Creating and Distributing a Single Survey in REDCap – How-To Guide

Any data collection form in REDCap can be enabled as a survey, allowing participants to enter data for themselves, without having access to the REDCap project and its data. Survey participants do *not* need to have GatorLink access to complete surveys, only those who need to see the data and create the surveys need access to the REDCap project.

This guide describes how to create and distribute a *single survey* (the project contains only *one* data collection instrument that is enabled as a survey), methods for collecting anonymous and non-anonymous survey data, how to set up longitudinal survey collection (the *one* survey is distributed *multiple* times to participants) and how to get notified when a participant submits a survey.

REDCap has an online *Help & FAQs* page detailing survey design, the different distribution methods (Public Link vs. Participant List), and the advantages/limitations of each of these methods. It is recommended that you read the relevant sections below *before* sending out your survey to participants.

Survey Design: Help & FAQs:
https://redcap.ctsi.ufl.edu/redcap/index.php?action=help#ss41

Surveys: Anonymous Surveys: Help & FAQs:
https://redcap.ctsi.ufl.edu/redcap/index.php?action=help#ss56

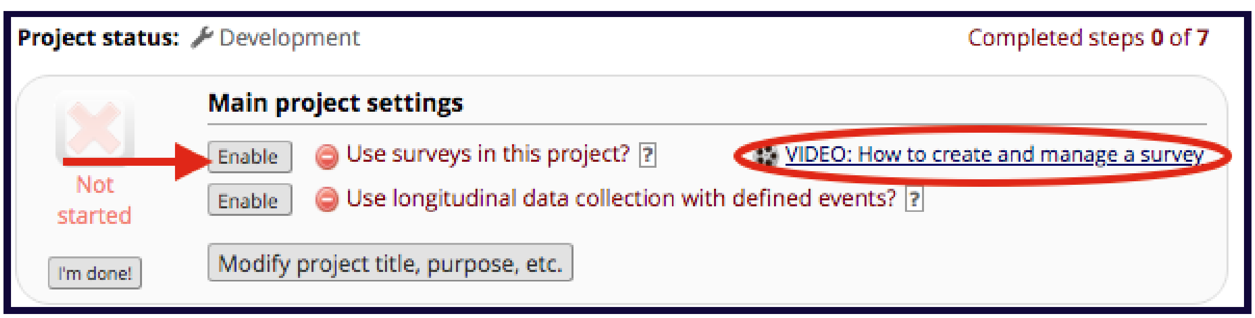
Surveys: Invite Participants: Help & FAQs:
https://redcap.ctsi.ufl.edu/redcap/index.php?action=help#ss57

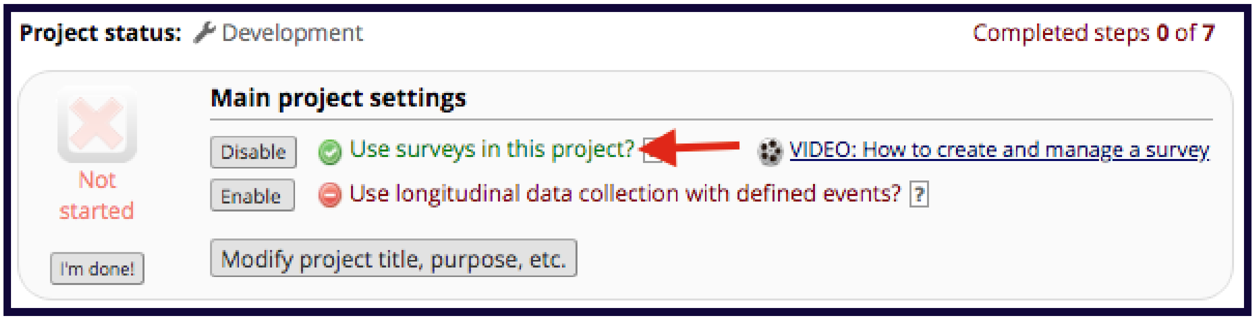
Surveys: Automated Survey Invitations (longitudinal survey data): Help & FAQs:
https://redcap.ctsi.ufl.edu/redcap/index.php?action=help#ss58

Enabling a Data Collection Form as a Survey:

