Basic User Guide

Contents

This guide was created using the documents available for REDCap Administrators:

- Vanderbilt REDCap Training Materials website: https://redcap.vanderbilt.edu/plugins/redcap_consortium/training_materials.php
- REDCap Help & FAQ tab in software
- REDCap software

REDCap and Project Information

What is REDCap?

REDCap (Research Electronic Data Capture) is a secure, HIPAA and FERPA compliant, web-based application for building and managing online surveys and databases. Vanderbilt University developed REDCap and the software and support is available at no charge to institutional partners: ECU is a member of the REDCap Consortium. ECU houses REDCap (the database and servers), which means that all the data is secure within ECU's IT infrastructure. Multimedia & Technology Services (MTS) administers the REDCap software. This software can be used for research, operational, and quality improvement studies with the appropriate approvals.

Features in REDCap include:

Build online surveys and databases quickly and securely--You can create and design your project quickly using secure web authentication from your browser. No extra software is required.

Fast and flexible—You can build a database quickly, from conception to production level database or survey in less than a day.

Export data to common data analysis packages—You can export your data to Microsoft Excel, PDF, SAS, Stata, R, or SPSS for analysis.

Ad Hoc Reporting--You can create custom queries for generating reports to view or download.

Scheduling—You can utilize a built-in project calendar and scheduling module for organizing your events and appointments.

Easily manage a contact list of survey respondents or create a simple survey link—You can build a list of email contacts, create custom email invitations, and track who responds, or you may also create a single survey link to email out or post on a website.

REDCap Mobile App—You can collect data offline using an app on a mobile device when there is no WiFi or cellular connection, and then later sync data back to the server.

Send files to others securely—You can upload and send files to multiple recipients using "Send-it". This includes existing project documents that are too large for email attachments or that contain sensitive data.

Save your data collection instruments as a PDF to print—You can generate a PDF version of your forms and surveys for printing to collect data offline.

Advanced features--There are other advanced features including auto-validation, calculated fields, file uploading, branching logic, skip logic, and survey stop actions.

REDCap API—You can have external applications connect to REDCap remotely in a programmatic or automated fashion.

Data Queries—You can document the process of resolving data issues using the Data Resolution Workflow module.

Piping—You can inject previously collected data values into question labels, survey invitation emails, etc. to provide a more customized experience.

Be Prepared

Things you should already know about your project

There are several things you should already know about your project before you start creating it in REDCap. The following list of items provide a starting point but will vary on a case-by-case basis. In some projects, you may have more than this planned out already, while others may still be defining the basics.

1. The end goal(s) of your research
2. The specific data you are going to be capturing
3. The type of study you are going to be performing (longitudinal, cross-sectional, etc.)

4. Who will be on your research team and what role will they have

HIPAA Compliance and PHI

The HIPAA Security Rule defines the standards, which require covered entities to implement basic safeguards to protect electronic protected health information (EPHI), which is individually identifiable health information in the electronic form. Privacy depends upon security measures: no security, no privacy.

HIPAA also mandates that covered entities must maintain reasonable and appropriate administrative, physical, and technical safeguards to protect patients' electronic protected health information. This information may be in any electronic format that is stored or transmitted from devices such as desktop or laptop computers, networked systems, disks, CD-ROMs, hand-held device (PDAs), and other clinical-related devices.

Always think about the security of your data—only export when necessary. Take precaution when exporting data and only export data if you need to run reports or analysis outside of REDCap. Limit user privileges to allow export rights only to those who really need it. Note: REDCap is a web-based system. Once data is downloaded from REDCap to a device (ex: computer, laptop, mobile device), the user is responsible for that data. If the data being downloaded is protected health information (PHI), the user must be trained and knowledgeable as to which devices are secure and in compliance with ECU's standards (ex: HIPAA) for securing PHI.

Use the REDCap Send-It feature to send data—Send-It is a secure data transfer application that allows you to upload a file (up to 32MB in size) and then allow multiple recipients to download the file in a secure manner. Each recipient will receive an email containing a unique download URL, along with a second follow-up email with the password (for greater security) for downloading the file. The file will be stored securely and then later removed from the server after the specified expiration date. Send-It is the perfect solution for anyone wanting to send files that are too large for email attachments or that contain sensitive data.

At ECU, we are committed to protecting our patients' privacy and maintaining our organization's security of information. We continue to comply with the HIPAA rule and maintain the confidentiality, security, and integrity of our patients' health information. Note: If you have a question about HIPAA or wish to report a privacy concern, please call: 744-5200 or email: HEALTHCAREPRIVACY@ecu.edu.

PHI Identifiers

There are 18 pieces of information that are considered identifiers (also called protected health information, or PHI) for the purposes of HIPAA compliance. When you indicate a variable as an Identifier, you have the option to "de-identify" your data on data exports. In the Data Export Tool, the identifier variables appear in red and there are de-identification options you can select prior to exporting the data.

The Privacy Rule allows a covered entity to de-identify data by removing all 18 elements that could be used to identify the individual or the individual's relatives, employers, or household members; these elements are enumerated in the Privacy Rule. The covered entity also must have no actual knowledge that the remaining information could be used alone or in combination with other information to identify the individual who is the subject of the information.

The 18 HIPAA Identifiers are:

1. Names
2. All geographic subdivisions smaller than state, including street address, city, county, precinct, Zip Code, and their equivalent geographic codes, except for the initial three digits of a ZIP Code if, according to the current publicly available data from the Bureau of the Census:
    a. The geographic unit formed by combining all ZIP Codes with the same three initial digits contains more than 20,000 people.
    b. The initial three digits of a ZIP Code for all such geographic units containing 20,000 or fewer people are changed to 000.
3. All elements (except year) for dates directly related to an individual, including birthdate, admission date, discharge date,

date of death; and all ages over 89 and all elements of dates (including year) indicative of such age, except that such ages and elements may be aggregated into a single category of age 90 and older.

4. Telephone numbers
5. Facsimile numbers
6. Electronic mail addresses
7. Social Security numbers (not allowed in REDCap)
8. Medical Record numbers
9. Health Plan beneficiary numbers
10. Account numbers
11. Certificate/License numbers
12. Vehicle identifier and serial numbers, including license plates
13. Device Identifiers and serial numbers
14. Web Universal Resource Locators (URLs)
15. Internet Protocol (IP) address numbers
16. Biometric Identifiers, including finger and voiceprints
17. Full-face photographic images and any comparable images
18. Any other unique identifying number, characteristic, or code that could identify the individual

Source: U.S. Department of Health and Human Services National Institutes of Health (2017)
Retrieved from https://privacyruleandresearch.nih.gov/pr_08.asp

Project Status

There are five categories also known as project statuses of a project. A project can exist in one of the following five categories at any given time:

Development

All projects when first created start in Development. In Development, you can design, build, and test your REDCap projects. All design decisions can be made in real time and are implemented immediately to your project. All survey and data entry features/functions can and should be tested. In this phase, no real data is entered. If you are conducting a research study, your IRB number is not required until you move into Production mode.

Production

From Development, you will move your project to Production. At this point, you should have fully tested the workflow, data validation and branching logic. You should be certain that your data forms are finalized and fully functional. You should also have your IRB approval number, if applicable. If it was not added to your project initially, you may add it under "Modify project title, purpose, etc." on the main project dashboard. When you are ready to deploy your project, you will request to have your project moved into Production mode by clicking the button on the Project Setup page. This will send a notification to the REDCap Administrator that you are ready to deploy your project. Once your project is approved for Production, you will receive an email alerting you of your project's new status. By default, moving a project to Production erases all existing practice records, calendar events, and all other associated practice data. All survey and data entry features/functions will be the same as they are in development except for certain Project Setup features. In this phase, real data is collected. Moving your project to Production prior to collecting real study data ensures you are maintaining data accuracy and integrity.

Draft

When you enter production mode and find that you need to modify an element of your data entry forms, you may enter Draft Mode and submit the changes. Changes to your project configuration and setup are possible, but should be minor and infrequent. Some project and form design updates will require contacting a REDCap Administrator and/or submitting data collection instrument changes in Draft Mode. Changes to data collection instruments in Draft Mode are not made to your project in real time. After making updates, you must submit the changes for review. Review and approval time are typically done in two business days. This post-production control process provides an additional check to ensure that data in your records are not modified, deleted, or overwritten unintentionally.

From Production, you can move the projects in the following status on the Project Setup > Other Functionality page:

Inactive

Inactive mode is only available once a project is already in Production mode; it is not available in Development mode. Under the "Other Functionality" tab of the project dashboard, you can move your project to inactive status. Ideally, you would move the project to inactive status when data collection is complete, but you would still like to export and analyze the records you have collected. This will disable most project functionality, including access to individual records, but the data will remain available for export and analysis. In this phase, the project is essentially complete. Your project will still be accessible from your My Projects List, but you will see a red "Inactive" icon next to it. Once inactive, the project can be moved back to production status at any time by clicking the "Other Functionality" tab and click "Move to production status". Since your project was already approved for Production, it does not need another approval; it will be immediately placed back in Production.

Archive

Once you are finished with a project, you may archive it. Unlike the Inactive mode, a project can be moved to Archive mode whether it is in Development or Production mode. You can also move a project into Archive mode directly from Inactive mode. Move the project to archive mode if data collection is complete and/or you no longer wish to view it on My Projects List. Like the Inactive mode, this will disable most project functionality. The project can only be accessed again by clicking the Show Archived Projects link at the bottom of the My Projects page. Once archived, the project can be moved back to production mode at any time by clicking the "Other Functionality" tab and click "Move to production status".

Note: Once you finish a project, you are required to export all your data to PirateDrive. Once this has been completed and you verify the information is on the PirateDrive, delete the project from REDCap.

Only users that have Project Design and Setup permissions can accomplish transitions of the project status. A project may not necessarily progress through these categories in sequence. Some such as "Practice" projects may never reach production; others may be archived directly once the Production phase is complete.

REDCap Overview

Logging into REDCap

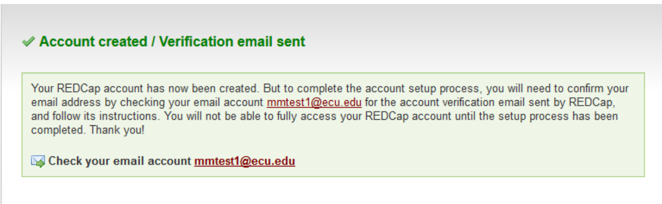
There are three ways to get to REDCap:

1. Type directly into your browser: https://redcap.ecu.edu
2. From the ITCS website under Services, click on the "All Services" button on the right. Scroll down to the "Research Computing" category and click on "REDCap Online Research Surveys", click on the "REDCap Login" button on the right of the page.
3. From the ITCS website under Logins, click on the "All Logins" button on the right. Scroll down to the "REDCap" button.

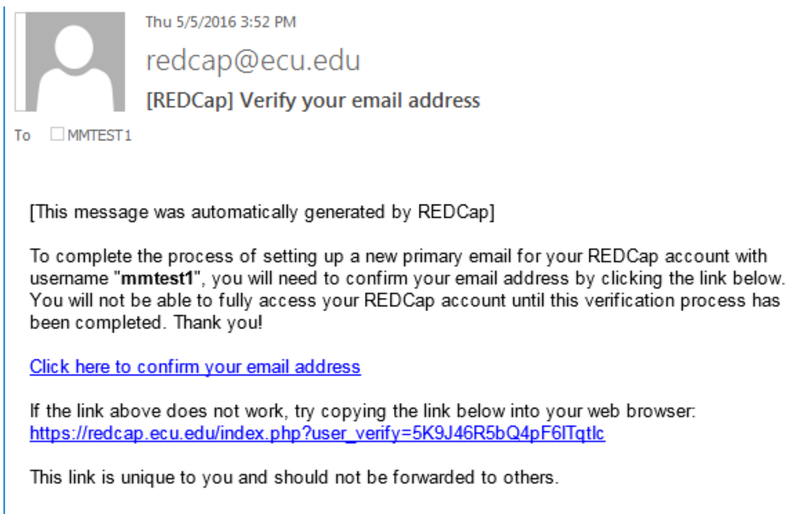
As an ECU employee, you will always use your ECU PirateID and password. Since REDCap uses your ECU PirateID credentials, whenever you change your password, it is automatically changed for REDCap. Note: If you do not log into REDCap at least once in a 4-month period, your account will be suspended.

The first time you log in, you will need to fill out the "Basic User Information Form".

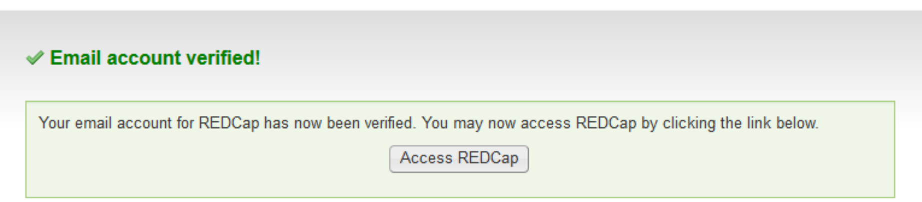
After you complete the basic user information, you will receive the "Account created/Verification email sent" display message.



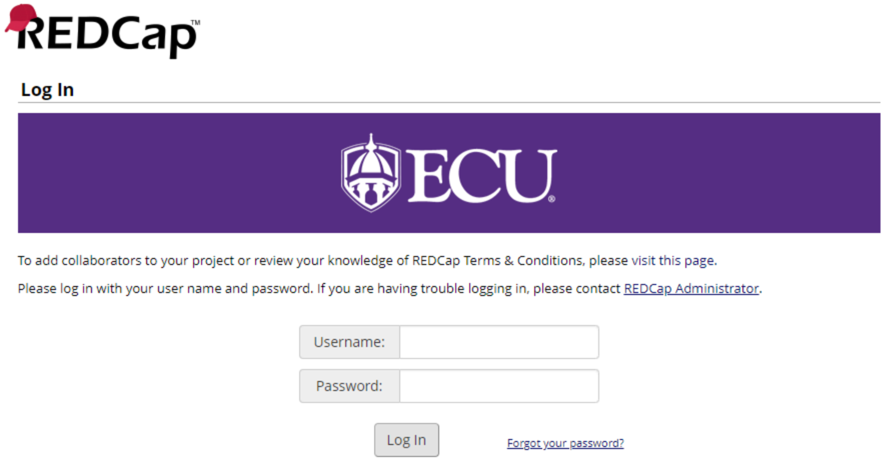
You will then need to check your ECU email account to access the REDCap email needed to complete the login process.



Follow the instruction in the email by clicking the link to confirm your email address. Once confirmed, the message "Email account verified!" will be displayed.



Click the "Access REDCap" button and you will have access to the application.



REDCap Glossary

Arms: group events into 'arms'; there may be one or more arms/groups per project. Each arm can have as many events as needed. Used in Longitudinal projects.

Branching Logic: may be used when fields/questions need to be hidden for data entry under certain conditions. For example, you may want to hide the question "What is your favorite flavor of ice cream?" until a "Yes" answer is checked for the previous question, "Do you eat ice cream?"

Calendar: a project calendar to help organize the scheduling and keep track of any upcoming events. Data

Access Groups: restricts viewing of data within a database (Ex: in a multi-site study).

Data Collection Instrument: a form or survey created for capturing data. This term is interchangeable with "data entry form".

Data Dictionary: an Excel (.csv--comma separated value format) spreadsheet containing the metadata used to create data collection instruments and fields for your project. The file is uploaded and changes are made to your project.

De-identification: the removal of certain health information that can be explicitly linked or reasonably associated with an individual as defined by HIPAA. See the section on PHI Identifiers.

Double Data Entry: allows two project users to create and edit fields of the same record without seeing one another's data. The double data entry is then checked by a Reviewer then merged into a single entry. This tool is used as a data entry quality control method.

Event: allows for the utilization of data collection forms multiple times for any given project record (used when collecting longitudinal data). An 'event' may be a temporal event during a project, such as a participant visit or a task to be performed.

Field (or Variable or Question): these terms may be used interchangeably and represent unique items of data to be collected and analyzed.

Field Label: the text (actual question or descriptive text) that will be visible to researchers and/or participants during data entry.

File Repository: a repository that stores and retrieves files and documents used for a project. Whenever a data export is performed, the resulting data and syntax files are also stored in the file repository of the project.

Longitudinal Model: this model is designed so that data collection instruments may be used multiple times for any given record/patient so that data for the same fields may be captured repeatedly longitudinally. This model allows users to define events that will be used for the data collection and associated data collection instruments with those events.

Logging: module that lists all changes made to the project, including data exports, data changes, and the creation or deletion of users (audit trail).

Project Status: the statuses of a project are in development, production, draft, inactive, and archived.
Project Type: there are several project types used in REDCap:

- Traditional Project: Classic model with data entry forms
- Single Survey Project: utilizes only one data collection instrument
- Longitudinal Project: multi-use data entry forms with abstract time points
- Longitudinal Project + Scheduling: multi-use data forms with defined time points
- Operations: use case for non-study/non-trial

Record: the set of information for a unique participant or subject. Each record is composed of several fields (pieces of data), which can be spread across multiple form (instruments) per record.

Record ID: a unique identifier for each record in your database. You can label this differently in your project, but the ID must remain the first field in the first data form.

Record Label: information/variables added to the unique ID of the study to help select the right record during data entry. For example, date of birth or last name can be added as record labels when selecting a subject for data entry. Record labels are displayed only and have no impact when exporting data.

Record Status Dashboard: a table that lists all existing records and their status for every data collection instrument. The table uses color-coded icons; Red – Incomplete; Yellow—Unverified; Green—Complete; Grey—Incomplete (no data saved); Orange Check—Partial Survey Response; Green Check—Completed Survey Response.

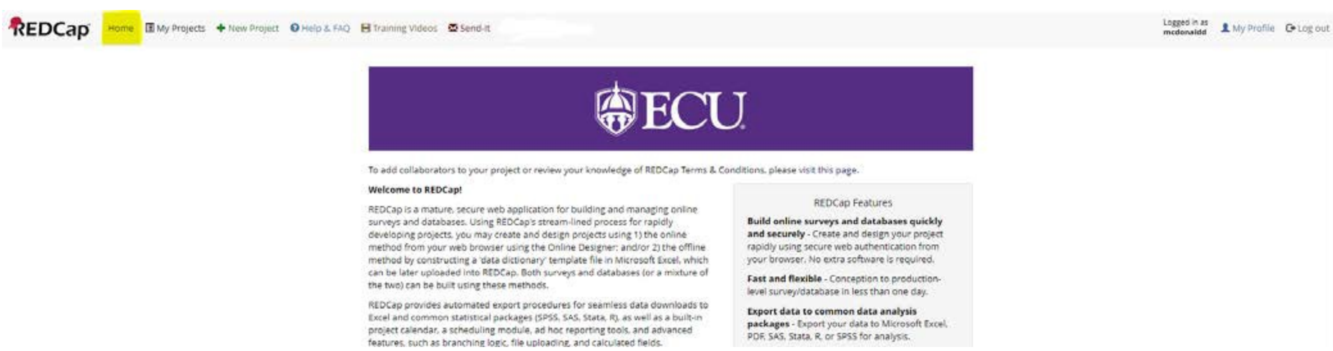
User Rights: the customized privileges that research team members have in terms of data form modification, data entry, and data access. The PI may create “Roles” for groups of team members to ensure consistency in specified user rights.

Variable: the name of the field or answer choice that is stored in the database (not visible during data entry).

REDCap Pages (Tabs) Overview

Home Page

The Home Page (Tab) is the front page of the application; the first page you see when you login. This tab gives a brief overview of REDCap and the features.



In the upper right-hand corner, you will see your user name.

Next to your user name will be the “My Profile” button. You can go to “My Profile” to change your name, email address or password. You can also add additional email addresses to your REDCap account that you can use when sending survey invitations. A verification process is done to ensure you have access to all the email accounts you enter. You can also set your preference on how REDCap displays date/time and numbers.

