of the survey.)

You may create MULTIPLE CHOICE questions and set the answer choices for them. You can have as many answer choices as you need. This multiple choice question is rendered as RADIO buttons.

Choice One  
 Choice Two  
 Choice Three  
 Etc.

reset

This is a descriptive text field used as a sub-heading

You may also set multiple choice questions as DROP-DOWN MENUS.

Allow participants to download a PDF of their responses at end of survey?

The default setting is no.

The respondent will see a PDF button on the confirmation screen (screen they see after they hit the survey submit button).

**Close survey**

**Thank you for taking the survey.**

Have a nice day!

**Download your survey response (PDF):**  **Download**

All fields viewable to the survey respondent on the screen, regardless of whether or not they answered the question, are included in the PDF. This means that if a HIDDEN [action tag](#) is used on a field in the survey, that field will not be visible in the PDF.

Exceptions: This option is not available if the Survey Auto-continue feature is enabled or if the Survey queue auto-start option is enabled.

## Survey-specific email invitation field in Survey Settings

You may have a project with multiple surveys where different people are completing the survey for the same record. If you wish to designate which person should be sent the invitation for that specific survey, you would select that designated email field from the drop-down list.

Note: only text box fields that have been validated as an email address show up on the drop-down list.

For “Required” fields, display the red ‘must provide value’ text on the survey page

The default setting is Yes. If you do not wish to have the ‘must provide value’ field display on your survey, use the drop down and select No.

Allow survey respondents to view aggregate survey results after completing the survey

The default setting is disabled. Otherwise you may choose to display Graphical Plots, Descriptive Statistics or both plots and statistics. If you enable this setting, you can choose the minimum number of responses before participants are allowed to view the aggregate data.

## Text-To-Speech functionality

The default settings is Disabled. When enabled, icons will be displayed next to each text that is listed on the survey. When clicked, the text will be read out loud to the participant.

## Survey Access in Survey Settings

How a survey participant accesses the survey can be set in the Survey Access section of Survey Settings.

Survey Access:	
<b>⌚ Response Limit (optional)</b> <i>(Maximum number of responses to collect. Prevents respondents from starting the survey after a set number of responses have been collected.)</i> <a href="#">?</a>	<input type="text"/> (e.g., 150) If left blank, the response limit will not be enforced. Will include <input type="checkbox"/> partial and completed responses
Custom text to display to respondent on survey when limit is reached: Thank you for your interest; however, the survey is closed because the maximum number of responses has been reached.	
<b>⌚ Time Limit for Survey Completion (optional)</b> <i>(The amount of time that each respondent has to complete the survey based on when they were initially sent the survey invitation. Note: This feature excludes public survey links.)</i>	<input type="text"/> days <input type="text"/> hours <input type="text"/> minutes If the respondent loads the survey after this time has passed, it will not allow them to begin or continue the survey. (If all are left blank, the time limit will not be enforced.)
<b>📅 Survey Expiration (optional)</b> <i>(Time after which the survey will become inactive.)</i> <a href="#">?</a>	<input type="text"/> M/D/Y H:M The time must be for the time zone <b>America/Chicago</b> , in which the current time is 12/31/2018 13:31.
<b>🕒 Allow 'Save &amp; Return Later' option for respondents?</b> <i>(Allow respondents to leave the survey and return later.)</i> <a href="#">?</a>	<input type="checkbox"/> No <input type="checkbox"/> Allow respondents to return without needing a return code <a href="#">?</a> <input type="checkbox"/> Allow respondents to return and modify completed responses <a href="#">?</a>

### Response Limit (optional): Default is blank

This setting prevents respondents from starting the survey after a set number of responses have been collected. You can specify if a response is only completed responses or partial/completed responses. You can also modify the stock language that is shown when the limit is reached.

For a comparison of how this differs from other survey expiration options, [see this section of the User Guide](#).

## Time Limit for Survey Completion

You can use this setting if you wish to limit the amount of time a respondent has to complete a survey after it was sent to them.

This only works when you have a participant list – it will not work on public survey links. It's ideal if you want to keep a survey open but will have rotating groups of people taking it.

Note: the language displayed to the participant is not customizable.

For a comparison of how this differs from other survey expiration options, [see this section of the User Guide](#).

**Survey Expiration (optional):** You may enter a date/time you would like for your survey to expire. This saves you the trouble of going to survey settings and changing the survey status to inactive (especially helpful if you want the survey to go offline when you are not at work!)

For a comparison of how this differs from other survey expiration options, [see this section of the User Guide](#).

**Allow 'Save & Return Later' (Save and Return Later) option for respondents:** You may enable this option if you would like your participants to be able to come back and finish taking their survey.

If enabled, the participant will receive a generated code they must enter in order to continue. If you want them to be able to return to the survey without needing a code, you can check that box. **NOTE:** If you are collecting identifying information (e.g., PII, PHI), for privacy reasons it is HIGHLY recommended that you leave the option unchecked so as to enforce a return code.

You may also indicate if you would like your participants to be able to return and modify their completed responses.

## Survey Termination Options in Survey Settings

### Survey Termination Options:

- (Optional) Auto-continue to next survey:** Automatically start the next survey instrument after finishing this survey [?](#)

— OTHERWISE —

- Redirect to a URL**

*(Redirect to a webpage when survey is completed)*

Provide a full URL, e.g. <http://www.example.com/mypage.html>

 [How to use Piping here](#)

— OR —

- Survey Completion Text**

*(Displayed after survey is completed as 'thank you' text or as acknowledgement text)*

**Thank you for taking the survey.**

Have a nice day!



 [How to use Piping here](#)

### PDF Auto-Archiver

*Upon survey completion, a compact PDF copy of the survey response will be automatically stored in the project's File Repository, from which the archived PDFs can be downloaded at any time.*

- Disabled

- Auto-Archiver enabled

- Auto-Archiver + e-Consent Framework [What is the e-Consent Framework?](#)  
*(includes end-of-survey certification & archival of PDF consent form)*

### Send confirmation email (optional)?

*(Email the respondent when they complete the survey)*

No ▾

### [Auto-continue to next survey](#)

Click this if you have more than one survey and you would like the next survey to automatically start as soon as this survey is completed. If you want the respondent to complete a subsequent survey at a later time or only if they answered questions with a specific answer, then you would not want to enable this feature. See Survey Invitations for further information.

Note: if you have auto-continue enabled and then set up a Survey Queue, auto-continue is not automatically disabled. In fact, it will trump your Survey Queue settings.

### [Redirect to a URL](#)

If you would like the participant to be redirected to another URL after they have completed their survey, enter the full URL. For instance, if a person is registering for an event and you have a website for your event, you could enter that website here.

### [Allow respondents to repeat the survey](#)

If the instrument is enabled as a repeating instrument, you will see these options in the Survey Settings.



**(Optional) Allow respondents to repeat the survey:** Ask them to take the survey again upon completion, if they wish.

Set custom text for the button:

Location of the button on survey:  ▾

### [Survey Completion Text](#)

Enter any text you wish to display after the participant has finished taking your survey. The default text is "Thank you for taking the survey. Have a nice day!"

### [PDF Auto-archiver](#)

With this setting enabled, upon survey completion, a compact PDF copy of the survey response will be automatically stored in the project's File Repository, from which the archived PDFs can be downloaded at any time. The default setting for this option is 'no'.

### [Auto-Archiver + eConsent Framework](#)

This setting not only will save the version of the completed survey to the file repository, but it will provide a summary screen to the respondent. The respondent has to review that summary screen before clicking submit.



#### **PDF Auto-Archiver**

*Upon survey completion, a compact PDF copy of the survey response will be automatically stored in the project's File Repository, from which the archived PDFs can be downloaded at any time.*

Disabled

Auto-Archiver enabled

Auto-Archiver + e-Consent Framework [What is the e-Consent Framework?](#)  
(includes end-of-survey certification & archival of PDF consent form)

**e-Consent Framework Options:** For e-Consent it is sometimes required to include the consenting participant's name (and date of birth in some cases) on the final consent form as extra documentation of their identity. Below you may select fields used to capture that info. You may also enter the current e-Consent version and Consent type for this form. The values for the fields below will be automatically inserted into the footer of the PDF consent form that the participant will review at the end of the survey, after which that PDF 'hard-copy' will be archived in the File Repository. [Read more](#)

e-Consent version:  e.g., 4

First name field:

Last name field:

Note: If you are using a single field to capture whole name, you may select it for either first/last name above while leaving the other name field unselected.

**Optional fields (these are not always necessary for e-Consent):**

e-Consent type:  e.g., Pediatric

Date of birth field:

**It is highly recommended that you have a discussion with your local Institutional Review Board (IRB) if you wish to do e-Consent in REDCap.**

### [Send survey confirmation email in Survey Settings](#)

If you would like the participant to receive a confirmation email once they have completed the survey, use the drop down and select Yes. Enter the subject and the body of the message.

You may also add an attachment to the email by clicking Choose File or automatically attach a PDF of the completed survey as an attachment. The PDF of the completed survey will show all the questions and choices in the survey – not just the questions and choices selected.

Since email is not considered a secure form of communication, the PDF attachment option is NOT recommended if the survey contains questions asking for identifying information (e.g., PHI).

If you send a confirmation email to the participant and you have the eConsent framework enabled, the participant will receive a compact version of the PDF of their survey responses. That means that they will only see the questions they answered (it will omit unanswered questions and unselected choices.)

You can use html coding in the confirmation email.

 **Send confirmation email (optional)?**  
*(Email the respondent when they complete the survey)*

Yes ▾

Provide email subject, email message, and (optionally) an attachment to be sent to respondent when they complete the survey.  [How to use Piping here](#)

From:  ▾

Subject:

[Compose](#) [Preview](#) [Send test email](#)

 Attachment:  No file chosen

Include PDF of completed survey as attachment

 **WARNING:** Since email is not considered a secure form of communication, the PDF attachment option is NOT recommended if the survey contains questions asking for identifying information (e.g., PHI).

 Note: Because the e-Consent Framework option is enabled on this page, the PDF here will not be the full-length PDF but will be the 'compact' PDF, which omits unanswered questions and unselected choices.

## Survey Inactive Comparison

There are several ways a survey can be taken offline. Here is a side-by-side comparison to help you choose the one that best suits your needs:

### Inactive Survey Setting Comparison

Survey Status	Survey Expiration	Response Limit	Time Limit for Survey Completion
At top of survey settings page	In Survey Access section of Survey Settings	In Survey Access section of Survey Settings	In Survey Access section of Survey Settings
Manual	Automatic	Automatic	Automatic
Survey-level (affects all participants)	Survey-level (affects all participants)	Survey-level (affects all participants)	Participant-level
Not time-specific	Time-specific	Not time-specific	Time-specific
Does not require use of Participant List	Does not require use of Participant List	Does not require use of Participant List	Requires sending survey invitation via Participant List (not using Public Survey Link)

## Best practices for Survey Settings if collecting PHI (Protected Health Information)



### If collecting PHI, in Survey Settings...

- Set customization to allow download but DON'T attach completed responses to confirmation email
- If enable save & return, don't tick box to allow participant to return without a return code

To change an instrument from a survey back into a data entry form (reverting a survey to a data entry form)

If you have designed an instrument as a survey but want to change it back to a data entry form, go to Survey Settings (Project Setup/Online Designer) and click on the Delete Survey Settings button at the bottom of the page.

**Save Changes**

-- Cancel--

### Delete Survey Settings

**Delete Survey Settings:** Please note that deleting the survey settings will NOT delete any responses collected using the survey. Also, deleting the survey settings will NOT delete the data collection instrument, but instead the instrument will revert back to how it was before it was enabled as a survey, in which data can only be collected by authenticated users on the data entry form.

### Survey Notifications (Survey notification emails)

If you would like REDCap to email you or a team member **every time** a survey is completed, you can turn on Survey Notifications. Go to Online Designer and you will see this:



Click on Survey Notifications. Listed are all the surveys in the project and under each survey is a list of email addresses associated with each user that has been granted access to the project. You can select which user should receive the survey notification email.

If you have a lot of survey responses coming in at once, it can be overwhelming to receive a flurry of notification emails. If that is the case, you might want to turn off survey notifications and instead create a reverse chronological order report in your project and check that on a regular basis. For information on creating custom reports, see this section of this User Guide: [Create Custom Report](#).

If you would like to receive notifications not simply when a survey is completed but if a particular response is marked, you can set up an alert for that. See the [Alerts & Notifications section](#) of this User Guide for instructions on how to set that up.

### Survey Delivery options

There are many ways to deliver survey invitations. Outlined below are the delivery options and when you might want to use them.

Delivery Option	Allows for future scheduling	Allows for conditional logic
-----------------	------------------------------	------------------------------

Manual (via public survey link or participant list found under Survey Distribution Tools)	Yes	No
Auto-continue (found in survey settings)	No	No
Survey queue (found on Online Designer page)	No	Yes
Automated Survey Invitations (found on Online Designer page)	Yes	Yes

You can find additional information about those delivery options at the locations listed above. Below are some brief explanations.

#### [Public Survey Link](#)

Using a public survey link is the simplest and fastest way to collect responses for your survey. Responses are collected anonymously. Three things need to be in place for you to have a public survey link:

1. Your project must be enabled for surveys (1<sup>st</sup> step on the Project Setup page) while in Development mode.
  - a. If a project is in Production, the use surveys in project' button is disabled on the Project Setup page. The project must be moved back into Development mode in order for that setting to work. You will need to contact your REDCap administrator to move your project back into Development mode.
2. You must have an instrument enabled as a survey within your project (set this in Online Designer)
3. The first instrument within your project must be a survey.

To access the public survey link, click on Survey Distribution Tools in the left-hand navigation menu:

Logged in as rc\_fund | Log out

My Projects  
REDCap Messenger

**Project Home and Design**

- Project Home · Project Setup
- Designer · Dictionary · Codebook
- Project status: Development

**Data Collection**

- Survey Distribution Tools**
  - Get a public survey link or build a participant list for inviting respondents
- Record Status Dashboard
  - View data collection status of all records
- Add / Edit Records
  - Create new records or edit/view existing ones

Show data collection instruments

**Applications**

**Help & Information**

- Help & FAQ
- Video Tutorials
- Suggest a New Feature

Contact REDCap administrator

**Survey Distribution Tools**

Using a public survey link is the simplest and fastest way to collect responses for your survey. You may obtain the survey link below to email it to your participants. Responses will be collected anonymously (unless the survey contains questions asking for identifying data from the participant). **NOTE:** Since this method uses a single survey link for all participants, it allows for the possibility of participants taking the survey multiple times, which may be necessary in some cases.

To obtain the survey link, copy the URL below and paste it into the body of an email message in your own email client. Your email recipient(s) can then click the link to begin taking your survey.

**Public Survey URL:** <https://redcap.vanderbilt.edu/surveys/?s=WKEHYYEWLF>

Protect the public survey using the Google reCAPTCHA feature

**Link Actions**

- Open public survey
- Open public survey + Log out
- Send me URL via email
- Survey Access Code or QR Code

**Link Customizations**

- Get Short Survey Link
- Create Custom Survey Link
- Get Embed Code

There is the option to obtain a shorter, more easily typed link by clicking the **Get shorter survey link**. The link generated, when accessed, will redirect the user's browser to the regular public survey URL.

#### *Project status re: survey link*

Your public survey link remains the same when you move the project from Development mode to Production. If you created a short public survey link in development, it will carry through into Production – you won't see it at first on the Survey Distribution Tools page but when you click on the 'get short public survey url' button, it will generate the same short url that you had in Development.

#### *Only one public survey link per REDCap project*

Please note: only the first survey in a project has a public survey link. Any subsequent surveys within the project have their own unique link. There are several ways you can disseminate the private link. This is important in tying the responses from different surveys together. If you wish to disseminate multiple surveys with public survey links for each one, just know that each survey will have to be in a separate REDCap project and the responses cannot be tied together.

This concept is still true even if you have a Longitudinal Project with multiple arms. Only one instrument (regardless of which arm it is in) can have a public survey link. So, even if you have multiple arms, you don't get one public survey link per arm.

#### *reCAPTCHA – Protect the public survey using the Google reCAPTCHA feature*

This feature allows you to utilize the Google reCAPTCHA functionality to help protect public surveys from abuse from "bots", which are automated software programs that might enter trash data into surveys. You can enable the Google reCAPTCHA functionality on the Public Survey Link tab of Survey Distribution Tools:

## Survey Distribution Tools



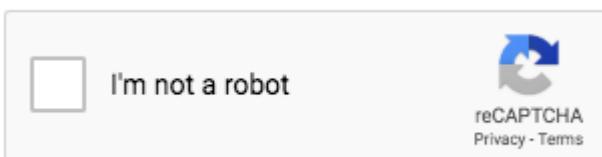
Using a public survey link is the simplest and fastest way to collect responses for your survey. A survey link below to email it to your participants. Responses will be collected anonymously (unless the survey contains questions asking for identifying data from the participant). **NOTE:** Since this method generates a single survey link for all participants, it allows for the possibility of participants taking the survey multiple times if necessary in some cases.

To obtain the survey link, copy the URL below and paste it into the body of an email message in your email client. Your email recipient(s) can then click the link to begin taking your survey.

Public Survey URL: <https://redcap.vanderbilt.edu/surveys/?s>  

Protect the public survey using the Google reCAPTCHA feature 

The public survey will display the reCAPTCHA checkbox and “I’m not a robot” text on a survey page prior to allowing the participant to view the public survey:



This feature is not employed on any private survey links because those are unique to a record and thus would never be made publicly available like a public survey link would.

Note: A survey participant will never have to pass the reCAPTCHA test more than once per day on a given device/computer.

### Emailing unique survey links to participants

If you know ahead of time the email addresses of your survey respondents, you can email the survey link to those people from REDCap using Compose Survey Invitations. To use that feature, you first need to build your Participant List.

### Participant List



REDCap generates a survey URL that is unique to each member of the list, which enables you to track who is responding to your survey invitation – and who is not – without requiring that the survey form contain any identifying information.

Please see the section of this User Guide “Converting an Outlook Distribution list...” if you wish to build a participant list from an existing Distribution List.

### Participant Identifier (Optional)

The ability to specify an identifier for each member of the participant list is optional. This means that you can choose a tracking model that best suits your project:

1. **No identifier:** the Participant List shows who has responded but there is no link from the participant to a specific response. **The responses remain anonymous.**
2. **With identifier:** the Participant List shows who has responded and you can navigate directly to the participant's response.

This setting is available only when your project is in Development. If your project is in Production mode and you wish to enable identifiers, you will need to email [redcap@vumc.org](mailto:redcap@vumc.org) and request that your project be moved back to Development mode. Once your project is in Development mode, you can enable identifiers. You would then need to move the project back to Production mode via the Project Setup page.

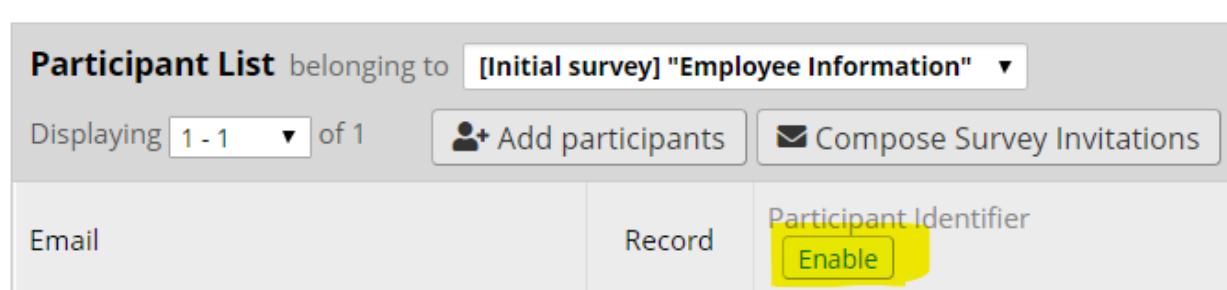
You should not use participant identifiers if you want your responses to remain anonymous.

#### Enable Participant Identifiers

To enable participant identifiers, click the Enable button on the Participant List page:

## Survey Distribution Tools

The Participant List option allows you to **send a customized email** to anyone in your list. It is also possible to identify an individual's survey answers, if desired, by providing an Identifier (this must first be enabled by clicking the 'Enable' button in the table below). Note: All survey responses are anonymous unless you 1) are using Participant Identifiers or 2) have enabled the designated tracking model.



The screenshot shows the REDCap Participant List interface. At the top, it says "Participant List belonging to [Initial survey] "Employee Information"" with a dropdown arrow. Below that, it says "Displaying 1 - 1 of 1" and has buttons for "Add participants" and "Compose Survey Invitations". The main table has columns for "Email", "Record", and "Participant Identifier". In the "Participant Identifier" column for the first row, there is a yellow box around the "Enable" button.

#### Add Participants

There are two options for populating your participant list:

1. Click **Add Participants** and enter (e.g. copy-and-paste) your list of email addresses (and identifiers, if enabled), one per line:

<email address> email only, with no identifier

<email address>,<id> comma-separated email,id when identifiers have been enabled

Participant List belonging to [Initial survey] "Employee Information" ▾		
Displaying 1 - 3 ▾ of 3	Add participants	Compose Survey Invitations
Email	Record	Participant Identifier (optional) <a href="#">Disable</a>
mycap@vumc.org		MyCap admin
redcap@vanderbilt.edu		REDCap admin
redcapapp@vumc.org		REDCap Mobile app admin

If you add participants with identifiers but you have not enabled identifiers, you will see this error message:

### Alert

It appears you are attempting to provide participant identifiers for one or more participants. However, this is not possible because identifiers are not enabled. Please remove the identifiers for the emails listed below, and submit your list of participants again.

**REMOVE IDENTIFIER** - email@email.com, Email

If you wish to build a participant list from a distribution list within your email client (e.g. Outlook), please see the instructions for [Converting an Outlook Distribution List into a Participant List](#).

2. [Designate an email field](#) from one of your data collection forms. Email data entered into this field will be used to populate the Participant List automatically.

Participant List belonging to "Consent Form"							Export list
Email	Participant Identifier	Responded?	Invitation Scheduled?	Invitation Sent?	Link	Survey Access Code and QR Code	
1) luke.stevens@mcri.edu.au (ID 112)	Disabled		-		-	-	
2) luke.stevens@mcri.edu.au (ID 212)	Disabled		-				
3) luke.stevens@mcri.edu.au (ID 211)	Disabled						

Note:

- Participant Identifier values must be unique

- Email addresses need not be unique. You may add your own (or a project) email address for all records, for example, if you wish to tailor each request to each specific participant and send the request email yourself

### Send Survey Invitations

Clicking **Compose Survey Invitations** enables you to send email invitations to members of your participant list.

