Research Electronic Data Capture (REDCap)

An Introduction and Training Seminar

Kenna Whitley

Center for Research Methods and Data Analysis
What is REDCap?

A secure, web-based electronic data capture system for building and managing HIPAA-compliant online surveys and databases

Advantages to REDCap:

- Secure and web-based
- Database Flexibility
- Bulk Data Import
- Export Data to Common Data Analysis Packages
- Accessibility
Disadvantages to REDCap:
Disadvantages to REDCap:
REDCap Support

Have an issue?
Notify the REDCap Administrator or the CRMDA, and you won’t for long!
• I live in the CRMDA
• The CRMDA lives in Watson

CRMDA support:
• Create REDCap accounts
• Prevent security issues
• Keep our servers and service from catching metaphorical or literal fire
• Fee-for-service survey creation and management
REDCap at KU

Production server
https://redcap.ittc.ku.edu
  • HIPAA-compliant, secure storage environment.

Testing server
http://freecap.ku.edu
  • Non-HIPAA-compliant, non-secure environment
Protected Health Information (PHI)

- 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
# Data Entry vs Surveys

## Data Entry
Instruments used by workers to input collected data

## Surveys
Instruments sent to participants to collect data
Data Entry End Goal

1. Data entry personnel accesses project
2. Personnel selects instrument
3. Personnel enters record ID, or opts to create a new record ID (option selected in picture)
4. Personnel enters data
5. Personnel saves record, or saves and continue to continue entering data
Survey End Goal

1. REDCap server sends email invitation
2. Respondent follows link
3. Respondent completes survey
4. Response is securely transferred to database
5. Response data easily accessible in REDCap
Your Role

**PI (Principal Investigator)**
- Completes agreement with CRMDA when setting up projects
- Assigns research team members and regulates their roles
- Liable for maintaining security of project
- Ensures appropriate use of REDCap

**Research Assistant**
- Must read instructions and certify agreement to terms of service to request creation of account
- Added in a specific capacity by PI to a project
- Keeps PI informed of project activities

The role of maintaining the REDCap project can be delegated to an RA, however the PI will still be held responsible for data security.
Building a Project
Steps to Build a Project

- Create or access your account
- Create or access project
- Build your instrument
- Test instrument
- Move project to production
- Collect data
Create your account

REDCap User ID

- Link to the REDCap ID Request Form:  
  https://redcap.ittc.ku.edu/surveys/?s=TRoP4n
- Email the REDCap Administrator at: 
  redcap_admin@ku.edu

Freecap User ID

- Link to the Freecap ID Request Form: 
  https://dept.ku.edu/~crmdadep/freecap/surveys/?s=2ZliHtY4tG
- Email the REDCap Administrator at: 
  redcap_admin@ku.edu

Both ID Request forms can be found at http://crmda.ku.edu/redcap
ID Request Survey

ID Request

Thank you for your interest in REDCap. We have several questions for you to answer in order to best serve you.

Please note that any personal information you enter is extremely secure and will not be shared with anyone outside of the operations of the CRMDA and REDCap administration.

Do you currently have an appointment at KU/KUMC (student, faculty, post-doc, RA, etc.)?  
- Yes
- No

* must provide value

Next Page >>
ID Survey Complete

• Following completion of the ID Request Survey, an email with your responses is sent to the REDCap Administrator

• The REDCap Administrator then creates a user account based on your responses
ID Survey Complete

• After your user account is created, an email will be sent to you with a link to set your new REDCap password

Follow the link to set your new password
Setting Your New Password

**REDCap**

**Set Your Password**

Your password has not been set yet or has been reset. You will need to set your password here to whatever value you wish. Please enter your desired password below and click the 'Submit' button. Once your password has been set, you may use it with your username whenever you log in to REDCap. Please make sure that you write down or remember your new password for future use. The new password entered must be AT LEAST 9 CHARACTERS IN LENGTH and must consist of AT LEAST one lower-case letter, one upper-case letter, and one number.

Username: 
Password: 
Re-type password: 
Submit
Password Submitted

• Congratulations! Your new REDCap account is set-up, and you may now access your account.
Access your account

Access REDCap

https://redcap.ittc.ku.edu/

Access Freecap

https://dept.ku.edu/~crmdadep/freecap/
Shocked to see a KU log-in page?
Don’t panic!

- Dual log-in process
  - Shibboleth
  - REDCap
- Non-KU researchers can gain access through a sponsored temporary account
  - KU Account Management creates temporary accounts: http://technology.ku.edu/sponsored-temporary-accounts
Log In

Please log in with your user name and password. If you are having trouble logging in, please contact Kenna Whitley.

Username: 
Password: 

Log In  Forgot your password?

Welcome to REDCap!

REDCap is a mature, secure web application for building and managing online surveys and databases. Using REDCap's stream-lined process for rapidly developing projects, you may create and design projects using 1) the online method from your web browser using the Online Designer; and/or 2) the offline method by constructing a 'data dictionary' template file in Microsoft Excel, which can be later uploaded into REDCap. Both surveys and databases (or a mixture of the two) can be built using these methods.

REDCap provides automated export procedures for seamless data downloads to Excel and common statistical packages (SPSS, SAS, Stata, R), as well as a built-in project calendar, a scheduling module, ad hoc reporting tools, and advanced features, such as branching logic, file uploading, and calculated fields.

Learn more about REDCap by watching a brief summary video (4 min). If you would like to view other quick video tutorials of REDCap in action and an overview of its features, please see the Training Resources page.

NOTICE: If you are collecting data for the purposes of human subjects research, review and approval of the project is required by your Institutional Review Board.

If you require assistance or have any questions about REDCap, please contact Kenna Whitley.

The University of Kansas
Center for Research Methods & Data Analysis
crmds.ku.edu

REDCap Features

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

Fast and flexible - Conception to production-level survey/database in less than one day.