The default settings are:

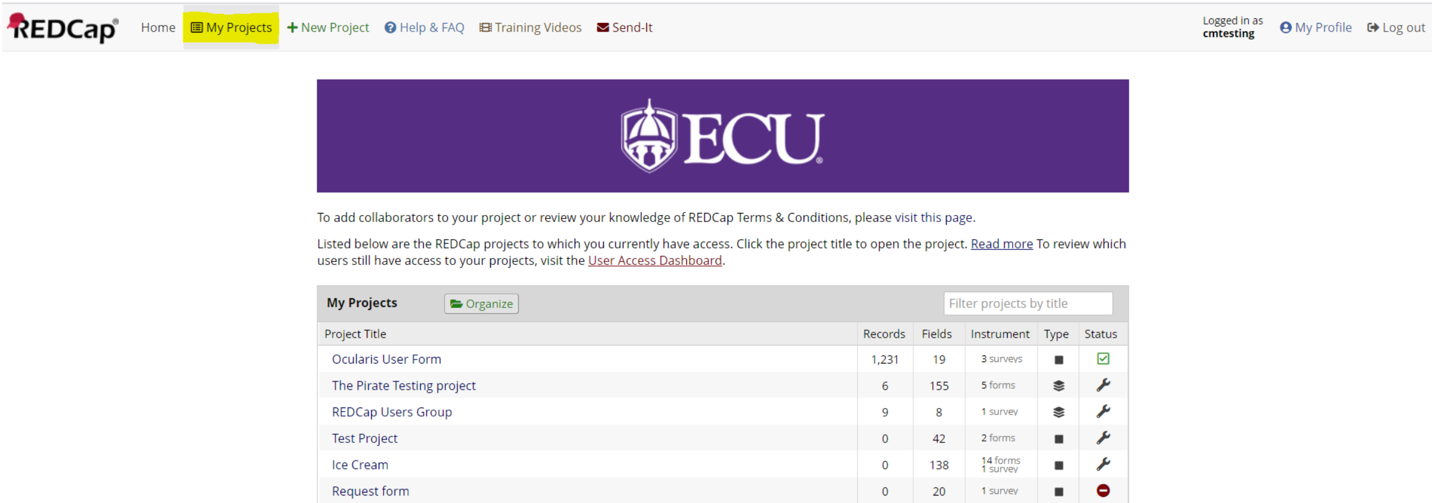
- Date and time format: MM/DD/YYYY and 12-hour AM/PM Time

- Number format-decimal character: . period/full stop
- Number format-thousands separator: , (comma)

Next to the "My Profile" button, you will see the "Log out" button. It is recommended that you always log out using the "Log out" button when you are ready to exit REDCap.

My Projects Page

The "My Projects" page (Tab) gives a listing of all the REDCap projects to which you currently have access. Click the project title to open the project.



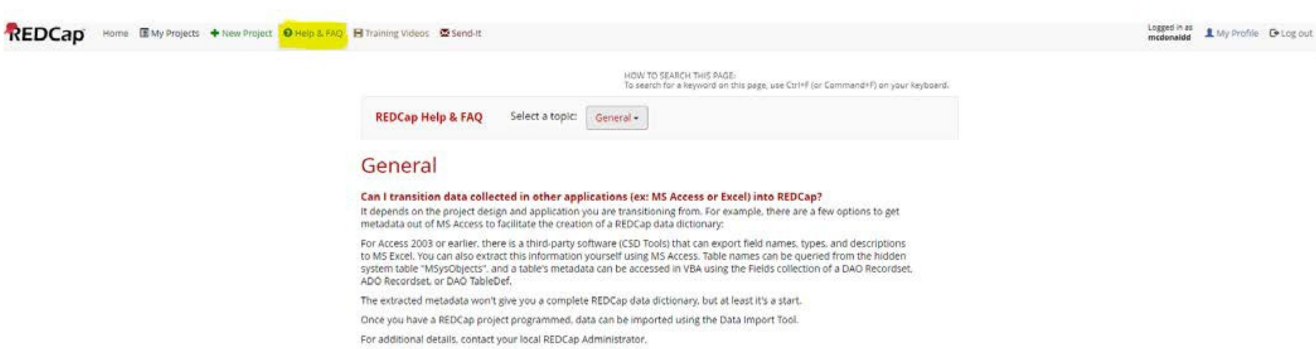
Newly created projects begin in Development status as you begin to build and design them. When you are ready to begin entering real data in the project, you may move it to Production status to designate the project as officially collecting data. When you are finished collecting data or if you wish to stop collection, the project may be set to Inactive status, although it may be brought back to Production status at any time when you are ready to begin collecting data again. Also listed is the project type, which designates if the project is in classic or longitudinal data collection format.

+ New Project Page

The "+ New Project" tab will be discussed in detail after the overview of all the tabs and the navigation overview. This tab contains the steps a user must follow to create a new project.

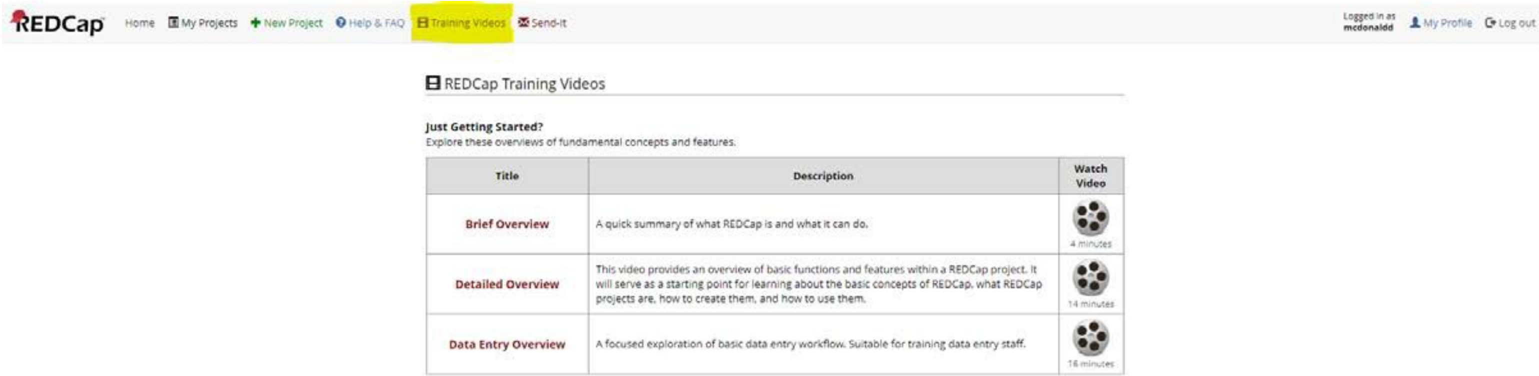
Help & FAQ Page

The "Help & FAQ" page (Tab) contains several questions and answers relevant to the features and use of the system. This is a good place to check if you need help with a topic. The questions and answers are grouped into categories: General, Project Setup/Design, Data Collection Instrument Design, Data Entry/Collection, Applications, and Making Production Changes. You can also search the page by using Ctrl+F on your keyboard.



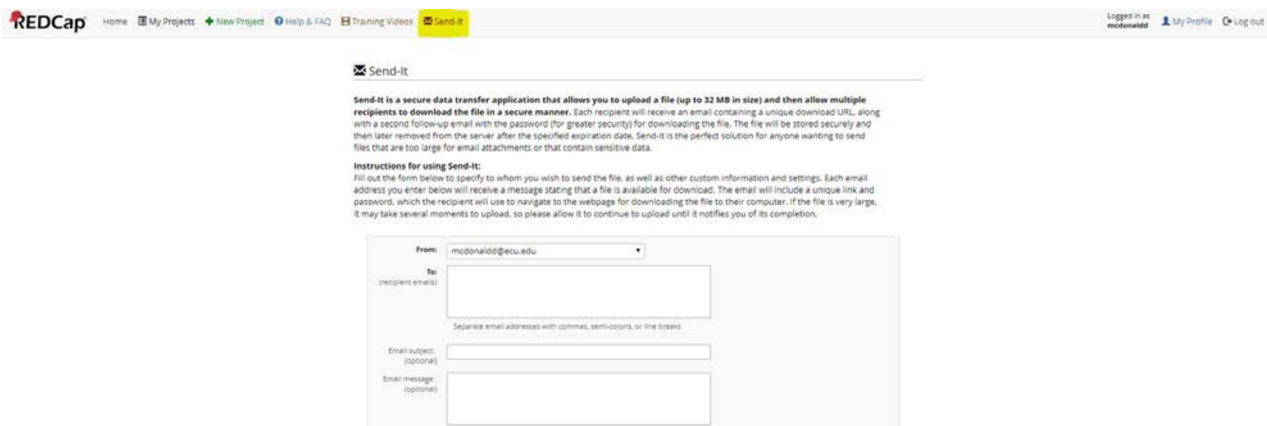
Training Videos Page

The" Training Videos" page (Tab) gives you access to several training videos and example projects provided by Vanderbilt. They can be accessed at any time while you are using REDCap. The training videos are grouped into sections: Getting Started, Building a Project, Basic Features & Modules, Types of Projects, and Special Features within REDCap Projects.



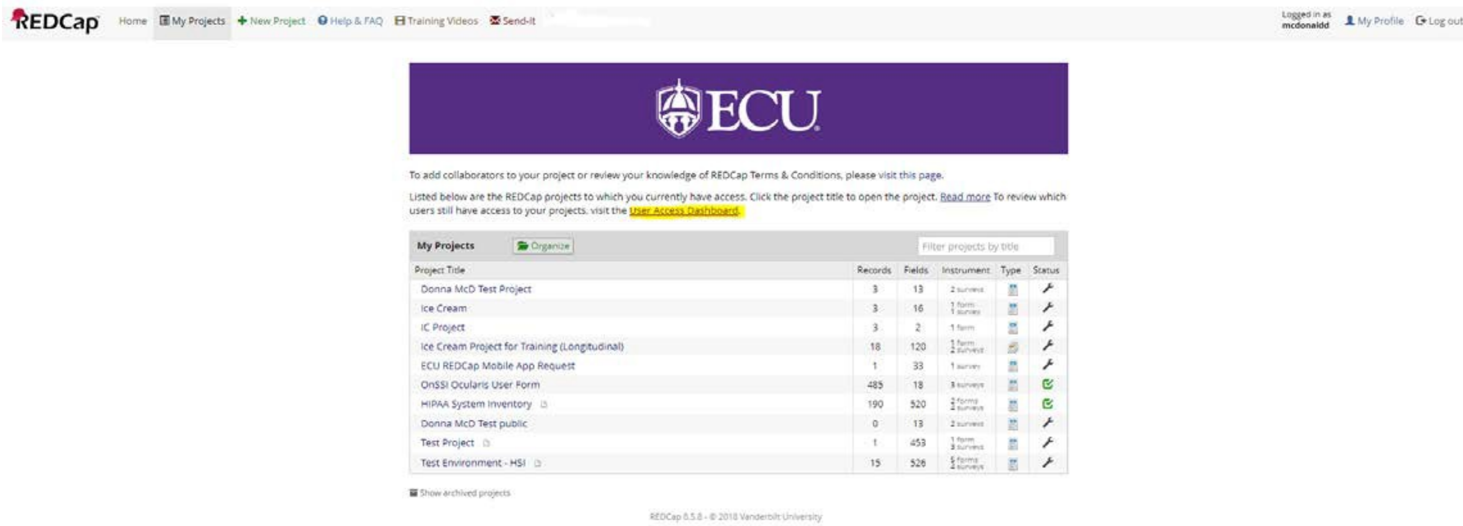
Send-It Page

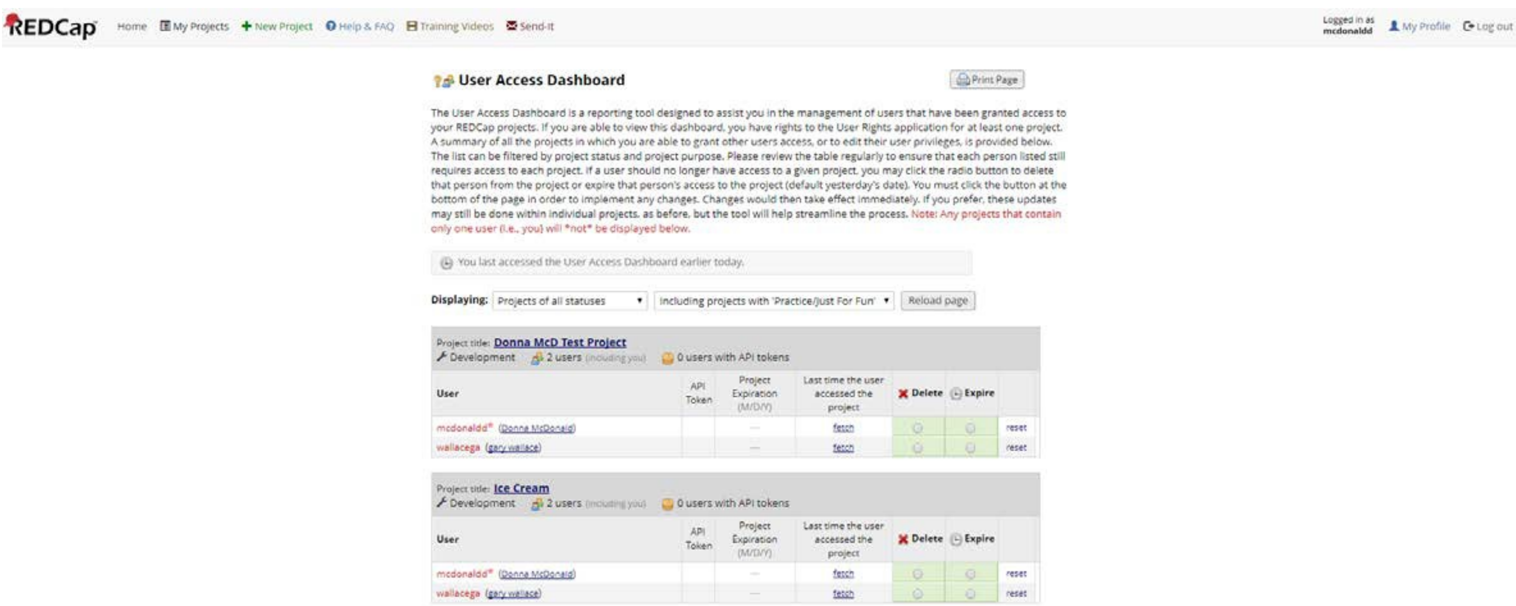
The "Send-It" page (Tab) is where you access the secure data transfer application. "Send-It" allows you to upload a file (up to 32MB in size) and then allow multiple recipients to download the file is a secure manner. Using "Send-It' enable you to send files that are too large for email attachments or that contain sensitive data.



User Access Dashboard

The "User Access Dashboard" is a reporting tool designed to assist you in the management of users that have been granted access to your REDCap projects. If you are able to view this dashboard, you have rights to the User Rights application for at least one project. A summary of all the projects in which you are able to grant other users access, or to edit their user privileges, is provided below. The list can be filtered by project status and project purpose. Please review the table every 30 days to ensure that each person listed still requires access to each project. If a user should no longer have access to a given project, you may click the radio button to delete that person from the project or expire that person's access to the project (default yesterday's date). You must click the button at the bottom of the page in order to implement any changes. Changes would then take effect immediately. If you prefer, these updates may still be done within individual projects, as before, but the tool will help streamline the process. It is recommended that you access the User Access Dashboard at least once a month to review which users still have access to your projects. To access the dashboard, click on the "User Access Dashboard" link.





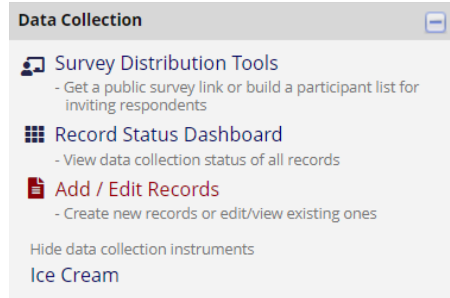
REDCap Menu Overview

Navigation Menu

This menu provides navigation options around the REDCap application:

- REDCap -- Return to My Projects list
- Logout -- Logout of REDCap
- My Projects -- Return to My Projects list
- Project Home -- This page
- Project Setup -- See Project Setup

Data Collection Menu



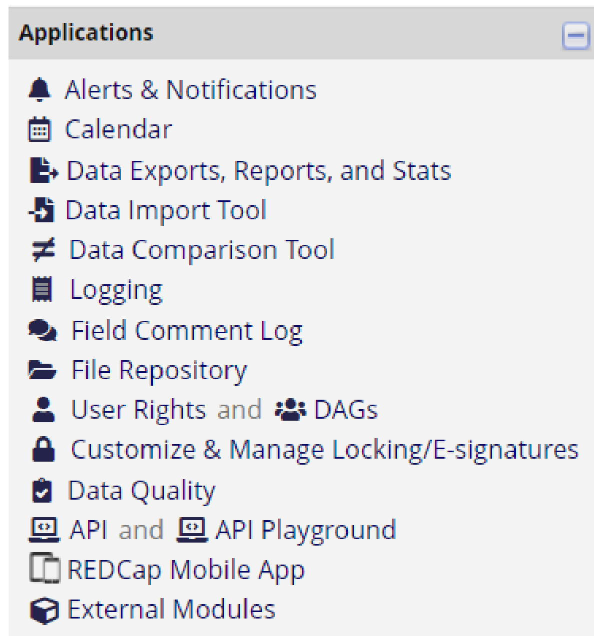
This menu provides links for survey and record operations:

- Survey Distribution Tools -- This menu only shows when you have a survey enabled. This has the Public Survey Link, Participant List (Intermediate Topic), and Survey Invitation Log (Intermediate Topic)
- Record Status Dashboard -- This menu displays the status of all records (Complete, Unverified, Incomplete, Completed Survey Response, or Partial Survey Response)
- Add/Edit Records -- This menu allows you to create new records or edit/view existing records

It also lists the current data instruments for the project.

Applications Menu

The “Applications” are REDCap modules that provide functionality for managing your project and the data it contains. These Include:

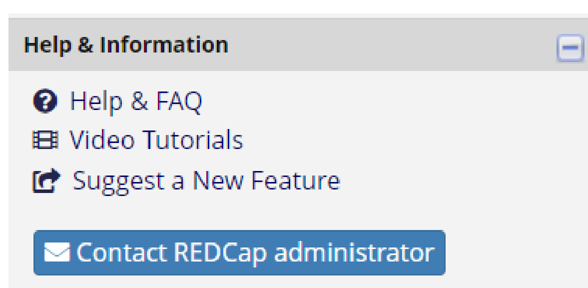


- Calendar (Intermediate Topic)
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging
- Field Comment Log (Intermediate Topic)
- File Repository (Intermediate Topic)
- User Rights and DAGs (Intermediate Topic)
- Record Locking Customization (Advanced Topic)
- E-signature and Locking Mgmt (Advanced Topic)
- Data Quality (Advanced Topic)
- API and API Playground (Advanced Topic)
- REDCap Mobile App (Advanced Topic)
- External Modules (Advanced Topic)

For more detailed information see the “Applications” section.

Help & Information Menu

To menu provides links to REDCap help and training resources:

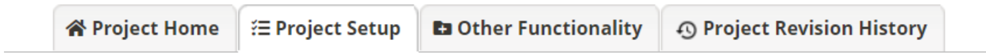


- Help & FAQ
- Video Tutorials
- Suggest a new feature -- This link will take you to the Vanderbilt website to fill out a form
- Contact REDCap administrator -- This link will email your REDCap question to the administrator (redcap@ecu.edu)

Project Menus (Tabs)

These menus provide access to the main project configuration screens in REDCap. Tabs include:

- Project Home
- Project Setup
- Other Functionality
- Project Revision History



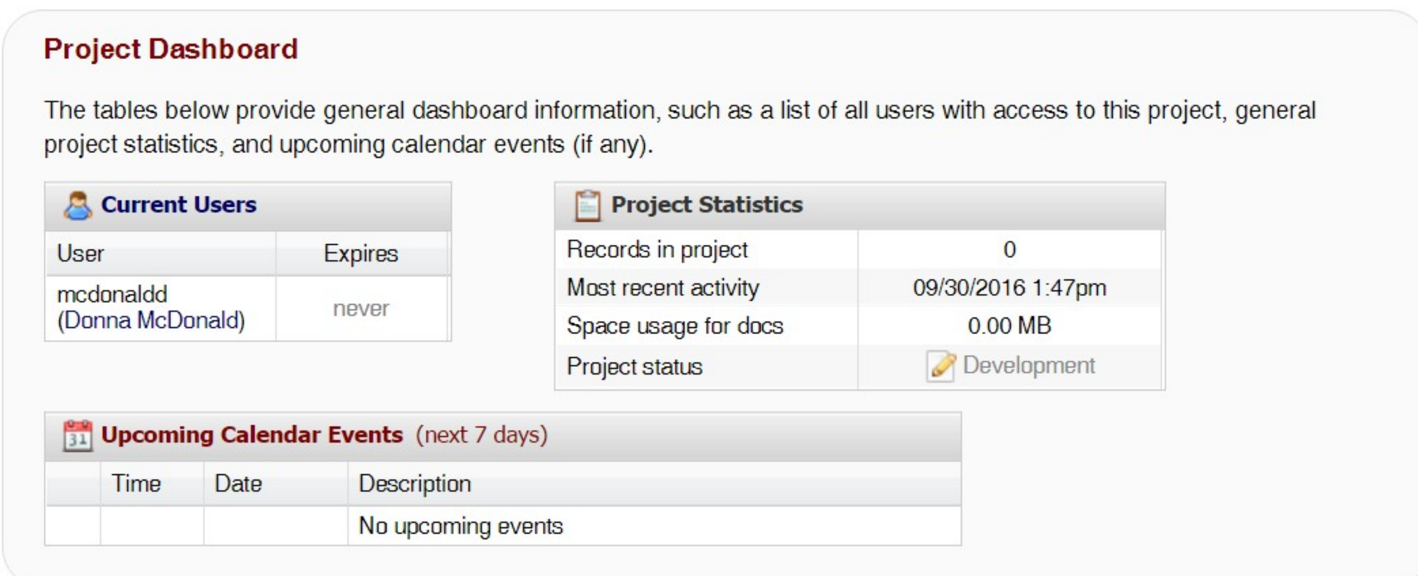
Project Home and Design

These are shortcuts to Project "Home" and "Setup". Applications including "Dictionary" and "Codebook". The Codebook is a human-readable, read-only version of the project's Data Dictionary and serves as a quick reference for viewing field attributes.