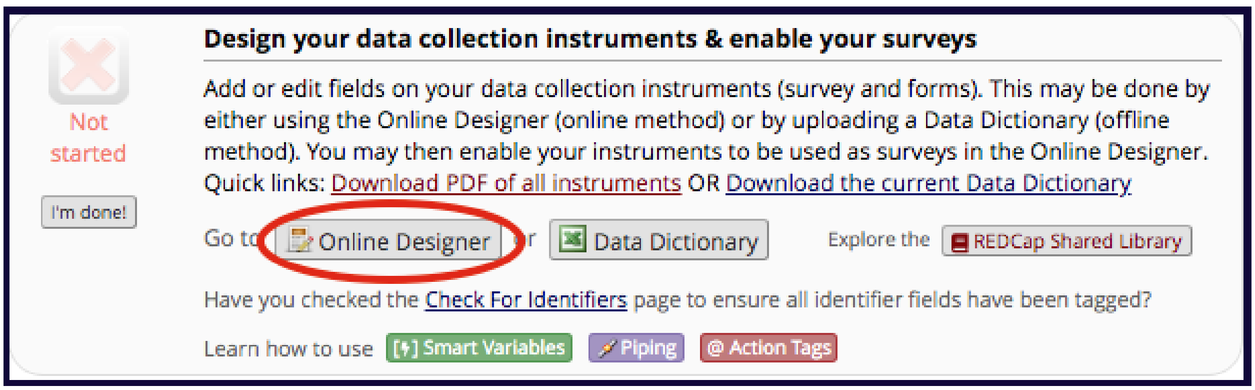
Once you have built the data collection form that is intended to be a survey, the first step is to enable the form to be a survey.

On the *Project Setup* page, click on 'Enable' next to 'Use surveys in this project'. Once enabled, the text will become green.

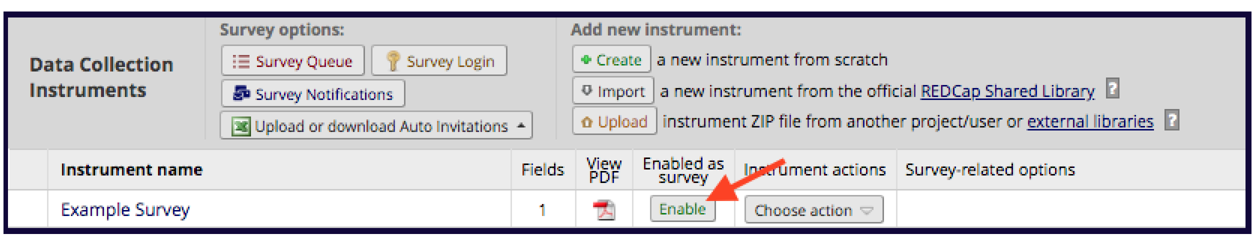




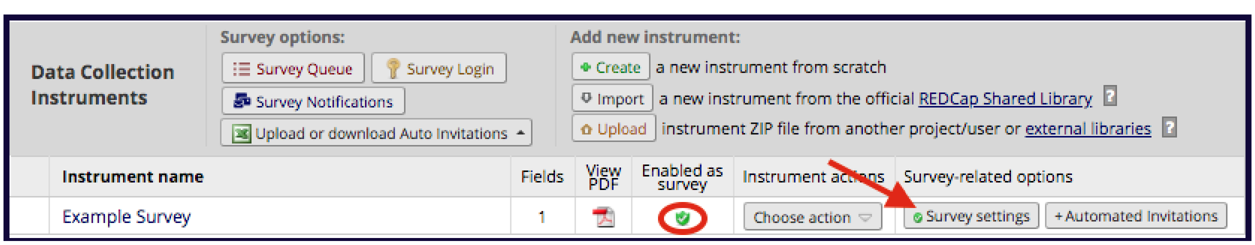
After surveys have been enabled, go to the *Online Designer* page to enable the form itself as a survey.



Click on 'Enable' under 'Enabled a survey'.