**Email a Survey Invitation to Participants**

**Info**

**Survey title:** e-Diary  
**Event:** Randomisation

**When should the emails be sent?**

Immediately  
 At specified time:  M-D-Y H:M  
The time must be for the time zone System/Localtime, in which the current time is 04-09-2013 11:14.

**Participant List**  
(those who have not responded)

Email	Participant Identifier	Scheduled?	Sent?
a@email.com		-	[envelope icon]
b@email.com		-	[envelope icon]

**Actions:** -- check/uncheck participants --

**Compose email message**

From: luke.stevens@mcri.edu.au

To: [All emails selected from Participant List]

Subject: [redacted]

**NOTE:** The survey link will be automatically included in the email message.  
You may use HTML formatting in the email message: <b> bold, <u> underline, <i> italics, <a href="#"> link, etc.

Send Emails Cancel

- Indicate whether the message(s) is(are) to be sent immediately or at a specified time
- Select the email address that you want the message(s) to be sent from. You will have the option to select the email address of any user on the project.
- Set the message subject and body: the participant's unique URL will automatically be appended to the message body. You can edit any of the pre-populated text, but you must keep the unique survey link string, which will be listed within brackets.
- Select the desired recipients by ticking the relevant checkbox. The Actions drop-down list gives you shortcuts to ticking:
  - Check All
  - Uncheck All
  - Check Sent
  - Check Not Sent
  - Check Scheduled
  - Check Not Scheduled
  - Check Not Scheduled and Not Sent
- There is no limit to the number of times an invitations may be manually sent and re-sent to a participant

## Survey Queue

The survey queue enables your survey respondents to see a list of the surveys that you are asking them to complete. This can be a powerful feature because it enables you to, for example:

1. Force respondents to complete surveys in a particular order
2. Give different surveys to different respondents based on certain criteria. Age-specific questionnaires, for example.
3. Control when surveys become available.

To activate your survey queue, navigate to Online Designer and click the Survey Queue icon located above your data collection instruments.

The screenshot shows the 'Data Collection Instruments' section of the REDCap Online Designer. At the top, there's a 'Survey options:' menu with three items: 'Survey Queue' (highlighted with a yellow box), 'Survey Login', and 'Survey Notifications'. Below this is a link 'Upload or download Auto Invitations'. The main area lists two instruments: 'Demographics' (17 fields) and 'Lab Visits' (2 fields). The 'Instrument name' column is bolded.

Instrument name	Fields
Demographics	17
Lab Visits	2

A “Set up Survey Queue” box will appear. If you would like, you may add your own custom text to display at the top of the survey queue.

The 'Set up Survey Queue' dialog box contains instructions about what the survey queue displays. It includes a 'Tell me more' link and a note that the first instrument survey is not displayed below because it does not have a survey that comes before it for which to set conditions. A red arrow points to the 'Add custom text to display at top of survey queue' button.

The main table has four columns: 'Activated?' (checkbox), 'Survey Title' (text input), 'Display survey in the Survey Queue when...' (logic builder), and 'Auto start?' (checkbox). The 'Survey Title' row for 'Lab Visits' is selected. The logic builder shows two conditions: 'When the following survey is completed' (with a dropdown menu 'select a survey') and 'When the following logic becomes true' (with a text input field '(e.g., [age] > 30 and [gender] = "1")').

Activated?	Survey Title	Display survey in the Survey Queue when...	Auto start?
<input checked="" type="checkbox"/> Not activated <input type="button" value="Activate"/>	"Lab Visits"	<input type="checkbox"/> When the following survey is completed: select a survey <input type="checkbox"/> AND <input type="checkbox"/> When the following logic becomes true: (e.g., [age] > 30 and [gender] = "1")	<input type="checkbox"/>

Click the Activate icon for each survey you would like to set up. Under the “Display survey in the Survey Queue when...” column, use the drop down to indicate when the survey should be displayed. For an example, you might want your second survey to display after the first survey is completed.

**Set up Survey Queue**

The Survey Queue displays a list of your surveys to a participant all on a single page, in which the queue comprises all surveys that are to be completed (like a 'to-do' list) as well as the surveys that the participant has already completed. [Tell me more](#)

NOTE: The first instrument survey is not displayed below because it does not have a survey that comes before it for which to set conditions.

[Add custom text to display at top of survey queue](#)

Activated?	Survey Title	Display survey in the Survey Queue when...	Auto start?
Not activated	"Lab Visits"	<input type="checkbox"/> When the following survey is completed: <input type="button" value="select a survey"/> <b>AND</b> <input type="checkbox"/> When the following logic becomes true: <a href="#">How to use this</a> <input 1")"="" type="text" value="([age] &gt; 30 and [gender] = "/>	<input type="checkbox"/>

**Save** **Cancel**

If you would like to add additional logic as to when the next survey should be displayed, use the operator drop down and select AND/OR and then check the box next to "When the following logic becomes true" and finally add your logic in the formula box. See further down for tips on [how to configure complex Boolean logic](#).

For an example, I want my second survey to start after my first survey is completed AND the participant's age is greater than 12. To do this, I added the variable for the participant's age field in square brackets, the greater than sign and the number.  $[age] > 12$

**Set up Survey Queue**

The Survey Queue displays a list of your surveys to a participant all on a single page, in which the queue comprises all surveys that are to be completed (like a 'to-do' list) as well as the surveys that the participant has already completed. [Tell me more](#)

NOTE: The first instrument survey is not displayed below because it does not have a survey that comes before it for which to set conditions.

[Add custom text to display at top of survey queue](#)

Activated?	Survey Title	Display survey in the Survey Queue when...	Auto start?
Activated	"Lab Visits"	<input checked="" type="checkbox"/> When the following survey is completed: <input type="button" value="Demographics"/> <b>AND</b> <input checked="" type="checkbox"/> When the following logic becomes true: <a href="#">How to use this</a> <input type="text" value="([age] &gt; 12)"/>	<input type="checkbox"/>

When a participant takes my survey and enters an age greater than 12, they will see the following Survey Queue:

**Survey Queue**

Listed below is your survey queue, which lists any other surveys that you have not yet completed. To begin the next survey, click the 'Begin survey' button next to the title.

Status	Survey Title
Completed	<b>Demographics</b>
<input type="button" value="Begin survey"/>	<b>Lab Visits</b>

[Get link to my survey queue](#)

They can click the Begin Survey to start the second survey. If you would like the second survey to automatically launch and do not want to force the participant to click the Begin Survey icon, you can accomplish this by going back to the Survey Queue settings and click the box underneath the Auto Start column. When the participant finishes the first survey and they are at least 13 years old, the second survey will display.

**Set up Survey Queue**

The Survey Queue displays a list of your surveys to a participant all on a single page, in which the queue comprises all surveys that are to be completed (like a 'to-do' list) as well as the surveys that the participant has already completed. [Tell me more](#)

NOTE: The first instrument survey is not displayed below because it does not have a survey that comes before it for which to set conditions.

[+ Add custom text to display at top of survey queue](#)

Activated?	Survey Title	Display survey in the Survey Queue when...	Auto start?
 Activated	"Lab Visits"	<input checked="" type="checkbox"/> When the following survey is completed: "Demographics" AND <input checked="" type="checkbox"/> When the following logic becomes true: [age] > 12 (e.g., [age] > 30 and [gender] = "1") 	<input checked="" type="checkbox"/>

You may continue to add logic for the rest of your surveys.

**Set up Survey Queue**

The Survey Queue displays a list of your surveys to a participant all on a single page, in which the queue comprises all surveys that are to be completed (like a 'to-do' list) as well as the surveys that the participant has already completed. [Tell me more](#)

NOTE: The first instrument survey is not displayed below because it does not have a survey that comes before it for which to set conditions.

[+ Add custom text to display at top of survey queue](#)

Activated?	Survey Title	Display survey in the Survey Queue when...	Auto start?
 Activated	"Lab Visits"	<input checked="" type="checkbox"/> When the following survey is completed: "Demographics" AND <input checked="" type="checkbox"/> When the following logic becomes true: [age] > 12 (e.g., [age] > 30 and [gender] = "1") 	<input checked="" type="checkbox"/>
 Not activated	"Follow Up #1"	<input type="checkbox"/> When the following survey is completed: --- select a survey --- AND <input type="checkbox"/> When the following logic becomes true: How to use this [age] > 12 (e.g., [age] > 30 and [gender] = "1") 	<input type="checkbox"/>
 Not activated	"Follow Up #2"	<input type="checkbox"/> When the following survey is completed: --- select a survey --- AND <input type="checkbox"/> When the following logic becomes true: How to use this [age] > 12 (e.g., [age] > 30 and [gender] = "1") 	<input type="checkbox"/>

---

As with all features in REDCap, it is a good idea to test this feature before using it with real participants.

#### Caution when using Survey Queue

The auto-continue option overrides the Survey Queue. So, if you want to use Survey Queue, make sure that auto-continue is turned off for surveys in your project. Otherwise, the participant will automatically be taken to the next survey even if they do not meet the conditions specified in the Survey Queue.

The auto-continue option is in Survey Settings for the individual survey. Survey Queue is found on the Online Designer page.

The screenshot shows the REDCap Online Designer interface. At the top, there are tabs: Project Home, Project Setup, Online Designer (which is selected), Data Dictionary, and Codebook. Below the tabs, there are buttons for creating a snapshot of instruments, viewing a video tutorial, and last snapshot status. The main area is titled "Data Collection Instruments". It has sections for "Survey options:" (Survey Queue, Survey Login, Survey Notifications, Upload or download Auto Invitations), "Add new instrument:" (Create a new instrument from scratch, Import a new instrument from the official REDCap Shared, Upload instrument ZIP file from another project/user or external source), and a table of instruments. The table columns are: Instrument name, Fields, View PDF, Enabled as survey, Instrument actions, and Survey-related opt. Two rows are shown: Demographics (17 fields, enabled, survey settings) and Lab Visits (2 fields, enabled, survey settings).

#### Design tip: writing conditional logic for a Survey Queue

Sometimes it can be tricky writing conditional logic, especially when working with checkbox fields or date ranges. What you can do is create a test report using the filter section of the custom report to figure out your logic.

In the example below, we are essentially saying that we want to see the results where the box is checked for any of the three boards and the roster date is between 1/1/2018 and 12/31/2018.

The screenshot shows the "STEP 3" section of a custom report filter dialog. It includes a link to "How to use filters and AND/OR logic". The filter criteria are as follows:

- Filter 1:** boards "Does this study require the following board(s)" is checked □ Institutional Review
- OR**
- Filter 2:** boards "Does this study require the following board(s)" is checked □ Scientific Review Committee
- OR**
- Filter 3:** boards "Does this study require the following board(s)" is checked □ FDA Approval (Other)

Below these, there are "AND" operators and additional filters:

- Filter 4:** rosterdate "Roster Date:" > 01-01-2018  M-D-Y
- AND**
- Filter 5:** rosterdate "Roster Date:" < 01-01-2019  M-D-Y
- AND**
- Filter 6:** Type variable name or field label  =

At the bottom, there is a link "Switch format: Use advanced logic" with a red box around it.

You can check the results of the report to make sure you have your logic configured correctly.

Once you get it right, you can click on Advanced Logic (not it in the red box above) and click the ‘convert’ button. You will see your logic written for you in Boolean form.

**STEP 3**

**Filters (optional)**

**Advanced filter logic:** ([boards(1)] = "1" OR [boards(2)] = "1" OR [boards(6)] = "1") AND ([rosterdate] > "2018-01-01") AND ([rosterdate] < "2019-01-01")

(e.g., [age] > 30 and [gender] = "1") [How do I use special functions?](#)

[Expand](#)

Switch format: [Use simple logic \(choose fields from list\)](#)

You can copy and paste that logic into the box “When the following logic becomes true” in your **Survey Queue**:

Activated?	Survey Title	Display survey in the Survey Queue when...
 Not activated	"Public Registration"	<input type="checkbox"/> When the following survey is completed: <input type="button" value="... select a survey ..."/> <input type="checkbox"/> When the following logic becomes true: <a href="#">How to use this</a> <input &gt;="" &lt;="" ([rosterdate]="" 1\"="" [boards(2)]='\"1\"' [boards(6)]='\"1\")' \"2018-01-01\")="" \"2019-01-01\")"="" and="" data-bbox="801 1044 1373 1111" or="" type="text" value="([boards(1)] = \"/> (e.g., [age] > 30 and [gender] = "1")  Test logic with a record: <input type="button" value="-- select record --"/>
 Activated	"CV And Licensure"	<input checked="" type="checkbox"/> When the following survey is completed: <input public="" registration\""="" type="button" value="\"/> <input checked="" type="checkbox"/> When the following logic becomes true: <a href="#">How to use this</a> <input &gt;="" &lt;="" ([rosterdate]="" 1\"="" [boards(2)]='\"1\"' [boards(6)]='\"1\")' \"2018-01-01\")="" \"2019-01-01\")"="" and="" data-bbox="801 1336 1373 1403" or="" type="text" value="([boards(1)] = \"/> (e.g., [age] > 30 and [gender] = "1") <span style="color: green;">✓ Valid</span>

If you want to use a datediff function to return results that satisfy the conditions for the last year, you can add the datediff function to your advanced logic. The advanced logic builder does not have the capability of constructing it.

For the above example, our date validation is in the format of ymd. To capture results from the last year, you could add datediff([rosterdate], "today", "d", "ymd")<=365 to your advanced logic.

#### Automated Survey Invitations (ASIs)

You can configure invitations to be sent automatically by REDCap upon certain criteria being met using the **Automated Invitations** option.

**You need to have a the ‘designate an email field’ function enabled on your project setup page in order for Automated Survey Invitations (ASI) to work.** For instructions on how to set that up, [see this section](#) of this User Guide.

Note: you may want to have your [Codebook](#) open on a separate tab if you are going to use piping in the survey invitation email and to write the conditional logic.

- Click **Automated Invitations** in the **Online Designer** table for the appropriate form
- If your project is longitudinal, select the event
- The **Define Conditions for Automated Survey Invitations** dialog is displayed

**Info**

**Survey title:** Consent Form

**STEP 1: Compose message**

**From:** luke.stevens@mcri.edu.au  
(select any project user to be the 'Sender')

**To:** [All participants who meet the conditions defined]

**Subject:** Consent Form

Dear [name],  
Please provide your consent on the form linked to below.  
Thanks!  
The team.]

**NOTE:** The survey link will be automatically included in the email message.  
You may use HTML formatting in the email message: **<b>** bold, **<u>** underline, **<i>** italics, **<a href="#">** link, etc.

[How to use Piping in the survey invitation](#)

**STEP 2: Conditions**

**Specify conditions for sending invitations:**

When the following survey is completed:  
--- select a survey ---

When the following logic becomes true:  
[P] ([hasdiabetes] = "1") AND ([hasdiabetes] = "2")  
(e.g., [age] > 30 and [gender] = "1") [How do I use special functions?](#)

**STEP 3: When to send invitations AFTER conditions are met**

Send immediately

Send on next -- select day -- at time [ ] H:M

Send after lapse of time: [ ] days [ ] hours [ ] minutes

Send at exact date/time: [ ] D/M/Y H:M

**OPTIONAL: Enable reminders**

Re-send invitation as a reminder if participant has not responded by a specified time? (Times below refer to AFTER original invitation time.)

Send every Day at time 09:00 H:M

Send every 0 days 0 hours 0 minutes

Send at exact date/time: [ ] D/M/Y H:M

- AND -

Recurrence: Send up to 5 times

**Activated?**

Activate these automated invitations? In order for automated survey invitations to be sent using these specified conditions, it must be set to Active. You may make them Not Active (and vice versa) at any point in the future.

Active  Not Active

Save Cancel

The **Instructions** text (including that shown when clicking [Tell me more](#)) is fairly complete, but to summarize:

- **Info:** Displays the event and survey that you have selected
- **Compose email message:** Specify the subject line and content for the email that REDCap will send.
- The participant's unique URL link and some stock text will pre-load in the dialog box. You can edit the content, but you need to keep the survey link in the format it appears (with brackets around it.)
- **Conditions:** Indicate the conditions that – when met – will indicate to REDCap that an invitation is to be sent.

**Ensure that you include the event reference alongside any field reference if your project is longitudinal (as in the example shown in the image above).**

- **When to send:** Specify when REDCap should send the invitation **after the trigger condition has been met.**  
Note that an invitation will still be triggered even if by the time the invitation is sent the participant data has changed such that the trigger would not be met.
- **Enable reminders:** Choose the settings you want for automating the resending of the survey invitation. The invitation will be sent at most five times (i.e. the initial invitation and four resends).
- **Activated?:** To save your ASI settings, click on save. By default, the settings will remain Inactive. This is helpful during the design phase of the ASI.

Note that you can still send invitations manually via the participant list irrespective of the Automated Invitations settings.

Scheduled invitations (and reminders) may be deleted via the Survey Invitation Log.

Automated Survey Invitation online tutorial

Please click on this link for an interactive tutorial in Automated Survey Invitations (ASIs):

<https://redcap.vanderbilt.edu/surveys/?s=LKM4DPEHL4>

*Design tip: writing conditional logic for an Automated Survey Invitation*

Sometimes it can be tricky writing conditional logic, especially when working with checkbox fields or date ranges. What you can do is create a test report using the filter section of the custom report to figure out your logic.

In the example below, we are essentially saying that we want to see the results where the box is checked for any of the three boards and the roster date is between 1/1/2018 and 12/31/2018.

The screenshot shows the 'STEP 3' section of the REDCap interface for creating a custom report. The 'Filters (optional)' section contains six filters arranged in two columns. The first column contains 'Filter 1', 'OR Filter 2', and 'OR Filter 3'. The second column contains 'Operator / Value' dropdowns for each. 'Filter 1' has 'is checked' selected for 'boards "Does this study require the fo...' and 'Institutional Review' selected for the value. 'Filter 2' has 'is checked' selected for 'boards "Does this study require the fo...' and 'Scientific Review Coi' selected for the value. 'Filter 3' has 'is checked' selected for 'boards "Does this study require the fo...' and 'FDA Approval (Other)' selected for the value. Below these are three 'AND' buttons. The second column contains 'Filter 4' and 'Filter 5'. 'Filter 4' has 'rosterdate "Roster Date:" > 01-01-2018' selected. 'Filter 5' has 'rosterdate "Roster Date:" < 01-01-2019' selected. At the bottom is 'Filter 6' with a placeholder 'Type variable name or field label'. A red box highlights the 'Switch format: Use advanced logic' button at the bottom left.

You can check the results of the report to make sure you have your logic configured correctly.

Once you get it right, you can click on Advanced Logic (not it in the red box above) and click the 'convert' button. You will see your logic written for you in Boolean form.

**STEP 3**

**Filters (optional)**

**Advanced filter logic:** (e.g., [age] > 30 and [gender] = "1") [How do I use special functions?](#)

`([[boards(1)] = "1" OR [boards(2)] = "1" OR [boards(6)] = "1") AND ([rosterdate] > "2018-01-01") AND ([rosterdate] < "2019-01-01")`

[Expand](#)

Switch format: [Use simple logic \(choose fields from list\)](#)

You can copy and paste that logic into the box “When the following logic becomes true” in your ASI:

**STEP 2: Conditions**

**Specify conditions for sending invitations:**

When the following survey is completed:

... select a survey ...

AND

When the following logic becomes true:

`([[boards(1)] = "1" OR [boards(2)] = "1" OR [boards(6)] = "1") AND ([rosterdate] > "2018-01-01") AND ([rosterdate] < "2019-01-01")`

(e.g., [age] > 30 and [gender] = "1")

**Valid**

[How do I use special functions?](#)

If you want to use a datediff function to return results that satisfy the conditions for the last year, you can add the datediff function to your advanced logic. The advanced logic builder does not have the capability of constructing it.

For the above example, our date validation is in the format of ymd. To capture results from the last year, you could add datediff([rosterdate],"today","d","ymd")<=365 to your advanced logic.

[Conditional logic in ASI of Longitudinal Project](#)

If your project is longitudinal and you want to use a variable in your conditional logic that is from an event *that is not the current event*, you need to pre-pend to the variable the appropriate unique event name also enclosed within square brackets, e.g. [unique\_event\_name][variable\_name]. Unique event names can be found by going to Project Setup/Define My Events. You will see an events table, and the last column shows you the Unique event name, which is automatically generated by REDCap.

[Giving device to survey participant in person](#)

If you want a person to complete a survey as a participant and they are in the same physical space as you, it is best to use the logout feature when handing the device over to the participant. That will prevent the participant from having access to your project. This protects the security of the data that is stored in your project.

If the survey you wish the person to complete is the first survey in the project and there is a public survey link, you can go to Survey Distribution Tools and select the logout option from there:

## Survey Distribution Tools

[!\[\]\(8deb4aa4887f12595afba8e2015a9002\_img.jpg\) Public Survey Link](#) [!\[\]\(688958de39eb04dd5af53e70dadae3d7\_img.jpg\) Participant List](#) [!\[\]\(b6ee7470b36a16ec7b037ee8f7cdade8\_img.jpg\) Survey Invitation Log](#)

Using a public survey link is the simplest and fastest way to collect responses for your survey. You may obtain the survey link below to email it to your participants. Responses will be collected anonymously (unless the survey contains questions asking for identifying data from the participant). **NOTE:** Since this method uses a single survey link for all participants, it allows for the possibility of participants taking the survey multiple times, which may be necessary in some cases.

To obtain the survey link, copy the URL below and paste it into the body of an email message in your own email client. Your email recipient(s) can then click the link to begin taking your survey.

**Public Survey URL:** <https://redcap.vanderbilt.edu/surveys/?s=7HXH3T49N8>  

**Custom Public Survey URL:** <https://is.gd/REDCapTrainings>  

Protect the public survey using the Google reCAPTCHA feature 

### Link Actions

 Open public survey

 Open public survey + Log out

### Link Customizations

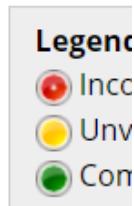
 Get Short Survey Link

 Create Custom Survey Link

If the survey you wish them to complete is not the first survey, navigate to the record home page for that person via the Record Status Dashboard or Add/Edit records:

## Record Home Page

The grid below displays the form-by-form progress of data entered for the currently selected record. You may click on the colored status icons to access that form/event.