The Data Dictionary is a specifically formatted CSV (comma delimited) file within which you may construct your project fields and afterward upload the file to commit the changes to your project. The "Project Status" is also provided.

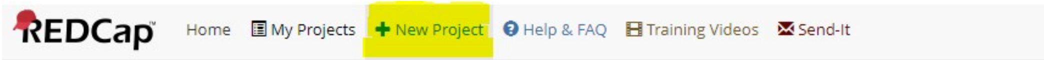
Project Dashboard

This dashboard provides general information about the project.



Create a New Project

To start a new project, click on the “+ New Project” page (Tab).



Project Title Enter a 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 for creating a practice project to become familiar with the features and learn about REDCap
- 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 Improvement – use this for any projects that help with goals and performance improvement
- Other – if you choose this option, please specify the purpose of your project

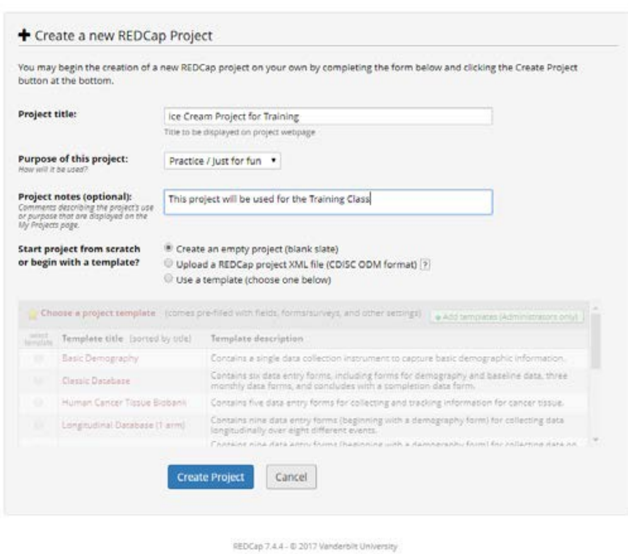
Please Note: No projects with Practice/Just for Fun listed as the purpose will be approved for Production.

Project notes (optional)

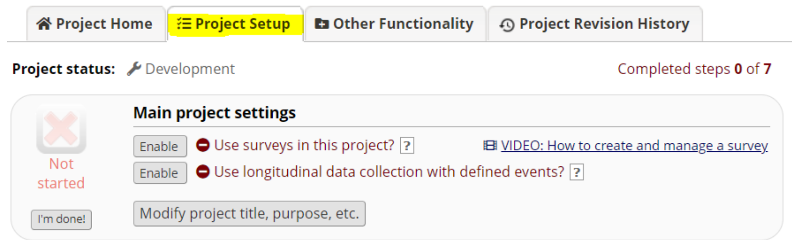
Enter any notes or comments regarding the use or purpose of the project.

Start project from scratch or begin with a template

You will generally want to select “Create an empty project (blank state)”. This will allow you to customize your project to your exact specifications. If you would like to select a template for your project there are several available. Until you become familiar with REDCap choose “Create an empty project (blank slate)” and click “Create Project”.



Project Setup



Follow the “Project Setup” tab checklist to build your project.

Main project settings

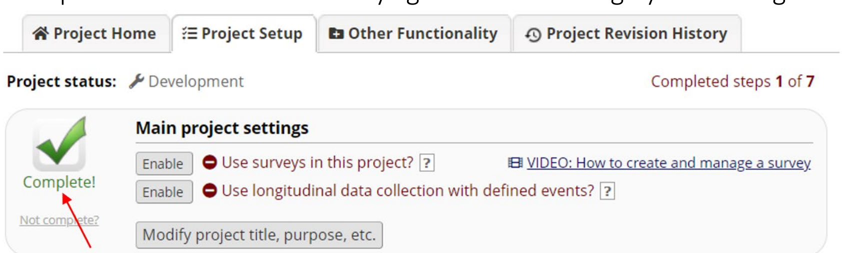
Select your data collection type:

Use longitudinal data collection with repeating forms: Click “Enable” if your project will contain instruments that will be used to collect data numerous times. For an example, you are going to collect lab results over ten visits for the same participant. This is considered an intermediate feature of REDCap and will be discussed in more detail in the Intermediate Training Class. By default, new projects will use the 'classic' data collection format, which is the best option if all data collection instruments will only need to be used once for each subject/record in the project.

Use surveys in this project: Click “Enable” if your project will contain surveys.

Modify project title, purpose, etc.: Click this icon if you would like to change your project title or purpose.

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.



Design your data collection instruments

REDCap utilizes two types of data collection instruments—Surveys and Forms:

- Surveys: You can have multiple surveys within a project. A survey can be e-mailed to individual participants where they are given unique “Private Survey URL’s” or a survey can be made public. The public survey creates a “Public Survey URL” that can be posted on a website or e-mailed to participant. Private surveys can only be filled out one time and the REDCap project owner can determine which participants have responded to the survey. Public surveys can be filled out multiple times and has no built-in functioning to determine which participants have responded.
- Forms: The forms intended use is in a clinical setting where a researcher enters the data into REDCap. Multiple forms can be used in a project.

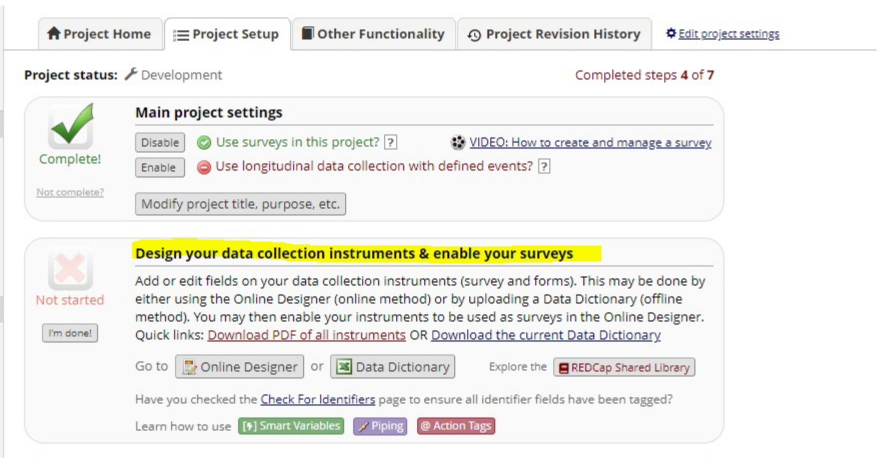
REDCap allows projects to use both surveys and forms for data collection.

Project development begins with designing data collection instruments. Instruments are the webpages used to enter your data into REDCap. There are two methods to design instruments: the Online Designer and the Data Dictionary.

Online Designer: The Online Designer will allow you to make project modifications to fields and data collection instruments very easily using only your web browser.

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 feature and should not be used unless you are an experienced user. This topic is covered in the Advanced Training Class.

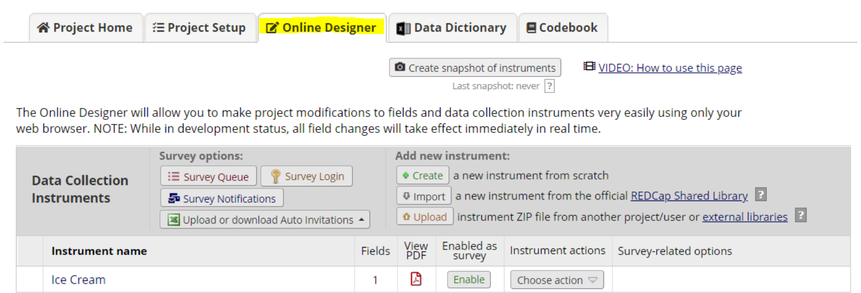
REDCap Shared Library: The REDCap Shared Library is a global repository of data collection instruments that can be downloaded and used in your project. Note: This is considered an intermediate feature and should not be used unless you are an experienced user. This topic is covered in the Intermediate Training Class.



Online Designer

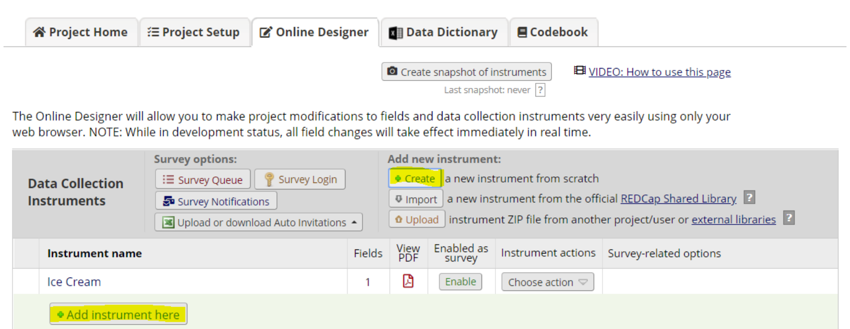
This is the fast, easy way to build instruments entirely online. You can also customize existing instruments and create new ones. The Online Designer makes it easy to customize existing questions and add new questions. REDCap will begin your project with a data collection instrument titled “My First Instrument”. To change the title, go to the Instrument Actions section, click on “Choose action” and select “Rename”. Enter the new title and click “Save”.

Note: While in development status, all field changes will take effect immediately in real time.



To add additional data collection instruments, click on the “Create” button. Click on “Add instrument here” button, enter a name for the new instrument, and click on “Create”.

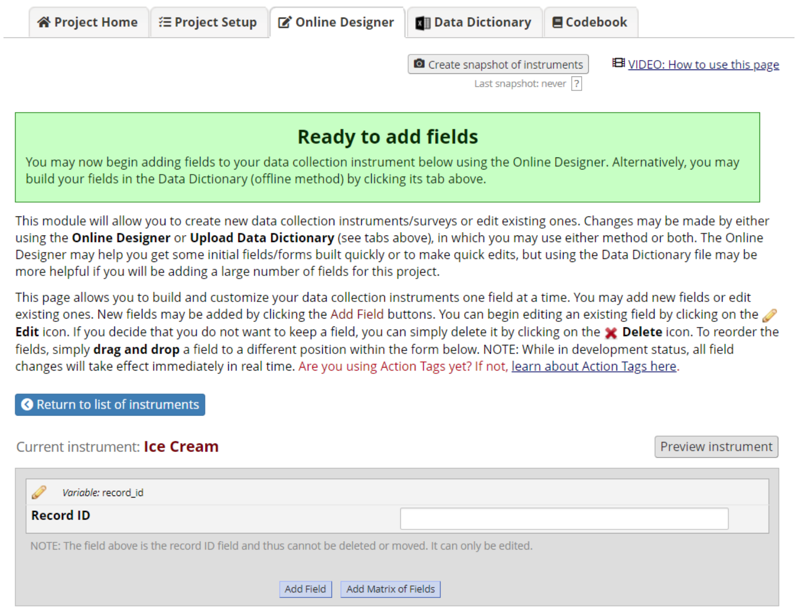
To begin building your data collection instrument, click on the instrument name.



Record Identifier

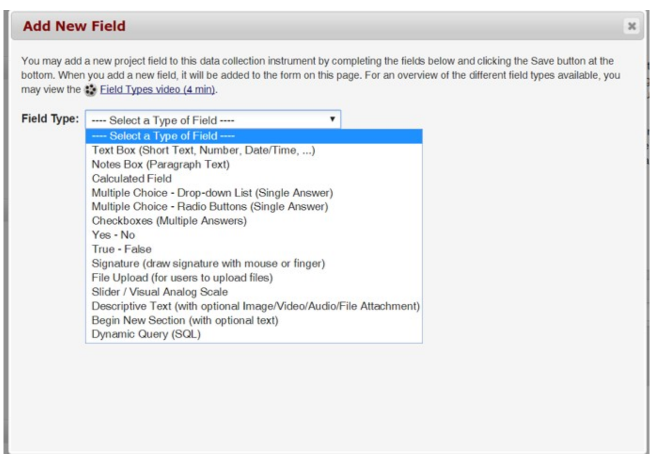
The very first field in the first data collection instrument must be used as the record identifier and must be unique. The record identifiers can be automatically sequentially- generated or user-entered. The record identifier field cannot be deleted however you may rename this field by clicking on the pencil icon.

A good example of a unique record identifier would be the patient's MRN. 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.).



Add Fields to Your Data Collection Instruments

Click "Add Field" and select one of the several field types available:

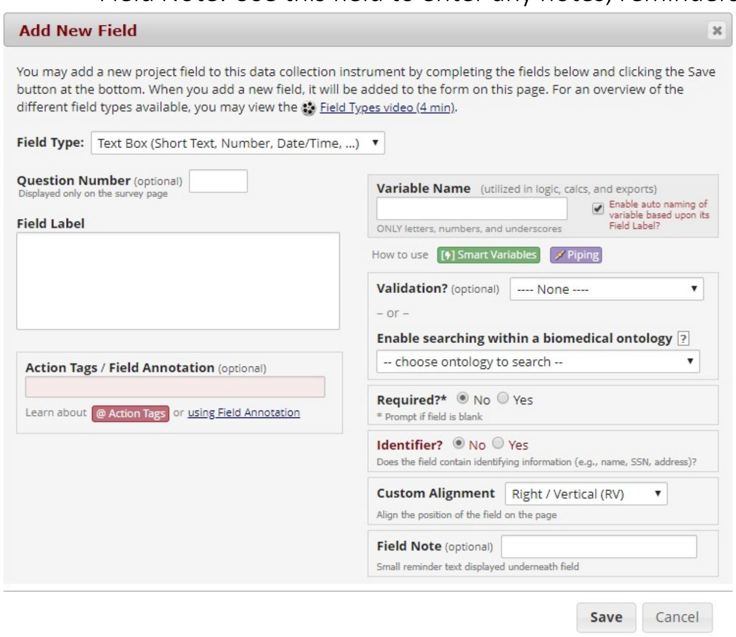


Once you have selected your field type, you can then enter the following fields:

- Question Number: This is used for surveys to display the survey question for screen display.
- Field Label: This is how you would format your question or data field.
- Action Tags / Field Annotation: Action Tags are an excellent way to customize the data entry experience for surveys and forms. They are specials 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. Field Annotations can be used to add explanatory notes or commentary about a question/data field, if needed. 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.

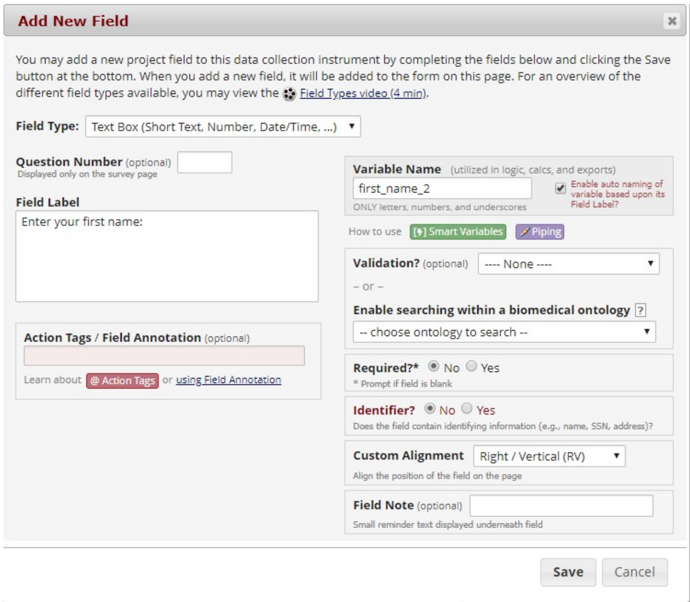
- Smart Variables: Field Notation, variable names always point to data fields in the project. However, another type of entity exists called "Smart Variables" that allow you to reference information other than data fields. Smart Variables are context-aware and thus adapt to many different situations in which they can know who the current user is, what event is currently being viewed, whether 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.
- Piping: This feature allows you to inject previously collected data into text on a data collection form or survey, thus providing greater precision and control over question wording. It can also be used in other ways, such as for customizing survey invitations (e.g., by including the respondent's name in the email) or survey completion text (e.g., thanking your respondent by name after completing a survey).
- Validation: The Field Type of Text Box (Short Text) will give you the opportunity to select a validation. If you would like to indicate how this field should be entered, use this drop down and select an option.
- Range Checks (Minimum and Maximum): Validation types of Date and Time, Integer and Number give you the ability to enter range checks.
- 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.
- 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 your field.

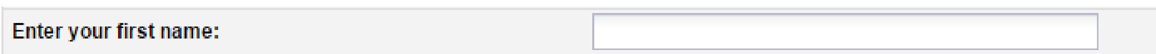


Examples of Field Types

Text Box (Short Text, Number, Date/Time, ...)

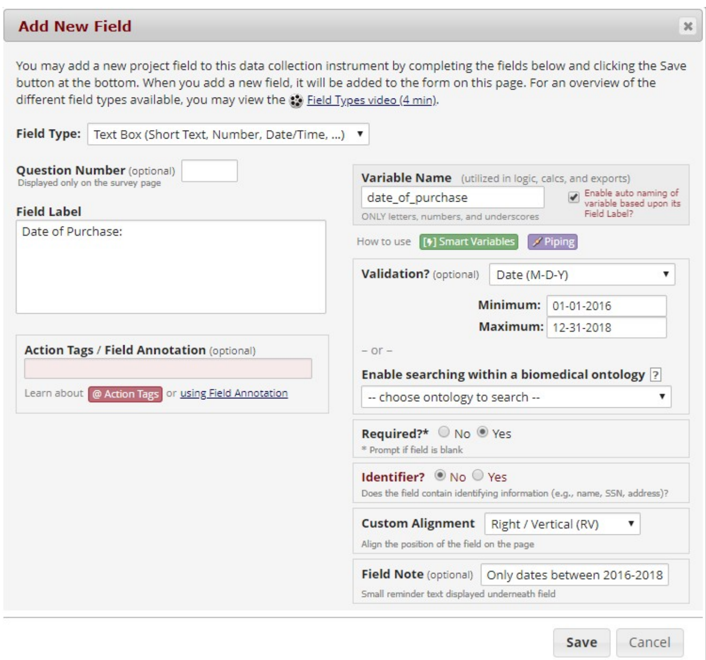
This field can be used for text, dates, numbers, email addresses, phone numbers etc. Use the Validation drop down to restrict how data should be entered.



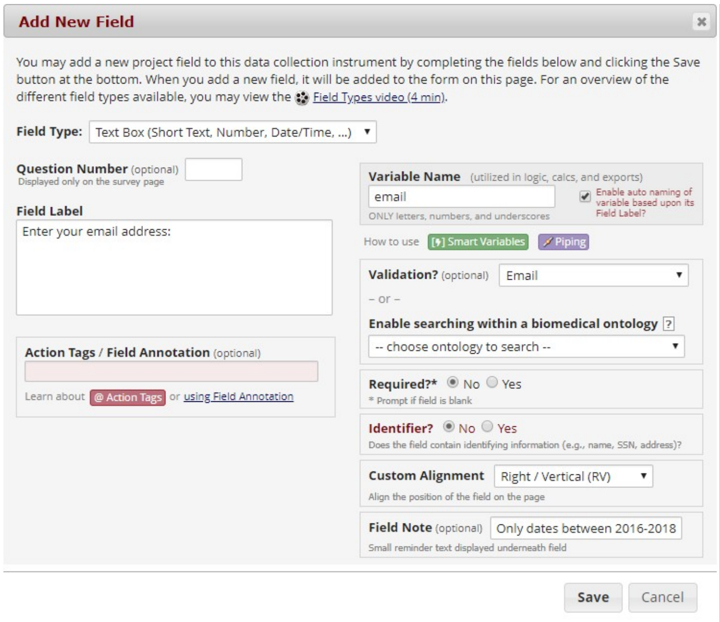


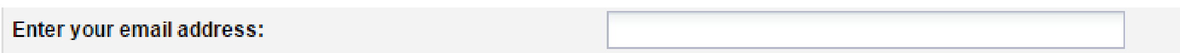
Text Box (Short Text, Number, Date/Time, …) with a validation of Date (M-D-Y)

I have set this field up with range checks (minimum and maximum fields). I have also made this field required and added a field note.