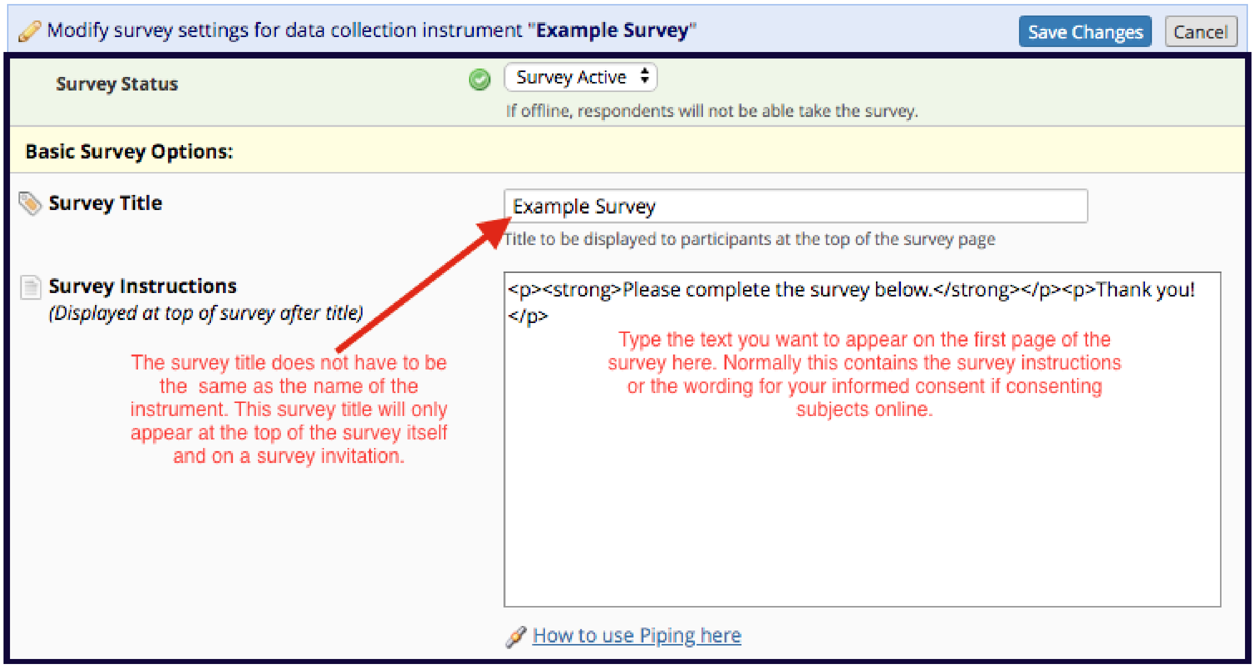


Now that the form is enabled as a survey, click on 'Survey Settings' (Figure 4) to design your survey.