Export data to common data analysis packages - Export your data to Microsoft Excel, PDF, SAS, Stata, R, or SPSS for analysis.

Ad Hoc Reporting - Create custom queries for generating reports to view or download.

Scheduling - 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 - 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.

Send files to others securely - Using ‘Send-It’, upload and send files to multiple recipients, including 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 - Generate a PDF version of your forms and surveys for printing to collect data offline.
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- Scheduling: 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: Build a list of email contacts, create custom email invitations, and track who responds, or you may also create a simple survey link to email out or post on a website.
- REDCap Mobile App: 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: Using 'Send-it', upload and send files to multiple recipients, including 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: Generate a PDF version of your forms and surveys for printing to collect data offline.
- Advanced features: Auto-validation, calculated fields, file uploading, branching/skip logic, and survey stop actions.
- REDCap API: Have external applications connect to REDCap remotely in a programmatic or automated fashion.
- Data Queries: Document the process of resolving data issues using the Data Resolution Workflow module.
- Piping: Inset previously collected data values into question labels, survey invitation emails, etc. to provide a more customized experience.
Set Up Password Recovery

- After clicking on around for a bit in REDCap, this screen will pop up.
- Set up your security question and answer
Creating a New Project

Testing Server
(Freecap)

Production Server Projects are Created by REDCap Admin
Welcome to REDCap!

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REDCap Features

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Ad Hoc Reporting - Create custom queries for generating reports to view or download.

Scheduling - 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 - 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 - Collect data offline using an app on a mobile device when there is no Wi-Fi or cellular connection, and then later sync data back to the server.

Send files to others securely - Using 'Send-It', upload and send files to multiple recipients, including 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 - Generate a PDF version of your forms and surveys for printing to collect data offline.

Advanced features - Auto-validation, calculated fields, file uploading, branching/skip logic, and survey stop actions.

REDCap API - Have external applications connect to REDCap remotely in a programmatic or automated fashion.

Data Queries - Document the process of resolving data issues using the Data Resolution Workflow module.

Piping - Inject previously collected data values into question labels, survey invitation emails, etc. to provide a more customized experience.
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:

Title to be displayed on project webpage

Purpose of this project:

--- Select One ---

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 state)
- Use a template (choose one below)

Choose a project template

<table>
<thead>
<tr>
<th>Template title</th>
<th>Template description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Demography</td>
<td>Contains a single data collection instrument to capture basic demographic information.</td>
</tr>
<tr>
<td>Classic Database</td>
<td>Contains six data entry forms, including forms for demography and baseline data, three monthly data forms, and concludes with a completion data form.</td>
</tr>
<tr>
<td>Human Cancer Tissue Biobank</td>
<td>Contains five data entry forms for collecting and tracking information for cancer tissue.</td>
</tr>
<tr>
<td>Longitudinal Database (1 arm)</td>
<td>Contains nine data entry forms (beginning with a demography form) for collecting data longitudinally over eight different events.</td>
</tr>
<tr>
<td>Longitudinal Database (2 arms)</td>
<td>Contains nine data entry forms (beginning with a demography form) for collecting data on two different arms (Drug A and Drug B) with each arm containing eight different events.</td>
</tr>
</tbody>
</table>

Create Project  Cancel
Main project settings
- Use longitudinal data collection with repeating forms?
- Use surveys in this project?

Design your data collection instruments
Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method), in which you may use either method or both. Quick links: Download PDF of all data collection instruments or Download the current Data Dictionary.

Enable optional modules and customizations
- Auto-numbering for records
- Scheduling module (longitudinal only)
- Randomization module
- Designate an email field to use for invitations to survey participants

Set up project bookmarks (optional)
You may create custom bookmarks to webpages that exist inside or outside of REDCap. These bookmarks will be seen as links on the left-hand project menu and can be accessed at any time by users who are given privileges to do so. Every project bookmark has custom settings that allow one to control its appearance and behavior.

User Rights and Permissions
You may grant other users access to this project or edit the user privileges of current users on this project by navigating to the User Rights page. Additionally, if you wish to limit user access to certain records/responses for this project, you may want to use Data Access Groups, in which only users within a given Data Access Group can access records created by users within that group.

Test your project thoroughly
It is important to test the essential components of your project before moving it into production. Try creating a few test records and entering some data for each to ensure that your data collection instruments look and behave as you expect, especially branching logic and calculations. Then review your test data by creating reports and exporting your data to view in Excel or a statistical analysis package. If you have surveys, complete the surveys as if you were a participant by using the Public Survey Link or Participant List by sending a survey invitation to yourself. If other project modules will be used regularly, test them out a bit too. 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
Move the project to production status so that real data may be collected. Once in production, you will not be able to add the project fields in real-time anymore. However, you can make edits in Draft Mode, which will then need to be approved by a REDCap administrator before taking effect.
Main project settings

Not started

- Use longitudinal data collection with repeating forms?
- Use surveys in this project?

Not started

- Modify project title, purpose, etc.

Design your data collection instruments

Not started

- Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method), in which you may use either method or both.
- Quick links: Download PDF of all data collection instruments OR Download the current Data Dictionary

Not started

- Go to Online Designer or Data Dictionary
- Have you checked the Check for Identifiers page to ensure all identifier fields have been tagged?

Enable optional modules and customizations

Optional

- Auto-numbering for records
- Scheduling module (longitudinal only)
- Randomization module
- Designate an email field to use for invitations to survey participants

Not started

- Additional customizations

Set up project bookmarks (optional)

Optional

- You may create custom bookmarks to webpages that exist inside or outside of REDCap. These bookmarks will be seen as links on the left-hand project menu and can be accessed at any time by users who are given privileges to do so.
- Every project bookmark has custom settings that allow one to control its appearance and behavior.