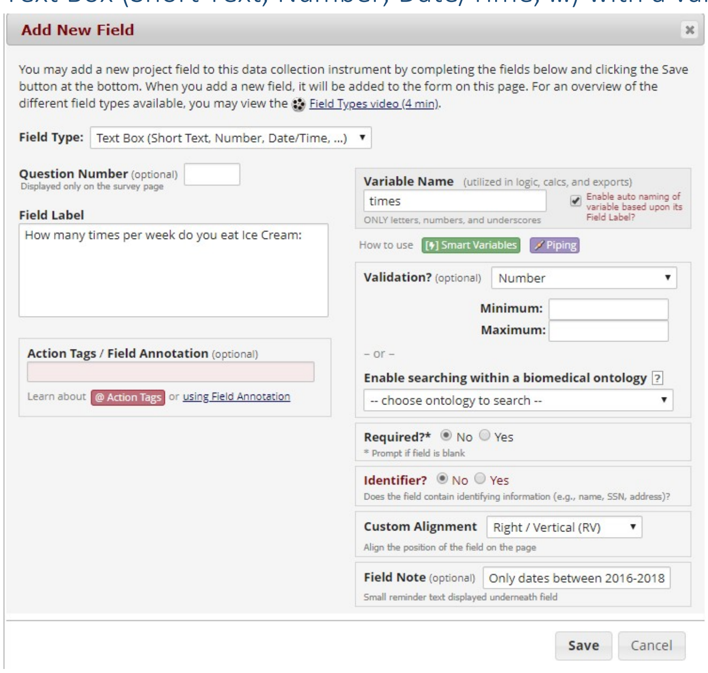


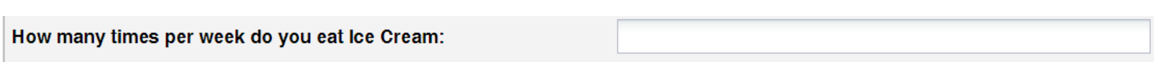
Text Box (Short Text, Number, Date/Time, …) with a validation of Email





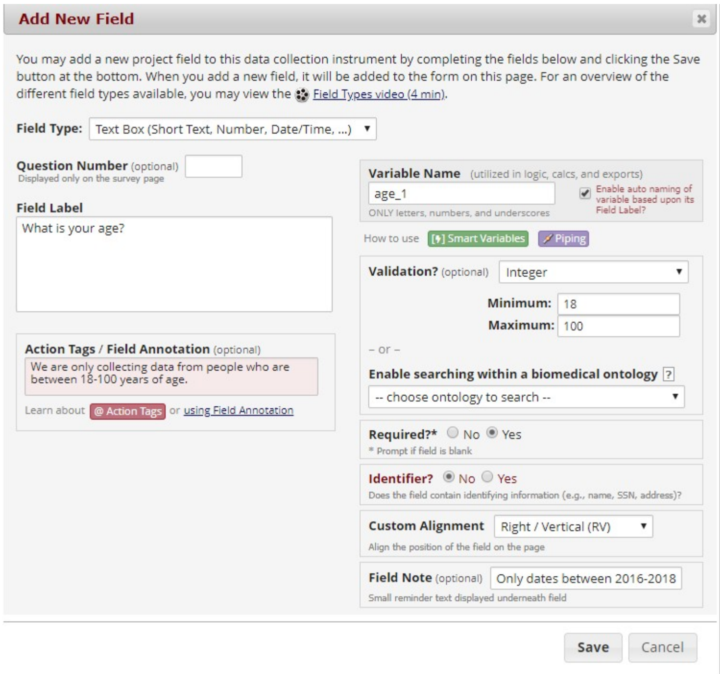
Text Box (Short Text, Number, Date/Time, …) with a validation of Number (allows decimals)



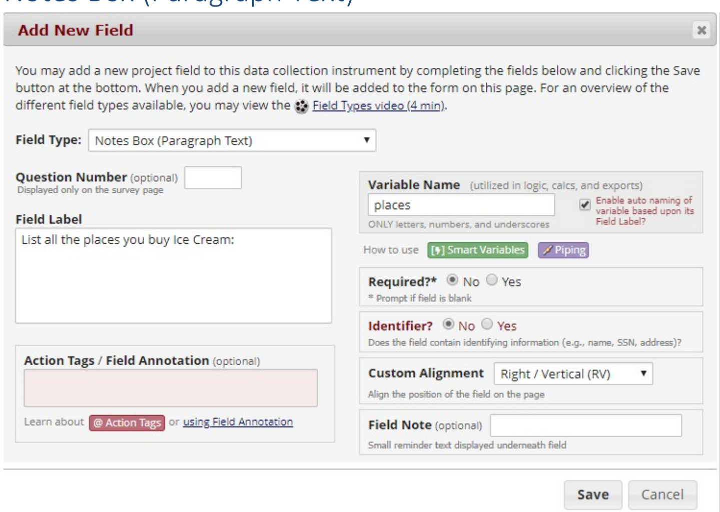


Text Box (Short Text, Number, Date/Time, …) with a validation of Integer (a whole number)

I have set this field up with range checks (minimum and maximum fields). I have also made this field required and added a field annotation.

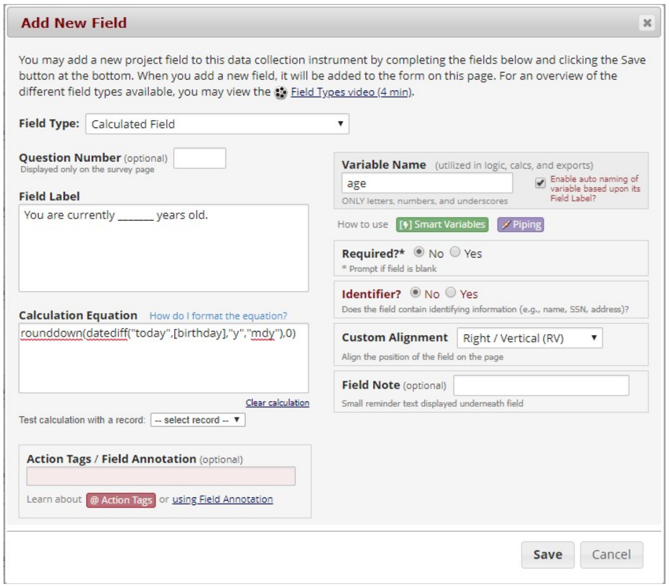


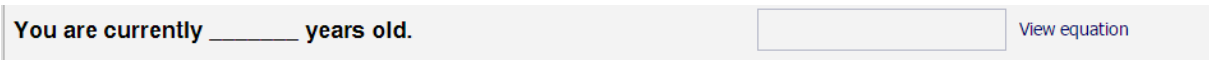
Notes Box (Paragraph Text)



Calculated Field

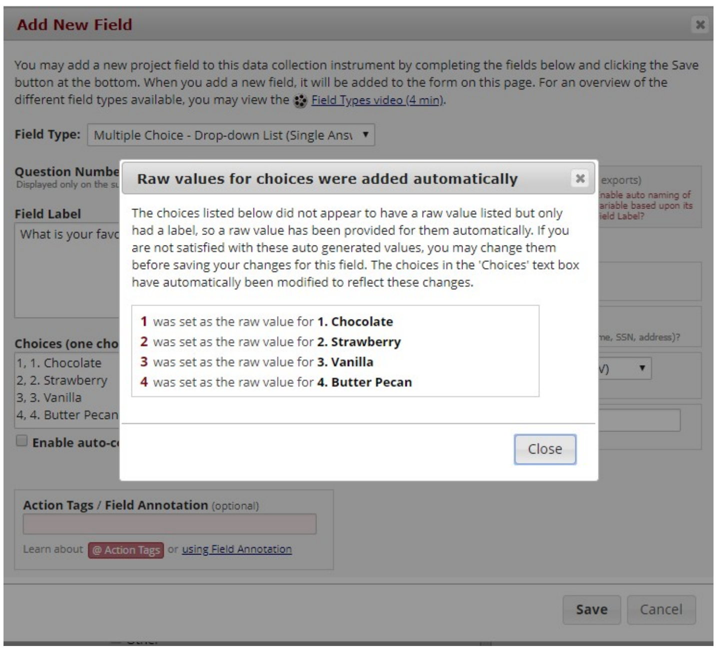
This field can perform real-time calculations based on the data from other fields. For an example, you could create a calculation based off of the birth date field and visit date field in order to find out how old the participant was at the time of visit.



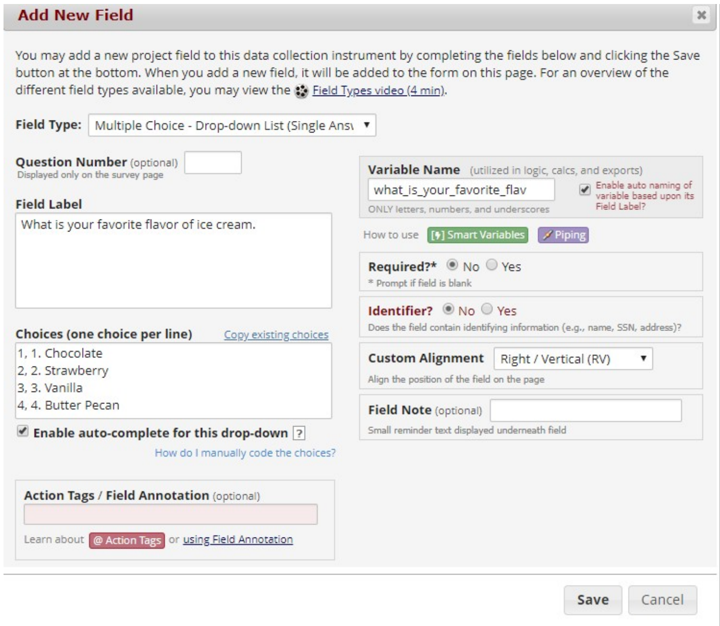


Multiple Choice – Drop Down List (Single Answer)

This field will display your answer choices as a drop down list. When a field contains multiple answer choices, you must give each answer choice a variable name. If you do not, REDCap will automatically assign them for you.

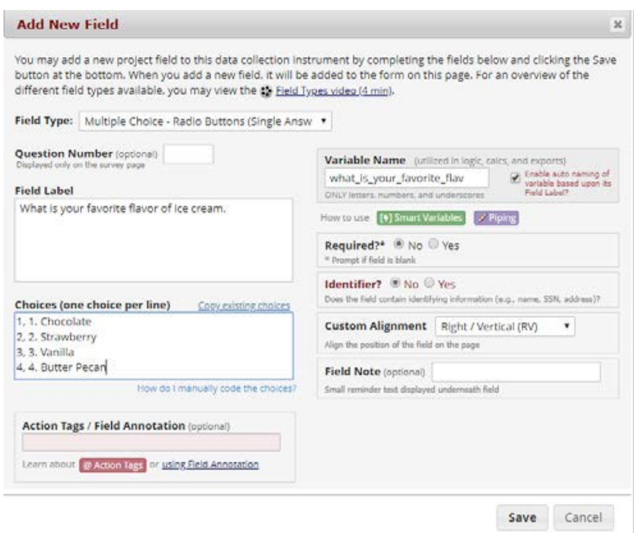


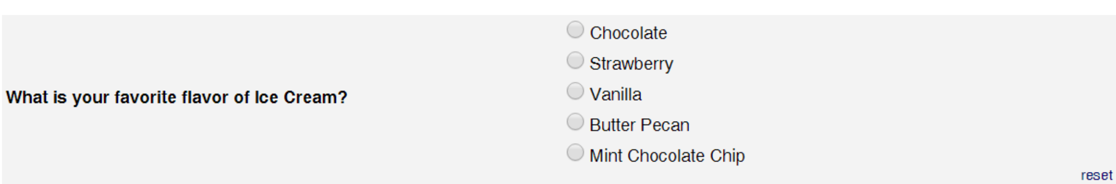
REDCap has an auto-complete feature for drop-down fields. When this is enabled, it allows the participant or data entry person to type in a couple of the characters of the answer choice and a list of matching options will appear. For an example, if I typed in Van, Vanilla would automatically appear.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



Multiple Choice – Radio Buttons (Single Answer)

This field will display your answer choices as radio buttons

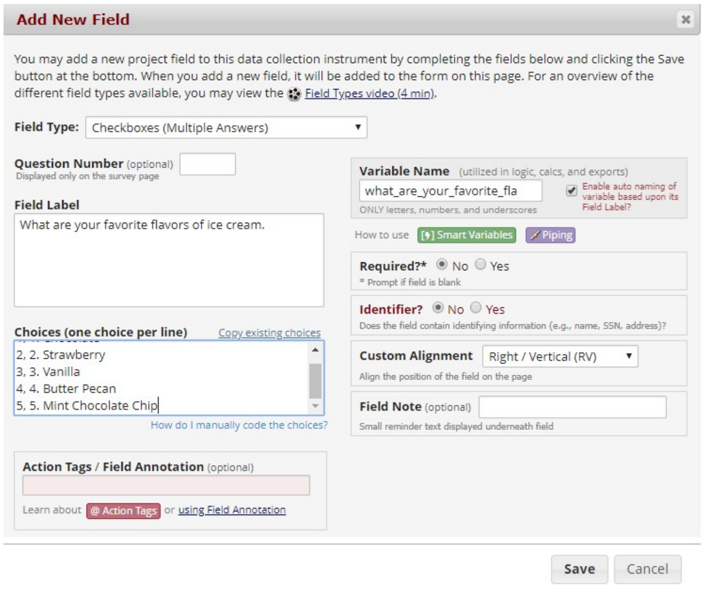


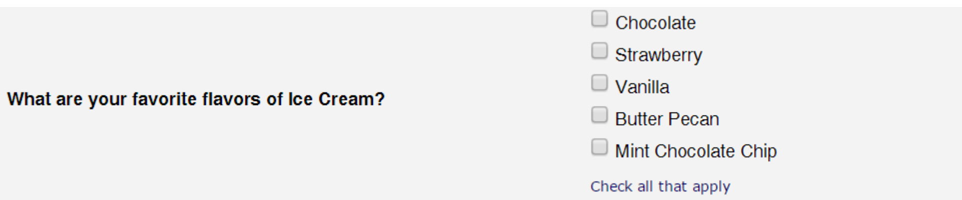


Checkboxes (Multiple Answers)

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

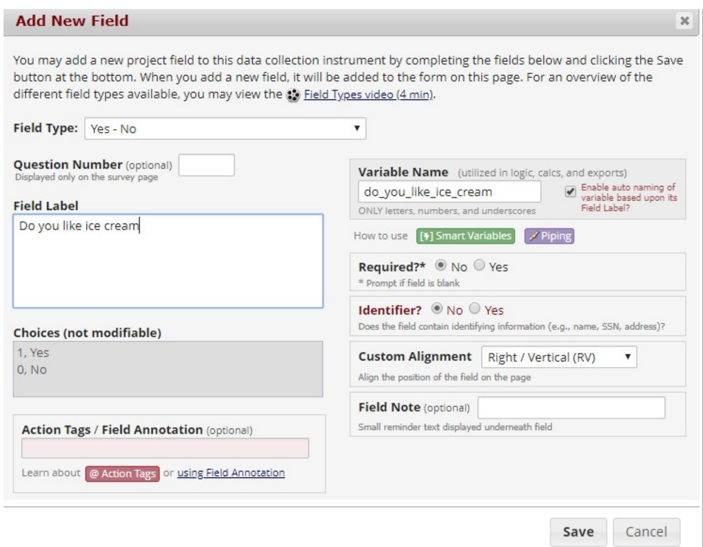
Note: I added a field note that states “Check all that apply”.

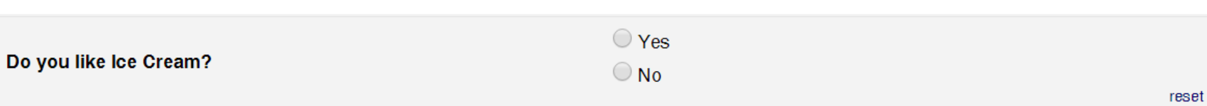




Yes – No

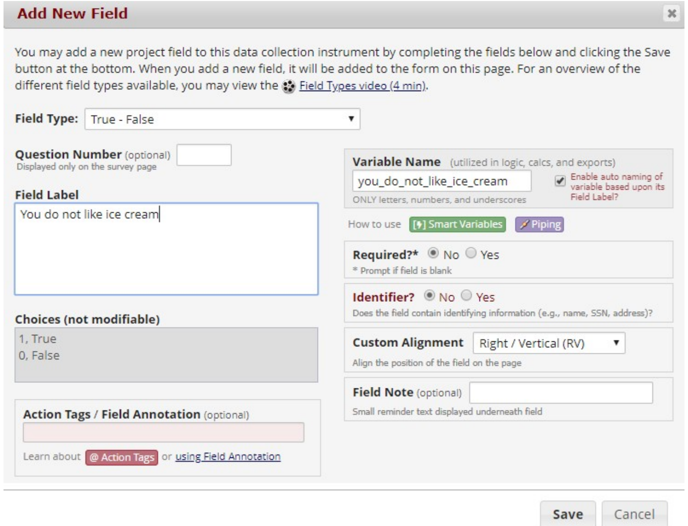
This field will display Yes and No as radio button answer choices.

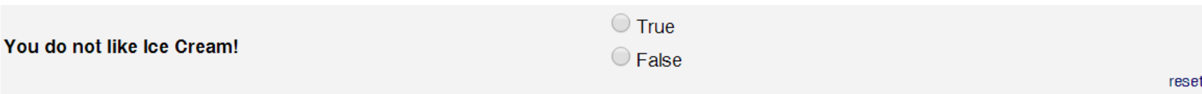




True – False

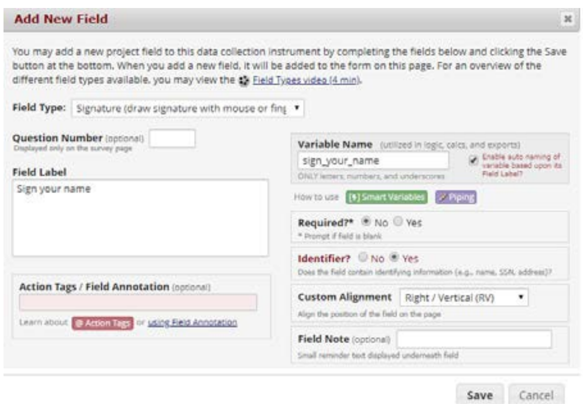
This field will display True and False as radio button answer choices.

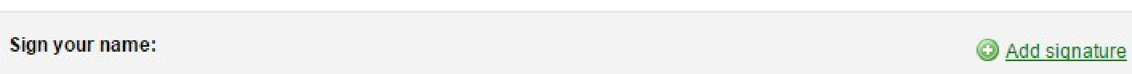




Signature (draw signature with mouse or finger)

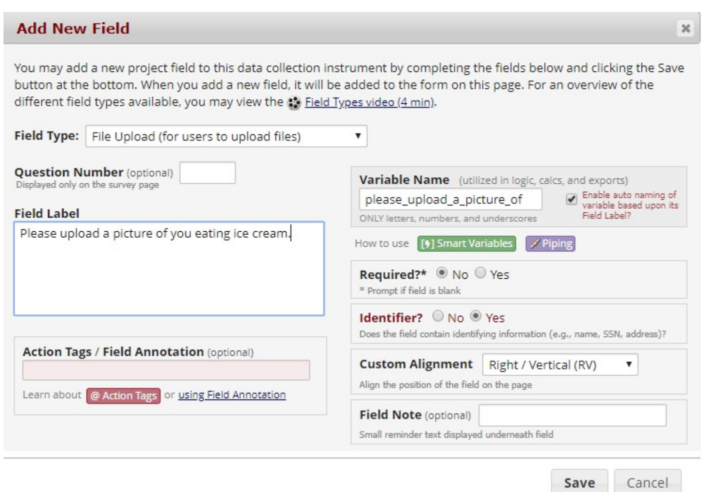
This field will allow the participant to add their signature using their mouse or the finger (if using a tablet or touch screen device)

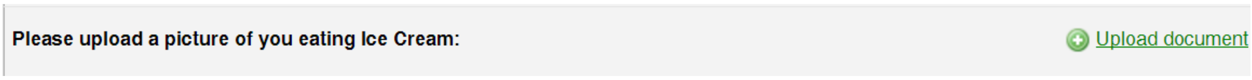




File Upload (for users to upload files)

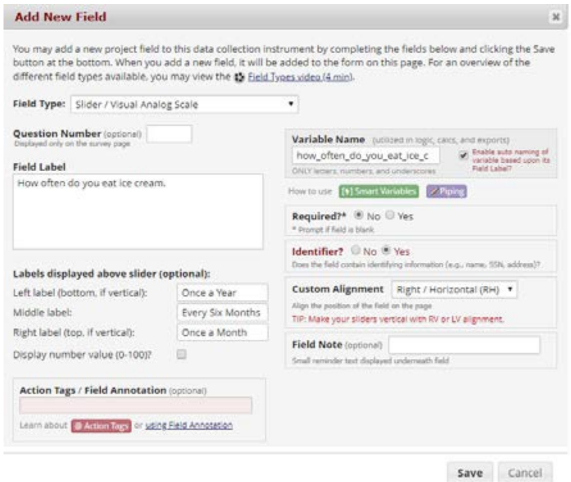
This field gives the participant the ability to upload a file or image

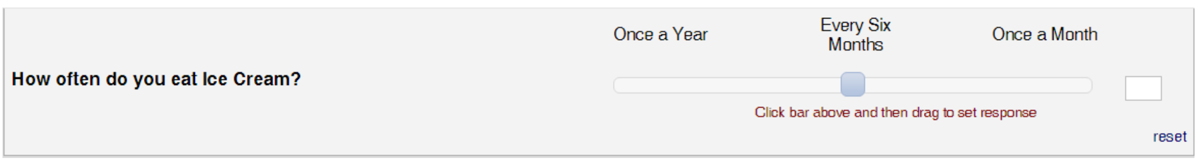




Slider Visual Analog Scale

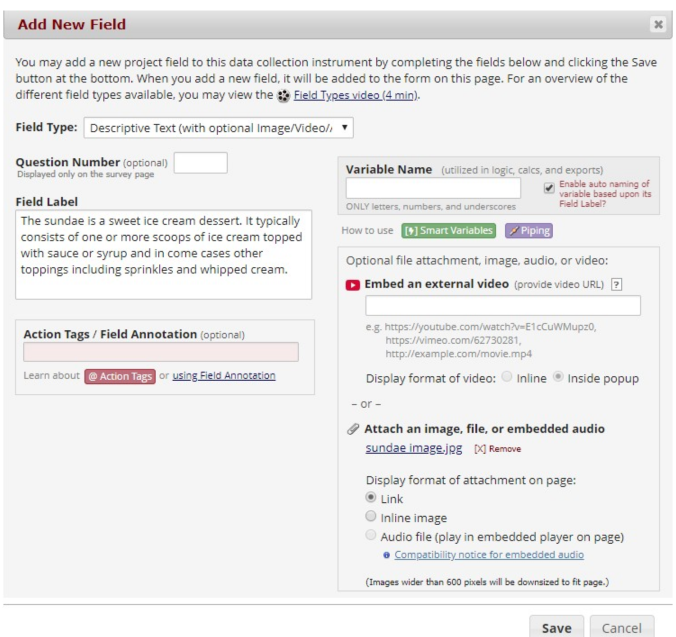
This field gives you a scale with three answer choices. If you select “Display number value (0-100)”, it will code the answer given and it will display in the box on the right of the scale.