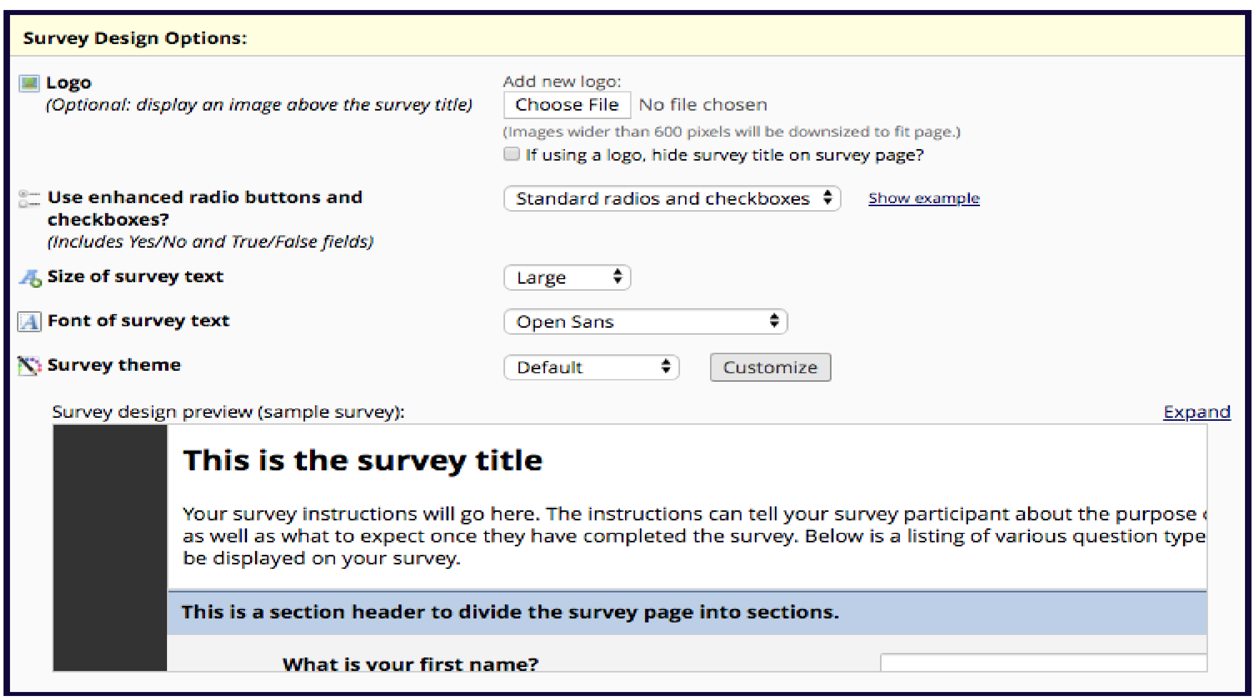


This will take you to the *Survey Settings* page.

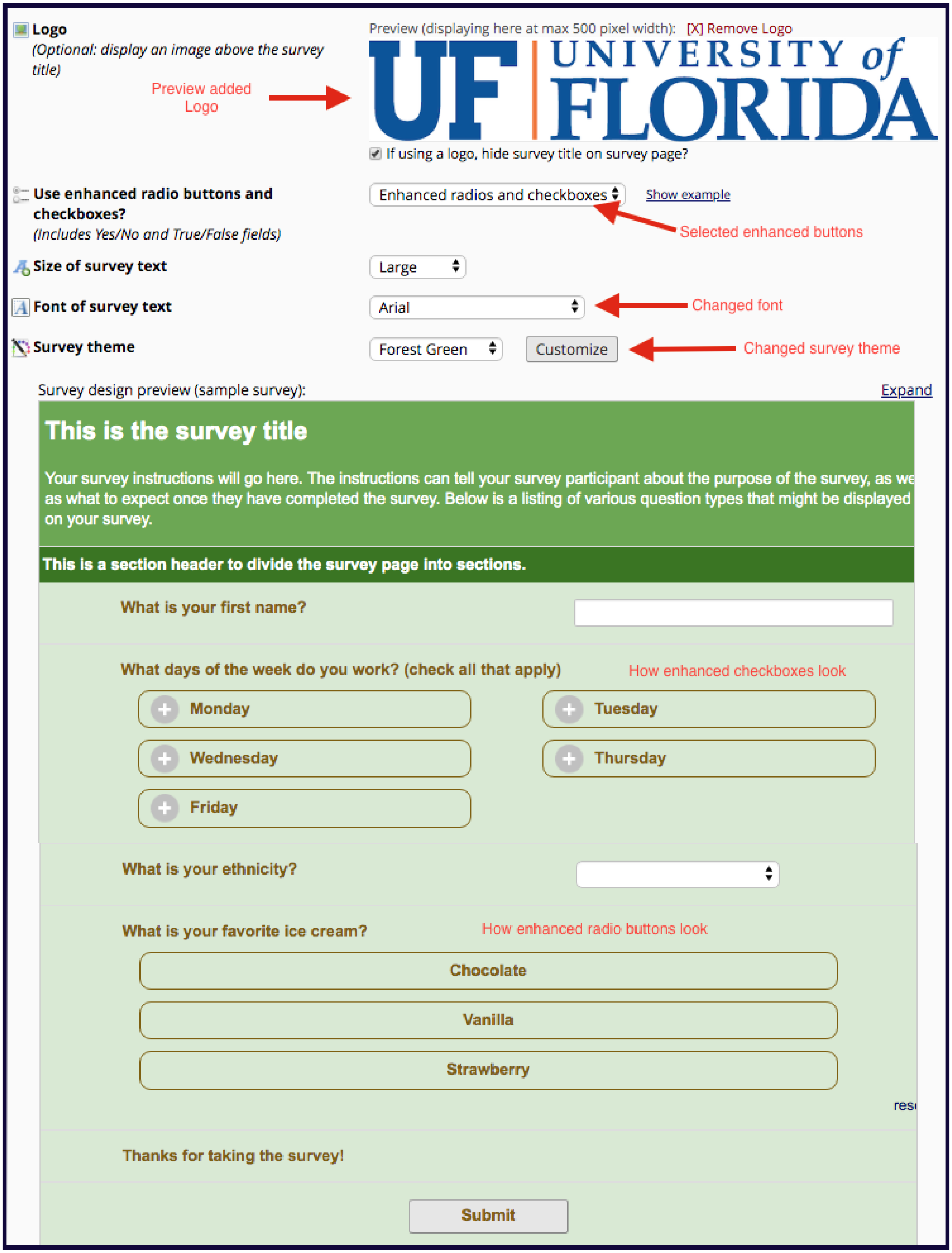
The ***Survey Settings*** page is where you design your survey, such as choosing the font, text size and the survey's color theme, and configure its settings, such as the question display format (all on one page or multiple pages), setting up an expiration date, enabling Text-to-Speech functionality, entering the survey completion text, and setting up confirmation emails for respondents.