Not started

- Go to Add or edit bookmarks

User Rights and Permissions

Optional

- You may grant other users access to this project or edit the privileges of current users on this project by navigating to the User Rights page. Additionally, if you wish to limit user access to certain records/responses for this project, you may want to use Data Access Groups, in which only users within a given Data Access Group can access records created by users within that group.

Not started

- Go to User Rights or Data Access Groups

Test your project thoroughly

Not started

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- Then review your test data by creating reports and exporting your data to Excel or a statistical analysis package. If you have surveys, complete the surveys as if you were a participant by using the Public Survey Link or Participant List by sending a survey invitation to yourself. If other project modules will be used regularly, test them out a bit too. 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

Not started

- Move the project to production status so that real data may be collected. Once in production, you will not be able to add the project fields in real time anymore. However, you can make edits in Draft Mode, which will then need to be approved by a REDCap administrator before taking effect.

Go to Move project to production
Main Project Settings

- Longitudinal Data Collection
- Surveys
- Modify project title, purpose, etc.
Design your data collection instruments
Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method) in which you may use either method or both. Quick links: Download PDF of all data collection instruments OR Download the current Data Dictionary
You may also browse for pre-built data collection instruments in the REDCap Shared Library
Have you checked the Check For Identifiers page to ensure that all identifier fields have been tagged?

Enable optional modules and customizations
- Auto-numbering for records
- Scheduling module (longitudinal only)
- Randomization module
- Designate an email field to use for invitations to survey participants

Set up project bookmarks (optional)
You may create custom bookmarks to webpages that exist inside or outside of REDCap. These bookmarks will be seen as links on the left-hand project menu and can be accessed at any time by users who are given privileges to do so. Every project bookmark has custom settings that allow one to control its appearance and behavior.

User Rights and Permissions
You may grant other users access to this project or edit the user privileges of current users on this project by navigating to the User Rights page. Additionally, if you wish to limit user access to certain records/responses for this project, you may want to use Data Access Groups, in which only users within a given Data Access Group can access records created by users within that group.
Design Instruments

- Online Designer
- Data Dictionary
Online Designer:
Build Your Instrument

Data Entry Forms and Surveys
Creating a Data Entry Form
The Online Designer

Nacho - Practice Tutorial

Project Setup  Online Designer  Data Dictionary

VIDEO: How to use this page

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.

Data Collection Instruments

Add new instrument:
- Create a new instrument from scratch
- Import a new instrument from the official REDCap Shared Library
- Upload instrument ZIP file from another project/user or external libraries

<table>
<thead>
<tr>
<th>Instrument name</th>
<th>Fields</th>
<th>View PDF</th>
<th>Instrument actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>My First Instrument</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Renaming your Instrument

• The option to rename your instrument is found under “Instrument actions” in the Online Designer.

• Select “rename”, then press when you are happy with your instrument’s new name.
Editing your Instrument

• Selecting your instrument brings you here

• Here you may add, edit, and delete instrument fields
Adding a Field

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

Variable Name (utilized during data export)

ONLY letters, numbers, and underscores

Enable auto naming of variable based upon its Field Label?

Validation? (optional) ---- None ----

- 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

Align the position of the field on the page

Field Note (optional)

Small reminder text displayed underneath field

Field Annotation

Explanatory notes - not displayed on any page

--- Select a Type of Field ---

Text Box (Short Text)

Notes Box (Paragraph Text)

Calculated Field

Multiple Choice - Drop-down List (Single Answer)

Multiple Choice - Radio Buttons (Single Answer)

Checkboxes (Multiple Answers)

Yes - No

True - False

Signature (draw signature with mouse or finger)

File Upload (for users to upload files)

Slider / Visual Analog Scale

Descriptive Text (with optional Image/Video/Audio/File Attachment)

Begin New Section (with optional text)

Save  Cancel
All Fields Have:

- **Field Label** – The question/instruction displayed on the form: shown to respondents
- **Variable Name** – How the field appears in the data set: not shown to respondents. Useful for piping
- **Required**: Mark whether question must be answered if data collection is to continue
- **Identifier**: Mark whether field contains PHI
- **Custom Alignment**
- **Field Note**: Shown to respondents
- **Field Annotation**: Not shown to respondents
Text Fields

• Two text fields: Text Box, and Notes Box
• Only the Text Box field offers validation options

• Let’s make a new text field
Our Instrument So Far

• After saving the field, we return to the Online Designer page. We can see our instrument’s new field:
Let’s change:

- The Field Type from Notes Box to Text Box
- The Variable Name
- The Validation

Now let’s [Save] our new field
Our Instrument So Far

Current instrument: The Most Awesome Nacho Survey Ever

- 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.

- Variable: email
  Hello, welcome to the REDCap Data Entry/Survey example! Please enter your email:

- Variable: email2
  Hello, welcome to the REDCap Data Entry/Survey example! Please enter your email:
Yes – No, and True – False
Multiple Choice and Checkboxes

- **Multiple Choice**: Single-answers via Drop-down List or Radio Buttons
- **Checkboxes**: Multiple-answers
Begin New Section

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**

This new section doesn’t so much address your want of Nachos, as much as your NEED of Nachos.

[Add New Field interface with options and instructions]
Descriptive Text

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

Nachos are an important part of a healthy diet. It is recommended you eat Nachos at least twice a day in order to receive enough essential Nacho nutrients.

Variable Name (utilized during data export)

info

ONLY letters, numbers, and underscores

Enable auto naming of variable based upon its Field Label?

Optional file attachment, image, audio, or video:

Embed an external video (provide video URL)

- or -

Attach an image, file, or embedded audio

Upload document

Display format of attachment on page:

* Link
* Inline image
* Audio file (play in embedded player on page)

Field Annotation

Explanatory notes - not displayed on any page
Slider Scale

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 extreme is your current nacho craving?