 Choose action for record ▾

Record ID **204** Teresa Parker

Data Collection Instrument	Status
REDCap Training Registration (survey)	
Reminder/Cancellation Survey (survey)	
Registrant Info	
Training Feedback Survey (survey)	

On that record home page, click on the empty circle of the survey you want the person to complete. In this example, you're clicking on the highlighted circle in the image above. You will see a screen like this:

The screenshot shows a REDCap record home page for "Training Feedback Survey". The page includes a navigation bar with "Training Feedback Survey" and a "Survey options" button. A modal window titled "Survey options" is open, displaying four options: "Open survey" (highlighted in yellow), "Log out + Open survey", "Compose survey invitation", and "Survey Access Code and QR Code".

Editing existing Record ID 204	Record ID 204	Invitation status:
Presentation/Training Materials		
The slides from today's presentation:		
Attachment: <a href="#">REDCap the Basics April 2019.pptx</a> (44.32 MB)		

If you click on the Survey options button on the top right, you see an option to Log out and open the survey. This means the person will now be entering their information into the instrument as a survey. They will not see the left-hand navigation bar. This protects the security of the data that is stored in your project.

### Viewing Survey Invitations

The **Survey Invitation Log** tab of the **Survey Distribution Tools** page can display all of the survey invitation messages sent for your project and the date and time that any future invitations are scheduled to be sent.

Use the filter criteria to specify the criteria for the invitations you are interested in seeing. Click **Apply filters** to refresh the list.

Unsent invitations (including reminders) may be deleted by clicking the red **X**. There is no undo, but you may always send or invitation manually.

## Survey Distribution Tools

[Public Survey Link](#) [Participant List](#) [Survey Invitation Log](#)

Listed below are the survey invitations that have already been sent or have been scheduled to be sent to survey participants in this project. For each invitation it displays the participant email, participant identifier (if exists), survey name, and the date/time in which the invitation was (or will be) sent. You may even view the invitation email itself by clicking the icon in the 'View Email' column. Please note that all times below correspond to the time zone "America/Chicago", in which the current time is 12/27/2018 10:02am.

Survey Invitation Log (in ascending order by time sent)								
		View past invitations		Begin time: <input type="text" value="12/27/2018 10:02"/> (M/D/Y H:M) Display All invitation types and All response statuses				
		View future invitations		Display All surveys Display All records <input checked="" type="checkbox"/> Display invitation reminders? Apply filters Reset Download log (as seen below) <input checked="" type="checkbox"/> Delete all selected				
Invitation send time	View invite	Participant Email	Record	Participant Identifier	Survey	Survey Link	Responded?	Errors (if any)
11/29/2018 11:22am		bdev...@uic.edu	1		Speaker Profile Information	-		
11/29/2018 11:23am		j...@uic.edu	2		Speaker Profile Information	-		
12/03/2018 11:24am (1)		j...@uic.edu	2		Speaker Profile Information	-		
12/18/2018 10:43am		j...@uic.edu	3		Speaker Profile Information			
12/18/2018 10:43am		j...@uic.edu	3		Webinar Information	-		
12/18/2018 10:45am		j...@uic.edu	4		Webinar Information	-		
12/18/2018 10:45am		jace...@uic.edu	4		Speaker Profile Information			

To view the content of the email invitation, click on the envelope icon.

Best practices for collecting anonymous data via Surveys



For collecting truly anonymous data...

- Don't ask for any identifying data in the survey (including name, email address)
- Only use public survey link (don't use participant list)
- In Survey Settings, can set customization to download of completed responses and/or confirmation email

## Testing the survey

It is critical to test your survey to make sure it looks and behaves the way you want it to for your survey participants. See [Adding test data](#) for suggestions on how to do that.

## Codebook

The Codebook is a list of your projects questions and serves as a quick reference for viewing the attributes of any given field in the project without having to download and interpret the Data Dictionary or access the Online Designer. This is particularly helpful when you are in Production mode since the only way you can access an instrument via the Online Designer is by entering into Draft Mode.

Times when it may be helpful to access the Codebook:

- When you are writing conditional logic for an Automated Survey Invitation
- When you are writing calculated fields
- When you are using piping

Project Home   Project Setup   Online Designer   Data Dictionary   Codebook

The Codebook is a human-readable, read-only version of the project's Data Dictionary and serves as a quick reference for viewing the attributes of any given field in the project without having to download and interpret the Data Dictionary. Note: Checkbox fields have their coded values displayed both in the format defined by users in the Online Designer/Data Dictionary as well as in the extended format seen in data imports and exports (i.e., field\_\_code).

Print page   Data Dictionary Codebook   Collapse all instruments

#	Variable / Field Name	Field Label Field Note	Field Attributes (Field Type, Validation, Choices, Calculations, etc.)				
Instrument: <b>Project</b> (project) <span style="float: right;"> Collapse</span>							
1	proj_id	Project ID	text				
2	title	Section Header: Demographic Characteristics Project Title	notes				
3	pi_firstname	PI First Name	text				
4	pi_lastname	PI Last Name	text				
5	pi_vunetid	PI VUnetID	text				
6	project_type	Project Type	dropdown <table border="1"><tr><td>1</td><td>Expedited</td></tr><tr><td>2</td><td>Full Committee</td></tr></table>	1	Expedited	2	Full Committee
1	Expedited						
2	Full Committee						

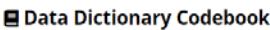
Access the codebook view by clicking the **Codebook** button (  ) on the left-hand navigation bar Under Project Home and Design.



The screenshot shows the REDCap interface. At the top is the REDCap logo. Below it is a navigation bar with links: 'Logged in as rc\_fund | Log out', 'My Projects', and 'REDCap Messenger'. Underneath is a grey header bar titled 'Project Home and Design' with a close button. Below this are two more links: 'Project Home' and 'Project Setup'. At the bottom of the header is a breadcrumb trail: 'Designer · Dictionary · **Codebook**' where 'Codebook' is highlighted with a red box.

### [Collapse/expand instruments in Codebook](#)

If you have multiple instruments and many fields within your project, the Codebook page can be very long. There may be times when you want to only look at the fields for a specific instrument. To condense the page so that you are only viewing the specific instrument you wish to look at, you can use the 'collapse' option.

[Print page](#)  Data Dictionary Codebook

[▼ Expand all Instruments](#)

	#	Variable / Field Name	Field Label <small>Field Note</small>	Field Attributes (Field Type, Validation, Choices, Calculations, etc.)
Instrument: <b>Project</b> (project)				
	1	proj_id	Project ID	text
	2	title	Section Header: Demographic Characteristics Project Title	notes
	3	pi_firstname	PI First Name	text
	4	pi_lastname	PI Last Name	text
	5	pi_vunetid	PI VUnetID	text
	6	project_type	Project Type	dropdown 1 Expedited 2 Full Committee

Likewise, when all instruments are collapsed, you can expand them.



## Data Dictionary Codebook

[Expand all Instruments](#)

#	Variable / Field Name	Field Label <i>Field Note</i>	Field Attributes (Field Type, Validation, Choices, Calculations, etc.)
	Instrument: <b>Project</b> (project)		<a href="#">Expand</a>
	Instrument: <b>Workflow</b> (workflow)		<a href="#">Expand</a>
	Instrument: <b>Pre-Review Administrative</b> (prereview_administrative)		<a href="#">Expand</a>
	Instrument: <b>Pre-Review Biostatistics</b> (prereview_biostatistics)		<a href="#">Expand</a>
	Instrument: <b>Pre-Review Scientific</b> (prereview_scientific)		<a href="#">Expand</a>
	Instrument: <b>Pre-Review Participant</b> (prereview_participant)		<a href="#">Expand</a>
	Instrument: <b>Pre-Review Budget</b> (prereview_budget)		<a href="#">Expand</a>
	Instrument: <b>Pre-Review Nursing</b> (prereview_nursing)		<a href="#">Expand</a>
	Instrument: <b>Pre-Review Cores</b> (prereview_cores)		<a href="#">Expand</a>

## Making changes to your project with the Data Dictionary

The Data Dictionary is a helpful tool to use when making global changes to your project (for instance, changing a word that appears several times in the project) or moving blocks of fields.

Why are there two methods that are essentially equivalent? There are different situations that suit the use of one method over the other:

### Use the Online Designer...

- for small changes like adding or editing a single field
- to apply specific formatting to form names
- to gain familiarity with branching logic expressions using the drag-n-drop builder
- tinkering with and testing a calculation
- when you feel like it

### Use the Data Dictionary...

- when you have many fields to add, edit or remove
- to utilize Excel features such as auto-fill and copy/paste to quickly specify similar settings to multiple fields
- to keep a record of the current state as a backup that you may want to roll back to
- when you feel like it

These are merely considerations to keep in mind: feel free to use whichever method you are most comfortable with.

The REDCap data dictionary is a CSV file that contains the specification of all fields in your data collection forms: the form metadata. In other words, the data dictionary is your project's code book.

## Download the Current Data Dictionary

You can access the Data Dictionary from a couple places within your project. On the left-hand navigation bar, click on Dictionary (listed under Project Home and Design):

The screenshot shows the REDCap Project Home and Design interface. At the top, there's a navigation bar with links for 'Logged in as rc\_fund | Log out', 'My Projects', and 'REDCap Messenger'. Below this is a main header 'Project Home and Design' with a close button. Underneath, there's a breadcrumb trail: 'Project Home · Project Setup · Designer · **Dictionary** · Codebook'. A note below the trail says 'Project status: Development'. The 'Dictionary' link is highlighted with a yellow box.

Or if you are on the Online Designer page, you can click on the Data Dictionary tab:

The screenshot shows the Online Designer interface. It features a navigation bar with tabs: 'Project Home', 'Project Setup', 'Online Designer', '**Data Dictionary**' (which is highlighted with a yellow box), and 'Codebook'. Below the tabs, there are two buttons: 'Create snapshot of instruments' and 'VID'. A note below the buttons says 'Last snapshot: never' with a question mark icon.

The Online Designer will allow you to make project modifications to fields and data collection instruments via web browser. NOTE: While in development status, all field changes will take effect immediately in real time.

### Download the Data Dictionary

**Always download the current version of the data dictionary before making new updates.** Changes made using the online designer or by other users will be lost if you make changes in and upload an out-of-date data dictionary.

To download the data dictionary, click on “Download the current Data Dictionary” from the Data Dictionary tab:

This module will allow you to create new data collection instruments/surveys or edit existing using the **Online Designer** or **Upload Data Dictionary** (see tabs above), in which you may use. The Online Designer may help you get some initial fields/forms built quickly or to make quick edits, but it is more helpful if you will be adding a large number of fields for this project.

This module may be used for making changes to the project, such as adding new fields or modifying existing ones. It uses an offline method called the Data Dictionary. The Data Dictionary is a specifically formatted CSV file that you may construct your project fields and afterward upload the file here to commit the changes.

Click the 'Browse' or 'Choose File' button below to select the file on your computer, and upload it. Once your file has been uploaded, changes will NOT immediately be made but will be displayed. A snapshot of your project's current Data Dictionary is correct before official changes are made to the project. A new Data Dictionary will be created automatically during the Data Dictionary upload. The new Data Dictionary. The snapshot can later be accessed and downloaded from the Project Home tab.

### Need some help?

If you wish to view an example of how your Data Dictionary may be formatted, you may download the [Data Dictionary demonstration file](#), or you may view the [Data Dictionary Tutorial Video \(10 min\)](#). For help setting up your Data Dictionary, also see the instructions listed on the [Help & FAQ](#).

### Steps for making project changes:

- 1.) [Download the current Data Dictionary](#) 

Design tip: create snapshot of instruments when in Development mode

Because any changes you make to the design of your project go into effect immediately when in Development mode, there is not an 'un-do' button if you change your mind.

It is more likely that you would want to un-do a change if there are multiple people designing the project at the same time and one person is making a design change that another team member is not aware of and who doesn't agree with the change.

To give yourself the opportunity to revert the design of the project to a previous iteration, it is a best practice to use the 'create snapshot of instruments' feature. You can find that feature on the Online Designer tab:

[Create snapshot of instruments](#)

That feature automatically creates a data dictionary of the project at the time that you click the button. That data dictionary is saved to the Project Revision History tab. So, if you want to revert to that data dictionary, you can go to Project Revision History, download that data dictionary and then upload it back into the project. You can access the Project Revision History tab via Project Home or Project Setup:



The tables below list information about when major changes and revisions were made to the project. The first table below displays when the project was created, and if the project is in production, lists the time it was moved to production, as well as any revisions made to the project fields while in production. You may also download any of the Data Dictionaries from past revisions. The second table at the bottom displays general statistics with regard to the times of project changes and revisions.

Project Revision History				<input type="checkbox"/> Hide data dictionary snapshots
Created project	03/18/2019 9:18am	-	-	Created by rc_fund (REDCap Fundamentals)
Data dictionary snapshot	05/15/2019 3:27pm	<input checked="" type="button"/> Download data dictionary		Snapshot by rc_fund (REDCap Fundamentals)
Development status (current)	-	<input checked="" type="button"/> Download data dictionary		

## Edit the Data Dictionary

The data dictionary is in CSV format, which is plain text with values delimited with commas. Excel is generally the tool of choice for editing CSV files, but you may use any spreadsheet program or text editor.

### Data dictionary in Excel

A	B	C	D	E	F
1 Variable / Field Name	Form Name	Section Header	Field Type	Field Label	Choices, Calculations,
2 study_id	demographics		text	Study ID	
3 first_name	demographics	Demographics Information	text	First Name	
4 last_name	demographics		text	Last Name	
5 dob	demographics		text	Date of Birth	
6 sex	demographics		dropdown	Gender	0, Female   1, Male
7 address	demographics		notes	Street, City, State, ZIP	
8 phone_number	demographics		text	Phone number	
9 eventdate	visit_form		text	Date of Event	

### Data dictionary in Notepad

```
REDCapUserGuide_DataDictionary_2012-06-22-1.csv - Notepad
File Edit Format View Help
"variable / Field Name","Form Name","Section Header","Field Type","Field Label","Choices,
study_id,demographics,,text,"Study ID",,,,,,,,
first_name,demographics,"Demographics Information",text,"First Name",,,,,,
last_name,demographics,,text,"Last Name",,,,,,
dob,demographics,,text,"Date of Birth",,,date_dmy,,,,,
sex,demographics,,dropdown,Gender,"0, Female | 1, Male",,,,
address,demographics,,notes,"Street, City, State, ZIP",,,,
phone_number,demographics,,text,"Phone number",,,phone,,,
eventdate,visit_form,,text,Date of Event,,,,,"
```

## Things you can/can't do in the Data Dictionary

When editing the data dictionary there are certain things to bear in mind about what is, and what is not permitted:

### You can...

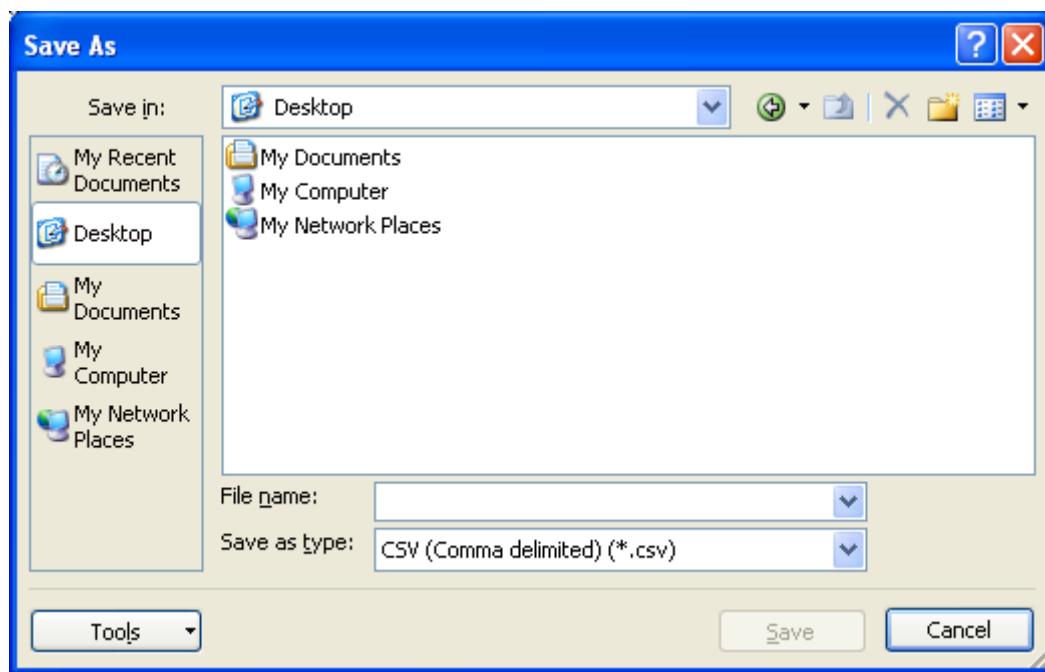
- Add new rows, i.e. add new fields and matrix groups
- Delete rows, i.e. remove fields
- Change form name (although some changes to how names are formatted – e.g. ALL CAPS – must be done using the [Online Designer](#))
- Move fields to a different form
- Re-order fields in a form
- Re-order forms (but ensure that the record id field remains as the top row - the first field of the first form)

### You cannot...

- Add, remove, rename or rearrange columns
- Have any blank rows
- Mix up the fields from different forms – forms' fields must appear together in blocks of adjacent rows

## Saving the Data Dictionary

After making changes in the data dictionary, ensure that it is saved in CSV format, i.e. with the file extension .csv. Files with other extensions (e.g. .xlsx, .txt) cannot be uploaded.



## Upload Data Dictionary

Browse to the file you saved and click **Upload File**. REDCap will load your file and perform a number of validation checks that ensure your settings are valid, for example:

- Check that the file is a valid CSV file containing the expected column headers
- Ensure all required settings are present (e.g. field name, form name, field label)
- Ensure settings are valid (e.g. no spaces in field names, choices specified in the correct format)
- Ensure type and validation settings are consistent (e.g. you cannot have a drop-down list field with a validation type of date)

## Viewing Data Dictionary history



The tables below list information about when major changes and revisions were made to the project. The first table below displays when the project was created, and if the project is in production, lists the time it was moved to production, as well as any revisions made to the project fields while in production. You may also download any of the Data Dictionaries from past revisions. The table at the bottom displays general statistics with regard to the times of project changes and revisions.

Project Revision History			
Created project	05/25/2011 1:56pm	-	Created by luke.stevens (Luke Stevens)
Moved to production	09/08/2011 4:30pm	Download data dictionary	Moved to production by luke.stevens (Luke Stevens)
Production revision #1	09/09/2011 11:41am	Download data dictionary	Requested by luke.stevens (Luke Stevens) Approved by luke.stevens (Luke Stevens)
Production revision #2	10/18/2011 1:26pm	Download data dictionary	Requested by luke.stevens (Luke Stevens) Approved by luke.stevens (Luke Stevens)
Production revision #3 (current)	01/18/2012 8:57am	Download data dictionary	Requested by luke.stevens (Luke Stevens) Approved by luke.stevens (Luke Stevens)

Project Revision Statistics	
Time since project creation	394.3 days
Time in development	106.1 days
Time in production	288.2 days
Time since last revision	156.5 days
Average / median time between revisions	43.9 days / 39 days

The **Project Revision History** tab gives you access to the details of each version of the data dictionary. You can download any of the data dictionary CSV files.

## Other Functionality

You must have Project Design & Setup permissions to perform actions on the Other Functionality page. You can navigate to the Other Functionality tab via Project Home or Project Setup.



The **Other Functionality** tab provides some additional project tools:

### Move to inactive status (production only):

Prevent access to all project functionality except [Data Export](#), [File Repository](#), [Logging](#) and [User Rights](#).

### Move to production status / Move to production status (archived only):

Return the project to its pre- archival state.

### Copy the project:

Make an exact duplicate of the project configuration and forms/fields plus (optionally) all project data, reports, data quality rules and users. You will be prompted for a new project title.

### Delete the project (development only):

Removes the project entirely. All data will be deleted.

### Erase all data (development only):

Clears out all data from your development project, including participant records, form data and scheduling and calendar data.

### Archive the project:

Prevent access to all project functionality except Data Export, File Repository, Logging and User Rights. Also removes the project from the **My Projects** list, unless the **Show Archived Projects** option is selected.

## Add Data

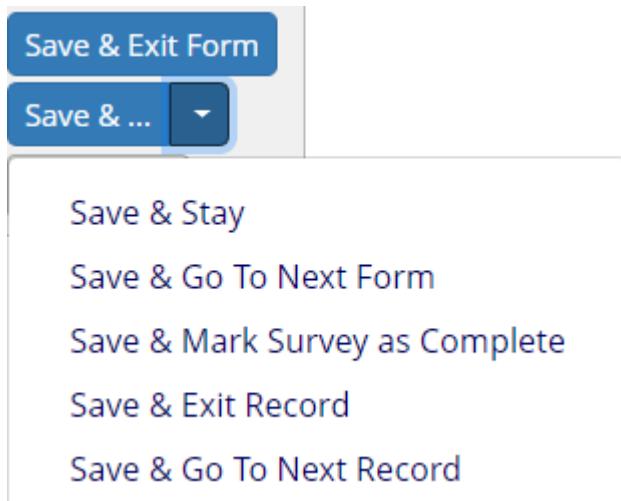
For a video overview of Data Entry, [see this link](#). It is 19 minutes in length. You can access the video from the Home or My Projects tab by clicking on Training Videos. If you are in a REDCap project, look on the left-hand navigation bar under the Help & Information section at the bottom of the navigation bar.

### What to know about data entry

- You can use the tab key to move from one question to the next
- Validation will force you to enter data in a specific way
- Branching logic will determine what questions you see
- Required questions force you to enter an answer for those questions in order to save
- Each entry creates a record

### Save options for data entry

At the bottom of the page you will see (some of) these options (the option to save & mark survey as complete only appears if surveys have been enabled on the project):



*Save & Stay (Save and Stay)* is a good option if you are entering complex data and you think it might take you awhile to get through the entire form. It will allow you to save what you have entered but still remain on the page.

[Save & Go To Next Form \(Save and Go To Next Form\)](#) is a good option if there are multiple instruments within the project and you want to enter data for the same record across multiple instruments. That option will take you to the next instrument for the same record you are currently on.

[Save & Mark Survey as Complete \(Save and Mark Survey as Complete\)](#) is a good option if you are entering data on behalf of a survey participant. It's important to use this option if there are subsequent surveys in the project. That is because if you are using the Survey Queue or Automated Survey Invitations, there are cases where the completion of an instrument AS A SURVEY determines whether or not a subsequent survey invitation gets sent. If you simply mark the with one of the other save options, REDCap doesn't know that the subsequent survey invitations should be triggered. Additionally, marking the form as a completed survey will generate a confirmation (if you have that set up in Survey Settings.) If you simply mark it complete as a data entry form, the confirmation email will not get sent.