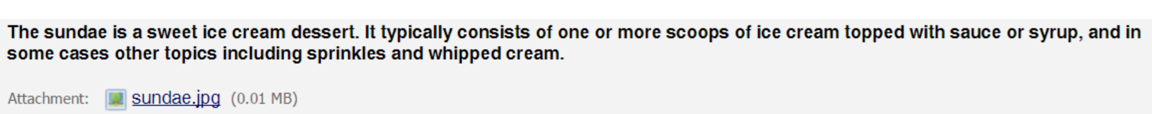


Descriptive Text (with optional Image/File Attachment)

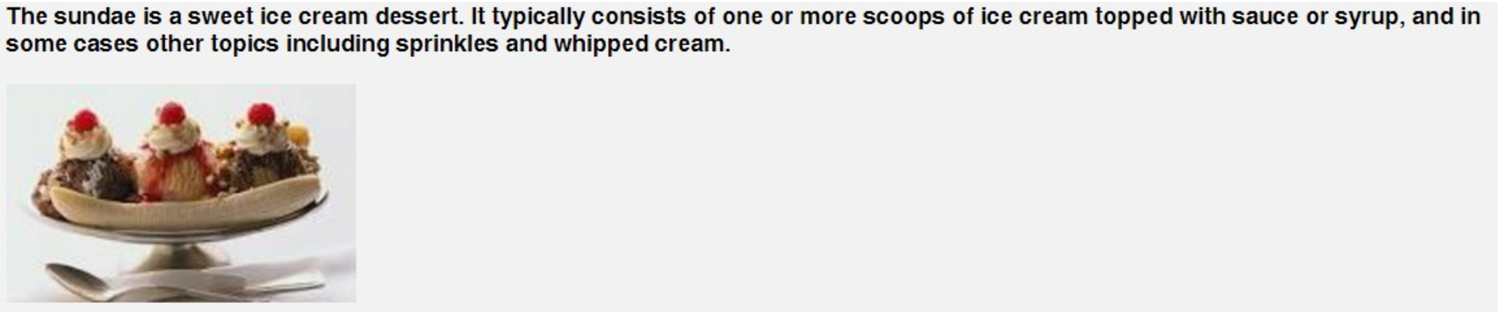
This field will allow you to add text such as instructions or additional information. It also gives you the option to add an image as a link or as an inline image.



Link:

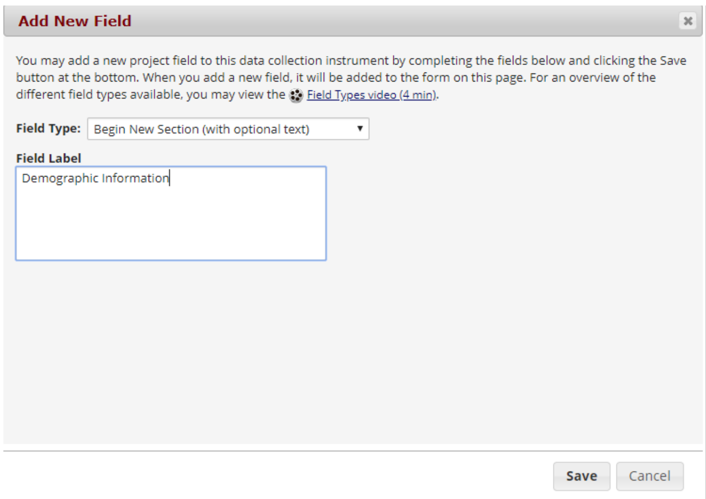


Inline Image:

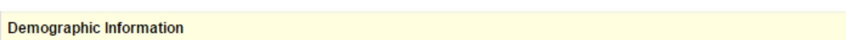


Begin New Section (with optional text)

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



With optional text:



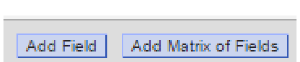
With no text:

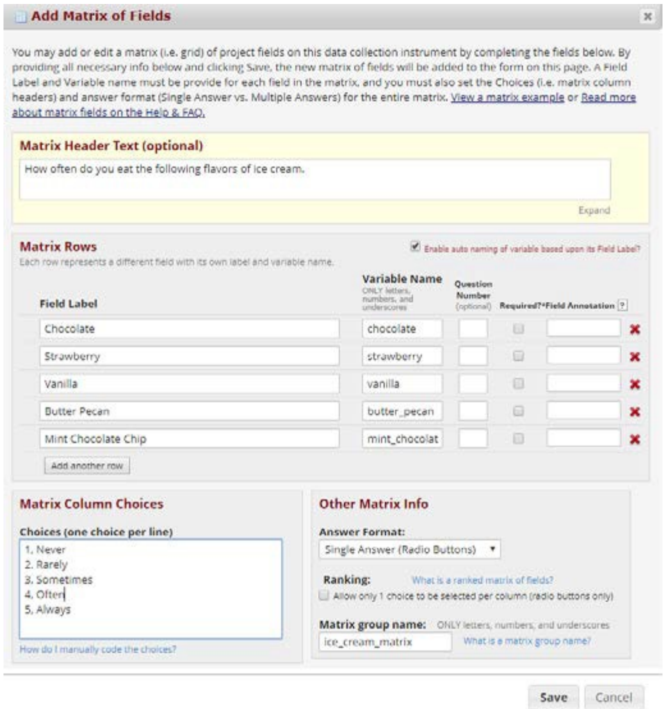
Dynamic Query (SQL)

The "SQL" field type allows one to populate a drop-down list on a REDCap project's data entry form or survey by providing an SQL query ("select" queries only) in the Online Designer for a field or in the Select Choices column of the Data Dictionary. Note: This is considered an advanced feature and should not be used unless you are an experienced user. This topic is covered in the Advanced Training Class.

Add Matrix of Fields

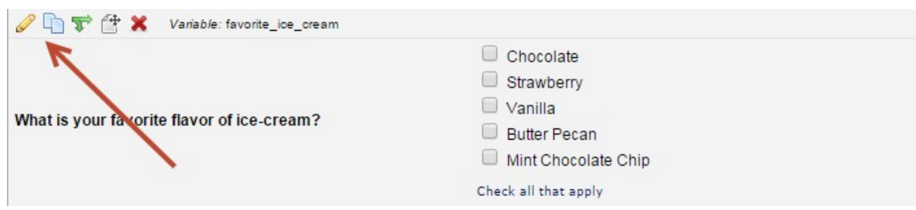
If you have a group of questions that all have the same answer choices, you can create a Matrix of Fields. Instead of clicking Add Field, you would click Add Matrix of Fields. You would add an optional header, your field labels and variable names, indicate which fields are required, add your answer choices 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.





Edit/Copy/Move/Delete a Field

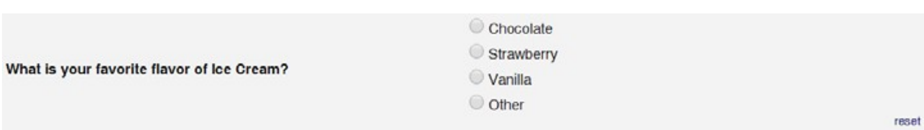
Edit: To edit a field, click on the pencil icon
Copy: To copy a field, click on the double paper icon
Move: To move a field, click on the paper with pointer icon
Delete: To delete a field, click on the red X icon

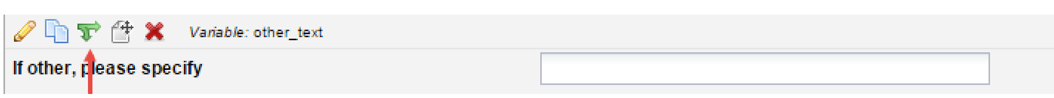


Add Branching Logic

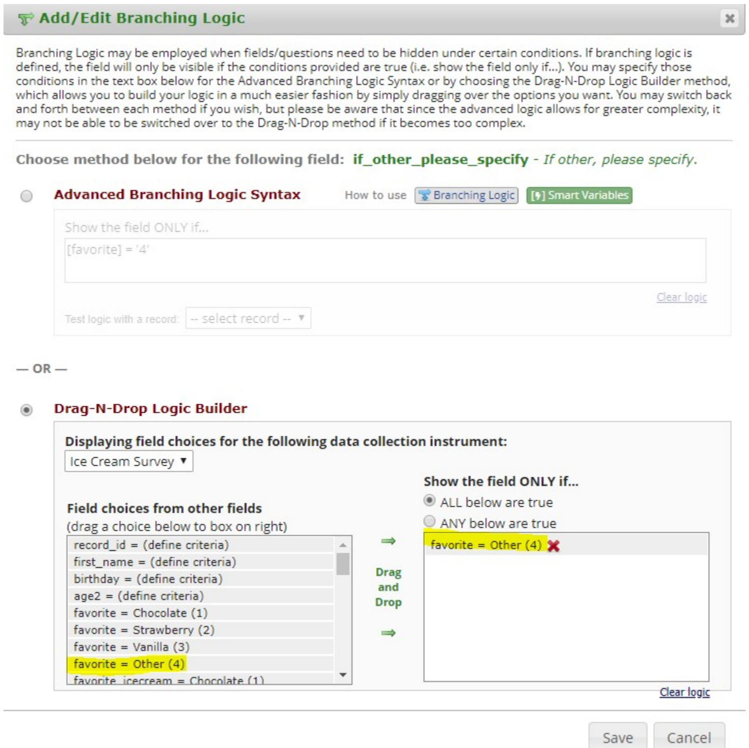
Branching logic is used when you have a field/question that you would only like to appear when a specific answer is given. To enable branching logic, click on the double green arrows on the field you want to hide.

For an example, I only want the "If Other, please specify" field to show if the answer to the question above it was Other.

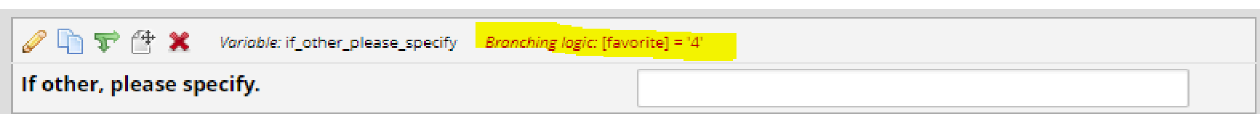




After clicking on the double green arrows, scroll through the list of field choices and drag and drop the field you want to base your branching logic on. Click "Save" once finished.



The field now alerts me that branching logic exists. If I want to view or modify the existing branching logic, I would click on the double green arrows.

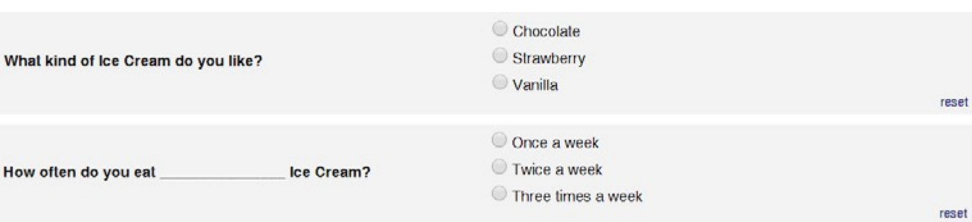


Add Piping Logic

Piping gives you the ability to insert answers and place it in various places within REDCap. More information is available in the Advanced User Guide and the Advanced Training Class.

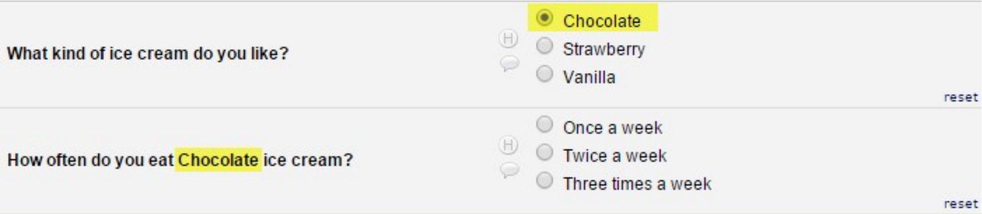
For an example, I have a field that asks the participant "What kind of ice cream do you like?". I then have another field that asks the participant "How often do you eat ice cream?". I have added piping logic in my second question so that it will insert the answer from the first question.

Before:

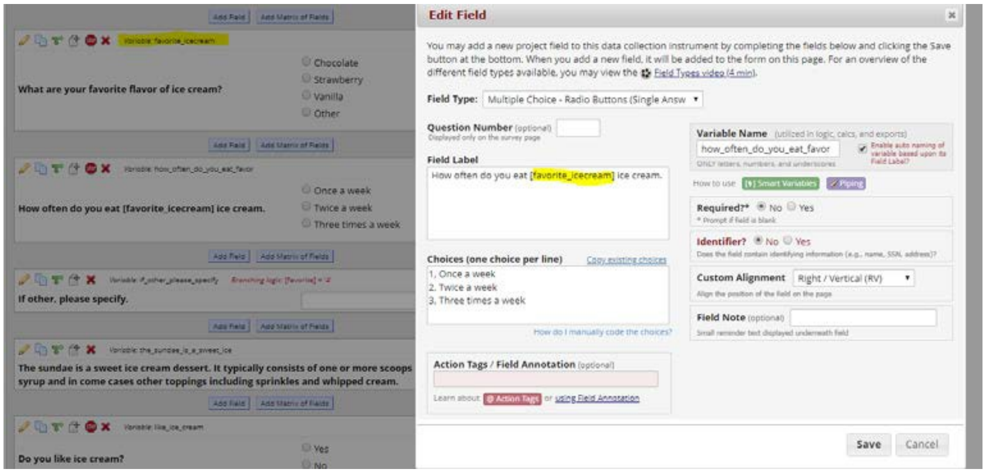


One the participant answers the first question; the answer is then inserted into my next question.

After:



To add piping, all you have to do is add the variable name of the field you want to pipe in. The variable name must be inserted into square brackets [ ].

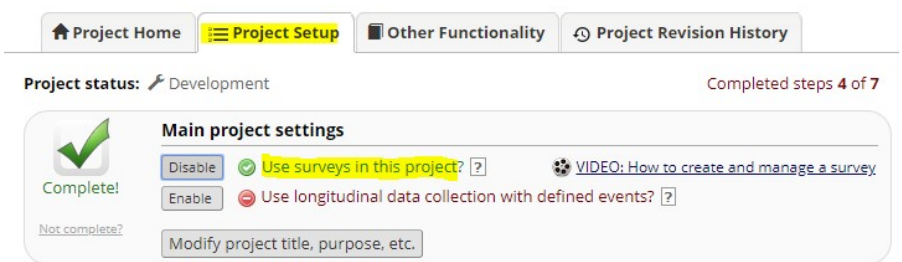


Piping can be used in many different places in REDCap such as:

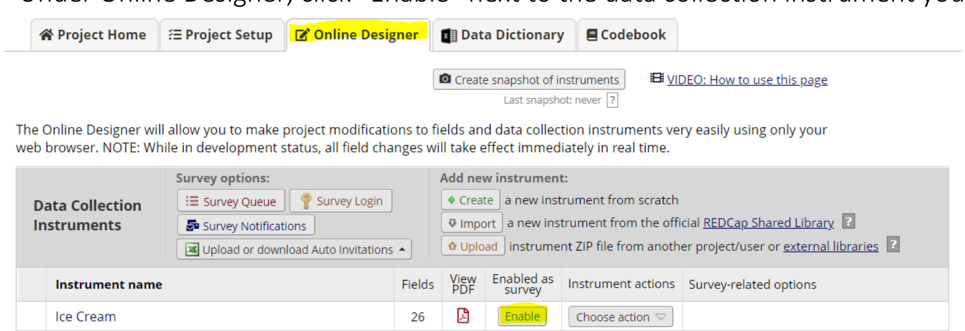
- Field Labels
- Field Notes
- Section Headers
- Survey Instructions & Survey Completion Text

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.



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



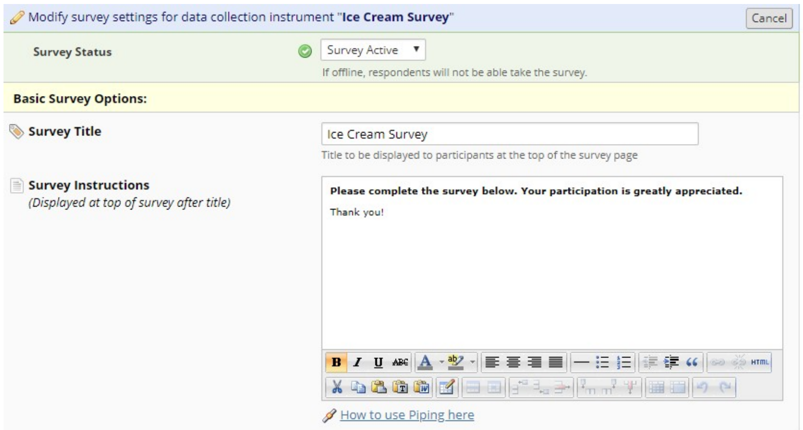
Survey Settings

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

Basic Survey Options

Survey Title: Enter a survey title. It does not have to be the same name as your form.

Survey Instructions: Enter any instructions you wish to give to the participant. The default instructions are “Please complete the survey below. Thank You!”



Survey Design Options

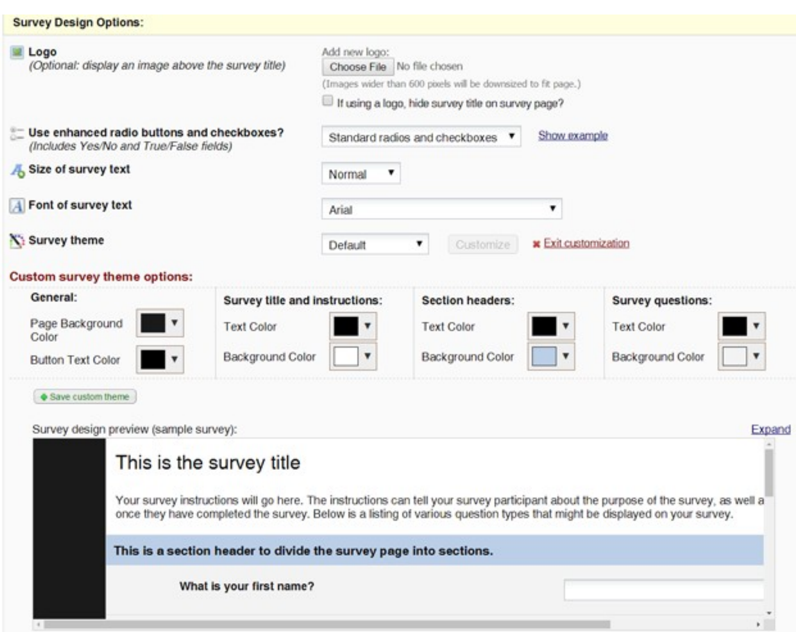
Logo: Click the “Choose File” button to add a logo. To add the ECU logo, please see the graphic directory on the website.