Survey Design Options – This is where you can customize how your survey looks. You can add a logo, used enhanced radio and checkbox buttons, edit survey text font and size and change the survey theme. As you customize you can see the changes in the Survey design preview box.



Here is a customized survey design preview



Survey Customizations – This section contains question numbering options, survey on one page or multiple pages, allow PDF downloads of completed surveys, add specific email invitation field, display "must provide value" for required fields, allow respondents to view aggregate survey results, text-to-speech functionality.

Question Numbering – You can select either Auto-numbered or Custom-numbered for the survey questions.

Question Display Format – The survey can be one page or multiple pages. To break the survey into sections for multiple pages, use the *Begin New Section (with optional text)* field type. Each section will be its own page of the survey.

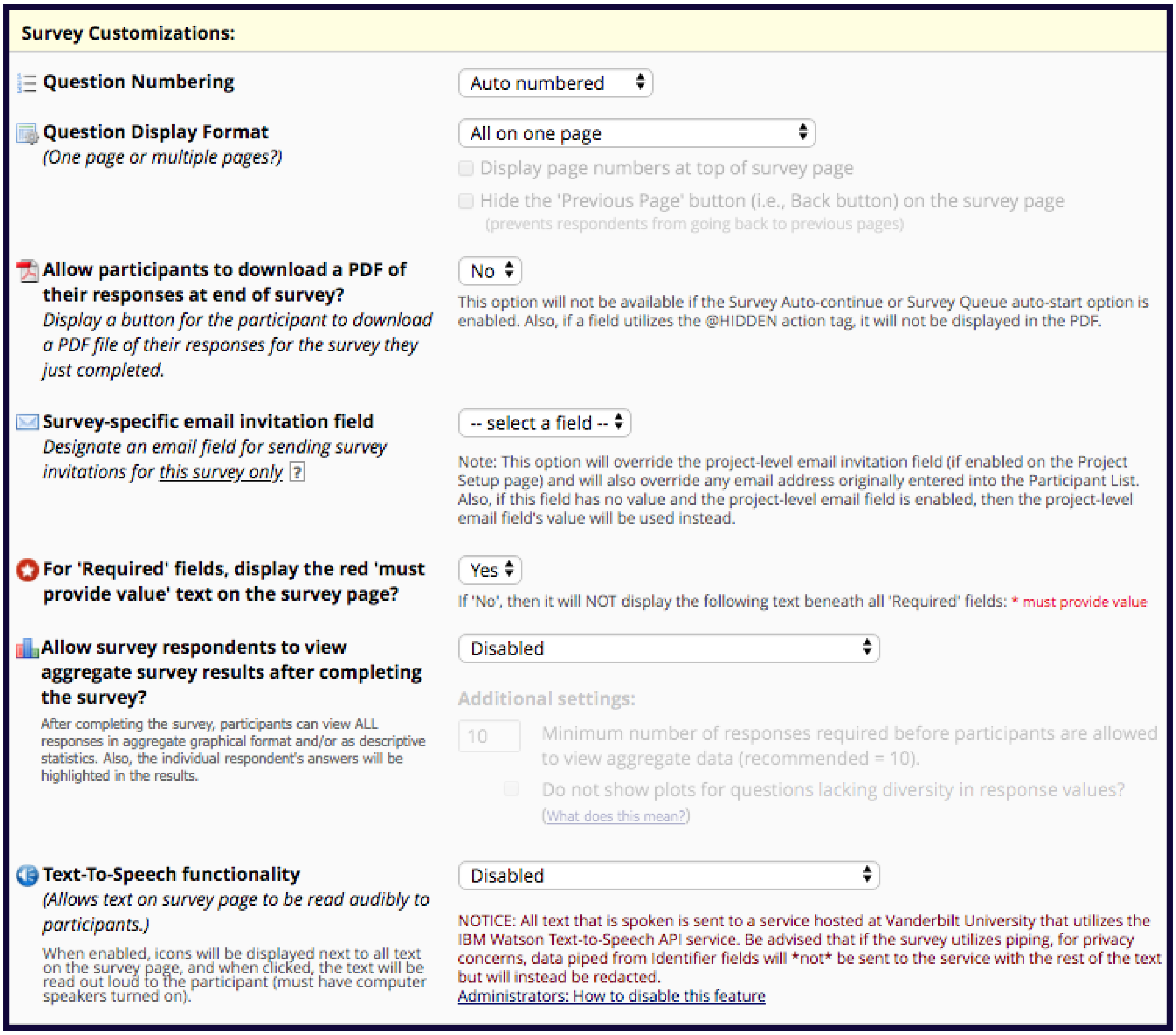
Allow participants to download a PDF of their responses at the end of survey – This option will display a button for the participant to download a PDF file of their responses for the survey they just completed.