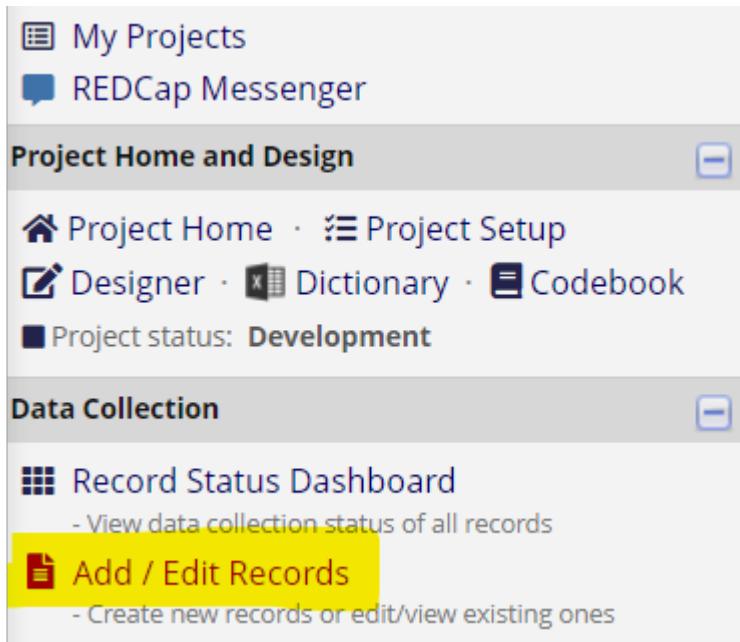
[Save & Exit Record \(Save and Exit Record\)](#) is an option you might use if you are only entering the data for one instrument for one record.

[Save & Go To Next Record](#) is a good option when you are entering data for multiple records and you want to stay on the same instrument.

## View Data

### [View individual record](#)

You can view any individual record within your project by clicking on the Add/Edit records link on your left-hand navigation bar.



Select the record from the drop-down menu. You will be brought to the Record Home Page of the record you selected. For longitudinal projects, you will see the Event Grid.

## Design Tip for Viewing Records

You can add a label to a record number, so that as you are viewing a list of records in the Add/Edit records or Record Status Dashboard, you will know more information about the record rather than having to open it to see what data is in it. For instance, if the record represents a person, you can add the person's first and last name as the custom record label. So instead of this:

**Displaying:** Instrument status only | [Lock status only](#) | [?](#)

Record ID	Registration Survey	Internal form	Follow-up Survey	Internal form 2	Final survey
1	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

You will see this:

Record ID	Registration Survey	Internal form	Follow-up Survey	Internal form 2	Final survey
1 Bonnie Plunkett	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Kelly Kapoor	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Christy Plunkett	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Mindy Lahiri	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Sam Swarek	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Jake Peralta	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Shawn Spencer	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Andy McNally	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Gus Burton	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 Danny Castellano	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For more information, see the [Set a Custom Record Label section](#) of this User Guide.

## Search Records

To search for an individual record by something other than the record identifier, you can use the **Data Search** section of Add/Edit Records. Only non-categorical fields appear in the list as they are most likely to contain useful identifiers.

The screenshot shows a 'Data Search' interface. On the left, under 'Choose a field to search (excludes multiple choice fields)', a dropdown menu is open, showing 'date\_recruited (Date recruited by fieldwork team)'. Below this, the 'Search query' section contains a text input field with '2011-12' and a 'Searching...' button. A list of results follows: '2011-12-06' in Study ID 4006 for event Recruitment and registration, '2011-12-20' in Study ID 4007 for event Recruitment and registration, and '2011-12-21' in Study ID 4008 for event Recruitment and registration.

With each keystroke of your typing, records with saved data matching your entry are shown in a list. Click an item in the list to select that record. You will be taken directly to the event/form for the data item you selected

## Record Status Dashboard

This is a table that lists all records/responses and their status for every data collection instrument in the project. To access it, click on Record Status Dashboard on the left-hand navigation bar, in the Data Collection section.

You may click on one of the icons in order to open the data collection instrument for a specific record.

Logged in as rc\_fund | Log out

- [My Projects](#)
- [REDCap Messenger](#)

**Project Home and Design**

- [Project Home](#) · [Project Setup](#)
- [Designer](#) · [Dictionary](#) · [Codebook](#)
- Project status: **Development**

**Data Collection**

- [Record Status Dashboard](#) - View data collection status of all records
- [Add / Edit Records](#) - Create new records or edit/view existing ones

[Hide data collection instruments](#)

- [Demographics](#)
- [Baseline Data](#)
- [Month 1 Data](#)
- [Month 2 Data](#)
- [Month 3 Data](#)
- [Completion Data](#)

**Applications**

- [Reports](#) [Search](#) [Organize](#) [Edit](#)

**Help & Information**

- [Help & FAQ](#)
- [Video Tutorials](#)
- [Suggest a New Feature](#)

[Contact REDCap administrator](#)

### Record Status Dashboard (all records)

Displayed below is a table listing all existing records/responses and their status collection instrument (and if longitudinal, for every event). You may click any of the table to open a new tab/window in your browser to view that record on that collection instrument. Please note that if your form-level user privileges are restricted to collection instruments, you will only be able to view those instruments, and if you belong to an Access Group, you will only be able to view records that belong to your group.

Dashboard displayed: [\[Default dashboard\]](#)

Displaying record [Page 1 of 1: "12346" through "968574"](#) of 9 records

[+ Add new record](#)

**Displaying:** [Instrument status only](#) | [Lock status only](#) | [All status types](#)

Study ID	Demographics	Baseline Data	Month 1 Data	Month 2 Data	Month 3 Data	Completion Data
<a href="#">12346</a>						
<a href="#">123567</a>						
<a href="#">142536</a>						
<a href="#">456789</a>						
<a href="#">748596</a>						
<a href="#">777222</a>						
<a href="#">852586</a>						
<a href="#">963258</a>						
<a href="#">968574</a>						

A record that has been entered as a data entry form will have the circle filled with color. A record that has been entered as a survey will have the color and a checkmark in it.

## Viewing Aggregate Data

See the Applications section of this User Guide re: [Data Exports, Reports and Stats](#). You will learn how to view all of the data in your project and also how to select a sub-set of data for viewing.

## Printing PDFs of your data

There are multiple ways to print PDFs of the records in your project. To customize the appearance of the PDF, please see [PDF Customizations](#).

### Printing PDFs of one record across all instruments

**From Add/Edit Records** - Select record from drop-down menu. You are now on the Record Home Page.

You can download either a full version (1<sup>st</sup> option listed) or compact version (2<sup>nd</sup> option listed) of the data. The first version will give you all the fields and all the responses in the instrument, regardless of whether the question was hidden due to branching logic or if it was left empty. A compact version shows only the fields that were asked and does show questions that were hidden due to branching logic. If you have multiple instruments, the PDF will contain data across all instruments.

Choose action for record ▾

Download PDF of record data for all instruments

Download PDF of record data for all instruments (compact)

#### Printing PDF of one instrument for a record

If you wish to download a PDF of only one instrument, click on the record for that instrument. You can get to a specific instrument for a record by going to the Record Home Page via Add/Edit records (see above) or via the Record Status Dashboard.

You will then have 3 options available:

Download PDF of instrument(s) ▾

This survey (blank)

This survey with saved data

This survey with saved data (compact)

Again, the compact version simply means that it will not show the fields that were hidden due to branching logic.

#### Note about printing PDFs of blank instruments

The screenshot shows a PDF page with the following content:

**Confidential** Healthy Bowels Study Phase  
Page 1 of 1

## Randomisation Data

Randomisation Number: \_\_\_\_\_

Randomisation Date: \_\_\_\_\_

Randomisation Stratum:

Disease present  
 Disease absent

**Note that the document produced is not suitable for use as a paper data entry form** because it does not provide sufficient guidance on expected data formats and coding to the person completing the form and the data entry person. For example, even three simple fields in the screenshot below would lead to a number of questions:

1. Is Randomization Number expected to be numeric? Could it be alphanumeric?
2. How many characters are expected for Randomization Number?
3. What format should be used for writing dates? dd-mm-yy? mm/dd/yyyy? dd-mmm-yyyy? yyyy-mm-dd? Consistency is very important, especially for projects running in a number of countries.

4. How does the data entry person encode the response for Randomization Stratum?  
1=present, 2=absent? 1=present, 0=absent?
  
5. For all fields, what code can the data entry person enter if data is missing from the form?  
What about if data is illegible or otherwise raises some query?

## Change data

### Edit records (edit response)

To edit a **data entry form**, you must have the data entry right “view & edit” selected for your username on the project. That is set using the User Rights application. For instructions on editing User Rights, please [see this section](#) of this User Guide.

Data Entry Rights				
<i>NOTE: The data entry rights *only* pertain to a user's ability to view or edit data on a web page in REDCap (e.g., data entry forms, reports). It has no effect on data imports or data exports.</i>				
	No Access	Read Only	<b>View &amp; Edit</b>	Edit survey responses
Presenter/Group info	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

With this user right, you could then go to the record, make changes and save. If you over-write data that has been previously entered, you may view the history of the response by clicking on the ‘H’ next to the field:

Data History for variable "sesstitle" for record "1"		
Listed below is the history of all data entered for the variable "sesstitle" for Attendee ID "1". The data history results are sorted from earliest to most recent.		
<b>Date/Time of Change</b>		
<b>User</b>		
<b>Data Changes Made</b>		
06/24/2019 14:12:55	mcleodl	Best cats ever
06/27/2019 15:39:05	rc_fund	Best dogs ever

**Close**

To edit a **survey response**, you must have the data entry right “edit survey responses” selected for your username on the project. That is set using the User Rights application. For instructions on editing User Rights, please [see this section](#) of this User Guide.

## Data Entry Rights

*NOTE: The data entry rights \*only\* pertain to a user's ability to view or edit data on a web page in REDCap (e.g., data entry forms, reports). It has no effect on data imports or data exports.*

	No Access	Read Only	View & Edit	Edit survey responses
Example Survey (survey)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>

With this user right, you could then go to the record, click on the 'edit response' button.

The screenshot shows a survey response page. At the top, there is a message: "Survey response is editable" with an edit icon, followed by a red-bordered "Edit response" button. Next is a "Survey options" dropdown. Below this, a note says: "Response was completed on 11/28/2018 12:56pm. You have permission to edit this survey response from its original values. In order to begin editing the response, you must click the Edit Response button above. [View all contributors](#) to this response." At the bottom, it says "Participant ID 1".

You can make changes and save. If you over-write data that has been previously entered, you may view the history of the response by clicking on the 'H' next to the field:

### Data History for variable "email" for record "5"

Listed below is the history of all data entered for the variable "email" for Study ID "5". The data history results are sorted from earliest to most recent.

Date/Time of Change	User	Data Changes Made
06/23/2019 18:08:22	[survey respondent]	bruc@batman.com
06/23/2019 18:08:39	rc_fund	bruce@batman.com

## Delete Records

To delete a record:

1. Navigating to any data entry form for the record
2. Click the **Delete Record** button that appears at the bottom of the form
3. Confirm the deletion

## Delete record rights

To delete records a user must have been given the necessary permission on the User Rights page. Access to this function should be restricted to a limited set of project users. If you want to grant this right to yourself, go to the User Rights page, click on your name and then the Edit User Privileges button. You can then tick the box for Delete Records.

Settings pertaining to project records: [Explain these settings](#)

- |  |                                     |
|--|-------------------------------------|
|  Create Records | <input checked="" type="checkbox"/> |
|  Rename Records | <input type="checkbox"/>            |
|  Delete Records | <input type="checkbox"/>            |

If you do not see that option or it is greyed out, you will need to contact the Project creator/owner and ask them to assign that right to you.

## Applications

### Alerts & Notifications

The Alerts & Notifications feature allows you to construct alerts and send customized email notifications. These notifications may be sent to one or more recipients (a user on the project, a survey respondent or someone else) and can be triggered or scheduled when a form/survey is saved and/or based on conditional logic whenever data is saved or imported.

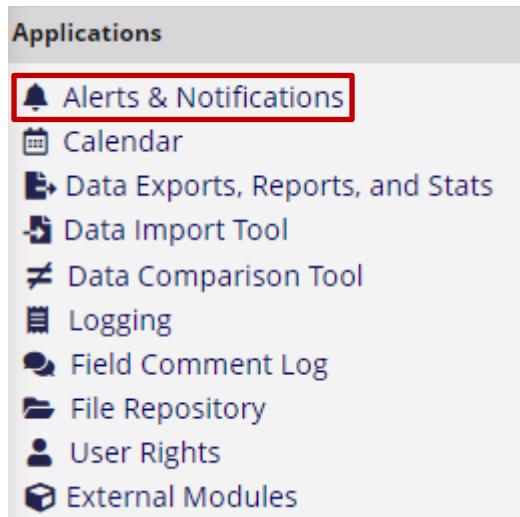
When adding/editing an alert, you will need to 1) set how the alert gets triggered, 2) define when the notification should be sent (including how many times), and 3) specify the recipient, sender, message text, and other settings for the notification.

For the message, you may utilize customized options such as rich text, the piping of field variables (including Smart Variables), and uploading multiple file attachments.

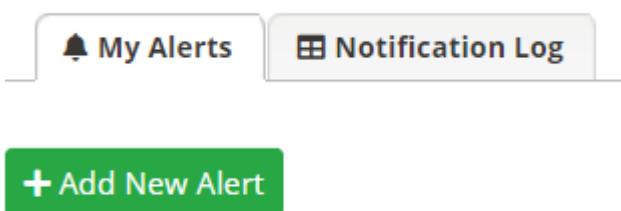
Alerts apply to both data entry forms and surveys, and they also allow for more options regarding who can be the recipient of a notification (project users, survey participants, etc.).

#### To create an Alert using Alerts & Notifications

To create an alert, click on Alerts & Notifications in the Applications section on the left-hand navigation bar.



Then click on the Add New Alert button:



You will then see the following sections for you to configure:

#### *Title the Alert*

You can title your alert, which is helpful if you have many alerts. This is a way to distinguish one alert from another.

**Title of this alert:**

#### *Step 1 of Alert setup*

If the condition for triggering the alert is simply that a record is saved, these would be your choices in Step 1:

##### STEP 1: Triggering the Alert

How will this alert be triggered?

- When a record is saved on a specific form/survey\*
- When a record is saved on a specific form/survey with conditional logic\*
- Using conditional logic during a data import or data entry

Trigger the alert...

when  is saved with any form status  (excludes data imports)

\* The alert will not be re-triggered if the form/survey is saved again, unless it is set to send "Every time" in Step 2 below.

If the condition for triggering the alert is based on conditional logic, these are the choices you will see in Step 1:

##### STEP 1: Triggering the Alert

How will this alert be triggered?

- When a record is saved on a specific form/survey\*
- When a record is saved on a specific form/survey with conditional logic\*
- Using conditional logic during a data import or data entry

Trigger the alert...

when  is saved with any form status  (excludes data imports)

while the following logic is true:

(e.g., [age] > 30 and [sex] = "1")  [How to use 'stop logic' to disable a scheduled alert](#)

Ensure logic is still true before sending notification? ?

\* The alert will not be re-triggered if the form/survey is saved again, unless it is set to send "Every time" in Step 2 below.

If the condition for triggering the alert is based on data import, these are the choices you will see in Step 1:

### ⌚ STEP 1: Triggering the Alert

How will this alert be triggered?

- When a record is saved on a specific form/survey\*
- When a record is saved on a specific form/survey with conditional logic\*
- Using conditional logic during a data import or data entry

Trigger the alert...

when the following logic becomes true:

(e.g., [age] > 30 and [sex] = "1")

⌚ [How to use 'stop logic' to disable a scheduled alert](#)

Ensure logic is still true before sending notification? [?](#)

\* The alert will not be re-triggered if the form/survey is saved again, unless it is set to send "Every time" in Step 2 below.

### Step 2 of Alert setup

This is the section where you tell REDCap when to send the alert and how many times to send it.

### ⌚ STEP 2: Set the Alert Schedule

When to send the alert?

- Send immediately
- Send on next  at time  H:M
- Send after lapse of time:  days  hours  minutes
- Send at exact date/time:

Send it how many times?

- Just once
- Multiple times: Send every  days  after initially being sent

### Step 3 of Alert setup

This is the section where you configure who the alert comes from, who it will go to, who to email if there are message send failures, the subject line and body of the email and upload attachments.

**STEP 3: Message Settings**

**Email From:**  \* must provide value

**Email To:**  Select recipients  
Or manually enter emails: jane@example.com; john@mysite.org

**Email CC:**  Select recipients  
Or manually enter emails: jane@example.com; john@mysite.org

**Email BCC:**  Select recipients  
Or manually enter emails: jane@example.com; john@mysite.org

**Email to send email-failure errors:**

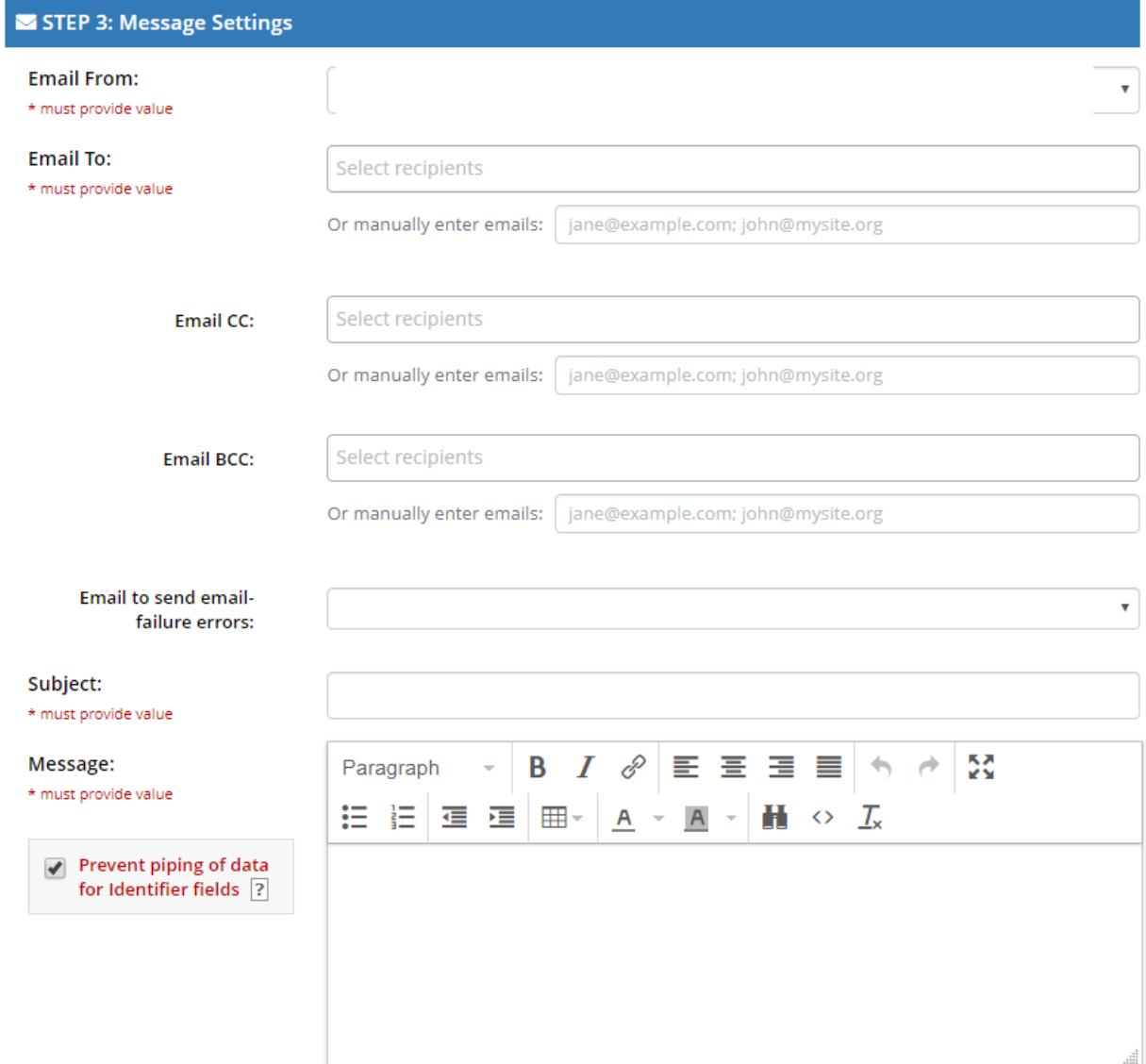
**Subject:**  \* must provide value

**Message:**  \* must provide value

Prevent piping of data for Identifier fields [?](#)

In the subject or message, you may use [Piping](#) and [Smart Variables](#)  
Example: Hi [first\_name]! Please complete this survey: [survey-link:followup\_survey]

**Add attachments**



**Email from:** This field will pre-populate with your email address. You can change it to another email address associated with your REDCap account or another user on the project.

**Email To:** This can be an email address captured in a field on the project or a user on the project. If you wish the alert to go to someone who is not a user on the project, simply manually type the email address in the second box (labeled 'or manually enter emails').

**Email CC and Email BCC:** click on the 'show more options' link located below Email To to see these.

**Email to send email-failure errors:** put the email address of the person managing the alert. If the recipient's email client rejects your message for some reason (e.g. the file size is too big), then this person will be notified.

Note: if you are attaching a file(s) to the alert, it is highly recommended that you put an email address in the 'Email to send email-failure errors'. That way, if the recipient's email client rejects your message for some reason (e.g. the file size is too big), then someone will be notified.

### Piping in Alerts

The box 'Prevent piping of data for identifier fields' is automatically checked for all alerts. This means that any field variables (e.g., [date\_of\_birth]) that exist in the alert's subject line or message will not have their value piped if the field has been tagged as an 'Identifier' field. In this case, it will simply replace the field variable with [\*DATA REMOVED\*] rather than piping the actual data into the message.

This is a preventative measure, since an Alert is sent via email and email is not a secure form of communication.

If you wish to pipe identifiable information into the subject line or body of the email message, you will have to un-check that box.

#### *Optional setting in Alert*

If you wish for REDCap to automatically expire your alert at a specified time, you can set that here.

**Optional**

Alert expiration:

This alert will be auto-deactivated at the specified date/time above. Note: This will cause any already-scheduled notifications not to be sent after the expiration time.

### *Alert listing*

Once you have created your alert, an abbreviated listing will appear, showing the highlights of the alert.