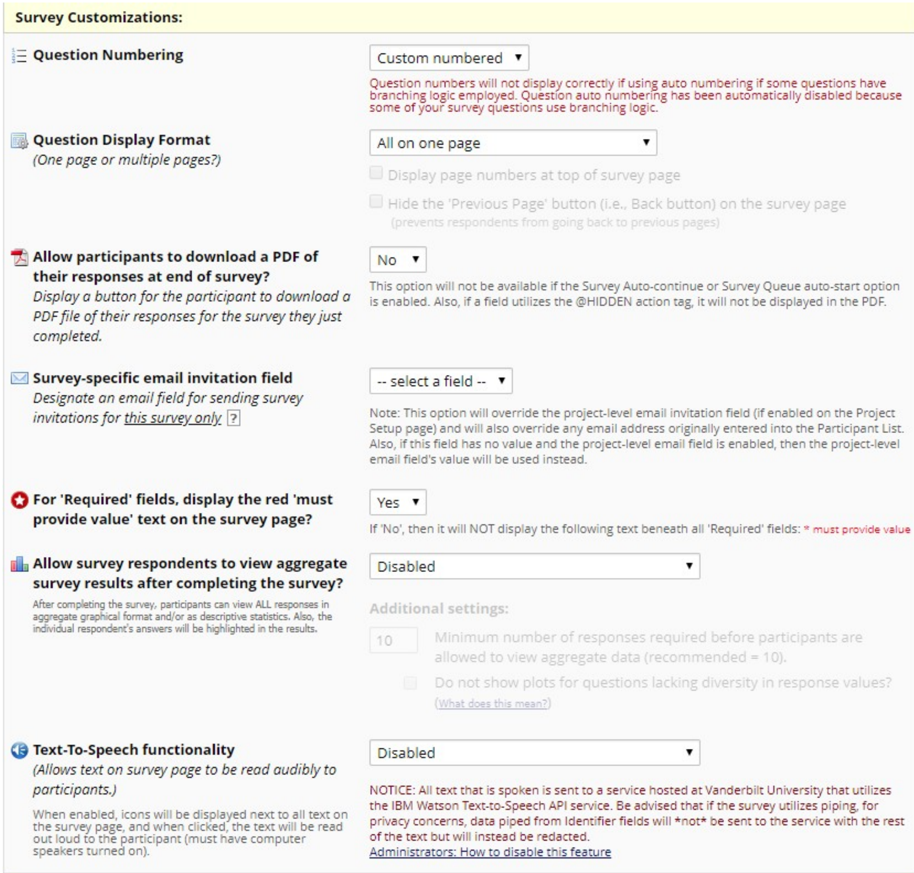
Use enhanced radio buttons and checkboxes: Click the dropdown to choose between “Standard radios and checkboxes” and “Enhanced radios and checkboxes” Using Enhanced the text and background colors are customizable. Also, the choices will stack into a single column if viewed on a mobile device.

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. You can also 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” button.





Survey Customizations

Question Numbering: REDCap can auto number your questions for you or you may custom number your questions.

Question Display Format –

> 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 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.

Allow participants to download a PDF of their responses at end of survey: The default setting is No. If you change it to yes, a button will display for the participant to download a PDF of their responses for the survey they just completed.

Survey-specific email invitation field: You must select a field to designate an email field for sending survey invitations for this survey only. Note: This option will override the project level email invitation field and will also override any email address originally entered the Participant List. Also, if this field has no value and the project-level email field is enabled, then the project-level email field's value will be used instead.

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.

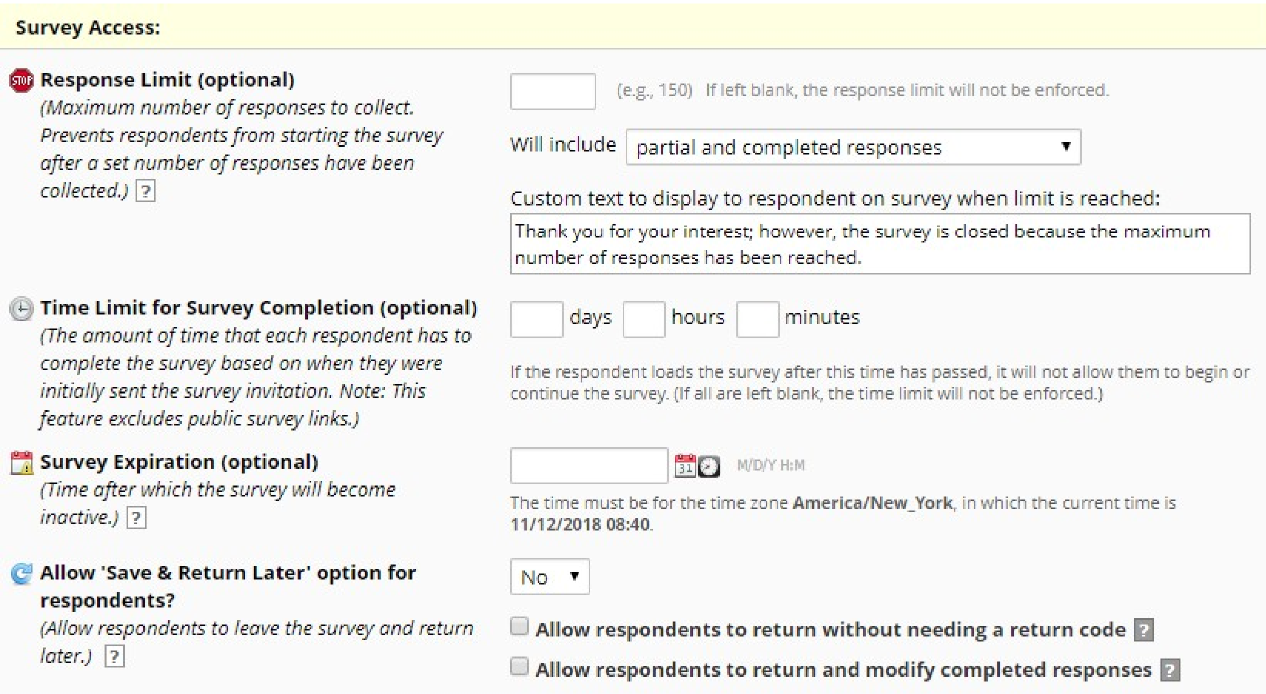
Survey Access

Response Limit (optional): You can limit the number of responses to collect. Here you set the maximum number of responses to prevent respondents from starting the survey after your set number of responses has been collected.

Time Limit for Survey Completion (optional): You can set the amount of time each respondent has to complete the survey based on when they were initially sent the survey invitation. Note: This feature excludes public survey links.

Survey Expiration (optional): You can enter a date/time you would like for your survey to expire. After this time, the survey will become inactive.

Allow 'Save & Return Later' option for respondents: You can 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. You can also indicate if you would like your participants to be able to return and modify their completed responses.



Survey Termination Options

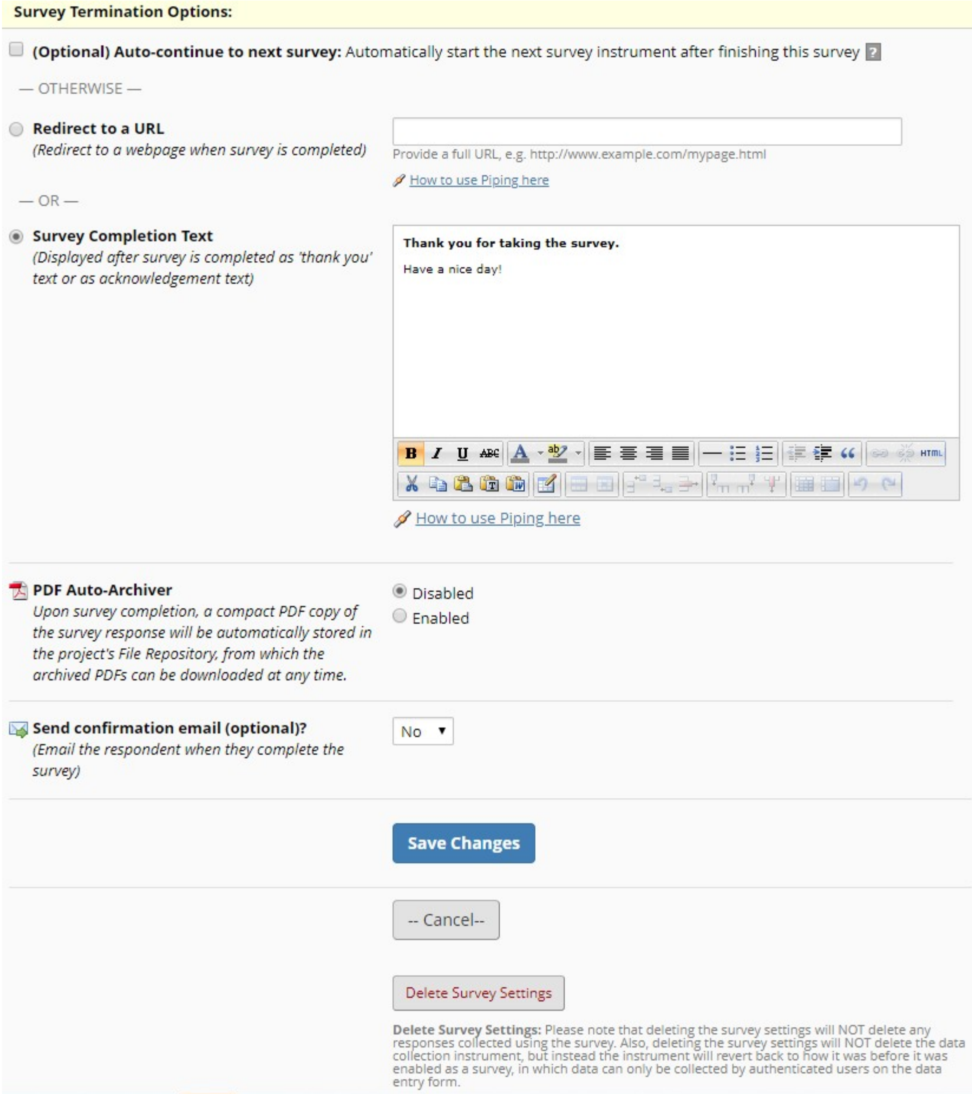
(Optional) Auto-continue to next survey: Click this if you have more than one survey and you would like the next survey to automatically start as soon as this survey is completed.

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.

Survey Completion Text: Enter any text you would like to display after the participant has finished taking your survey. The default text is "Thank you for taking the survey. Have a nice day!"

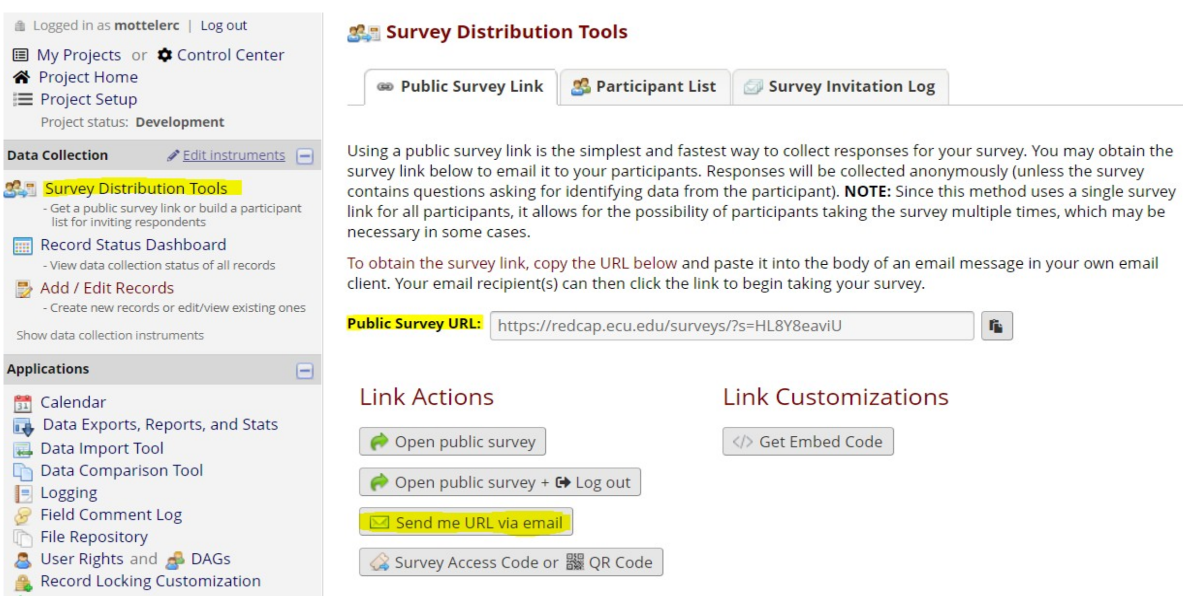
PDF Auto-Archiver: You can enable this feature if upon survey completion, you would like a compact PDF copy of the survey response automatically stored in the project's File Repository. This archived PDF can be downloaded at any time.

Send confirmation email (optional): 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. Click "Save Changes" once finished.

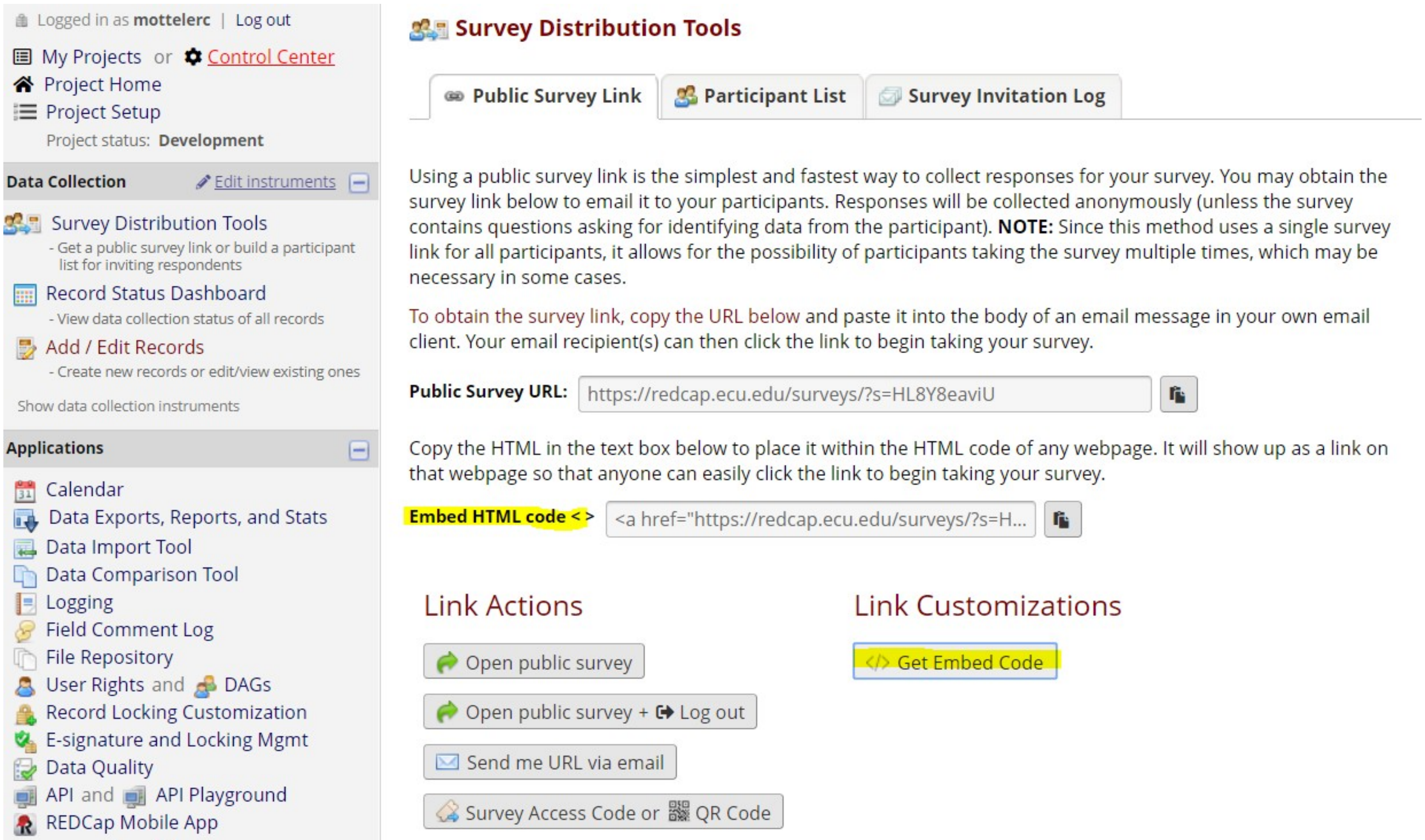


Public Survey Link

Using a public survey link is the simplest and fastest way to collect responses for your survey. Responses are collected anonymously. To set up the public survey link, you must make your first instrument a survey. This was done in a previous step. Under the Data Collection menu choose “Survey Distribution Tools" The Public Survey URL is shown in the middle of the screen.

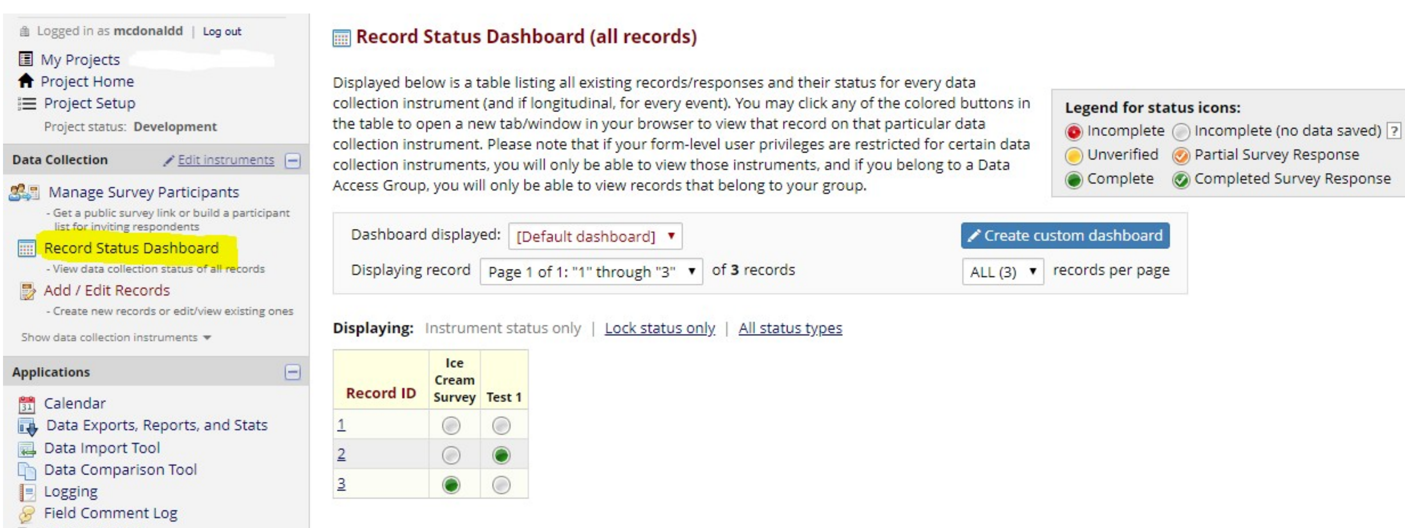


To send the URL in via, simply click on the “Send me URL via email” button. REDCap will send you an email with the links.
To add the link to a webpage, click on the “Get Embed Code” button. Now copy the HTML in the text box to place it within the HTML code of any webpage. It will show up as a link on that webpage so that anyone can easily click the link to begin taking your survey.



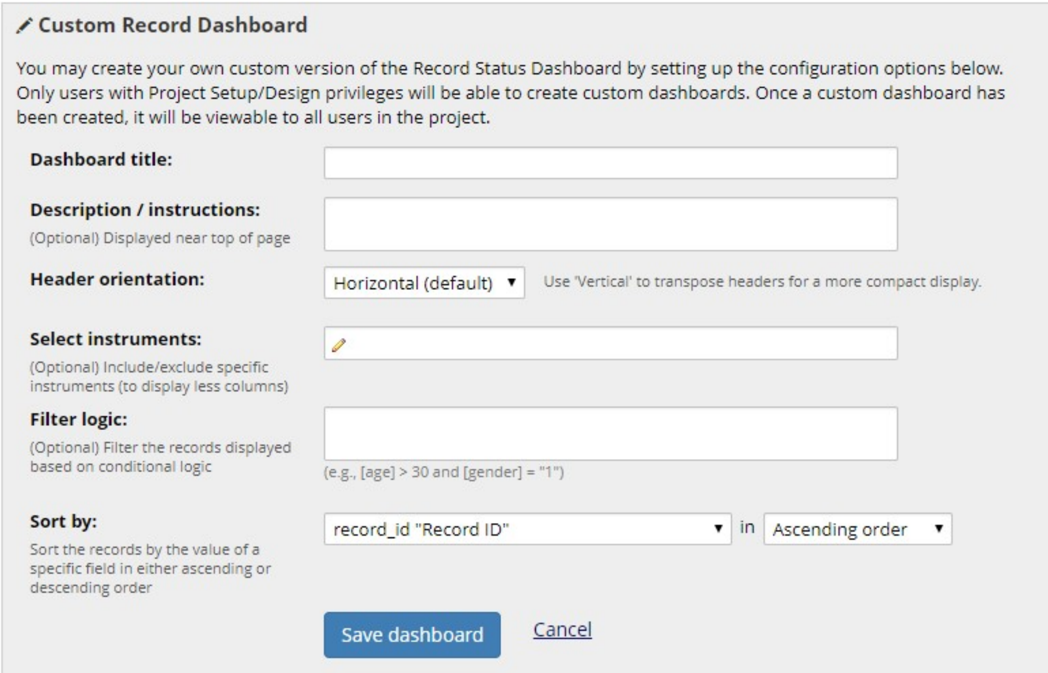
Record Status Dashboard

This is a table that lists all existing records/responses and the status for every data collection instrument. You may click on one of the icons in order to open the data collection instrument for a specific record.