Survey-specific email invitation field – A survey-specific email invitation field can be enabled for any given survey, in which you can designate any email field in your project to use for sending survey invitations for that particular survey. Thus, you can collect several email addresses (e.g., for a student, a parent, and a teacher) and utilize each email for a different survey in the project. Then you can send each person an invitation to their own survey, after which all the survey responses get stored as one single record in the project.
The survey-specific email field is similar to the project-level email invitation field except that it is employed only for the survey where it has been enabled. In this way, the survey-level email can override an existing email address originally entered into the Participant List or the project-level email field (if used). This feature allows users to have data entry workflows that require multiple surveys where the participant is different for each survey. (Note: The email field can exist on any instrument in the project, and you may use a different email field on each survey. You may also use the same email field for multiple surveys.)

For 'Required' fields, display the red 'must provide value' text on the survey page – If enabled the * must provide value will appear beneath all 'Required' fields.

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

Text-To-Speech functionality – Allows text on survey page to be read audibly to participants. When enabled, icons will be displayed next to all text on the survey, and when clicked, the text will be read out loud to the participant (must have device speakers turned on).



Survey Access – This section allows you to implement response limits, time limits to complete a survey once an invitation is sent, set an expiration date for the survey and an option on allowing respondents to save and return to survey at a later time.

> ***Response Limit*** – You can set the maximum number of responses to collect. Prevents respondents from starting the survey after a set number of responses have been collected. An important note about using the Response Limit feature is that if the limit has been reached for a given survey, then the survey will no longer show up in a participant's Survey Queue (if enabled), the Survey Auto-continue option (if enabled on the Survey Settings page) will skip over this survey, and also Automated Survey Invitations (if enabled) will no longer be scheduled for the survey.