Variable Name (utilized during data export)

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
Explanatory notes - not displayed on any page

Save Cancel
Calculated Fields

- **Field Type:** Calculated Field
- **Field Label:** Intensity percentage of current nacho-craving
- **Variable Name:** calcrave
- **Calculation Equation:** ([crave] * 0.01) * 100
File Upload

Add New Field

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

Field Label: Please upload the doctor’s note detailing your condition for which nachos are the only cure.

Variable Name: 
- doctors
  ONLY letters, numbers, and underscores

Required?:
- No
- Yes

Identifier?:
- No
- Yes

Custom Alignment: Right / Vertical (RV)

Field Note (optional):

Field Annotation: Learn about Action Tags

Save Cancel
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: Please sign here:

Variable Name (utilized during data export)
- sign
  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

Field Annotation
Explanatory notes - not displayed on any page

Save Cancel
Branching Logic

- Used to show questions under certain conditions
- This branching logic states the field will only show if the email2 variable field is not null (aka it has something in it)
Adding a New Record

The Most Awesome Nacho Survey Ever

You may view an existing record/response by selecting it from one of the drop-down lists below. The records are separated into each drop-down list according to their status for this particular data collection instrument. To create a new record/response, click the button below.

Total records: 0

Incomplete Records (0)

Complete Records (0)

Add new record
Data Entry

• This is what our newly created data collection instrument looks like to data entry personnel.
Incomplete, Unverified, Complete

**Nacho - Practice Tutorial**

**The Most Awesome Nacho Survey Ever**

You may view an existing record/response by selecting it from one of the drop-down lists below. The records are separated into each drop-down list according to their status for this particular data collection instrument. To create a new record/response, click the button below.

- **Total records:** 0
  - **Incomplete Records:** 0
    - -- select record --
  - **Complete Records:** 0
    - -- select record --
    - Add new record

**Data Search**

- **Choose a field to search**
  - -- select search field --
- **Search query**
  - Begin typing to search the project data, then click an item in the list to navigate to that record.
Creating a Survey

Let’s turn that data entry form we just created into a survey!
Return to Project Setup

And then back to the Online Designer:

Design your data collection instruments

Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method), in which you may use either method or both. Quick links: Download PDF of all data collection instruments OR Download the current Data Dictionary

You may also browse for pre-built data collection instruments in the REDCap Shared Library

Have you checked the Check For Identifiers page to ensure all identifier fields have been tagged?
Enable Instrument as Survey

You’ll be taken to the “Set Up My Survey” page, where you can choose the:

- Survey Design Options
- Survey Customizations
- Survey Access
- Survey Termination Options
Survey Design Options

Survey Design Options:

- **Survey Title**: The Most Awesome Nacho Survey Ever
  - Title to be displayed to participants at the top of the survey page

- **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?

- **Survey Instructions**
  - Displayed at top of survey after title
  - Please complete the survey below.
  - Thank you!

[How to use Piping here]
Survey Customizations

- **Question Numbering**: Auto numbered
- **Question Display Format**: All on one page
- **For 'Required' fields, display the red 'must provide value' text on the survey page?**: Yes
- **Allow survey respondents to view aggregate survey results after completing the survey?**: Disabled
- **Text-To-Speech functionality**: Disabled

Additional settings:
- Minimum number of responses required before participants are allowed to view aggregate data (recommended = 10).
- Do not show plots for questions lacking diversity in response values? (What does this mean?)

NOTICE: All survey text that is spoken is sent to a third-party service (TTS-API.COM). 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.
Survey Access:

Survey Expiration (optional)
(Time after which the survey will become inactive.)

The time must be for the time zone America/Chicago, in which the current time is 09/23/2015 13:02.

Allow 'Save & Return Later' option for respondents?
(Allow respondents to leave the survey and return later.)

No
Survey Termination Options:

- **Auto-continue to next survey**: Automatically start the next survey instrument after finishing this survey.
- **Redirect to a URL**: Redirect to a webpage when the survey is completed.
  - URL: http://www.example.com/mypage.html
  - How to use piping here

- **Survey completion text**: Displayed after survey completion.
  - Text: Thank you for taking the survey.
  - Have a nice day!
  - How to use piping here

- **Send confirmation email**: Send a confirmation email to the respondent when they complete the survey.
  - Yes / No

Save Changes

-- Cancel--
Enabled as Survey

- If you would like to disable the instrument as a survey, go to Survey settings, and select “Delete Survey”
Survey Participants

- Let’s take a look at our newly-created survey.

Manage Survey Participants

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. Get shorter survey link or Get embed code to place link on a webpage.

Public Survey URL: https://dept.ku.edu/~crmdadep/redcap/surveys/?s=LCW...
The Most Awesome Nacho Survey Ever

Please complete the survey below.

Thank you!

1) Hello, welcome to the REDCap Data/Survey example!
   Please enter your email:

2) Hello, welcome to the REDCap Data/Survey example!
   Please enter your email:

3) Have you ever eaten nachos?
   - Yes
   - No

4) Which ingredients do you enjoy?
   - Chips
   - Yellow cheese
   - White cheese
   - Meat
   - Beans
   - Tomatoes
   - Peppers

5) What is your absolute favourite ingredient?
   - Chips
   - Yellow cheese
   - White cheese
   - Meat
   - Beans
   - Tomatoes
   - Peppers

6) What is your absolute favourite ingredient?
   [This new section doesn’t so much address your want of Nachos, as much as your NEED of Nachos.]
   Nachos are an important part of a healthy diet. It is recommended you eat Nachos at least twice a day in order to receive enough essential Nacho nutrients.