<b>Alert #1: Initial email to concurrent session pl...</b>											
<p> If the following logic is TRUE when the instrument "Alerts and Survey Management" is saved and has any form status: [sendsessdescsurvey] = '1' AND [sesstype] &lt;&gt; "4"</p> <p> Send immediately</p> <p><input checked="" type="checkbox"/> Send one time</p>											
<p> <b>Activity:</b></p> <p> 7 records were alerted (<a href="#">view list</a>)     Last sent: 06/24/2019 3:59pm</p>											
<table border="1"><tr><td> Email</td><td>Preview ▾</td></tr><tr><td>From: laura.mcleod@vumc.org</td><td></td></tr><tr><td>To: [emailpoc]</td><td></td></tr><tr><td>Subject: Information regarding your REDCapCon invol...</td><td></td></tr><tr><td>Message: Greetings, [pocname]. Thank you for agreei...</td><td></td></tr></table>		Email	Preview ▾	From: laura.mcleod@vumc.org		To: [emailpoc]		Subject: Information regarding your REDCapCon invol...		Message: Greetings, [pocname]. Thank you for agreei...	
Email	Preview ▾										
From: laura.mcleod@vumc.org											
To: [emailpoc]											
Subject: Information regarding your REDCapCon invol...											
Message: Greetings, [pocname]. Thank you for agreei...											

### *Alert Activity*

To see a summary of what activity has occurred for the alert, you can look at the Activity section of your alert on the Alerts & Notifications page,

**Activity:**

7 records were alerted ([view list](#))    Last sent: 06/24/2019 3:59pm

If you click on the view list link, you will see something like this:

7 alerts sent for Alert #1 X

[View sent alerts in Notification Log](#)

Record names: 1, 2, 3, 4, 5, 6, 7

Please note, the record numbers are not hyperlinks. To see a detailed listing of Alerts sent, click on the View sent alerts in Notification Log link.

#### *Notification Log*

The notification log is a detailed listing of what alerts have been sent. It might look something like this:

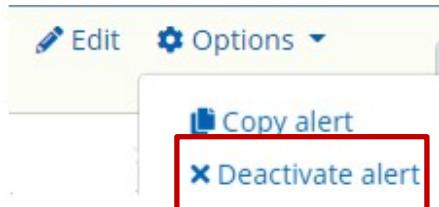
The screenshot shows the 'Notification Log' page. At the top, there are two tabs: 'My Alerts' (selected) and 'Notification Log'. Below the tabs are search and filter controls: 'Begin time:' (empty), 'End time:' (06/27/2019 15:05), '(M/D/Y H:M)', 'Display' dropdown (Alert #1: Initial email to concurrent session planners), 'Display' dropdown (All records), 'Apply filters', and 'Reset'. The main area displays a table with 7 rows, each representing an alert sent on 06/24/2019 at various times between 2:13pm and 3:59pm. The columns are: 'Notification send time' (with a downward arrow icon), 'Alert' (all show '#1'), 'View Notification' (an envelope icon), 'Record' (numbers 1 through 7), 'Recipient' (redacted email addresses), and 'Subject' (all show 'Information regarding your...').

Notification send time	Alert	View Notification	Record	Recipient	Subject
06/24/2019 2:13pm	#1		1	[REDACTED]	Information regarding your...
06/24/2019 2:45pm	#1		2	[REDACTED]	Information regarding your...
06/24/2019 2:57pm	#1		3	[REDACTED]	Information regarding your...
06/24/2019 3:22pm	#1		4	[REDACTED]	Information regarding your...
06/24/2019 3:44pm	#1		5	[REDACTED]	Information regarding your...
06/24/2019 3:53pm	#1		6	[REDACTED]	Information regarding your...
06/24/2019 3:59pm	#1		7	[REDACTED]	Information regarding your...

You will note that the alert number, not the name that you gave the alert, is listed. Also, the email address in this image has been obscured but you will see the first email address of the person to whom the alert was sent to. If you wish to view other recipients of the email (other people listed in the To, CC or BCC sections), click on the View Notification icon. You will see there a copy of the Alert.

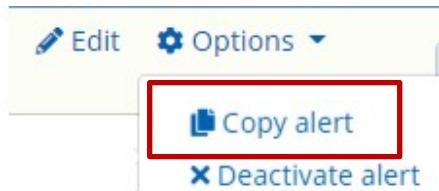
#### *Deactivating Alert*

If you wish to manually deactivate an alert, go to your Alerts & Notifications page, find the alert and click on the Options button. You can then click on the Deactivate alert option:



### *Copying Alert (Copy alert)*

Sometimes you might need to set up an alert that is very similar to one you've already created, but with a small change. To easily copy the existing alert, you would go to the Alerts & Notifications page, find the existing alert and click on the Options button. You can then click on the Copy alert option:



You would then edit the alert.

### *Editing Alert (Edit alert)*

To edit an alert, you would go to the Alerts & Notifications page, find the existing alert and click on the Edit icon:



### **Calendar (for longitudinal projects only)**

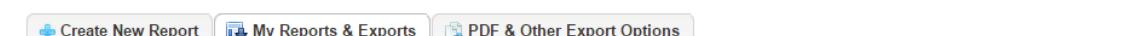
The calendar application can be used when the project is a longitudinal project. Please go to the [Longitudinal Projects](#) section of this User Guide for more information. You can also see the training video embedded in the application or find further information on the topic in the Help & FAQ section within REDCap itself.

### **Data Exports, Reports and Stats**

This will allow you to easily view reports of your data as well as export your data to Microsoft Excel, SAS, Stata, R or SPSS for analysis. If you wish to export your \*entire\* data set or view it as a report, then Report A is the best and quickest way. If you want to view or export data from only specific instruments (or events) on the fly, then Report B is the best choice.

#### **Data Exports, Reports, and Stats**

[VIDEO: How to use Data Exports, Reports, and Stats](#)



This module allows you to easily view reports of your data, inspect plots and descriptive statistics of your data, as well as export your data to Microsoft Excel, SAS, Stata, R, or SPSS for analysis (if you have such privileges). If you wish to export your \*entire\* data set or view it as a report, then Report A is the best and quickest way. However, if you want to view or export data from only specific instruments (or events) on the fly, then Report B is the best choice. You may also create your own custom reports below (if you have such privileges) in which you can filter the report to specific fields, records, or events using a vast array of filtering tools to make sure you get the exact data you want. Once you have created a report, you may view it as a webpage, export it out of REDCap in a specified format (Excel, SAS, Stata, SPSS, R), or view the plots and descriptive statistics for that report.

My Reports & Exports				
	Report name	View/Export Options	Management Options	Report ID
A	All data (all records and fields)	View Report  Export Data  Stats & Charts		(auto-generated)
B	Selected instruments (all records)	Make custom selections		
	+ Create New Report			

## Create Custom Report

You may create your own custom reports in which you can filter the report to specific fields, records, or events using a vast array of filtering tools to make sure you get the exact data you want. Once you have created a report, you may view it as a webpage, export it out of REDCap in a specified format (Excel, SAS, Stata, SPSS, R), or view the plots and descriptive statistics for that report.

### *Custom report: Step 1*

To get started, click Create New Report and enter a name for the report. This name will be listed in the Reports section of REDCap's left-hand menu column.

Indicate who should be able to access the report:

- All users
- A list users specified by name
- All users from a particular user role or roles
- All users from a particular data access group or groups (see [User Rights](#) for more information about user roles and data access groups)

Indicate who should have access to editing, copying or deleting the report. This feature will only be available to users on the project who have “Add/Edit/Organize Reports” privileges. Multiple users might want to use a report in different ways and might choose to change some of the fields, filters or sorting options. This setting will allow you to restrict other users’ ability to make those changes.

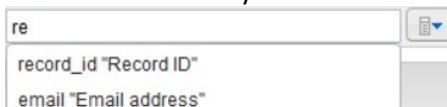
### *Custom report: Step 2*

Specify the fields to include in the report

Fields to include in report		
Field 1	record_id "Record ID"	X
Field 2	participant_complete "Complete?"	X
Field 3	consent_survey_complete "Complete?"	X
Field 4	-- select a field --	

Note:

- If your list of fields is very long it can be easier to find them by clicking **ABl** and opting to have a text entry box with an autocomplete dropdown.



- You may reorder fields by dragging a field to a new position
- Remove fields using the red X

Additional report options

*Survey Identifier field and survey timestamp fields*

If your project includes surveys, you have the option to tick a box so that the survey identifier field and survey timestamp fields are included in your report.

 Additional report options (optional)
<input type="checkbox"/> Include the survey identifier field and survey timestamp field(s)?
<input type="checkbox"/> Combine checkbox options into single column of only the checked-off options (will be formatted as a text field when exported to stats packages)

If you use multiple choice checkboxes in your project, you will note that each choice takes up its own column in a report or export. If you prefer to have those columns combined, tick the option to combine check box options.

#### *Custom report: Step 3*

Specify a filter for the records (optional).

You can apply straightforward filters by selecting the relevant fields and specifying an operator (e.g. “equals”) and a value to match. For complex expressions involving functions or requiring parentheses click **Use advanced logic** to write your filter expression. The syntax for the expression follows the same rules as for [calculated fields](#) and [branching logic](#).

#### Live Filters

Live filters can be selected on the report page for dynamically filtering data in real time. With the exception of the Record ID field, only multiple-choice fields can be used as Live Filters.

An example of when this might be useful is if you are looking at a report of all patients who have diabetes. You could have a live filter on gender and race. So when you first view the report (with no live filters), you would see all patients with diabetes. If you wanted to know how many of them are female, you could click on the live filter for gender and select to only see females. You would then be looking at a sub-set of your data: patients with diabetes who are female. You can then click the live filter for race and select African American. That would deliver you a further sub-set of data, this one displaying only the African American female patients who have diabetes.

#### *Custom report: Step 4*

Specify up to three of the report fields by which the records will be sorted

You will then click **Save Report**. You will be asked if you wish to View the Report, Return to My Reports & Exports or Continue Editing report. Once you click View Report, your report will be added to your report list on the left-hand navigation bar.

My Reports & Exports			
	Report name	View/Export Options	Management Options
A	All data (all records and fields)	 View Report  Export Data  Stats & Charts	Report ID  (auto-generated)
B	Selected instruments (all records)	 Make custom selections	
1	Form Completion	 View Report  Export Data  Stats & Charts  Edit  Copy  Delete	4
	+ Create New Report		

Reports are also listed in their own section of the left-hand menu and are available directly from any project page

## Reports

- 1) Recruitment - All Calls
- 2) Requested call dates
- 3) Packs to send

### Design tip: Survey Timestamps

While you do have the option in the Reports section to add a survey timestamp to a report, that timestamp is solely for the first survey in your project. If you have multiple surveys, REDCap does not automatically capture those survey completion times in the Report. Additionally, the survey timestamp is not a field on which you can sort your report. So if you need to sort your responses based on completion time, you will not be able to do that.

You can automatically capture the timestamp of subsequent survey completion times (and the initial survey completion time, should you wish to use that field to sort results) using [action tags](#). To do that, add a validated date field as the last field in your survey. When in that field, click on action tag and add 'TODAY' (if your validated option is for date only) or 'NOW' (if your validated option is for date and time.) Also click on 'HIDDEN-SURVEY'. What that does is instruct REDCap to capture the date behind the scenes without the survey participant having to fill it in.

See below for a screenshot example.

**Edit Field**

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

**Field Type:** Text Box (Short Text, Number, Date/Time, ...)

**Question Number (optional)**  Displayed only on the survey page

**Field Label**  
Today's date:

**Action Tags / Field Annotation (optional)**

**Variable Name** (utilized in logic, calcs, and exports)  
  Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#)

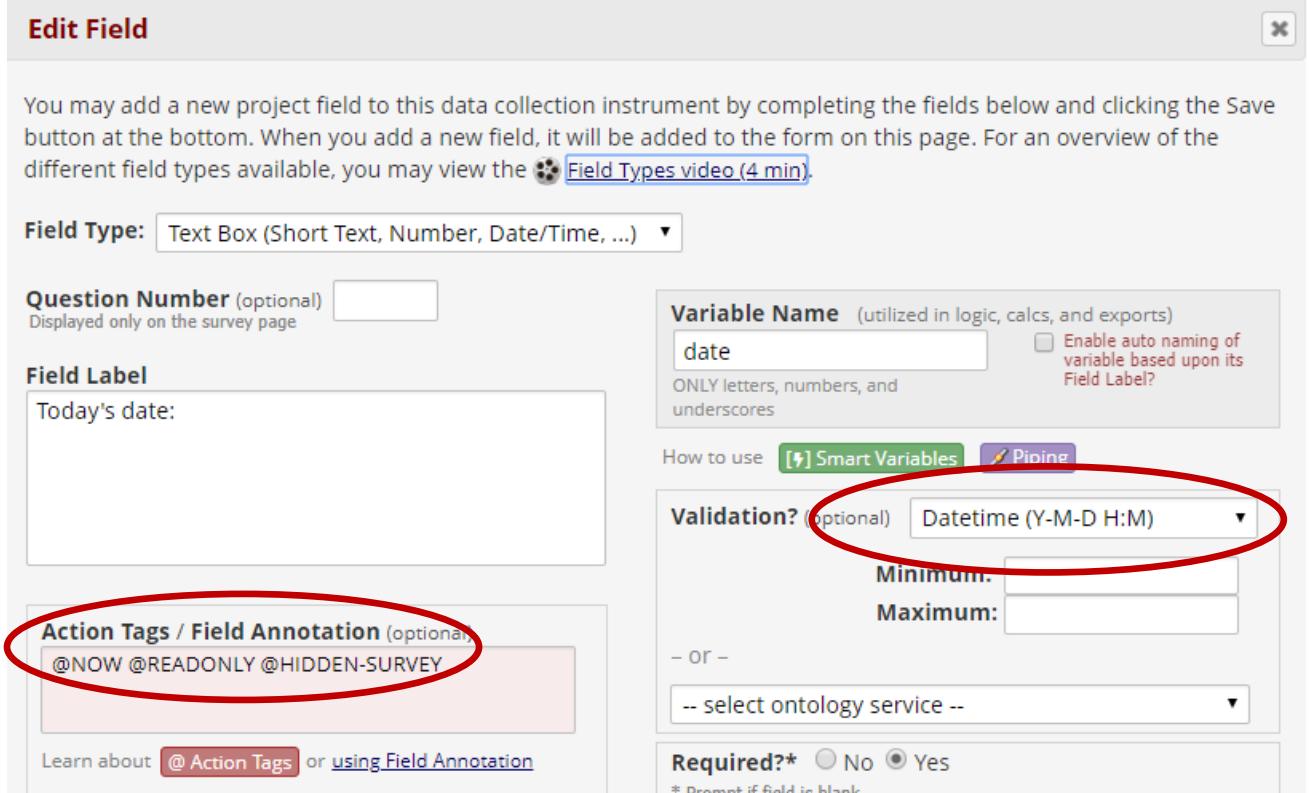
**Validation? (optional)** Datetime (Y-M-D H:M)

Minimum:   
Maximum:

- OR -

-- select ontology service --

**Required?\***  No  Yes  
\* Prompt if field is blank



## Managing and Using Your Reports

The list of Reports & Exports displays the two built-in reports and then any that have been created for your project. The table supports the following tasks:

### 1. View Report

Run the report and display the results in a table onscreen

### 2. Export Data

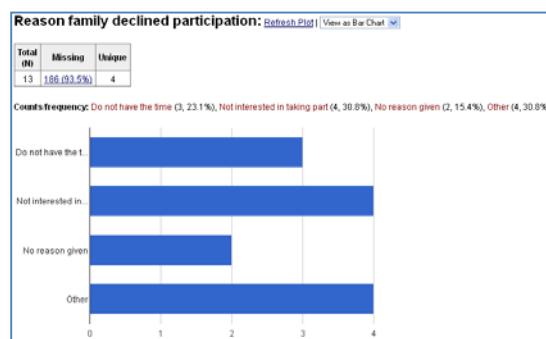
Select an export format and any de-identification options and download report data in CSV format, plus a syntax file for the stats package options

### 3. Stats & Charts

View plots and summary stats for each variable in the report. It does not enable you to define your own summaries, such as tabulations of two fields.

How the summary data is presented varies according to the field type:

- **Categorical fields:** summarized in bar charts



- **Numeric fields:** summarized in scatter plots. This can be of assistance in identifying outliers. Click on a data point to navigate to the specific record.

- **Text fields:** you see simple totals for the number of records that have data and the number of records where the value is missing

#### Full Name:

Total (N)	Missing
4	5 (55.6%)



### 4. Edit Report

Return to the edit screen to make changes to the design of the report.

### 5. Copy Report

Create a new report as a copy of the report selected. A new title must be entered, and you may then make alterations to other aspects of the new report's setup (allowed users, fields, record filter, sort).

### 6. Delete Report

Remove the report. There is no Undo!

### 7. Reorder Report List

You can reorder the list of reports by hovering your mouse pointer over the left-hand column of the table of reports and dragging a row in the table to a new position.

## Reports and Data Exports with Repeating Instruments and Events

Two new fields will be automatically included in Reports and Data Exports if data is collected through repeating instruments or events. Each repeated instance of an instrument or event will be displayed as a new row in the report or export file.

A Repeating Instrument will populate both columns and provide multiple rows for each instance.

A Repeating Event will provide one row without populating the Repeat Instrument column (all of the instruments for the event are repeated). The Repeat Instance number is an auto-numbered value (beginning with 1) that is incremented with each repeat of the instrument or event.

Sample Reporting							
Study ID (study_id)	Event Name (redcap_event_name)	Repeat Instrument (redcap_repeat_instrument)	Repeat Instance (redcap_repeat_instance)	Date collected (meddat)	Medication Name (med)	Dosage (dose)	What is the Adverse Event? (adverse_event)
<a href="#">1178902</a>	Baseline						
<a href="#">1178902</a>	Baseline	Medications	1	2017-03-23	Tylenol		The Medications Instrument has 3 instances. The Month1 Event with all of its instruments, has been repeated twice.
<a href="#">1178902</a>	Baseline	Medications	2	2017-03-25	Aspirin		
<a href="#">1178902</a>	Baseline	Medications	3	2017-03-28	Zyrtec		
<a href="#">1178902</a>	Month 1		1	2017-03-20	Prilosec	10 mg	Nausea
<a href="#">1178902</a>	Month 1		2	2017-03-29	Lisinopril	5 mg	Headache

If the report contains data specifically from a repeating instrument (as opposed to a repeating event), a field named 'redcap\_repeat\_instrument' will additionally be included, representing the instrument name for which the row of data belongs.

## Export Data

Exporting "All data (all records and fields)"

Select your export settings, which includes the export format (Excel/CSV, SAS, SPSS, R, Stata) and if you wish to perform de-identification on the data set.

**Choose export format**

- CSV / Microsoft Excel (raw data)
- CSV / Microsoft Excel (labels)
- SPSS Statistical Software
- SAS Statistical Software
- R Statistical Software
- Stata Statistical Software
- CDISC ODM (XML)

**De-identification options (optional)**

The options below allow you to limit the amount of sensitive information that you are exporting out of the project. Check all that apply.

**Known Identifiers:**

- Remove all tagged Identifier fields (tagged in Data Dictionary)
- Hash the Record ID field (converts record name to an unrecognizable value)

**Free-form text:**

- Remove unvalidated Text fields (i.e. Text fields other than dates, numbers, etc.)
- Remove Notes/Essay box fields

**Date and datetime fields:**

- Remove all date and datetime fields
- OR —
- Shift all dates by value between 0 and 364 days (shifted amount determined by algorithm for each record) [What is date shifting?](#)

[Deselect all options](#)

**Advanced data formatting options**

**Set CSV delimiter character**  
Set the delimiter used to separate values in the CSV data file (only valid for CSV Raw Data and CSV Labels export formats):

**Force all numbers into a specified decimal format?**  
You may choose to force all data values containing a decimal to have a specified decimal character (comma or period/full stop). This will be applied to all calculations and number-validated text values in the export file.

NOTE: Your data formatting selections above will be remembered in the future and will be pre-selected upon your next export.

After clicking Export Data for a report, you must select the format for the export and any de-identification options.

### Export Formats

Choose how you would like to download the data. Either:

#### 1. CSV Format

- Raw data:  
Variable names in the first row;  
categorical data shown as  
values
- Labelled data:  
Variable labels shown in first row;  
categorical data shown as  
labels

A	B	C
1 record_id	participant_complete	consent_survey_complete
2 112	2	2
3 211	2	0
4 212	2	0

A	B	C
1 Record ID	Complete?	Complete?
2 112	Complete	Complete
3 211	Complete	Incomplete
4 212	Complete	Incomplete

Use the “Raw” option if you are wanting to take a backup of your data or if you want to use the data for producing charts or to prepare a file to import back into REDCap (or indeed another system).

Remember that CSV files are NOT Excel files, and Excel may not display CSV data exactly how it is in the CSV file. See [Note on CSV Files](#).

#### 2. Statistical Software

For each stats package option (SPSS, SAS, R and Stata) REDCap will give you a raw data file in CSV format and a syntax file that will read in the data from the CSV file and apply the appropriate column formatting, variable labels and value labels.

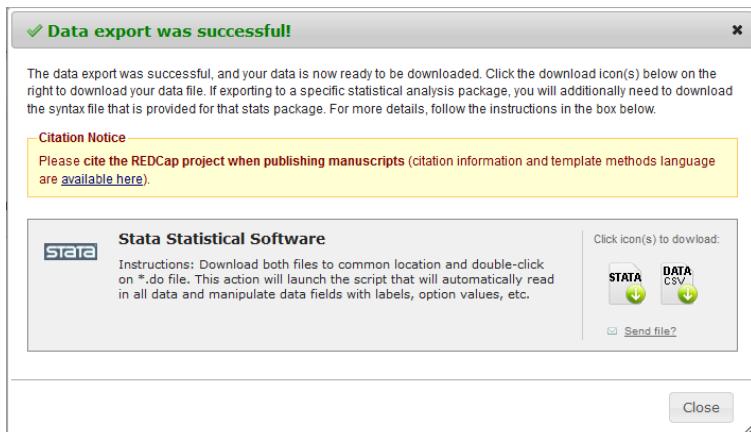
## De-Identification

- **Known identifiers:** obfuscate record identifiers and/or ensure all fields that are flagged as identifiers in the online designer or data dictionary are excluded from the export
- **Free-form text:** text entry fields with no validation (and particularly Notes-type fields) may well have identifying information entered into them. You can opt to exclude such fields from the export
- **Date and datetime fields:** can be excluded or date-shifted whereby all dates for each record are shifted by a random but consistent number of days (for example, record 1 dates all +23 days, record 2 dates all +201 days etc.)

For users whose export permissions are set to **De-identified only** (see [User Rights](#)) these options (with the exception of record identifier hashing) are always applied.