Custom Record Dashboard

You may create your own customer version of the Record Status Dashboard by setting up the configuration options. Only users with Project Setup/Design privileges will be able to create custom dashboards. Once a customer dashboard has been created, it will be viewable to all users in the project.

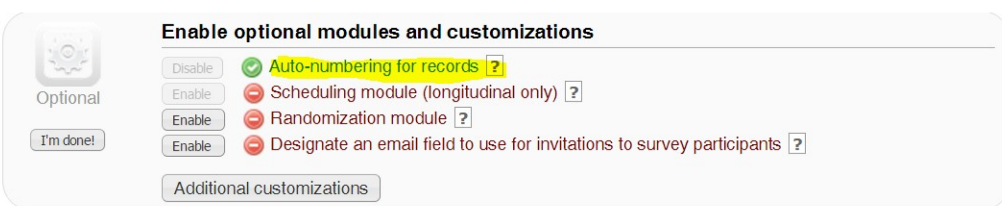


Enable Optional Modules and Customizations

Auto-numbering for records

Project Setup

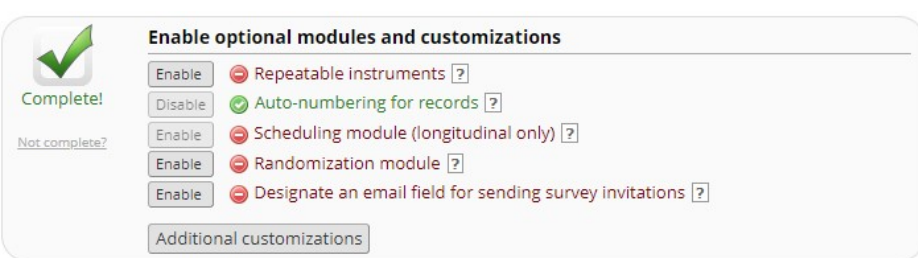
If the first form in your project is a survey, auto-numbering will automatically be enabled. Otherwise if you would like REDCap to generate a new unique record name, you may enable this feature manually.



Additional customizations

Project Setup

You can make additional customizations to your project by clicking on the "Additional customizations" button. A list of the additional customizations will be listed and you can select the options needed. When you are finished choosing your options, click "Save". Note: Most of the items listed will be discussed in the Intermediate and Advanced User Training Classes.



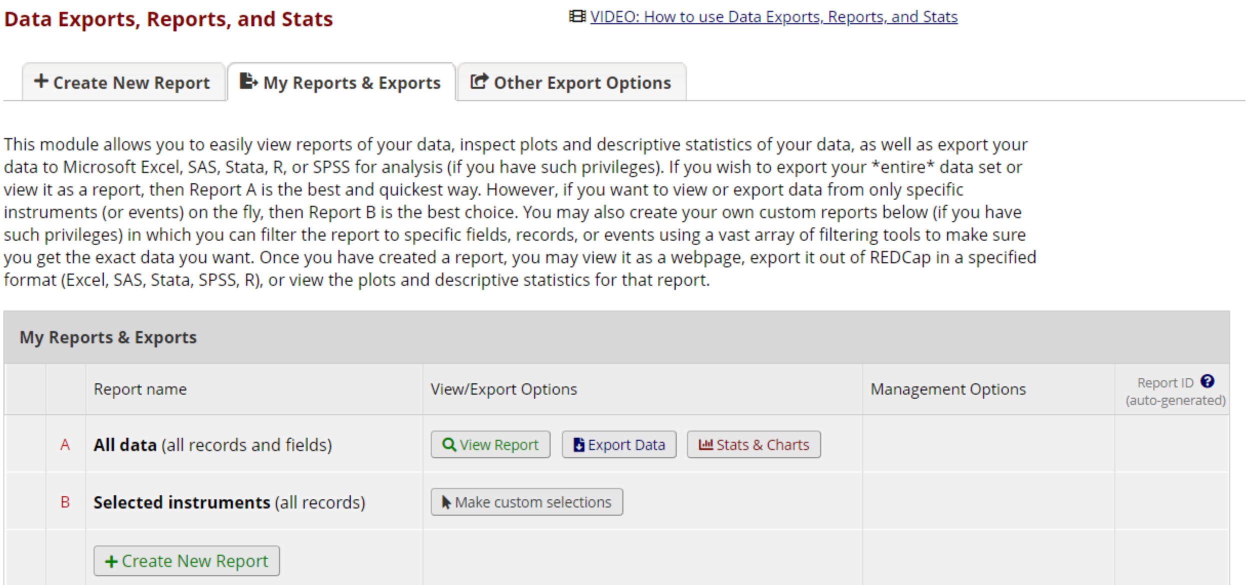
Display the Today/Now button for all date and time fields on forms/surveys?

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

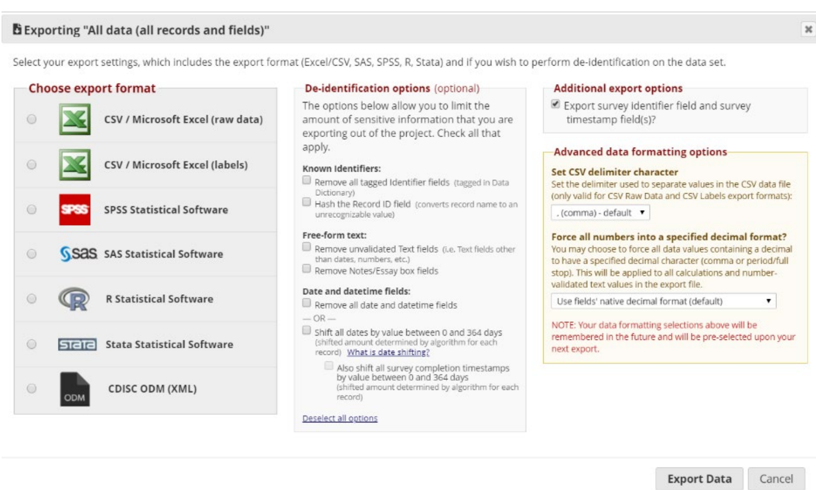
Applications

Data Exports, Reports and Stats

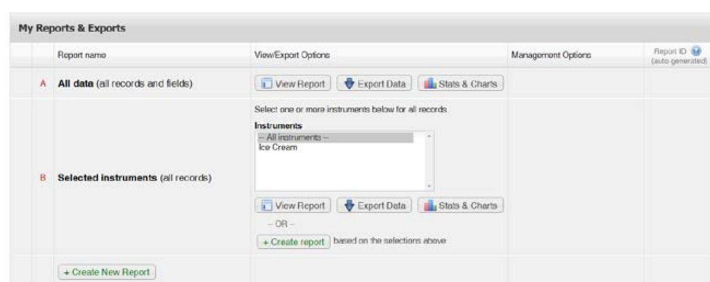
This application will allow you to easily view reports of your data, as well as export your data to Microsoft Excel, SAS, Stata, R or SPSS for analysis. If you wish to export your *entire* data set or view it as a report, then Report A is the best and quickest way. If you want to view or export data from only specific instruments (or events) on the fly, then Report B is the best choice.



Report A:

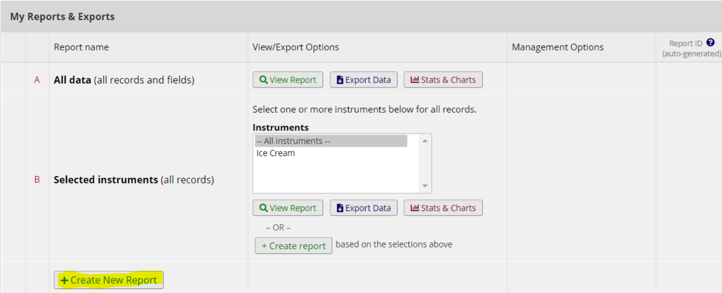


Report B:

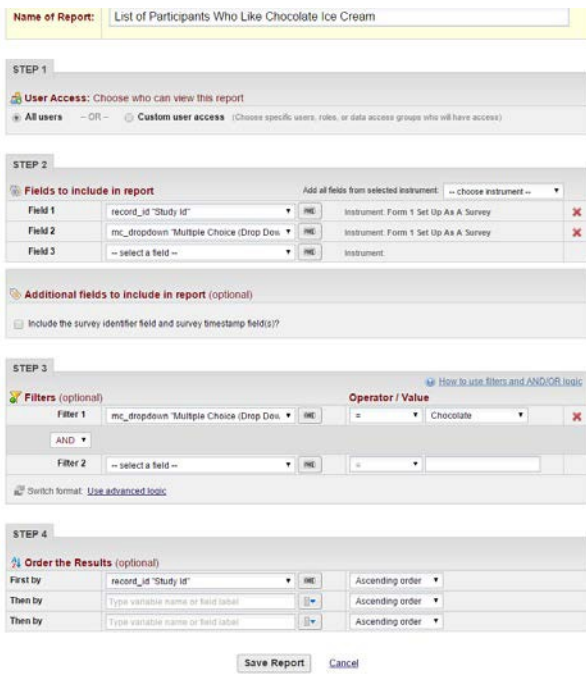


Create New Report

You may also 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. To create a new report, click on the “+ Create New Report” button.

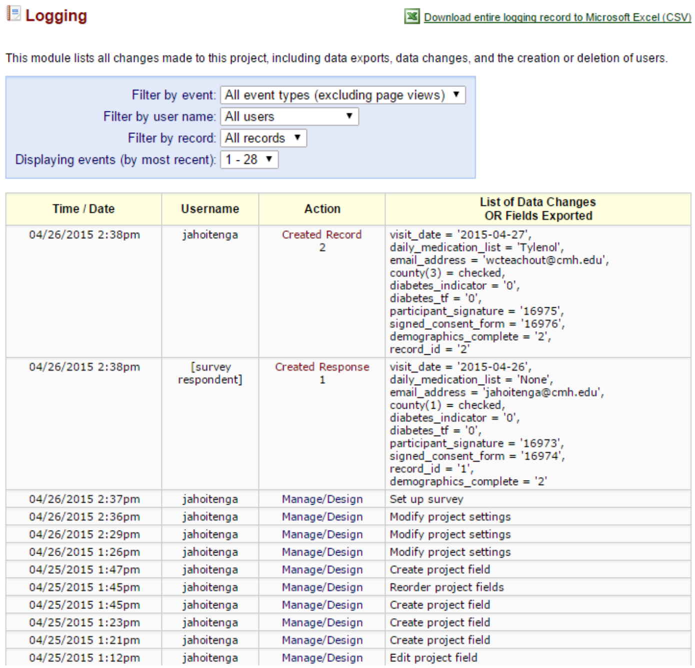


You can create a new report by selecting the fields/variables that you want to include in the report. You may add as many fields to your report as you wish, and you can choose which users may view this report. You will also need to provide a name for your report, which will then be displayed on the project's left-hand menu for anyone to whom you have given access. You can filter the results returned in the report in a variety of ways, including using complex AND/OR logic. When you are finished, click the "Save Report" button at the bottom. The new report will then be added to your list of reports, after which you may immediately begin viewing them or exporting them. 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.



Logging

This is where you can view audit information. This application will list the date and time and user that made changes made to the project. This includes data exports, data changes and the creating or deletion of users. You may also download the entire logging record, just note this may take some time for large or active projects. 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

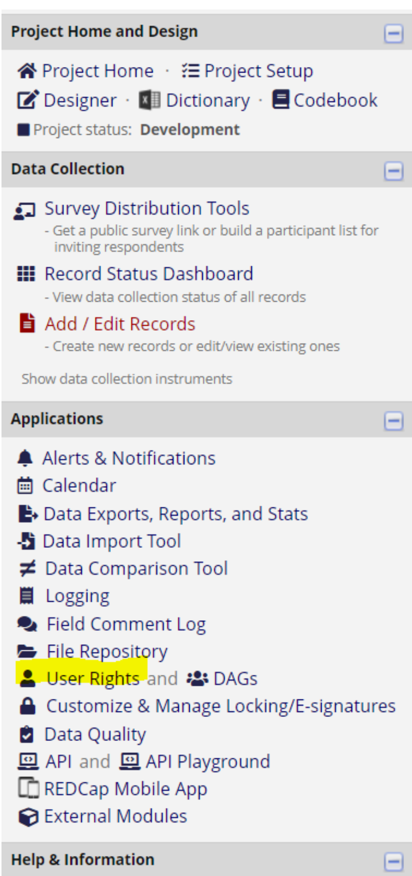
Time / Date	Username	Action	List of Data Changes OR Fields Exported
04/26/2015 2:38pm	jahoitenga	Created Record 2	visit_date = '2015-04-27', daily_medication_list = 'Tylenol', email_address = 'wcteachout@cmh.edu', county(3) = checked, diabetes_indicator = '0', diabetes_tf = '0', participant_signature = '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_medication_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

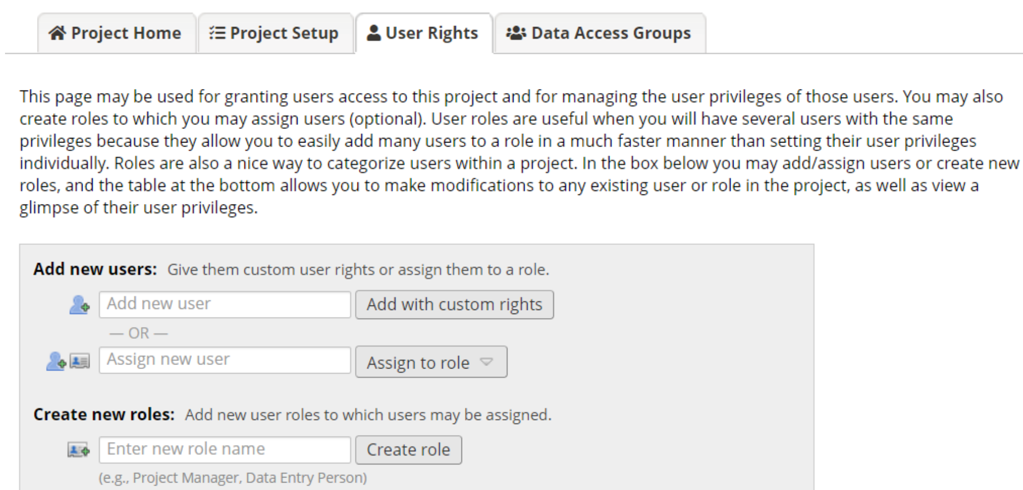
User Rights and Permissions

Access to individual projects is coordinated by the project owner (Principal Investigator) using the "User Rights" module. The project owner may delegate this task to other users by granting them permission to access the User Rights module.

Note: Do not ask the REDCap Administrator to grant a user access to your project.

If you would like to grant other users access to your project, click on "User Rights".

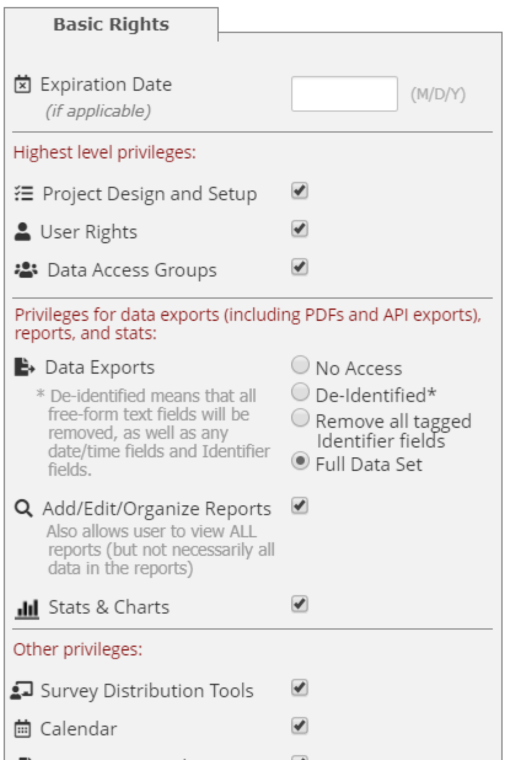




Enter the person's last name in the Add new user field. If the person is found, click on their name and then click on Add with custom rights. If the person is not found, this either means they do not have access to REDCap or they have not set up their user profile. If they are an ECU employee, you can add them to your project by entering their PirateID. You cannot add them by their email address.

Correct way: mcdonaldd Incorrect way: mcdonaldd@ecu.edu

Once you click "Add with custom rights" button, you will now choose what you want the user to have access to. Select the appropriate rights and then click "Add user". Note: More detailed User Rights and DAG (Data Access Groups) topics will be discussed in the Intermediate Training Class.



User Roles

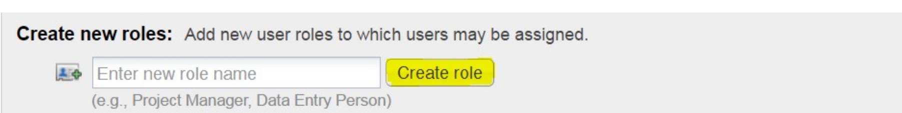
A role is simply a template of user rights. Users assigned to a role are granted the appropriate set of rights that the role. User roles are useful for your project when you have several users who will require the same user privileges. Instead of creating privileges individually, you can add a role and assign user to that role. For research teams of four or more people, creating roles is recommended. Users can be assigned, reassigned, or unassigned to roles at any time. Note: Any user assigned to a role will assume the user privileges of that role.

Role	Description	Rights
Principal Investigator	Primary individual in charge of and responsible for the proper conduct of a research project and assuring all regulatory issues are addressed, regardless of the funding source.	Full rights to all functions in project
Administrator	Person responsible for assisting the PI in assuring all regulatory issues are addressed and that research standards are adhered to.	Full rights to all functions in project

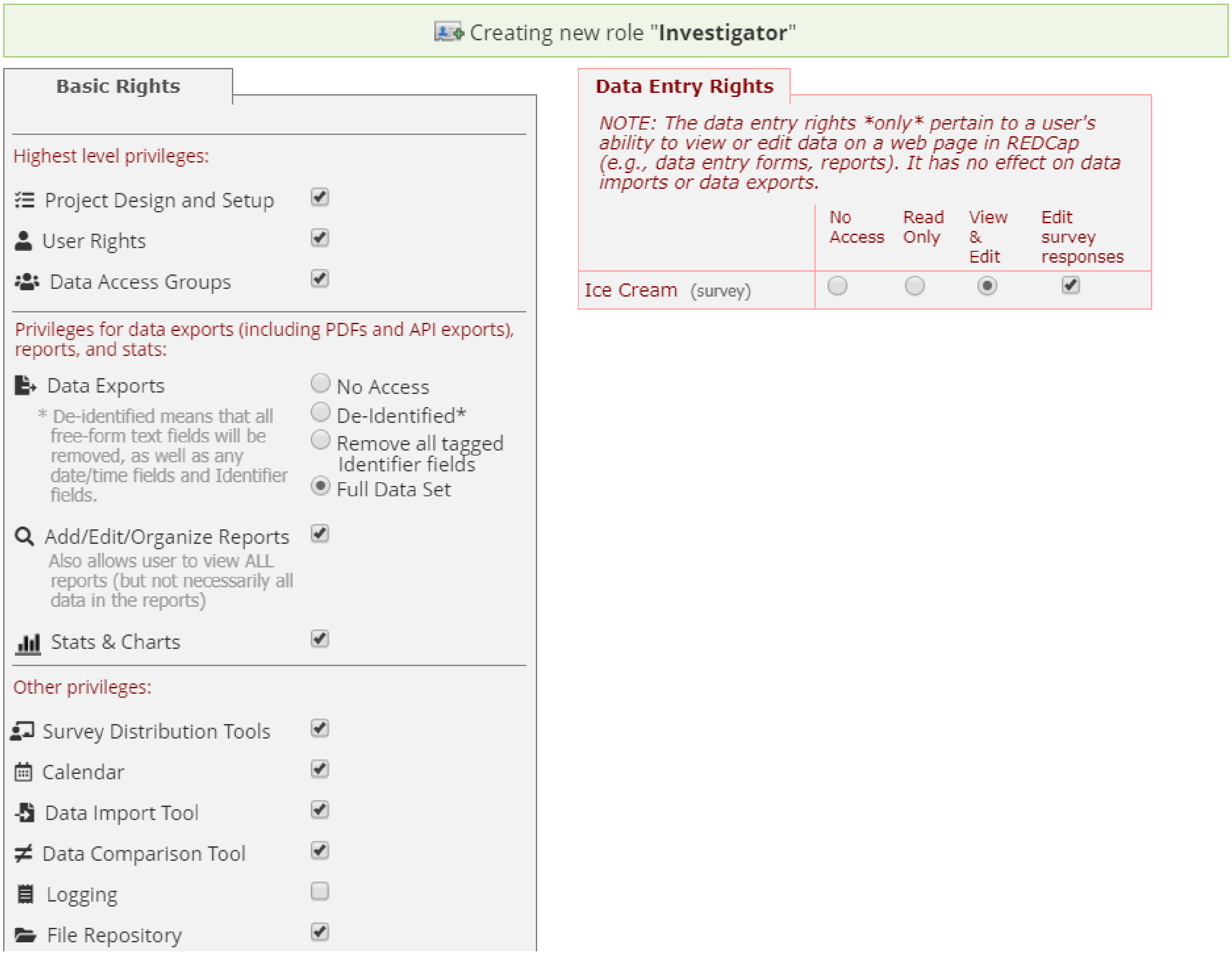
Project Coordinator	Person responsible for the day-to-day management of the research project to include, REDCap data instruments, and overall management of enrollment and data collection.	Full data export, calendar, data import, data comparison, logging, file repository, user rights, data access group, stats & charts, data quality create & edit rules and execute rules, add/edit reports, project design and setup, record locking customization, API import and export, locking/unlocking records, allow locking of forms, data entry rights view & edit, create records, rename records, delete records, edit survey responses, survey distribution tools.
Data Coordinator	Person responsible for the development of REDCap data instruments and the overall management of the project data.	Full data export, data import, data comparison, logging, stats & charts, data quality create & edit rules and execute rules, add/edit reports, data entry rights view & edit, create records, rename records, delete records, edit survey responses
Statistician	Person responsible for the development of the study design and the review and analysis of collected data.	De-identified data export, remove all tagged identifier data export, stats & charts, data quality create & edit rules and execute rules,
		lock/unlock records disabled, data entry rights read only
Project Staff	Assists other staff as appropriate.	De-identified data export, remove all tagged identifier data export, calendar, data import, file repository, stats & charts, add/edit reports, lock/unlock records disabled, data entry rights view & edit, create records
Read Only	Assists other staff as appropriate with limited, read-only access.	No export, stats and charts, add/edit reports, lock/unlock records disabled, data entry rights read only
Data Entry	Assists with the creation of records and data entry only.	No export, add/edit reports, lock/unlock records disabled, data entry rights view & edit, create records

Create a Role

Creating a role is similar to creating a user with custom rights. Enter the new role name and click the “Create role” button.