7) How extreme is your current nacho craving?
   [Very weak, Moderate, Very strong]
   [Click bar above and then drag to set response]

8) Intensity percentage of current nacho craving:
   [ ]

9) I use nachos to treat a medical condition (not just hunger).
   - True
   - False

10) Please upload the doctor’s note detailing your condition for which nachos are the only cure.
   [Upload document]

11) Please sign here:
   [Add signature]

Submit
Access Your Survey

There are many ways to provide access to your survey.
The Participant List option allows you to **send a customized email** to anyone in your list and **track who responds to your survey**. It is also possible to identify an individual’s survey answers, if desired, by providing an Identifier for each participant (this feature must first be enabled by clicking the ‘Enable’ button in the table below). Unless an Identifier is used, all survey responses collected are considered anonymous. [More details](#).

### Participant List belonging to [Initial survey] “The Most Awesome Nacho Survey Ever”

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[No email listed]</td>
<td>Disabled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[No email listed]</td>
<td>Disabled</td>
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<tr>
<td>[No email listed]</td>
<td>Disabled</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
### Send a Survey Invitation to Participants

**Survey title:** The Most Awesome Nacho Survey Ever

**When should the emails be sent?**
- **Immediately**
- **At specified time:** ___/___/___ 00:00

The time must be for the time zone America/Chicago, in which the current time is 03/23/2015 14:48.

**Enable reminders**
- **Re-send invitation as a reminder if participant has not responded by a specified time?**

**Compose message**
- **From:** kennamarie@ku.edu
- **To:** [All participants selected from Participant List]
- **Subject:**

**NOTE:** The survey link will be automatically included in the email message.

You may use HTML formatting in the email message: `<b>` bold, `<i>` italic, `<a>` link, etc.

[How to use piping in the survey invitation](#)

---

### Participant List

**Participant List**

<table>
<thead>
<tr>
<th>Participant Identifier</th>
<th>Scheduled?</th>
<th>Sent?</th>
<th>Responded?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No participants exist

**Actions:** -- check/uncheck participants --

[Actions](#)
Manage Survey Participants

Public Survey Link  Participant List  Survey Invitation Log

The Participant List option allows you to **send a customized email** to anyone in your list and **track who responds to your survey**. It is also possible to identify an individual's survey answers, if desired, by providing an Identifier for each participant (this feature must first be enabled by clicking the 'Enable' button in the table below). Unless an identifier is used, all survey responses collected are considered anonymous. [More details]

Participant List belonging to [Initial survey] "The Most Awesome Nacho Survey Ever"

Displaying 1 - 3 of 3  Add participants  Compose Survey Invitations

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>[No email listed]</td>
<td>Disabled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[No email listed]</td>
<td>Disabled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[No email listed]</td>
<td>Disabled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Applications

Many different features available for REDCap projects
The Calendar

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
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<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Applications

- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging
- Field Comment Log
- File Repository
- User Rights and DAGs
- Data Quality

Help & Information
- Help & FAQ
- Video Tutorials
- Suggest a New Feature

If you are experiencing problems, please contact your REDCap administrator.
Data Exports

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

<table>
<thead>
<tr>
<th>Report name</th>
<th>View/Export Options</th>
<th>Management Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> All data (all records and fields)</td>
<td><img src="image" alt="View Report" /> <img src="image" alt="Export Data" /> <img src="image" alt="Stats &amp; Charts" /></td>
<td></td>
</tr>
<tr>
<td><strong>B</strong> Selected instruments (all records)</td>
<td><img src="image" alt="Make custom selections" /></td>
<td></td>
</tr>
</tbody>
</table>

+ Create New Report
Reports

- Pick and choose fields from an instrument to generate a report
- Can be used to filter and sort data
Applications

- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging
- Field Comment Log
- File Repository
- User Rights and DAGs
- Data Quality

Help & Information
- Help & FAQ
- Video Tutorials
- Suggest a New Feature

If you are experiencing problems, please contact your REDCap administrator.
Data Import

- Download Data Import Template
- Fill in Template
- Upload Data

Data Import Tool

This module may be used for importing data into this project from a CSV (comma delimited) file. Below are the steps you will need to follow in order to import your data successfully into this project.

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

**Instructions:**

1. Click the link below to download your data import template as a CSV (comma delimited) file. Save it locally to your computer and then open it to begin filling it with the data you wish to import.

   ![Download your Data Import Template](image)

   OR

   ![Download your Data Import Template](image)

2. In each column of the Data Import Template file that you downloaded, place the data for each record that you wish to import. Once all your data has been added, save the file:
   - Be sure not to change the Variable/Field Names in the file or an error may occur.
   - Also, for all of the ‘dropdown’ or ‘radio’ fields in the project, you must make sure that the numerical value (rather than the text value) is entered in those cells, or else it cannot be processed.
   - Any empty rows or columns in the file can be safely deleted before importing the file. Doing this reduces the upload processing time, especially for large projects.

3. Click the ‘Browse’ or ‘Choose File’ button below to select the file on your computer, and upload it by clicking the ‘Upload File’ button.

4. Once your file has been uploaded, the data will NOT be immediately imported but will be displayed and checked for errors to ensure that all the data is in correct format before it is finally imported into the project.

**Record format:** The file to be uploaded has its records stored as separate
**Rows**

**Format for date and datetime values:**

MM/DD/YYYY or YYYY-MM-DD

**Allow blank values to overwrite existing saved values?**

No, ignore blank values in the CSV file (default)

**Upload your CSV file:**

- Choose File
- No file chosen

Upload File
Applications

- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging
- Field Comment Log
- File Repository
- User Rights and DAGs
- Data Quality

Help & Information
- Help & FAQ
- Video Tutorials
- Suggest a New Feature

If you are experiencing problems, please contact your REDCap administrator.
Data Comparison Tool

Compare two records currently in the project
Applications

- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging
  - Field Comment Log
- File Repository
- User Rights and DAGs
- Data Quality

Help & Information
- Help & FAQ
- Video Tutorials
- Suggest a New Feature

If you are experiencing problems, please contact your REDCap administrator.
Logging

• Log of events in a project
  – Update Record
  – Create Record
  – Manage/Design
  – Data Export
• Log of event time
• Username
• List of Data Changes
Applications

- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging
- Field Comment Log
- File Repository
- User Rights and DAGs
- Data Quality

Help & Information

- Help & FAQ
- Video Tutorials
- Suggest a New Feature

If you are experiencing problems, please contact your REDCap administrator.
Applications

- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging
- Field Comment Log
- File Repository
- User Rights and DAGs
- Data Quality

Help & Information
- Help & FAQ
- Video Tutorials
- Suggest a New Feature

If you are experiencing problems, please contact your REDCap administrator.
File Repository

- All uploaded files can be found here
- Can upload file
- Can export uploaded files
Applications

- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging
- Field Comment Log
- File Repository
- User Rights
- Data Quality

Help & Information
- Help & FAQ
- Video Tutorials
- Suggest a New Feature

If you are experiencing problems, please contact your REDCap administrator.
User Rights

This page may be used for granting users access to this project and for managing the user privileges of those users. You may also create roles to which you may assign users (optional). User roles are useful when you will have several users with the same privileges because they allow you to easily add many users to a role in a much faster manner than setting their user privileges individually. Roles are also a nice way to categorize users within a project. In the box below you may add/assign users or create new roles, and the table at the bottom allows you to make modifications to any existing user or role in the project, as well as view a glimpse of their user privileges.

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

<table>
<thead>
<tr>
<th>Role name</th>
<th>Username or users assigned to a role</th>
<th>Expiration</th>
<th>Project Design and Setup</th>
<th>User Rights</th>
<th>Data Access Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>---</td>
<td></td>
<td>never</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<td>never</td>
<td>✔</td>
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</tr>
</tbody>
</table>
Applications

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- Field Comment Log
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- User Rights and DAGs
- Data Quality

Help & Information
- Help & FAQ
- Video Tutorials
- Suggest a New Feature

If you are experiencing problems, please contact your REDCap administrator.
Data Access Groups (DAGs)

- Assign users to Data Access Groups
  - Users in a data access group will only be able to see project records created by themselves or other members of their group.
Applications

- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging
- Field Comment Log
- File Repository
- User Rights and DAGs
- Data Quality

Help & Information
- Help & FAQ
- Video Tutorials
- Suggest a New Feature

If you are experiencing problems, please contact your REDCap administrator.
Data Quality

This module will allow you to execute data quality rules upon your project data to check for discrepancies in your data. Listed below are some pre-defined data rules that you may utilize and run. You may also create your own rules or edit, delete, or reorder the rules you have already created. To find discrepancies for a given rule, simply click the Execute button next to it, or click the Execute All Rules button to fire all the rules at once. It will provide you with a total number of discrepancies found for each rule and will allow you to view the details of those discrepancies by clicking the View link next to each. Read more detailed instructions.

<table>
<thead>
<tr>
<th>Rule #</th>
<th>Rule Name</th>
<th>Rule Logic</th>
<th>Real-time execution</th>
<th>Total Discrepancies</th>
<th>SUPER SPECIAL GROUP</th>
<th>Delete rule?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Missing values*</td>
<td>-</td>
<td>Execute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Missing values* (required fields only)</td>
<td>-</td>
<td>Execute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Field validation errors (incorrect data type)</td>
<td>-</td>
<td>Execute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Field validation errors (out of range)</td>
<td>-</td>
<td>Execute</td>
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<td></td>
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<td>Cutlers for numerical fields (numbers, integers, sliders, calc fields)</td>
<td>-</td>
<td>Execute</td>
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<td>Hidden fields that contain values**</td>
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<td>Execute</td>
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<tr>
<td>G</td>
<td>Multiple choice fields with invalid values</td>
<td>-</td>
<td>Execute</td>
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<td></td>
<td></td>
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<td>H</td>
<td>Incorrect values for calculated fields</td>
<td>-</td>
<td>Execute</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Add

Enter descriptive name for new rule (e.g., Participants below age 16)

Enter logic for new rule (e.g., [age] < 13)

How do I use special functions?

Execute in real time on data entry forms?
Data Quality

This module will allow you to execute data quality rules upon your project data to check for discrepancies in your data. Listed below are some pre-defined data rules that you may utilize and run. You may also create your own rules or edit, delete, or reorder the rules you have already created. To find discrepancies for a given rule, simply click the Execute button next to it, or click the Execute All Rules button to fire all the rules at once. It will provide you with a total number of discrepancies found for each rule and will allow you to view the details of those discrepancies by clicking the View link next to each. Read more detailed instructions.

<table>
<thead>
<tr>
<th>Rule #</th>
<th>Rule Name</th>
<th>Rule Logic (Show discrepancy only if...)</th>
<th>Real-time execution</th>
<th>Total Discrepancies</th>
<th>SUPER SPECIAL GROUP</th>
<th>Delete rule?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Missing values*</td>
<td></td>
<td></td>
<td></td>
<td>22</td>
<td>view</td>
</tr>
<tr>
<td>B</td>
<td>Missing values* (required fields only)</td>
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<td>Field validation errors (incorrect data type)</td>
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<td>Field validation errors (out of range)</td>
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<td>Outliers for numerical fields (numbers, integers, sliders, calc fields)</td>
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<td>view</td>
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<td>Hidden fields that contain values**</td>
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<td>Incorrect values for calculated fields</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>view</td>
</tr>
</tbody>
</table>

Add
Enter descriptive name for new rule
(e.g., Participants below age 18)

Enter logic for new rule
(c.e., [age] < 18)

How do I use special functions??
Back to Project Setup

### Main project settings
- Use longitudinal data collection with repeating forms?
- Use surveys in this project?

### Design your data collection instruments
- Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method), in which you may use either method or both. Quick links: Download PDF of all data collection instruments OR Download the current Data Dictionary.