## Downloading

After the export is run and you have confirmed the citation reminder you are presented with buttons for downloading the files in the format you chose. For example, here a raw data file and Stata syntax (.do) file:



## Notes on CSV files:

- Note the reminder to cite your use of REDCap in any published material. See <http://www.project-redcap.org/cite.php> for some boilerplate text.
- The data in the Excel CSV Raw and stats package DATA CSV files are identical – raw, unlabelled data in [CSV format](#) – but the stats package DATA CSV files do not contain header rows (field information is included in the syntax files)
- The **Pathway Mapper** files for SPSS and SAS are Windows batch files. When you have downloaded the associated syntax and data files, you can run (double-click) the pathway mapper. It will update the syntax file's file handle/infile statement so that it includes the full file path to the location where the files are saved.

Using the **Pathway Mapper** is optional (and not possible if you use Mac or Linux). You can perform the same task by manually setting the path in the syntax file, or by setting the current working directory to the appropriate location.

- **Send file?** loads the export files into REDCap's [Send-It](#) application, enabling you to send the

files securely to anyone

- All exports are saved to the database and can be downloaded again using the [File Repository](#)

#### *PDF & Other Export Options*

The **PDF & Other Export Options** tab gives you options for downloading:

- A ZIP file containing all files uploaded to all of your project records
- A single PDF containing all data for all forms for all of your project records Further information is available in the text on the page.

 [Create New Report](#)    [My Reports & Exports](#)    [PDF & Other Export Options](#)

Below are some additional export options that are available for your project. Instructions for each type of export are provided. You may click the corresponding icon on the right to download the file for each.

 **ZIP file of uploaded files (all records)**

Uploaded files for all records in this project may be downloaded in a single ZIP file. This file contains any files uploaded for 'File Upload' fields/questions on a survey or data entry form. The ZIP file will contain a folder of all the files organized by record name and variable/field name and also contains an index.html file that serves as a table of contents for all the files. After downloading the ZIP file, extract all the files/folders to a directory on your local computer, after which you may double-click the index.html file inside to view a listing of the files using your web browser, or you may view the files directly by looking in the 'documents' folder. Click the icon to the right to begin downloading the ZIP file.



*Note: If your project has a large amount of 'File Upload' fields/questions or records/responses, the resulting ZIP file may be very large in file size. Please be patient if the file takes time to download.*

 **PDF of data collection instruments containing saved data (all records)**

The data for all records in this project may be downloaded in a single PDF file. This file contains the actual page format as you would see it on the data entry page or survey and includes all data for all records for all data collection instruments. Click the icon to the right to begin downloading the file.



*Note: If your project has a large amount of fields/questions or records/responses, the resulting PDF file may be very large both in file size and in page length. Please be patient if the file takes time to download.*

## Data Import Tool

This application is used when you have existing data that you would like to enter into your project. Detailed steps are provided on the application page. Note that you will need to download the data import template first and then paste your data into that template.

This tool is helpful to use if you have created a condition that will then schedule an Automated Survey Invitation.

### Import Template

First download an import template file ([CSV format](#)). The template contains column headings labelled with the field names from your [data dictionary](#) plus the [form status indicator fields](#). Calculated fields are omitted from the template – you may not import data into a calculated field, but calculated fields will be updated following an import.

Your template can be formatted with records in rows or records in columns. “Records in rows” is overwhelmingly more common.

### Importing to Checkbox Fields

Checkbox groups are treated as separate fields named according to the field name specified plus a zero-based index. Below illustrates the import template for a checkbox field named checkboxquestion that has three checkboxes. Following import, the first checkbox will be unticked (value=0) and checkboxes two and three will be ticked (value=1).

X	Y	Z
checkboxquestion__0	checkboxquestion__1	checkboxquestion__2
0	1	1

- Choice 0
- Choice 1
- Choice 2

### Importing to Date and DateTime Fields

Date values must be formatted as yyyy-mm-dd or dd/mm/yyyy

D	E
dob	enrol_date_time

2001-10-30      2011-12-14 12:30

### Importing to Data Access Groups

[Please see this section](#) of this User Guide.

### Calculated Fields

You may not import data into a calculated field, but calculated fields will be updated following an import. Calculated fields are omitted from the import template.

### Upload File

[Browse](#) to your import file and click [Upload](#).

Upload your CSV file:

## Upload Summary

REDCap does not import the data from the file immediately. First it parses your file

and displays a summary view. The summary view highlights what will  
with each data point in your import file.

KEY for Data Display Table below	
Black text = New Data	
Gray text = Existing data (will not change)	
(Red text) = Data that will be overwritten	
Red box = error	

Note: data can be imported into your project to create or update records. You cannot delete data using the Data Import Tool: **blank values in an import will not overwrite existing data values.**

When you have reviewed the summary page, complete the import by committing the data to the database by clicking **Import Data (Submit)** (for longitudinal projects).

Do you wish to import the new data (displayed above) into the project?  
(Click the button below to import the data.)

## Importing Data for Data Access Groups

When importing data into a project that uses Data Access Groups, you must include a column that specifies the [Data Access Group](#) (DAG) for each record. Find the values to use on the [Data Access Groups](#) tab from User Rights.

A	B	C	D	E	F	G	H
study_id	redcap_event_name	redcap_data_access_group	dob	enrol_date_time	enrolment_details_complete	allocation	randomisation_date
1	enrolment_arm_1	melbourne	2001-10-30	2011-12-14 12:30		2	
1	randomisation_arm_1	melbourne					1
1	follow_up_1_arm_1	melbourne					2012-02-01
1	follow_up_2_arm_1	melbourne					
2	enrolment_arm_2	melbourne	1994-09-15	2011-12-14 10:30		2	
3	enrolment_arm_1	melbourne	1995-12-06	2011-12-15 14:00		2	
4	enrolment_arm_2	melbourne				0	
5	enrolment_arm_1	sydney	2005-03-10	2011-12-14 15:45		2	
5	randomisation_arm_1	sydney					
5	enrolment_arm_2	sydney				0	

Where the user performing the import is assigned to a DAG, records are automatically assigned to the user's DAG. Such users cannot import records to other DAGs.

Records can also be assigned and re-assigned to a Data Access Group individually from their data entry forms following import.

## Data comparison Tool

This application may be used for comparing two records currently in the project. It is typically used for projects using Double Data Entry.

Select a record from each of the lists below and hit the 'Compare' button. A comparison table will then be displayed showing the differences between the two records. Only the fields that have differing values are listed. If you need to correct or change the value of one of the records, you can click on the data displayed in red, and it will take you to that form for that particular record.

## Data Comparison Tool

This page may be used for comparing two records currently in the project. Select a record from each of the lists below and hit the 'Compare' button. A comparison table will then be displayed showing the differences between the two records.

Study ID				
1 (Enrolment)	<input type="button" value="▼"/>	2 (Enrolment)	<input type="button" value="▼"/>	<input type="button" value="Compare"/>



Differences were found between the two records!

The table below compares the two records named **1** and **2**. Only the fields that have differing values are listed below. If you need to correct or change the value of one of the records below, simply click on the data displayed in red, and it will take you to that form for that particular record.

Label (field name)	Form Name	Study ID	
		1 (Enrolment)	2 (Enrolment)
Date of Birth (dob)	Enrolment Details	2001-10-30	1994-09-15
Disease State (disease_state)	Enrolment Details	bad	iffy

## Note: Data Comparison Tool and Repeating Instruments

While repeating instruments/events are fully supported when using Double Data Entry, REDCap states that the Data Comparison Tool **does not** \*fully\* support the Repeating Instruments and Events feature. Data can be compared (and even merged if using Double Data Entry), but REDCap will only allow comparison and merging of Instance #1 of a repeating instrument or repeating event. In other words, all other repeating data will be ignored on this page. Also, all non-repeating data can still be compared and merged.

## Logging

The **Logging** module is where you can view audit trail information, i.e. a log of data changes in your project. You can view and reconstruct a history of record creations, updates and deletions and review the activity of your project's users.

This will list the date and time and user or survey respondent who made changes made to the project. This includes data exports, data changes and the creating or deletion of users. **Note:** It does not give you the details of the changes made.

### Logging

Download entire logging record to Microsoft Excel (CSV)

This module lists all changes made to this project, including data exports, data changes, and the creation or deletion of users.

Filter by event:	All event types (excluding page views) ▾
Filter by user name:	All users ▾
Filter by record:	All records ▾
Displaying events (by most recent):	1 - 28 ▾

Time / Date	Username	Action	List of Data Changes OR Fields Exported
04/26/2015 2:38pm	jahoitenga	Created Record 2	visit_date = '2015-04-27', daily_medications_list = 'Tylenol', email_address = 'jteachout@cmh.edu', county(1) = checked, diabetes_indicator = '0', diabetes_tf = '0', participant_signature = '16975', signed_consent_form = '16976', demographics_complete = '2', record_id = '2'
04/26/2015 2:38pm	[survey respondent]	Created Response 1	visit_date = '2015-04-26', daily_medications_list = 'None', email_address = 'jahoitenga@cmh.edu', county(1) = checked, diabetes_indicator = '0', diabetes_tf = '0', participant_signature = '16973', signed_consent_form = '16974', record_id = '1', demographics_complete = '2'
04/26/2015 2:37pm	jahoitenga	Manage/Design	Set up survey
04/26/2015 2:36pm	jahoitenga	Manage/Design	Modify project settings
04/26/2015 2:29pm	jahoitenga	Manage/Design	Modify project settings
04/26/2015 1:26pm	jahoitenga	Manage/Design	Modify project settings
04/25/2015 1:47pm	jahoitenga	Manage/Design	Create project field
04/25/2015 1:45pm	jahoitenga	Manage/Design	Reorder project fields
04/25/2015 1:45pm	jahoitenga	Manage/Design	Create project field
04/25/2015 1:23pm	jahoitenga	Manage/Design	Create project field
04/25/2015 1:21pm	jahoitenga	Manage/Design	Create project field
04/25/2015 1:12pm	jahoitenga	Manage/Design	Edit project field

## Notes:

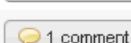
- Note the different filter options to help you narrow the scope of log records included in the view
- You may [Download the entire logging record](#), just be aware that this may take some time for large or very active projects.

## Field Comment Log

An application that lists all field comments for all records/fields. Field comments can be keyword searched and filtered.

### Field Comment Log

This page displays the Field Comment Log for all records/events/fields in this project. You may use the controls below to perform keyword searches in the comments as well as filter the comments by record, event, field, or data access group. Keep in mind that if you do not have user privileges to view some data collection instruments, then comments for any fields on those instruments will not be displayed in the table. Also, if you belong to a data access group, then you will only see results for records that belong to your group. The entire Field Comment Log is downloadable as a file in Excel/CSV format.

Field Comment Log		Filters:	All records	Export entire log
		All fields	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		All users	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Results returned: 4		Keyword search	<a href="#">Search tips</a>	
			<a href="#">Apply filters</a>	<a href="#">Reset</a>
Click button to view comment log	<b>Record</b>	<b>Field</b>	<b>Comments</b>	
 2 comments	<a href="#">P1001</a>	<b>num1</b> (Num1)	luke.stevens (11/14/2013 8:22am): "comment!" luke.stevens (11/14/2013 8:25am): "another comment"	
 1 comment	<a href="#">P1002</a>	<b>name</b> (Name)	luke.stevens (11/14/2013 8:26am): "will find this value"	
 1 comment	<a href="#">P1002</a>	<b>num1</b> (Num1)	luke.stevens (11/14/2013 8:26am): "some text"	
 1 comment	<a href="#">P1002</a>	<b>num2</b> (Num2)	luke.stevens (11/14/2013 8:26am): "another comment"	

## Notes:

- Note the different filter options to help you narrow the scope of comment records included in the view
- You may [Export entire log](#) in CSV format
- Unfortunately, it is currently not possible to change the month/day/year date format
- Clicking on the Record link for a field will open the associated data entry form and record

## File Repository

This application may be used for storing and retrieving files and documents used for this project. For instance, if you have an SOP (standard operating procedure document) or any other reference document which team members might need access to, you can upload it here.

## User Files

The [User Files](#) menu tab is where you view all files that have been uploaded for a project.

Notes:

- The four **Actions** are:
  - Download file
  - Edit label
  - Remove file
  - Send the file to anyone using [Send-It](#)
- All files will be visible to and all actions can be performed by any user that is given access to the **File Repository** module.

## Data Export Files

The **Data Export Files** menu tab gives users with Data Export permissions access to the history of data exports.

### Upload New File

Uploading a new file is very straightforward: select the **Upload New File** menu tab, select the file to upload and give it a label, then click **Upload File**.

## Data Access Groups (DAGs)

For **User Rights**, see Step 5 on the Project Setup tab.

**Data Access Group (DAG):** Access to certain project records may be limited by using Data Access Groups, in which only users within a given Data Access Group can access **records** created by users within that group. This may be useful in the case of a multi-site or multi-group project that requires that groups not be able to access another group's data.

### Create a Data Access Group

Enter the name of the new group into the text box and click **Add Group**.

Data Access Groups	Users in group	Number of records in group	Unique group name (auto-generated)	Delete group?
Melbourne	luke1	0	melbourne	X
Sydney		0	sydney	X
[Not assigned to a group]	luke.stevens * Can view ALL records	10		

Type new group name

Add Group

The new group will be added to the table. The table also indicates the users that are assigned to each group and the **Unique group name** used in data imports and exports.

#### Rename a Data Access Group

**Data Access Groups** *Change a Data Access Group by clicking its name in the table. Click or tab away from the field and the new name is saved automatically.*

Melbourne
-----------

#### Delete a Data Access Group

**Delete group?** *to delete a group.*

You must remove all users from the Data Access Group before it can be deleted.

#### Assign User to a Data Access Group

Assign user luke1 to Melbourne Assign

Select the user and group and click **Assign**. The user will be assigned (or re-assigned) to the group.

Note that it is not possible for a user to belong to more than one Data Access Group.

#### Remove User from a Data Access Group

Assign user luke1 to [No Assignment] Assign

Select the user, then select [No Assignment] as the group. Click **Assign** and the user will be removed from all Data Access Groups.

#### Assigning Records to a Data Access Group

To add records to a Data Access Group, go to the record home page and select “Assign to Data Access Group”:

## Record Home Page

The grid below displays the form-by-form progress of data entered for the currently selected record. You may click on the colored status icons to access that form/event.

 Choose action for record ▾

-  Download PDF of record data for all instruments
-  Download PDF of record data for all instruments (compact)
-  Assign to Data Access Group
-  Delete record (all forms)

Baseline Data	
Month 1 Data	
Month 2 Data	
Month 3 Data	
Completion Data	

### *Using the Data Import Tool to add records to a Data Access Group*

Once a Data Access Group is created on a project, REDCap creates a field named “redcap\_data\_access\_group” behind the scenes. To bulk add records to a data access group, go to the Data Import Tool under the Applications section of your left-hand navigation bar. Follow the directions listed on that page. Essentially, after you download the data import template, you will see a column with the header redcap\_data\_access\_group in it. That is the column into which you will enter the DAG group name (not the unique group name or Group ID number listed on the DAG page.) Note that the DAG group name is case-sensitive. You can then enter the record numbers (one per row) that you want to assign to that DAG. You will then upload the new file (with the records and DAG name) back into REDCap on that same page.

For more information on using the Data Import Tool, [please see this section](#) of this User Guide.

### E-signature and Locking Management

Record locking and e-signatures are optional features that can help you gain greater control over the status of the data in your project.

Records that are **locked** cannot be updated unless the lock is first removed by a user with record Lock/Unlock permissions.

Locked records can be **electronically signed**. A signature becomes invalid if the record is later unlocked.

The **Customization Module** enables configuration of your preferences for locking and e-signatures. By default, they are switched off, but you can enable locking and/or e-signatures for specific forms.

Display the Lock option for this instrument?	Data Collection Instrument	Also display E-signature option on instrument?	Lock Record Custom Text	Edit / Remove Custom Text
<input checked="" type="checkbox"/>	Enrolment Details	<input type="checkbox"/>	<input type="text"/> <input type="button" value="Save"/>	

The **E-signature and Locking Management** page gives you various views over the Lock/Sign status of your data entry forms.

 [Download the table below as Microsoft Excel \(CSV\)](#)

**Actions:** [SHOW ALL ROWS](#) | [Show timestamp / user](#) | [Hide timestamp / user](#) | [Show locked](#) | [Show not locked](#) | [Show e-signed](#) | [Show not e-signed \(excludes N/A\)](#) | [Show both locked and e-signed](#) | [Show neither locked nor e-signed \(excludes N/A\)](#) | [Show locked but not e-signed \(excludes N/A\)](#)

All Records					
Record	Event Name	Form Name	Locked?	E-signed?	
1	Enrolment	Enrolment Details			<a href="#">View record</a>
1	Randomisation	Randomisation			<a href="#">View record</a>

## Data Quality

This application will allow you to execute data quality rules upon your project data to check for discrepancies in your data. Pre-defined data rules that are already developed for you in the application are for such things as missing values, field validation errors and outliers for numerical fields.

A “data quality rule” is a calculation expression that must evaluate to True or False. When a rule is executed on your project data any records for which the expression evaluates False can be viewed and potentially corrected.

The **Data Quality** page includes detailed instructions.

### Execute Rules

Execute rules one at a time using **Execute**, or all together using **Execute All Rules**.

The **Clear** button refreshes the view to the state before any rules have been executed.

Data Quality Rules			<a href="#">Execute All Rules</a>	<a href="#">Clear</a>			
	Rule #	Rule Name	Rule Logic (Show discrepancy only if...)	Total Discrepancies	Group 1	Group 2	Delete rule?
	a	Missing values*	-	<a href="#">Execute</a>			

## Discrepancies

Rules that identify discrepancies (i.e. where your project contains data for which the calculation expression returns False) are highlighted in red.

d	Field validation errors (out of range)	-	2	<a href="#">view</a>
e	Outliers for numerical fields (numbers, integers, sliders, calc fields)	-	0	<a href="#">view</a>

- Click [view](#) to see the records that fail the test.

Rule: **Field validation errors (out of range)**  
Discrepancies found: 2

Record (Sorted by DAG)	Discrepant fields with their values	Status	Exclude <a href="#">?</a>
5	integer_with_range = 66 (min: 18, max: 65)	Out of range	<a href="#">exclude</a>
1 (Group 2)	integer_with_range = 17 (min: 18, max: 65)	Out of range	<a href="#">exclude</a>

[Close](#)

- Navigate to the record / form that contains the discrepant value by clicking on the value
- Clicking [exclude](#) will mark a discrepant value as not to be included as a discrepancy in future executions of this rule

## Add a New Rule

Add a new rule by entering a description of the rule and the calculation expression. Then click [Add](#).

<a href="#">Add</a>	Num1 should be $\geq$ Num2	[num1] < [num2]	<input type="checkbox"/>
	<b>Enter descriptive name for new rule</b> (e.g., Participants below age 18)	<b>Enter logic for new rule</b> (e.g., [age] < 18) <a href="#">How do I use special functions?</a>	Execute in real time on data entry forms <input type="checkbox"/>

For more information on calculation expressions see [Calculated Fields](#). Remember that data quality rule expressions must evaluate to True or False.

**Important Tip!** If your expression includes a “less than” sign (<), ensure that you include a space after it (as shown above). This stops the page thinking that you’re entering a potential harmful HTML tag and stripping out the remainder of your expression! Using “Less than or equal to” ( $\leq$ ) is fine – this problem does not occur.

## Real Time Execution

Ticking the [Execute in real time](#) option is a useful mechanism for performing cross-field validation checks during data entry. Rules where this option is ticked will be execute each time you save a data entry form that contains a field that is part of the expression.

Note that the rules are executed on **data entry forms only**: NOT when importing data via [Data Import](#) or [API](#), and NOT during survey data entry.

## API

The REDCap API (“Application Programming Interface”) is an interface that allows external applications to connect to REDCap. It enables remote retrieval or modification of data or settings within REDCap, such as performing automated data imports into or exports from a specified REDCap project.

### Knowledge required to set up API

Typically, the user on a REDCap project who works with API is someone who can write computer programming language (PHP, Perl, Python, Ruby, Java, R and cURL are the most commonly used.) If you do not know those languages, you would need to find someone in your department to help you. The REDCap administrative team does not write API code for its users.

### To use API on a REDCap project

From within your project, click on the API link in the Applications sidebar and request an API token.

### API Documentation

For more information on the REDCap API, please see this link:

### REDCap Mobile App

The REDCap Mobile App is an app that can be installed on an Android or iOS tablet or mobile device so that data may then be collected in an offline fashion on that device.

Please note: the only reason to use the REDCap Mobile App is if you will be collecting data in an area that has unreliable internet. Otherwise, you can use the regular online version of REDCap, since it will work on any mobile device via the device's internet browser.

To watch a brief video overview of the REDCap Mobile App, [please see this link](#). It is 2 minutes in length. You can access the video from the Home or My Projects tab by clicking on Training Videos. If you are in a REDCap project, look on the left-hand navigation bar under the Help & Information section at the bottom of the navigation bar.

For further information about the Mobile App, please see this link: <https://projectredcap.org/wp-content/uploads/2019/07/In-Depth-Guide2019.pdf>

For additional information on the Mobile App, click on the REDCap Mobile App link on the left-hand navigation bar from within any project. You can also consult the Help & FAQ tab within REDCap for information about the Mobile App.

### REDCap Mobile App Help

If you are experiencing problems with your project that uses the REDCap Mobile app, you can:

1. From the mobile device on which the mobile app is downloaded, on the main app screen, there is a button labeled ‘report a bug’ at the bottom of the screen. Click that button and complete the form. Once your device is connected to the internet, your inquiry will get sent to our team. Our developer will respond to your inquiry within 1-2 business days.
2. Attend the weekly REDCap Mobile App Assistance call. It is held every Monday at 9 am Central. You can join the conference call via this link: <https://global.gotomeeting.com/join/305129941> and enter the access code 305-+129-941.
  - a. There might be other mobile app users who are on the call at the same time as you. You can wait your turn and then describe the problem you are having. Our developer can then help you. Oftentimes it is helpful to listen in on the discussion that other users have with the developer, since sometimes they might be having the same issue as you!