You may set the rights for the user role by checking the boxes next to the application tools to which you wish to grant them access. You may also grant them or deny them access to individual data collection instruments. To save your selections, click the "Create role" button at the bottom of the page.

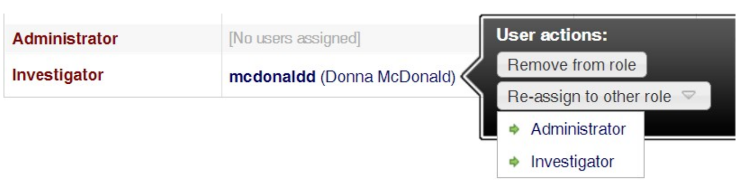


Add a New User to a Role

To add a user to a role, enter the username into the "Assign new user" box, click "Assign to role" and select the role to which the user will be assigned.

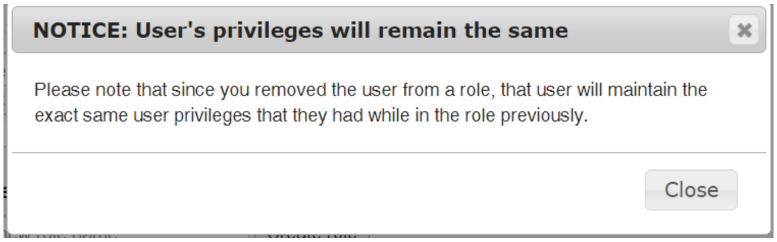
Change a User's Role

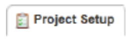
You can change a user's role or assign an unassigned user to a role by clicking on the user's name, then clicking "Assign to role" and then selecting the role.



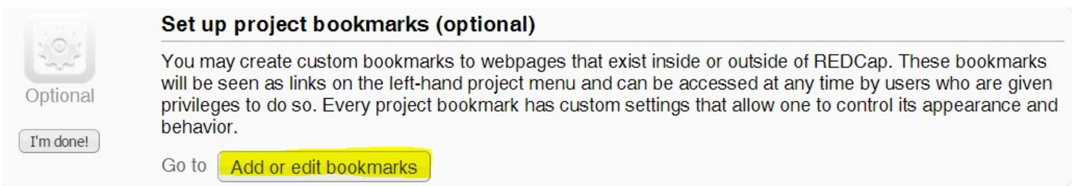
Remove a User's Role

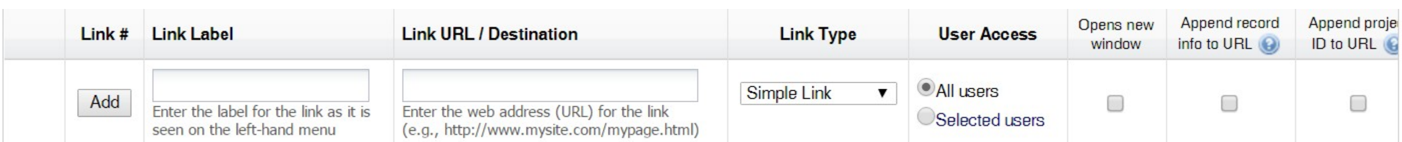
You can remove a user's role by clicking on the user's name, then clicking "Remove to role". Note: The user's privileges will remain the same, you will need to edit their access rights.



Set up Project Bookmarks (optional) 

You can create custom bookmarks to webpages that exist inside or outside of REDCap. Bookmarks will be seen as links on the left hand project menu and can be accessed by those who have access to your project.





This module will allow you to set up project bookmarks (i.e. custom links) that point to webpages that exist inside REDCap (i.e. other REDCap projects) or outside REDCap (i.e. webpages on a different server on the web). You can create simple web links for navigating to those webpages, and the links will be displayed on the left-hand project menu. You may set various settings for each link, such as defining the label for how it appears on the left-hand menu, whether or not the link opens a new window/tab in your web browser, and which individual users (or Data Access Groups) within your project will be able to utilize these bookmarks.

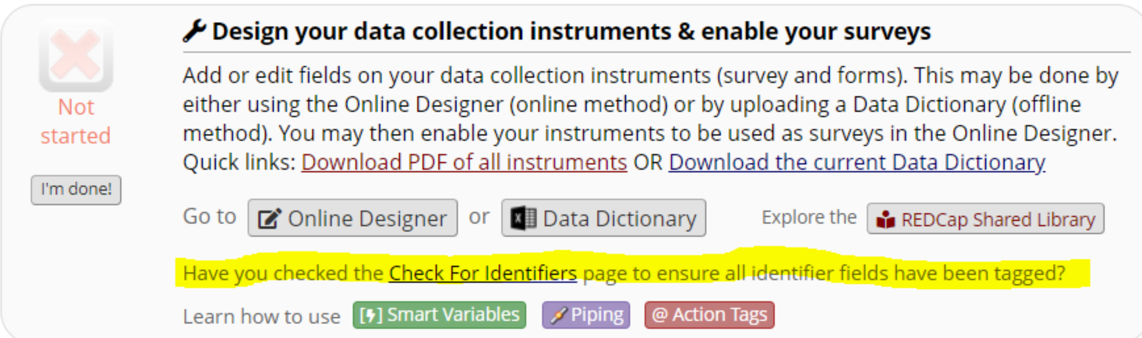
Test Your Project Thoroughly

Project Setup

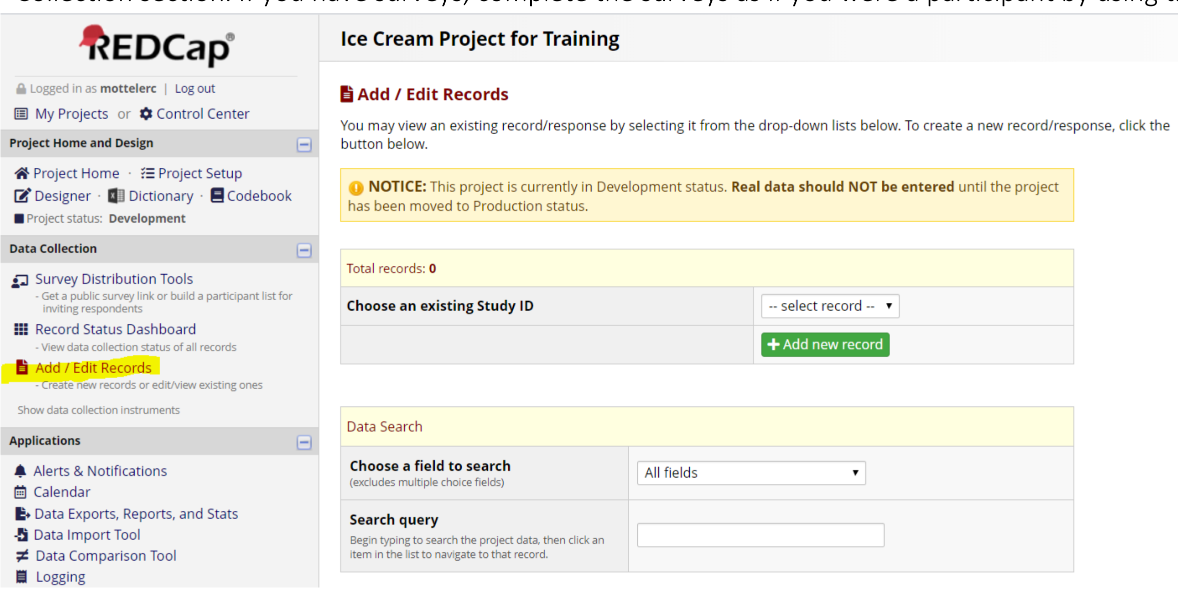
It is extremely important to test your project before moving it into production! The purpose of testing your database is to ensure that it has the structure and integrity checks that you expect and that it meets your requirements. Entering practice data will often lead to more instrument changes.

Testing a database means doing much more than simply verifying that it contains the desired fields: you need to verify that each field has the appropriate properties (data type, identifiers, allowed range, allowed values) and that cross-field data validations work as you expect.

Make sure you have tagged all fields containing PHI Identifiers. Does the field contain identifying data (any of the 18 pieces of information that are considered identifiers), is so you need to check for identifiers? This module will help you assess whether some fields may be identifiers, and then allows you to easily tag such fields as identifiers for greater data security.



You also need to create test records and enter some data to ensure that your data collection instruments look and work how you expect, especially branching logic and calculations. You can do this by clicking "Add/Edit Records" in the Data Collection section. If you have surveys, complete the surveys as if you were a participant by using the Public Survey Link.



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.

Note: It is recommended that you export your test data for review prior to moving your project into Production.

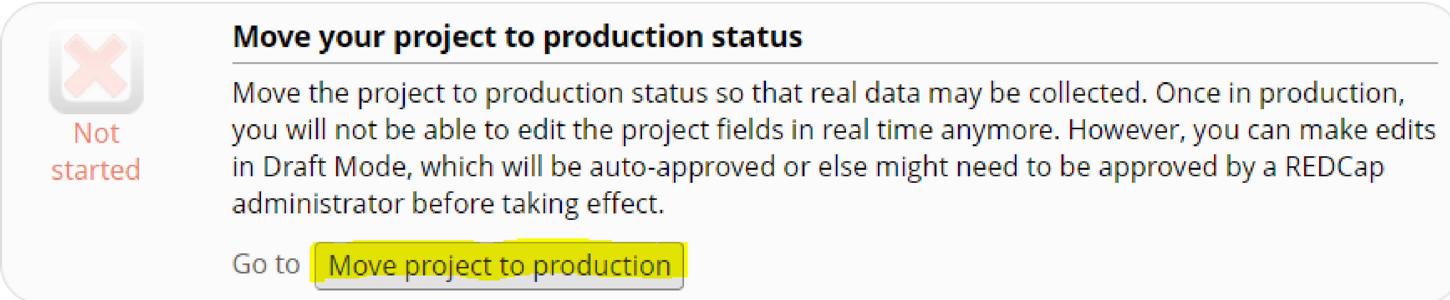
The best way to test your project is to use it as if you were entering real production data, and it is always helpful to have colleagues (especially team members) take a look at your project to get a fresh set of eyes looking at it.

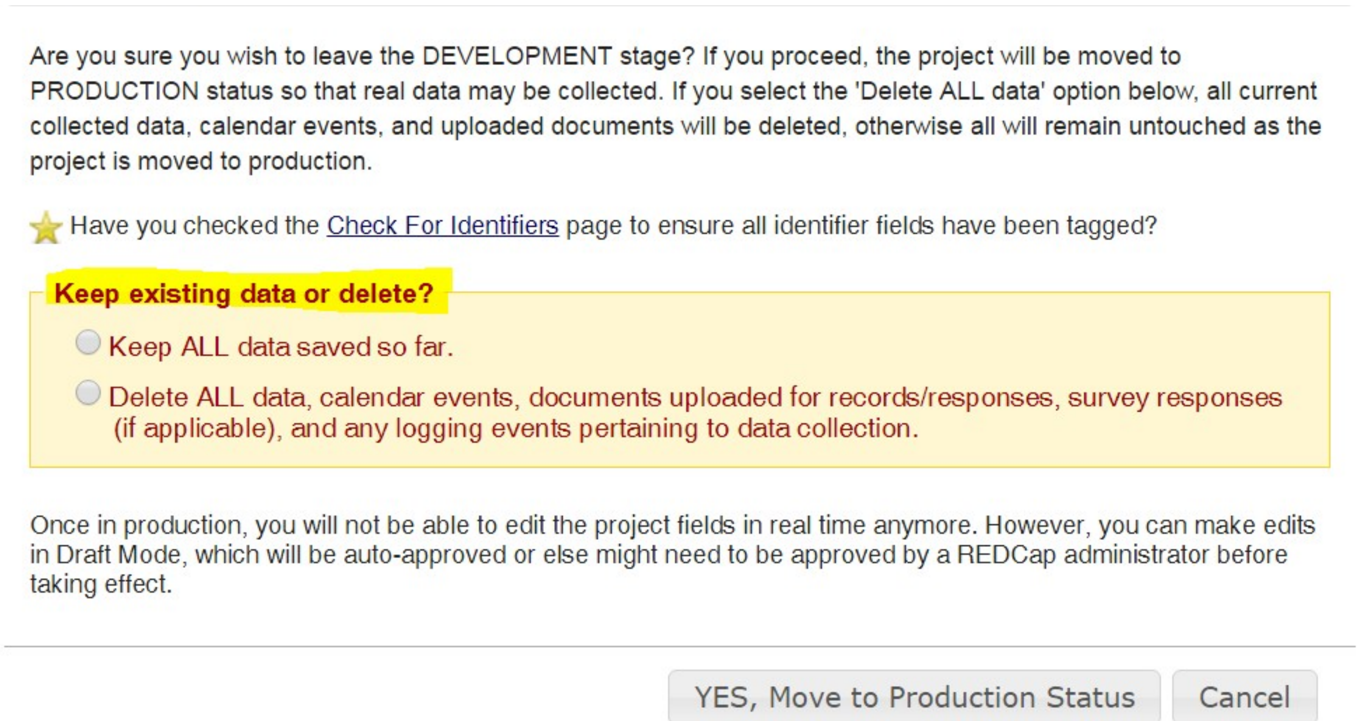
Move Your Project to Production Status

Project Setup

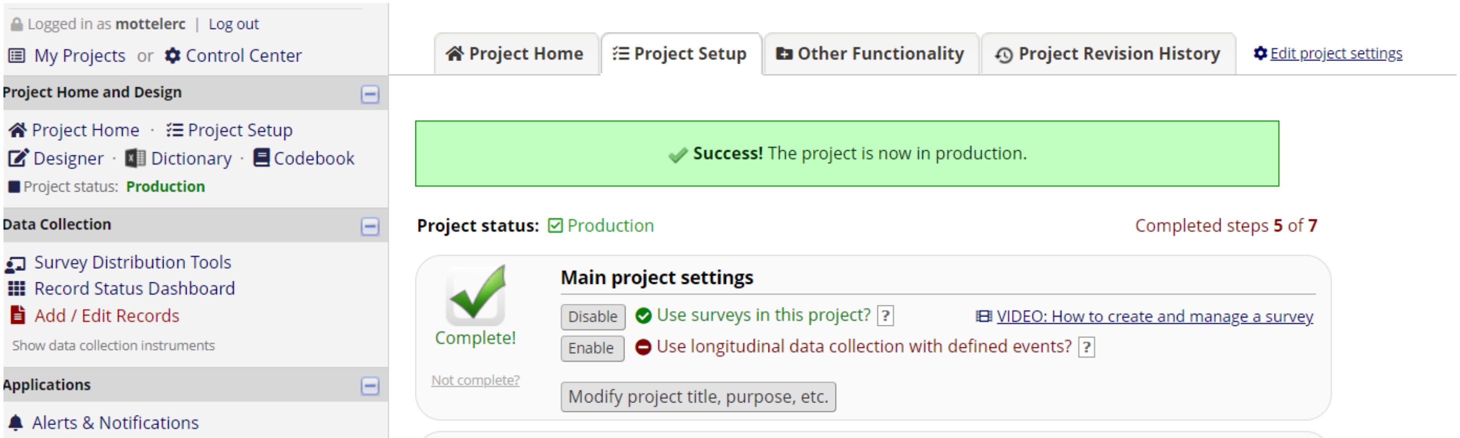
When you are ready to begin entering real data, use the Project Setup tab to move the project to production status. Once in production, you will not be able to edit the project fields in real time. However, you can make edits in Draft Mode, which will then need to be approved by a REDCap administrator before taking effect.

You are strongly encouraged to test your project thoroughly before you move your project into Production. Once you have ensured your project is capturing all of the fields you need and has all of the design elements, click on the Move project to production icon.



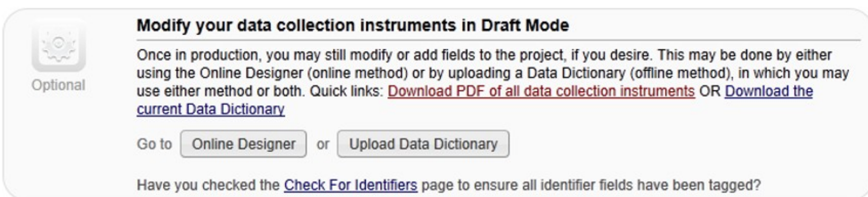


Note: Moving a project from development mode to production mode is done by the REDCap Administrator.

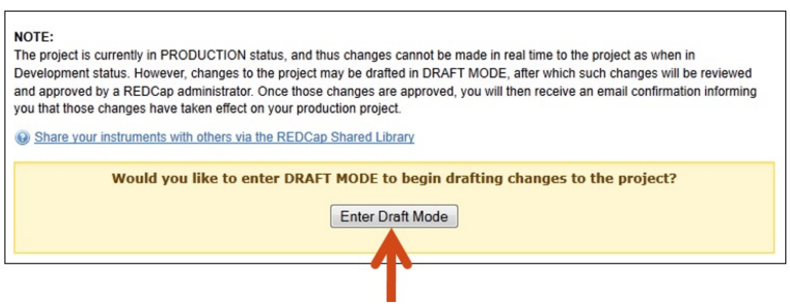


Production mode looks much like development mode, but production has extra precautions to protect saved data. All survey and data entry features/functions will be exactly the same as they are in development with the exception of certain Project Setup features.

The Online Designer and Data Dictionary can still be used to modify instruments. You can only make edits in Draft Mode, which will then need to be approved by a REDCap administrator before taking effect.



Enter Draft mode to make and submit changes to the instruments.



Additional Training/Support Resources

If you have questions or need additional training, please email redcap@ecu.edu

Intermediate Topics

The following features will be included in the REDCap Intermediate User Training Class. Please login to Cornerstone to see the upcoming classes.

Import an Instrument from the REDCap Shared Library

Data Entry Overview

Survey Topics

- Survey Queue, Survey Login & Survey Notifications
- Automated Invitations
- Stop Survey Action
- Participant List, Compose Survey Invitations & Survey Invitation Log

Define events and designate instruments

- Longitudinal data collection
- Define events & Designate Instruments for My Events

Enable optional modules and customizations

- Repeatable instruments
- Scheduling module (longitudinal only)
- Designate an email field to use for invitations to survey participants
- Set a custom record label
- Define a secondary unique field
- Order the records by another field
- Enable the Field Comment Log or Data Resolution Workflow (Data Queries)
- Enable the Data History widget for all data collection instruments
- Require a ‘reason’ when making changes to existing records

Applications

- Calendar & Scheduling
- Field Comment Log
- File Repository
- User Rights and DAGs

Data Export

Advanced Topics

The following features will be included in the REDCap Advanced User Training Class. Please login to Cornerstone to see the upcoming classes.

- How to Use Piping
- Create additional Arms
- Randomization Module
- Data Dictionary
- Data Import Tool
- Data Comparison Tool
- Double Data Entry
- Record Locking Customization
- E-signature and Locking Mgmt
- Data Quality
- Data Entry Trigger
- API
- Dynamix Query (SQL)
- Calculated Fields
- Customizing Text
- Logging
- Reports