### Test your project thoroughly
It is important to test the essential components of your project before moving it into production. Try creating a few test records and entering some data for each to ensure that your data collection instruments look and behave how you expect, especially branching logic and calculations. Then review your test data by creating reports and exporting your data to view in Excel or a statistical analysis package. If you have surveys, complete the surveys as if you were a participant by using the Public Survey Link or Participant List by sending a survey invitation to yourself. If other project modules will be used regularly, test them out a bit too. 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.

### Set up project bookmarks (optional)
You may create custom bookmarks to webpages that exist inside or outside of REDCap. These bookmarks will be seen as links on the left-hand project menu and can be accessed at any time by users who are given privileges to do so. Every project bookmark has custom settings that allow one to control its appearance and behavior.

### Move your project to production status
Move the project to production status so that real data may be collected. Once in production, you will no longer be able to edit the project fields in real-time anymore. However, you can make edits in Draft Mode, which will then need to be approved by a REDCap administrator before taking effect.

### User Rights and Permissions
You may grant other users access to this project or edit the user privileges of current users on this project by navigating to the User Rights page. Additionally, if you wish to limit user access to certain records/responses for this project, you may want to use Data Access Groups, in which only users within a given Data Access Group can access records created by users within that group.

Go to: [User Rights] or [Data Access Groups]
Longitudinal Data Collection

• After enabling Longitudinal Data Collection, you’ll see a new section appear in your main project settings.
Define Events

• Events
  – Able to define unlimited number of events per project

• Arms
  – Able to group events into arms
Designate Instruments for My Events

• After you save, the selected instrument will be utilized for the event “Event 1”
Optional Modules and Customizations

- Scheduling Module: Enables auto-generated project calendar scheduling based on project-defined events
- Randomization Module: Allows you to define randomization parameters to randomize subjects (i.e. records in a project)
- Designate an email field: Populate participant list through a data collection instrument
Designating an Email Field

- After enabling the “designate an email field” setting, this screen will pop-up allowing you to select the field which will gather emails.
- This field can only be a text-box field, that is email-validated. No other field will work with this setting.
- In our case, it is the field with the “email2” variable.
Successful Email Designation

- Success!
- Now emails entered into this field will populate your participants list.
- It does not matter if the field exists in a survey or data entry form.
Randomization Modules

• Another new section will appear after enabling randomization modules
Setting Up Randomization Modules
Step One

- Stratified randomization:
  - Ensures equal treatment among a number of factors
- By Group:
  - Randomize via group
- Choose Field
Setting Up Randomization Modules

Step Two

STEP 2: Download template allocation tables (as Excel/CSV files)

Below are some example files that you may download to get a general idea for how you may structure your own randomization table. You do not have to use any of these. In fact, we recommend that you NOT use these exact templates but instead recommend that you merely use them as an example or baseline to start from in order to create your own custom allocation file. After uploading your allocation table in Step 3 below, it will then be used as a lookup table to perform assignments when subjects are being randomized. **NOTE:** Record names (e.g., study ID) should NOT be included as a column in your allocation table, but only the fields listed in the example files below. More details

- Example #1 (basic)
- Example #2 (all possible combos)
- Example #3 (5x all possible combos)

What Example #3 Looks Like for our Nachos Question

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>nachos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>NOTES:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>- Do NOT modify the first row, although you may modify, add, or delete any other row in this file.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>- Remember that this file is ONLY a template and should NOT be used as-is as your allocation table.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>- You do not have to delete this 'notes' column when uploading your allocation table (it will be ignored).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>- Below is a list of all raw coded values and their corresponding option labels for each strata field and/or Data Access Groups.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>Values/labels for &quot;nachos&quot; (Have you ever eaten nachos?):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>1 Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0 No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Setting Up Randomization Modules

Step Three

STEP 3: Upload your allocation table (CSV file)

Once you have created your custom allocation table as a CSV file and made sure that you kept the format prescribed in the template files from Step 2 above, you may now upload the file below. It will be checked for any possible errors first before it is accepted and stored in REDCap. Please note that you will need to create two different allocation tables: one to be used for testing while your project is in development status, and the other for use when in production status. Below are some important reminders before you begin uploading your allocation tables.

Reminders:
- Once your project is in production status, the allocation tables will become locked and unmodifiable.
- Be sure to include more assignments in your allocation table than you think you will need (to accommodate possible drop-out and drop-in of subjects).
- Record names (e.g., study ID) should NOT be included as a column in your allocation table, but only the fields listed in the example files from Step 2 above.

Upload allocation table (CSV file) for use in DEVELOPMENT status

Choose File | No file chosen

Upload File

Upload allocation table (CSV file) for use in PRODUCTION status

Choose File | No file chosen

Upload File

Upload your Allocation Table to complete randomization
Randomization Dashboard

Randomization

Randomization is a process that assigns participants/subjects by chance (rather than by choice) into specific groups, typically for clinical research and clinical trials. The randomization module in REDCap will help you implement a defined randomization model within your project, allowing you to randomize your subjects (i.e. records in your project). In this module, you first define the randomization model with various parameters. Based on the defined parameters, the module creates a template allocation table, which you can use to structure the randomization table you will import. The module also monitors the overall allocation progress and assignment of randomized subjects. Note: It is recommended that only people with experience in randomization set up the Randomization module. More details

Setup Dashboard

The table below displays the allocation dashboard for use in DEVELOPMENT status. All assignments are grouped to show in aggregate the count of records that have been randomized for each row (i.e. combinations). Assignments that have been used will get counted in the 'Used' column while those that are still unallocated will get counted in the 'Not Used' column. Once all assignments have been used for a given row/combination, it will display a checkmark icon in its row. The headers in the table may be clicked to sort the table by that column either in ascending or descending order.