To determine if the Mobile App is necessary for your project, consider this information:

Features	REDCap Mobile App	REDCap
Offline data collection		
Data collection on mobile device or laptop		
Barcode scanning		
GPS		
Translations		
Longitudinal projects		
<b>Online Survey</b> <i>CATS (Computer Adaptive Test Surveys) Survey Login Survey Notifications Survey queue Viewing Files Inline audio/video Stop actions Thank-you text</i>		
1000+ field forms		
Randomization		
Double data entry		

MyCap



2) Scroll down to the bottom of the page and submit the "PUBLIC DEMO" form. You should see a QR code after

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## Double Data Entry – Data Comparison Tool

Double data entry is a tried and tested strategy for validating data entered manually. Ideally all records would be entered twice by different data entry persons, but if this is not practical, double entry and checking of just a sample can be a worthwhile compromise.

REDCap contains specific functionality for managing double data entry, but there is a requirement that specific users are allocated to entry roles 1 and 2. This is often too restrictive for projects that have several data entry staff that might fulfil different roles at different times.

An alternative – similar – method is for each record to be entered as normal once, then for a duplicate record to be entered as a new record but with a suffix appended to the record identifier, for example:

```
study_id
1001
1002
1003
...
1001-duplicate 1002-duplicate 1003-
    duplicate
...
```

Validation of the data entry is performed using the [Data Comparison Tool](#) (and source data e.g. paper CRF). Each pair of records is viewed in the tool, which highlights any instances where a field value differs between the pair. Data can be corrected and the “-duplicate” records dropped from data exports prior to analysis.

## Longitudinal Projects

If your project will contain instruments that will be used to collect data numerous times, you will want to enable your project as a Longitudinal Project. An example of a project that is well-suited for longitudinal design is when participants undergo certain assessments at defined time points over the duration of their participation in a study, as defined in the study protocol.

### Project Setup

Enable your project as a longitudinal project

On the Project Setup page on the first step, click Enable for ‘Use Longitudinal data collection with defined events’.

### Design instruments

You will want to next [design your data collection instruments](#) and then follow the below steps to round out the longitudinal aspects of your project design.

#### *Design Tip: calculated fields and branching logic in longitudinal projects*

When using calculations and branching logic that reference variables in different events, be sure to include the unique event name before the variable. If the unique event name is not added before the variable, the calculation/bl will not work.

If you want to pipe in data from an event **that is not the current event**, you need to pre-pend the appropriate unique event name, also enclosed within square brackets. For example, [enrolment][first\_name]. Unique event names can be found by going

to Project Setup/Define My Events. You will see an events table, and the last column shows you the Unique event name, which is automatically generated by REDCap.

### Enabling Repeating Instruments and Events in a Longitudinal Project

While the repeating instruments feature allows you to repeat a given instrument as a single unit, the repeating events feature allows you to repeat an entire event of instruments together, in unison. This might be useful when multiple instruments have data correlating together, such as multiple surveys which are collected back to back for a specific time-point or visit, for example.

*Note: this option assumes 1) events are already defined and 2) instruments have been designated to events.*

Event Name	Repeat entire event or selected instruments?	Instrument name (select instruments to repeat)	Custom label for repeating instruments (optional) 
Baseline	-- not repeating -- <input type="button" value="▼"/>	<input type="checkbox"/> Demographics <input type="checkbox"/> Adverse Event Collection <input type="checkbox"/> Blood Draw <input type="checkbox"/> Physical	
Month 1	Repeat Entire Event (repeat) <input type="button" value="▼"/>	<input checked="" type="checkbox"/> Adverse Event Collection <input checked="" type="checkbox"/> Blood Draw <input checked="" type="checkbox"/> Physical	
Month 2	Repeat Instruments (repeat) <input type="button" value="▼"/>	<input checked="" type="checkbox"/> Adverse Event Collection <input type="checkbox"/> Physical	[adverse_event]
Termination	-- not repeating -- <input type="button" value="▼"/>	<input type="checkbox"/> Study Termination	

 **Tip:** If you repeat all of an Event's instruments together, add new instances of the Event by clicking the + sign in the column (see Month 1).

Add a new instance of an individual

Data Collection Instrument	Baseline	Month 1	Month 2	Termination
Demographics				
Adverse Event Collection				
Blood Draw				
Physical				
Study Termination				
Delete all data on event:				

Repeating Instruments

Adverse Event Collection	
Month 2	
1	Feeling rock-headed
2	Flat-footed
<input type="button" value="+ Add new"/>	

For more information about Repeatable Instruments, [please see this section](#) of this User Guide.

## Design your Event Grid

When your project is configured as longitudinal you can define a series of events and associate data collection forms with those events.

An Event Grid determines how scheduling will work and how data will be created in your longitudinal project. Designing your Event Grid is comprised of two steps:

1. Defining your events
2. Designating (or assigning) instruments to your events

Those two steps can be found on your Project Setup page, after you have enabled your project for longitudinal data collection.

### Define your events and designate instruments for them

Create events for re-using data collection instruments and/or set up scheduling.

Go to [Define My Events](#) or [Designate Instruments for My Events](#)

These steps should only be done while the project is in Development mode (not Production.)

## Define My Events

To define events click **Define My Events** on the **Project Setup** page. The **Define My Events** page opens.

	Event #	Days Offset	Offset Range Min / Max	Event Name	Unique event name (auto-generated)
	1	0	-0/+0	Enrolment	enrolment_arm_1
	2	1	-0/+0	Randomisation	randomisation_arm_1
	3	7	-0/+0	Follow Up 1	follow_up_1_arm_1
	4	14	-0/+0	Follow Up 2	follow_up_2_arm_1
<a href="#">Add new event</a>	<input type="text"/> Days	<input type="text"/> -0 <input type="text"/> +0	<input type="text"/>	Descriptive name for this event	
		<a href="#">Convert from other units</a>			

Notes:

- The edit button () facilitates editing a record
- Use the delete button () to remove an event from the schedule
- To add an event, enter data into the text boxes then click **Add new event**
- The number of events you can define is limited only by your patience for creating them and assigning forms!
- **Days Offset** is the number of days from an arbitrary baseline on which an event will be created when using the Scheduling module. If not using the Scheduling module Days Offset is just for information.
- **Days Offset** can be negative
- **Offset Range** is a number of days before (-) or after (+) the date set using Days Offset. There is no special significance to this range within REDCap, other than that a warning message is displayed if you move the scheduled event date to a date that is outside of the range. For example, an event is scheduled on 10<sup>th</sup> June +/-5 days. If the event is rescheduled to a date before June 5<sup>th</sup> or after June 15<sup>th</sup> a warning message is displayed that prompts the user to confirm that they accept the new out-of-range date. See [Scheduling](#) for more information about the Scheduling module.
- Note the settings for **Unique event name**. These codes are used when [importing](#) and [exporting](#) longitudinal data.

## Designate Instruments for My Events

The next step in setting up your event grid is to assign your data collection instruments to your events. Designating your instruments creates links between events and data collection instruments. This allows completion of any instrument multiple times for each record.

To assign data collection forms to events click **Designate Instruments to My Events** on the **Project Setup** page or on the **My Events** page. The event setup page opens.

Since you have defined multiple events on the [Define My Events](#) page, you may now select which data collection instruments that you wish to utilize for each event by using the table below. This allows you to enter data on any data collection form multiple times for any given project record. Any and all data collection instruments can thus be used for any event defined.

Click the [Begin Editing](#) button to change the relationships below by designating which forms you wish to utilize for which events. When you are finished making changes, click the [Save](#) button to finalize your changes.

[Upload or download instrument mappings](#)

[Begin Editing](#)

[Save](#)

Data Collection Instrument	Event 1 (1)	Event 2 (2)
Enrolment (survey)		
Randomisation (survey)	<input checked="" type="checkbox"/>	
Follow Up 1		
Follow Up 2		

The Designate Instruments page displays a grid of events, instruments and arms. Each event has its own column, each instrument has its own row, and (if applicable) each arm has its own tab.

Designating instruments to your events is a required step for your longitudinal project to work. To designate the instruments to events, click on ‘Begin Editing’ and select the instruments that are to be assigned to events by ticking the boxes.

[Begin Editing](#)

[Save](#)

[Select All](#) | [Deselect All](#)

Data Collection Instrument	Event 1 (1)	Event 2 (2)
Enrolment (survey)	<input type="checkbox"/>	<input type="checkbox"/>
Randomisation (survey)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Follow Up 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Follow Up 2	<input type="checkbox"/>	<input type="checkbox"/>

Remember to designate instruments for each arm of the project. Each arm uses a separate series of events, but all arms use the same instruments. For more information about defining arms, see below.

#### Defining Arms

REDCap’s Arm functionality enables you to create alternative event schedules for different groups of participants: different randomized treatments, for example.

Name your arms and set up the events as described for [Define My Events](#).

Arm 1

Arm 2

Add New Arm

Arm name: **Arm 1**

[Rename Arm 1](#) | [Delete Arm 1](#)

	Event #	Days Offset	Offset Range Min / Max	Event Name	Unique event name  (auto-generated)
 	1	0	-0/+0	Enrolment	enrolment_arm_1

Participant records are assigned to an Arm when they are created. **It is not possible to later edit the arm to which a record is assigned**, although it is straightforward to export data, delete the record and recreate it in the correct arm, and then import the record's data.

Projects where the arm is not known at the time records need to be created (a project with an enrolment phase, followed by a randomization at a later date, for example) should be set up with an arm specifically for the initial phase, as well as arms for the randomized treatment phase. Following randomization, a record can be created in the appropriate randomized arm with a record id that matches the record in the initial arm.

#### [Creating a New Record: Arms](#)

**You must select the arm appropriate to your new record before creating the record** in the same manner as described above.

Total records: 80	
Choose an existing Recruitment Source ID	Arm 1: VIHSP <input type="button" value="▼"/> -- select record -- <input type="button" value="▼"/>
Enter a new or existing Recruitment Source ID	Arm 1: VIHSP <input type="button" value="▼"/> Arm 1: VIHSP Arm 2: SCOUT Arm 3: CHIVOS

For longitudinal-type projects where multiple Arms are defined (see [Defining Arms](#)), each arm functions essentially as a distinct project. **Record identifiers are unique only within an arm**: you can have a record identified with study\_id=1001 in both Arm 1 and Arm 2, for example.

It is not possible to ensure that a record identifier is unique within the project, although REDCap does provide a warning when creating a new record with a record identifier that matches one from another arm:

**NOTICE:** Please note that Study ID "7" also exists on another arm.

Records are assigned to an Arm when they are created, and **it is not possible to later edit the arm to which a record is assigned**. There are ways to handle the need for a record to switch to another arm, however, depending on the reason why the switch is required.

#### [Switching Arms: Correcting an Incorrect Arm Assignment](#)

A switch of arm can be achieved indirectly via an export-import “shuffle”:

1. Using the [Data Export](#) module perform the “Export all project data” task and download the data in **Raw CSV** format
2. Locate the data row (or rows) that relate to the record to be switched to a different arm. There will be more than one row if data exists for more than one event: rows are uniquely identified by the combination of record identifier (e.g. study\_id) and event reference (e.g. enrolment\_arm\_1).
3. Delete all rows that correspond to other records
4. Correct the event reference, e.g. change enrolment\_arm\_1to enrolment\_arm\_2.

5. Save the file in CSV format. **Ensure that all dates remain in yyyy-mm-dd format and any leading zeros in numeric fields are preserved.** Excel can be unhelpful here: see [Note on CSV Files](#).
6. Use the [Data Import](#) tool to re-import the record's data
7. View the newly imported record to ensure that the data has been imported as you expect
8. Delete the original record from the incorrect arm

To perform these tasks user(s) require Create Record and Delete Record permissions and permission to access the **Data Export** and **Data Import** modules.

#### *Switching Arms: Progression Through Study*

Projects where the arm is not known at the time a record is created should be set up with an arm specifically for the initial phase, as well as arms for any subsequent phase(s). Create the record in the initial arm, then later create a record in the appropriate subsequent arm with a record id that matches the record in the initial arm. REDCap warns you of the duplicate identifier, but in this case, you expect to see this message: you have mistyped the identifier if you don't.

#### Scheduling

The **Scheduling** module is optional for longitudinal projects. It works in conjunction with the events you have created to enable you to generate an event schedule for each individual project record. Typically, this is a calendar of a participant's study visits.

#### [Enable Scheduling module](#)

To make use of the scheduling module, you must first enable the feature on the Project Setup page under Enable optional modules and customizations:

#### **Enable optional modules and customizations**

- |                        |  |                                       |                   |
|------------------------|--|---------------------------------------|-------------------|
| <a href="#">Enable</a> |  | Repeatable instruments and events     | <a href="#">?</a> |
| <a href="#">Enable</a> |  | Auto-numbering for records            | <a href="#">?</a> |
| <a href="#">Enable</a> |  | Scheduling module (longitudinal only) | <a href="#">?</a> |

Once it is enabled, you will be able to access it via the **Scheduling** button in the left-hand menu in the Data Collection section:

 My Projects

 REDCap Messenger

## Project Home and Design



 Project Home ·  Project Setup

 Designer ·  Dictionary ·  Codebook

 Project status: Development

## Data Collection



### Scheduling

- Generate schedules for the calendar  
using your defined events

### Record Status Dashboard

- View data collection status of all records

### Add / Edit Records

- Create new records or edit/view existing ones

## Create a Schedule

Create participant schedules on the **Create Schedule** tab.

  OR 

**Add new Study ID:**  **Start Date:**    
**Select Arm:**  

### Notes:

- You can create a new record here by entering a new record identifier in the text entry box: be sure to select the correct arm if your project has multiple arms (see [Creating a New Record: Arms](#)).
- Start Date is the baseline date for the schedule: the date from which each event's offset days is calculated.

A “projected schedule” is generated and displayed, allowing you to adjust event dates and times (avoiding weekend visits, for example). The schedule is not saved until you click **Create Schedule**.

	<b>Time (optional)</b>	<b>Date / Day of Week</b>		<b>Event Name</b>
✗		06/28/2012	Thursday	Enrolment
✗		06/29/2012	Friday	Randomisation
✗		07/05/2012	Thursday	Follow Up 1
✗		07/12/2012	Thursday	Follow Up 2

## Automatic Generation of Schedules

### View or Edit Schedule

Select the relevant record to view the associated schedule.

- Edit (  ): edit the date, time, status or notes for the schedule event
- Delete (  ): remove the schedule event. **Be careful: there is no 'Undo'!**
- View (  ): Open the schedule event in a dialog box. Also permits editing.

Do not delete event records unless you really mean to!

Schedule events across all records in your project may be viewed in a calendar format using the [Calendar](#) module.

### Calendar

The [Calendar](#) module integrates with REDCap's scheduling functionality to provide a calendar-based view of participant events.

◀ December ▶   
 2011 ▶   
  [Print Calendar](#)   
  [Scheduling Report](#)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 4 (Follow Up)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 5 (Follow Up)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 6 (Follow Up)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 7 (Follow Up)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 7 (Randomisation)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 5 (2nd Dose)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 7 (2nd Dose)</span>
<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 4 (Follow Up)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 5 (Follow Up)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 6 (Follow Up)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 7 (Follow Up)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 7 (Randomisation)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 5 (2nd Dose)</span>	<span style="font-size: 2em;">+ New</span> <span style="color: #ccc;">★ 7 (2nd Dose)</span>

- Select the [Day](#), [Week](#) or [Month](#) to view the events for that period
- [Agenda](#) shows a list of the events for the period in date order
- The [+ New](#) button will add a new ad-hoc event to the calendar, but you cannot associate data entry forms with ad-hoc events

### Calendar Events

- Click on an event to view and make edits to the calendar event

[Close](#)

### View/Edit Calendar Event

Study ID: 7 [view schedule](#)

Event Name: **Randomisation** (Arm 2: Arm 2)

Status: ★ Due Date [change status](#)

Date: 12/01/2011 (Thursday)

Time:  HH:MM [Save Time](#)

Notes:

[Save Notes](#)

[Delete from Calendar](#)

**Data Entry Forms**

● Randomisation

- Note the link to the data entry forms that are associated with the study event. Click the link to go to the form for data entry.

- The **Event Status** field has five settings:

- Due Date ★
- Scheduled ★
- Confirmed ✓
- Cancelled ✗
- No Show ⌚

The colored event status indicator changes (as shown) according to the status of the event.

REDCap ascribes no particular significance to the status of an event, which means that you can use these status flags in any way that suits you. The wording of the label does not bind you to any specific meaning.

### Exporting Longitudinal Data

With longitudinal projects you will find that your exported data contains multiple rows per project record: one row per record per event for which data is exported, as illustrated below:

A	B	C	D	E
1	study_id	redcap_event_name	dob	randomisation_date
2		1 Enrolment (Arm 1: Arm 1)	30-10-2001	
3		1 Randomisation (Arm 1: Arm 1)		01-02-2012
4		1 Follow Up 1 (Arm 1: Arm 1)		14-02-2012
5		1 Follow Up 2 (Arm 1: Arm 1)		19-02-2012

It is done this way to handle situations where a field occurs on a form used in more than one event, such as follow\_up\_date in the illustration above.

For your analyses you will often (but not always) need to manipulate the data so that it has all data for a record in a single row. Your stats package will have tools for accomplishing this kind of task (e.g. reshape in Stata, casestovars in SPSS).

After reshaping, the data above will appear in a manner similar to this:

J	K	L	M	N
study_id	dob	randomisation_date	follow_up_1_date	follow_up_2_date
1	30-10-2001	01-02-2012	14-02-2012	19-02-2012

## Longitudinal Reports

The current report builder is very limited when it comes to building report in longitudinal projects. Due to the fact that a field may be associated with multiple events, you get a result row for each record *for each event*, as illustrated below.

Study ID (study_id)	Event Name (redcap_event_name)	Date of Birth (dob)	Enrol Date (enrol_date)	Randomisation Date (randomisation_date)	Second Dose Date (second_dose_date)	Follow Up Date (follow_up_date)
1	Enrolment	2001-10-30	2011-12-14			
1	Randomisation			2012-02-01		
1	Follow Up 1					2012-02-14
1	Follow Up 2					2012-02-19
2	Enrolment	1994-09-15	2011-12-14			
3	Enrolment	1995-12-06	2011-12-15			

It severely restricts the usage of limiters because report records for events not associated with the field will never contain data for the field the limiter is applied to, and will therefore be excluded from the report results.

For example, say we wanted to view data for project records with dob < 01-01-2000. If we specify a filter of dob < 01-01-2000 then data from Randomization and Follow Up events will no longer appear in the result set because there can never be a value for dob associated with those events.

## Importing Data for Longitudinal Projects

Follow the Instructions for Applications/Data Import. Additionally, when importing data into a longitudinal project, you must include a column that specifies the unique event name for each record. Find the values to use on the [Define My Events](#) page from [Project Setup](#) (see [Define My Events](#)).

A	B	C	D	E	F	G	H
study_id	redcap_event_name	redcap_data_access_group	dob	enrol_date_time	enrolment_details_complete	allocation	randomisation_date
1	enrolment_arm_1	melbourne	2001-10-30	2011-12-14 12:30		2	
1	randomisation_arm_1	melbourne					1
1	follow_up_1_arm_1	melbourne					
1	follow_up_2_arm_1	melbourne					
2	enrolment_arm_2	melbourne	1994-09-15	2011-12-14 10:30		2	
3	enrolment_arm_1	melbourne	1995-12-06	2011-12-15 14:00		2	
4	enrolment_arm_2	melbourne				0	
5	enrolment_arm_1	sydney	2005-03-10	2011-12-14 15:45		2	
5	randomisation_arm_1	sydney					
5	enrolment_arm_2	sydney				0	

## Public Survey Links within a Longitudinal Project

There is only one survey for which you can have a public survey link in a project. If the first instrument in Online Designer is a survey, you can assign it to multiple arms and each arm will have a different public survey link – but they will all direct the participant to take the same survey.

To access your public survey links, go to Survey Distribution Tools on the left-hand menu. You'll see your Public Survey Link tab and a line of text that reads "The survey link below applies only to "x." There is a drop-down menu next to the name of your first arm. You can click on the drop-down arrow to get the public survey link for the other arms within the project. Just know that it will direct people to the same survey.

## Additional Tools In REDCap

### eConsent

There is an electronic consent (or eConsent) framework available in REDCap. This is typically used when consenting participants for a research study. The eConsent framework only works as a survey (not a data collection instrument.) Please see Survey Termination Options/Auto-Archiver = eConsent Framework above.

#### Setting up eConsent

You will need to design the content of your eConsent form. That will be dictated by what was approved by the IRB. You will add the fields to that instrument that provide the information you want given to the participant and then have the fields that you want the participant to complete. The eConsent framework then provides the mechanics by which the participant is able to review the information they have provided before submitting and also saves an electronic version of their consent into the file repository of your project.

1. Design your consent survey in Online Designer
2. If you wish the consent survey to be distributed via the public survey link, the consent survey will need to be the first instrument in your project
3. Enable the eConsent instrument as a survey by clicking 'enable' under the column "Enabled as survey."
  - a. If you are not seeing the Enable button, that means you do not have surveys enabled on your PROJECT. Go to Project Setup and click on the button 'use surveys on the project'
4. You will be brought to Survey Settings
5. **To set up eConsent framework**, see the section called "PDF Auto-Archiver." In that section, select the option "Auto-Archiver + e-Consent Framework." You can read more about that framework by clicking on "What is the e-Consent Framework?" hyperlink in that section.
6. **Be sure to click the Save Changes button at the bottom of that page.**

#### Content of e-Consent survey

Vanderbilt's IRB has a publicly-available webpage about e-consent (including a template REDCap data dictionary) which explains some general background and other useful information: <https://www4.vanderbilt.edu/irb/2015/03/e-consent-faqs/>

StarBRITE also has a resource about e-consent: <https://starbrite.vanderbilt.edu/managedata/eConsent.html>

Please use this information to coordinate closely with your IRB to learn about what they require for your specific protocol.

We recommend exploring all the options in both REDCap and with your study oversight to determine which REDCap features are most applicable to your work. Your oversight/governing bodies certainly have the final say in what they consider 'valid' – e.g. yes/no fields, typed vs signed names. You can use REDCap's features to build your e-consent form however you (and they) wish.

#### Viewing eConsent documents

As a participant submits their survey in a project that has the eConsent framework enabled on it, their signed eConsent form will go directly to your Projects File Repository. You can access the File Repository on the left-hand navigation bar under Applications.

#### Editing e-Consent documents

You may need to edit a participant's eConsent form (for instance, if they entered their name as Rob and it should be Robert. If you anticipate this might happen, tick the box for "Allow e-Consent responses to be edited by users?" (see image below.)

## PDF Auto-Archiver

Upon survey completion, a compact PDF copy of the survey response will be automatically stored in the project's File Repository, from which the archived PDFs can be downloaded at any time.