<table>
<thead>
<tr>
<th>Used</th>
<th>Not Used</th>
<th>Allocated records</th>
<th>Have you ever eaten nachos? (nachos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td></td>
<td>No (0)</td>
</tr>
<tr>
<td>0</td>
<td>5</td>
<td></td>
<td>Yes (1)</td>
</tr>
</tbody>
</table>
Project Setup

Main project settings
- Use longitudinal data collection with repeating forms
- Use surveys in this project

Design your data collection instruments
Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method), in which you may use either method or both.

Enable optional modules and customizations
- Auto-numbering for records
- Scheduling module (longitudinal only)
- Randomization module
- Designate an email field to use for invitations to survey participants

Set up project bookmarks (optional)
You may create custom bookmarks to web pages that exist inside or outside of REDCap. These bookmarks will be seen as links on the left-hand project menu and can be accessed at any time by users who are given privileges to do so. Every project bookmark has custom settings that allow one to control its appearance and behavior.

User Rights and Permissions
You may grant other users access to this project or edit the user privileges of current users on this project by navigating to the User Rights page. Additionally, if you wish to limit user access to certain records/responses for this project, you may want to use Data Access Groups, in which only users within a given Data Access Group can access records created by users within that group.

Test your project thoroughly
It is important to test the essential components of your project before moving it into production. Try creating a few test records and entering some data for each to ensure that your data collection instruments look and behave how you expect, especially branching logic and calculations. Then review your test data by creating reports and exporting your data to view in Excel or a statistical analysis package. If you have surveys, complete the surveys as if you were a participant by using the Public Survey Link or Participant List by sending a survey invitation to yourself. If other project modules will be used regularly, test them out a bit too. 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
Move the project to production status so that real data may be collected. 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 then need to be approved by a REDCap administrator before taking effect.
Project Setup

Main project settings
- Use longitudinal data collection with repeating forms?
- Use surveys in this project?
- Modify project title, purpose, etc.

Design your data collection instruments
Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (files only) or by uploading a Data Dictionary (offline method), in which you may either method or both. Quick links: Download PDF of all data collection instruments or Download the current Data Dictionary.

Enable optional modules and customizations
- Auto-numbering for records
- Scheduling module (longitudinal only)
- Randomization module
- Designate an email field to use for invitations to survey participants

Set up project bookmarks (optional)
You may create custom bookmarks to webpages that exist inside the project area. You can set custom settings for each bookmark. Every project bookmark has custom settings and behavior.

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Setup Project Bookmarks

Create bookmarks to websites
Project Setup

Main project settings
- Use longitudinal data collection with repeating forms?
- Use surveys in this project?
- Modify project title, purpose, etc.

Design your data collection instruments
Add or edit fields on your data collection instruments. This may be done by either using the Online Designer or by uploading a Data Dictionary. You may use either method or both.

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Move your project to production status
Move the project to production status so that real data may be collected. 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 then need to be approved by a REDCap administrator before taking effect.

Go to Online Designer or Data Dictionary
You may also browse for pre-built data collection instruments in the REDCap Shared Library. Have you checked the Check For Identifiers page to ensure that all identifier fields have been tagged?

Additional customizations
- Add or edit bookmarks

Go to User Rights or Data Access Groups

User Rights and Permissions

Another route of assigning User Rights and DAGs in a project.
Project Setup

**Main project settings**
- Use longitudinal data collection with repeating forms?
- Use surveys in this project?
- Modify project title, purpose, etc.

**Design your data collection instruments**
Add or edit fields on your data collection instruments. This may be done by either using the Online Designer (online method) or by uploading a Data Dictionary (offline method), in which you may use either method or both. Quick links: Download PDF of all data collection instruments OR Download the current Data Dictionary.

**Enable optional modules and customizations**
- Auto-numbering for records
- Scheduling module (longitudinal only)
- Randomization module
- Designate an email field to use for invitations to survey participants

**Set up project bookmarks (optional)**
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**Test your project thoroughly**
It is important to test the essential components of your project before moving it into production. Try creating a few test records and entering some data for each to ensure that your data collection instruments look and behave how you expect, especially branching logic and calculations. Then review your test data by creating reports and exporting your data to view in Excel or a statistical analysis package. If you have surveys, complete the surveys as if you were a participant by using the Public Survey Link or Participant List by sending a survey invitation to yourself. If other project modules will be used regularly, test them out a bit too. 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**
Move the project to production status so that real data may be collected. 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 then need to be approved by a REDCap administrator before taking effect.

Go to: Move project to production
Before Moving Project to Production

- Check sections as they are completed
- Test your project thoroughly
  - Edits made in production must be reviewed and approved by me before taking effect in your project

Test your project thoroughly

It is important to test the essential components of your project before moving it into production. Try creating a few test records and entering some data for each to ensure that your data collection instruments look and behave how you expect, especially branching logic and calculations. Then review your test data by creating reports and exporting your data to view in Excel or a statistical analysis package. If you have surveys, complete the surveys as if you were a participant by using the Public Survey Link or Participant List by sending a survey invitation to yourself. If other project modules will be used regularly, test them out a bit too. 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.

Until the appropriate procedure has been followed

YOU SHALL NOT PASS!
Moving Projects to Production

If using randomization, make sure you also uploaded an allocation table for use in production. It cannot be a duplicate of the table used for development.
Congratulations!

• Your project is now in production, which means you can start collecting real data for your project!
Advanced Features

These are some features REDCap Administrators can enable for your survey:

• Double Data Entry (DDE):
  – Have someone enter data, and then have it be double checked for errors before it is officially a part of your data-set

• API:
  – “Application Programming Interface”, allows external software to programmatically download and upload data into REDCap Projects

• REDCap Mobile:
  – App that can be used without wireless or internet connectivity to collect data on device, and send data back to project on REDCap server once the device is back online
New Features

• Improved Data Import Tool
  – Allow blank values to overwrite existing saved values
• REDCap Mobile
• Instrument ZIP Download and Upload
• Field Annotation
• Project Notes