- Disabled
- Auto-Archiver enabled
- Auto-Archiver + e-Consent Framework [What is the e-Consent Framework?](#)  
(includes end-of-survey certification & archival of PDF consent form)

**e-Consent Framework Options:** For e-Consent it is sometimes required to include the consenting participant's name (and date of birth in some cases) on the final consent form as extra documentation of their identity. Below you may select fields used to capture that info. You may also enter the current e-Consent version and e-Consent type for this form. The values for the fields below will be automatically inserted into the footer of the PDF consent form that the participant will review at the end of the survey, after which that PDF 'hard-copy' will be archived in the File Repository. [Read more](#)

Allow e-Consent responses to be edited by users?

e-Consent version:

First name field:

Last name field:

Note: If you are using a single field to capture whole name, you may select it for either first/last name above while leaving the other name field unselected.

Optional fields (these are not always necessary for e-Consent):

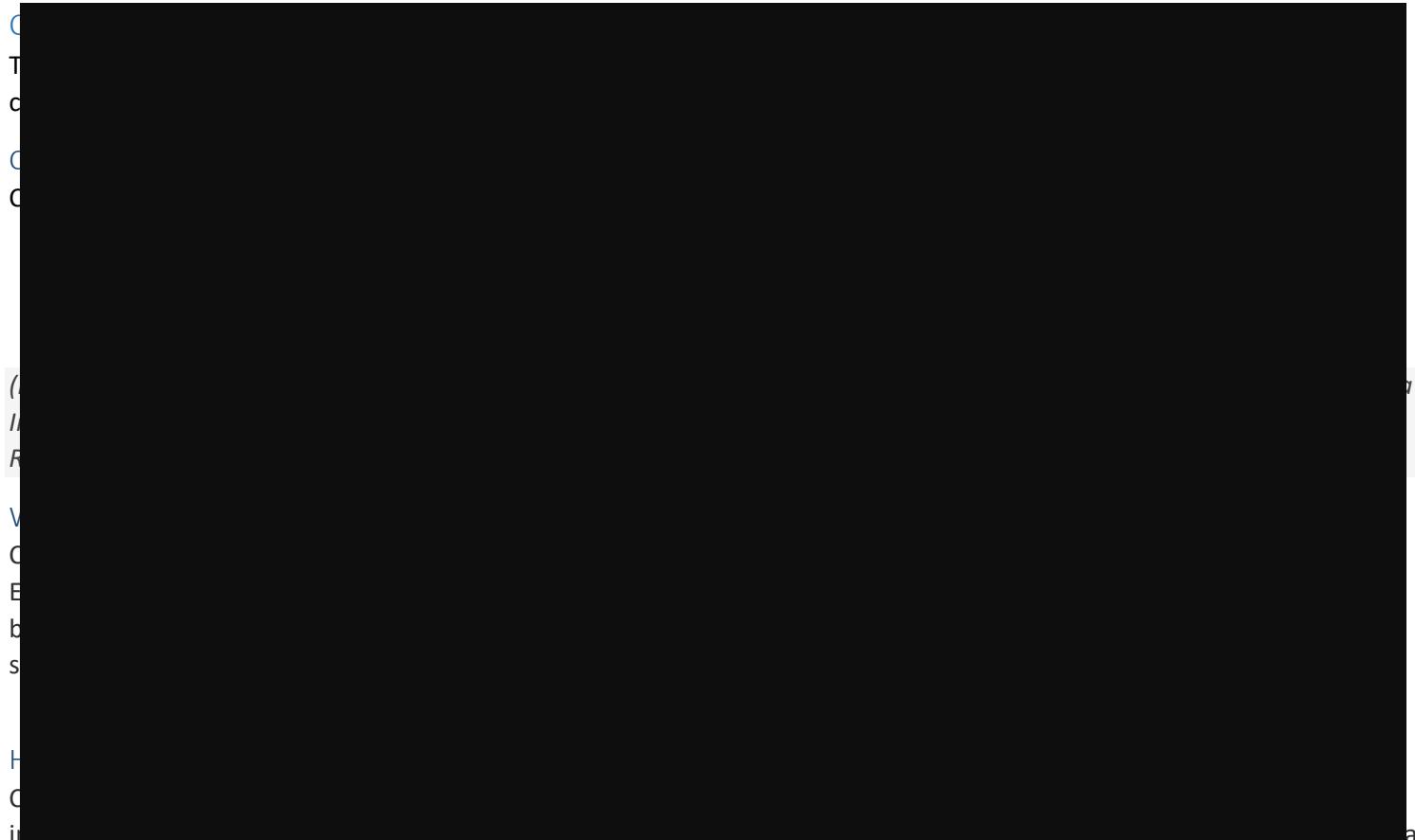
e-Consent type:

Date of birth field:

## Updating your e-Consent form

As your study progresses, you may find that you want to edit the terms of the consent form. To do that, update your e-Consent survey fields and then change the e-Consent version number in the Survey Settings. This will make it very clear which version of the consent document that the participant signed.

Also [see this section](#) of our Vanderbilt Meharry REDCap user page for more information on eConsent.



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## Twilio

REDCap's Twilio module enables your project to make and receive voice calls and SMS text messages, both **from** and **to** survey respondents. This module uses a third-party web service named [Twilio](#). You must have a Twilio account to use this module and your project must have a survey in it.

For further information about this feature, please [see this section](#) of our Vanderbilt Mehanry REDCap user page.

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## Converting an Outlook Distribution List into a Participant List

Using the Participant List in REDCap is very helpful in sending out survey invitations. One of the biggest benefits is that it creates a unique survey link so that a person can only complete the survey once. You can also enable reminders when composing your survey invitation, so that people who have not completed the survey are sent a follow-up email, reminding them to complete the survey.

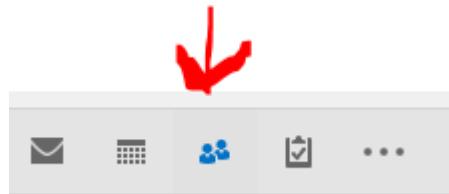
To create a participant list, each participant needs to be listed on a separate line, with the email address being listed first. When viewing members of a distribution list, the information may not be listed in the format required by REDCap. To convert your distribution list so that REDCap will accept it, please follow these instructions.

**Please remember that if you use a participant list, technically your participant's responses are not considered anonymous. That is because they are tied to an email address, which is identifiable.**

*These instructions are adapted from this online article: <https://www.extendoffice.com/documents/outlook/1730-outlook-extract-export-distribution-list-as-csv-to-excel.html#a1>*

The options you see may vary slightly depending on your version of Excel or if you are using a Mac. Whichever version you are on, you should be able to follow the prompts on your screen to accomplish the conversion. If the images shown don't align with what you are seeing, and you find it confusing, try searching for a similar article online. It's possible you can find one that matches what you are seeing.

1. In Outlook, click on Contacts

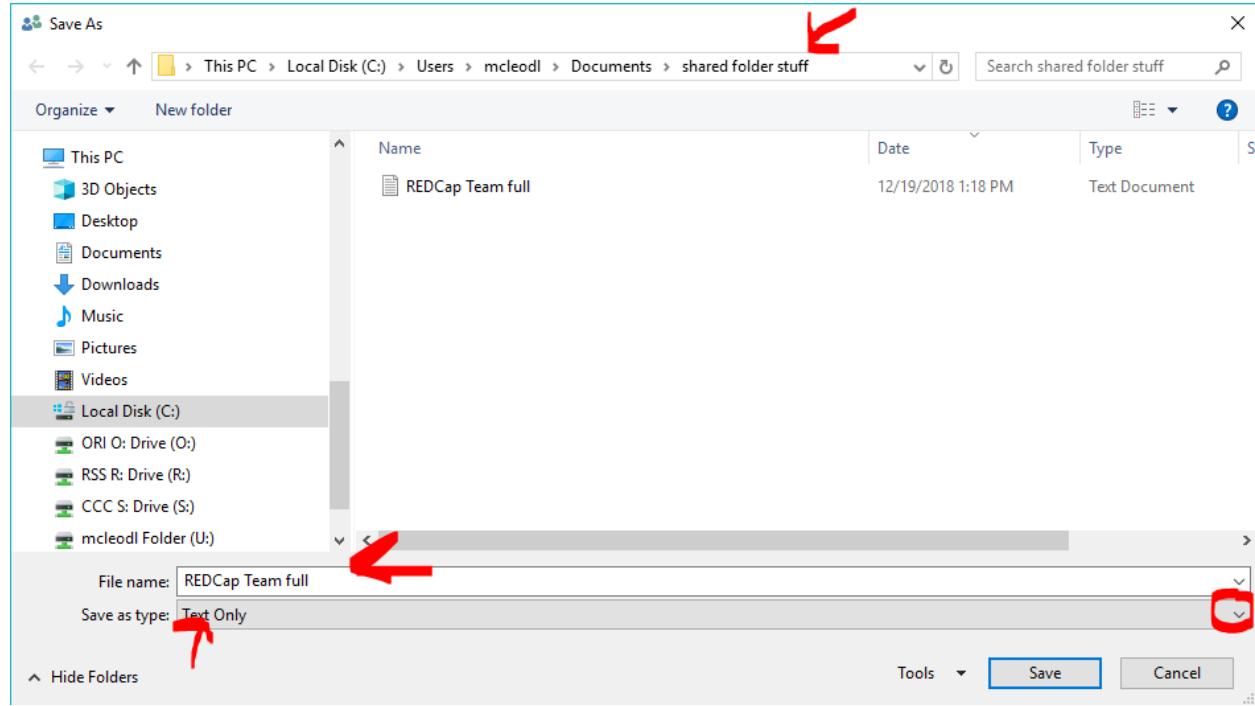


2. open the contact containing the specified contact group or distribution list

A screenshot of the Microsoft Outlook ribbon with the 'Contact Group' tab selected. The 'Members' button under the 'Actions' section is highlighted with a red box. The main pane displays a list of contacts in a hierarchical tree view. The contacts are grouped by letter (B, C, D, E, F, L, T) and listed under each group. To the right of the tree view, there is a column for 'Name' and 'Email'. Some names and emails are partially visible, such as 'c.org', 'vumc.org', 'rumc.org', 'g', 'vumc.org', 'g', and 'umc.org'. The ribbon also includes tabs for 'File', 'Insert', 'Format Text', and 'Review', along with various icons for saving, deleting, forwarding, and meeting.

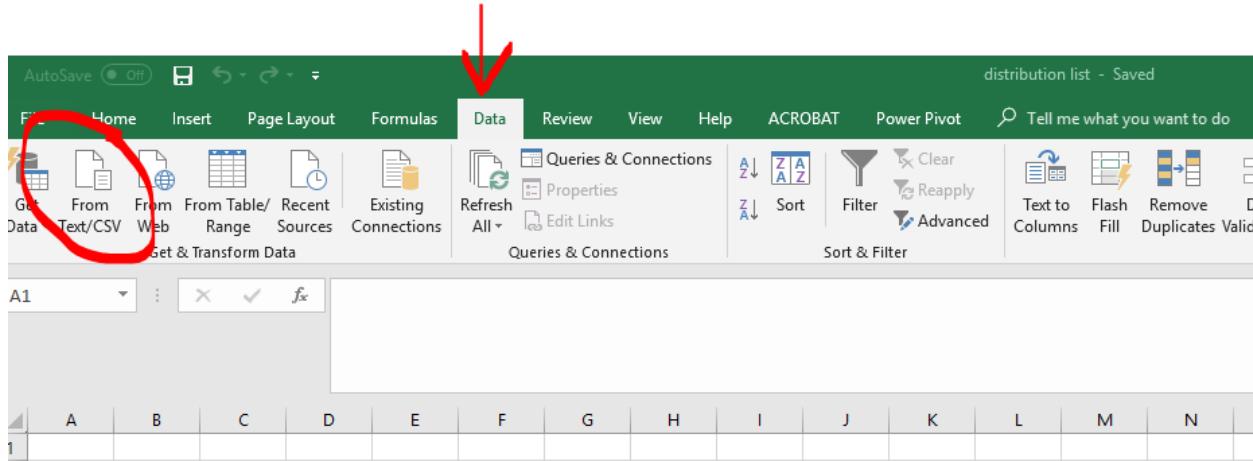
3. Click File > Save As.

- In the Save As dialog box, you need to (1) ensure the filepath for the saved file is correct (2) Rename the exported file if needed; (3) Click on the **Save as type** drop-down list (it will default to Outlook Message format – Unicode) and change it to **Text Only**; and (4) click **Save** button. See screenshot:

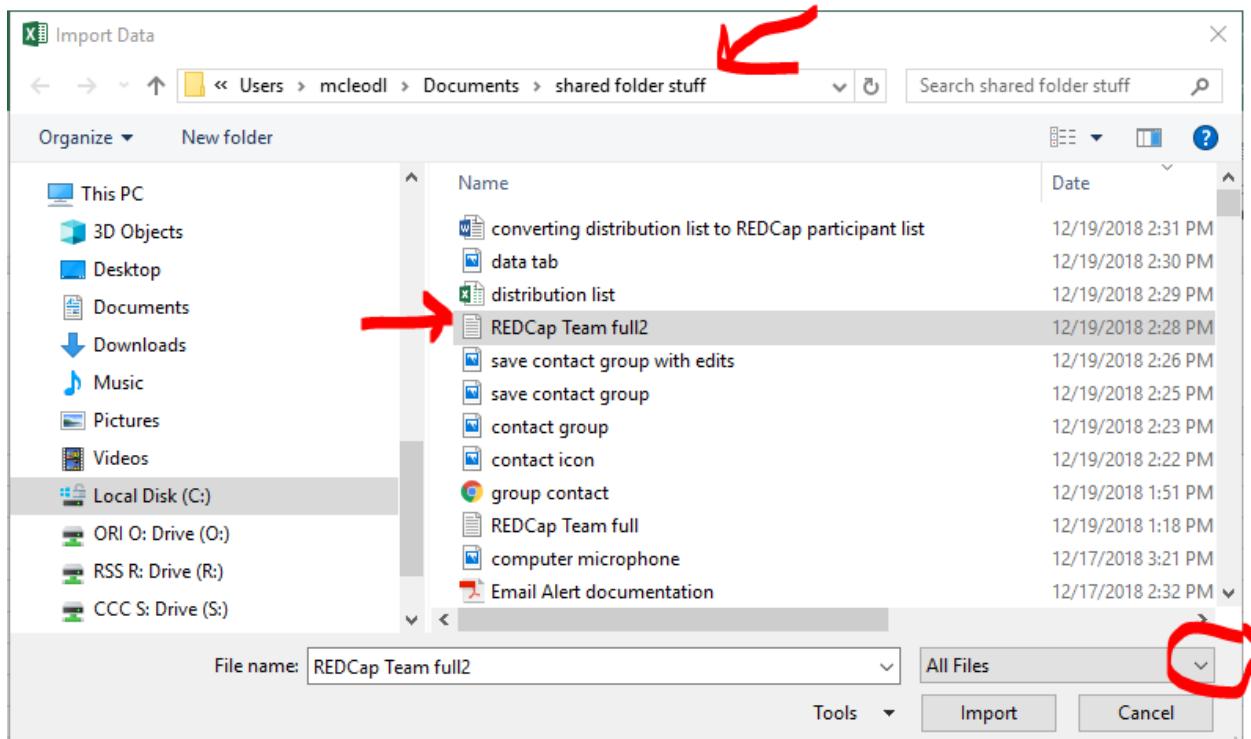


Now the specified contact group is saved as a separate text file.

4. Open Microsoft Excel, click on blank workbook. Save the Excel Workbook to a specified location on your computer.
5. Click Data > From Text/CSV.



6. A dialog box will pop up.
- Go to the filepath where you saved the distribution list and select the distribution list file.
  - the drop-down list besides **File name** box defaults to Text Files. Change that selection to All Files.
  - click the **Import** button.



7. Now the Text Import Wizard pops out. You want to make sure that your email addresses are in a separate column from the names and that there is one email address per cell. If the data comes in and the email address content is not separate, you can separate it from the rest of the content by selecting a delimiter (tab, comma, space.)

8. Click the 'Load' button to finalize the import.

REDCap Team full2.txt

File Origin: 1252: Western European (Windows) Delimiter: Tab Data Type Detection: Based on first 200 rows

Column1	Column2
Contact Group Name:	REDCap Team full
Members:	
B	mc.org
D	@vumc.org
D	@vumc.org
E	.org
F	@vumc.org
L	org
C	vumc.org
T	rg

↓

Now you will see the specified text file is imported and placed at the specified range.

The screenshot shows an Excel spreadsheet titled "distribution list - Excel". The ribbon menu is visible with tabs like File, Home, Insert, Page Layout, Formulas, Data, Review, View, and Help. The "Data" tab is selected. On the far left, there's a "Table Name:" dropdown set to "REDCap\_Team" and a "Properties" button. The main area displays a table with two columns, A and B. Column A (Column1) has rows 1 through 5 filled with text: "Column1", "Contact Group Name:", "Members:", and two empty rows. Column B (Column2) has rows 1 through 5 filled with text: "REDCap Team full", and two empty rows. Rows 6 through 13 of Column B are highlighted with a light blue selection box, containing the following email addresses:  
6: @vumc.org  
7: @vumc.org  
8: @vumc.org  
9: @vumc.org  
10: @vumc.org  
11: @vumc.org  
12: @vumc.org  
13: @vumc.org

The data comes in with the identifying information in column a and the email addresses in column b with one name per row, which is how REDCap will need the information for the Participant List. You can copy the email address content directly into the REDCap participant list tab. To add the people to your REDCap participant list:

1. Select the cells that have the email addresses and copy the content to your clipboard.
2. Go to your REDCap project and click on Survey Distribution Tools
3. Click on the Participant List tab
4. Click on Participant list and paste the content from your clipboard into it

### Modifying a participant list to include identifiers

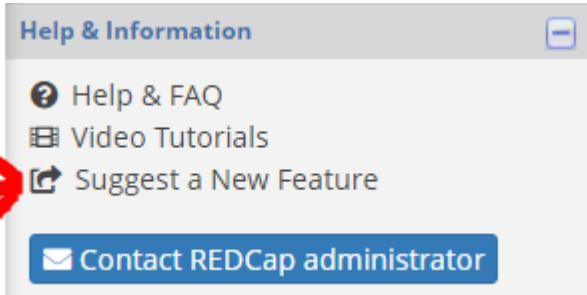
If you want to include the participant identifier, you have to do a few more steps. You would only want to use identifiers if it is ok that the responses are not anonymous.

1. Make a copy of the Excel sheet (so that, if in re-formatting you mess up the data you can go back to the original).
2. Cut column A and paste it so that it comes after the column with the email address content.
3. Copy the block of content (only the cells in column b and c that contain email addresses and names)

4. Paste the content into a Word document. It will appear in the Word doc as a table with grid lines
5. Click on the top left-hand corner of the grid (where the compass icon is). This will highlight the whole table. You will now see a "Layout" tab appear on your toolbar.
6. Click on the Layout tab
7. Making sure the whole table is still highlighted, click on the Convert to Text button (button that is second from the right)
8. A dialog box will pop up that asks you how you want to separate text. Click on the option "Other" and make sure a comma is in the box to the right of it.
9. Your list will now have the email addresses and participant identifiers in comma-delimited format.
10. Go to your REDCap project and click on Survey Distribution Tools
11. Click on the Participant List tab
12. Make sure participant identifiers are enabled (click on the enable button if they aren't)
13. Click on Participant list and paste the content from your Word doc into it

## Requesting a Feature

Any end user has the ability to submit an idea for a new REDCap feature via the Suggest a New Feature link, found on the left-hand navigation bar within a project.



Suggestions made there are ranked for feasibility and utility by the REDCap consortium software development team. That development team considers the input of ~852,000 users across all ~3,200+ consortium partner sites worldwide. We of course cannot guarantee that all suggestions will result in changes or new features, but suggestions do all feed into the consortium's exploration and development prioritization list. It's the best way to ensure your voice is heard!

## Additional Training/Support Resources

### Instructional text within REDCap

There is a lot of built-in instructional text within REDCap itself. Any time you see the question mark symbol in a box, you can click on it for more information.

A screenshot of the "Main project settings" page. On the left is a "Complete!" icon with a green checkmark. The page title is "Main project settings". There are two settings listed: "Use surveys in this project" (green checkmark) and "Use longitudinal data collection with defined events" (red minus sign). Each setting has a question mark icon in a box to its right. Two of these question mark boxes are circled in red. Below the settings is a button labeled "Modify project title, purpose, etc."

### Help & FAQ within REDCap

The Help & FAQ page contains a number of questions and answers relevant to general use of the system. Make it your first point of reference if you get stuck, particularly for help with branching logic or calculated field expressions. The Help & FAQ tab appears at the top of your screen.

Need help with Vanderbilt/Meharry user accounts and other common issues? Visit <http://tinyurl.com/vandy-rc-faq>

## REDCap Help & FAQ

Select a topic:

General ▾

Keyword search

Search

Search for exact phrase

# General

### Can you delete instance of repeating forms?

Yes, 'Delete data for THIS FORM only' button is what can be used to delete an instance when ON it for any given record.

### Is it possible to transfer a project to a different person?

There is no project user right in REDCap called "Owner." You could create a role called "Owner" - which would clearly designate which user is the project owner in the User Rights section (with appropriate permissions). Usually the owner is the user with the right to grant project access to other users.

Add the new owner to the project as a user with appropriate rights and remove old owner in the User Rights section of the project.

For purposes of project identification - you might also want to change the "Name of PI (if applicable)" in "Modify project title, purpose etc."

From within a project, you can select it from the left-hand menu.

The screenshot shows the REDCap interface with a sidebar on the left. At the top, there's a logo with a red cap icon and the word 'REDCap'. Below the logo, there's a 'Logged in as rc\_fund | Log out' link. The sidebar has several sections with icons: 'My Projects' (list icon), 'REDCap Messenger' (chat icon), 'Project Home and Design' (plus icon), 'Data Collection' (plus icon), 'Applications' (plus icon), 'Help & Information' (minus icon), 'Help & FAQ' (info icon, highlighted with a red box), 'Video Tutorials' (camera icon), 'Suggest a New Feature' (arrow icon), and 'Contact REDCap administrator' (envelope icon).

## Training Videos

The Training Videos tab within REDCap provides guidance on specific REDCap elements. Currently there are videos for those just getting started, Building a Project, Basic Features and Modules, Types of REDCap Projects and Special Features within REDCap Projects. The Training Videos tab appears at the top of your screen. From within a project, you can select it from the left-hand menu. You will also find hyperlinks to specific videos embedded within your project pages.

Main project settings

Disable  Use surveys in this project? [?](#)

Enable  Use longitudinal data collection with defined events? [?](#)

[VIDEO: How to create and manage a survey](#)

Modify project title, purpose, etc.