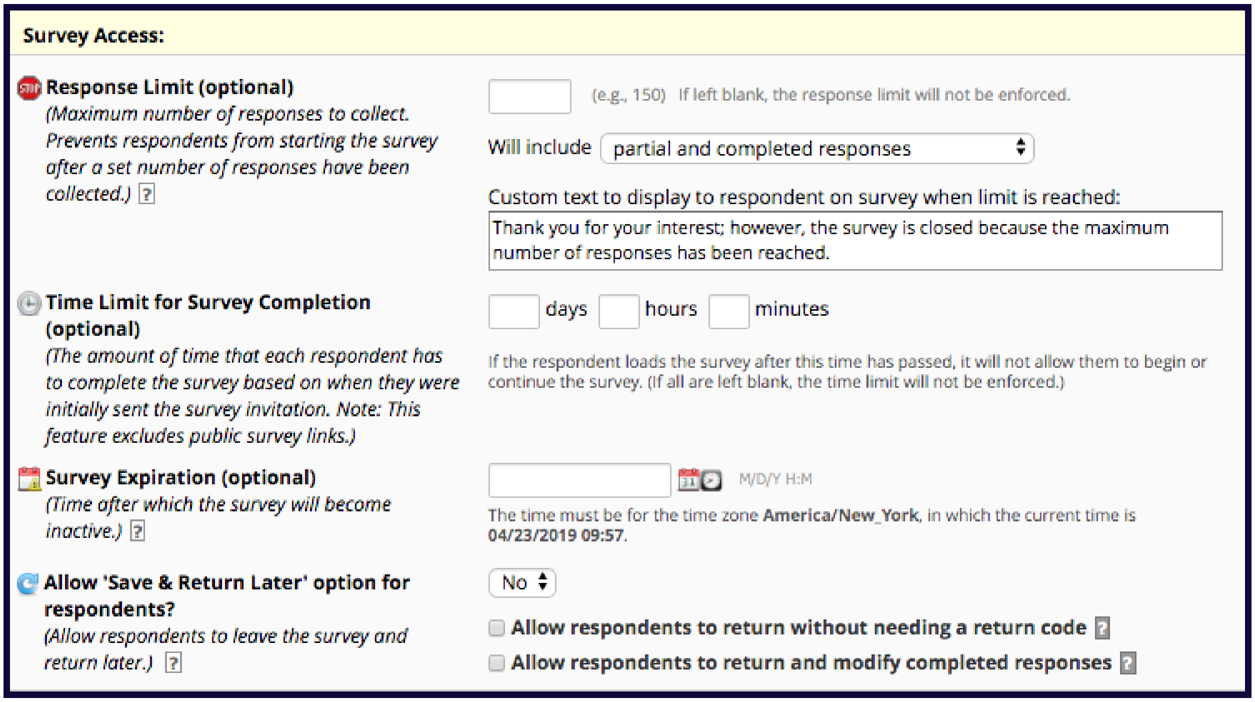
Response Limit continued:
RECORD DELETION NOTE: If records/responses are deleted from the project after the response limit has been reached, in which the number of responses falls below the limit again, then the survey will begin showing up in the Survey Queue again, the Survey Auto-continue option will begin working normally again, and Automated Survey Invitations will begin to be scheduled again. However, in this case, any invitations that did not get scheduled via Automated Survey Invitations after the limit had been reached will *not* get automatically scheduled again if the response count falls below the limit due to the deletion of records/responses, in which case those invitations would have to be scheduled manually.
LONGITUDINAL NOTE: If your project has the longitudinal module enabled, then please keep in mind that the Response Limit will be applied to each event individually where the survey is utilized. For example, if the response limit is set to 50, then even though the survey on Event 1 has reached the limit, the survey on Event 2 and so forth will still be open if the survey on those events have not reached the limit.

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

Survey Expiration – You can set the time after which the survey will become inactive.

Allow 'Save & Return Later' option for respondents – If you're survey is long or you want to allow respondents to save the survey and return to it later, you can enable that here. This option provides respondents with a 'Save & Return Later' button on the survey page, which allows them to save their progress and return where they left off to complete the survey any time in the future.
Allow respondents to return without needing a return code: By default, when respondents click the 'Save & Return Later' button on a survey, they will need the return code provided to them in order to return to the survey later to begin where they left off. But this behavior can be modified by checking the checkbox, which will allow anyone with only the survey link to return to the survey and view all previously entered responses WITHOUT needing a return code. <u>NOTE: If you are collecting identifying information (e.g., PII, PHI), for privacy reasons it is HIGHLY recommended that you leave the option unchecked so as to enforce a return code.</u>

Allow respondents to return and modify completed responses: By default, respondents are not allowed to modify their survey responses if the survey has been fully completed. By checking this checkbox, it allows respondents to return to a completed survey response (via the Save & Return Later functionality) and modify any of their answers in the survey. The survey response will remain as a completed response during this process and afterward. The only thing that will change with regard to the actual status of their survey response is that if the respondent gets to the end of the survey again and completes it again, the survey completion time will be updated with the new time of completion. If the survey has the Survey Login feature enabled, then the user will have to log in with their login credentials in order to return to the completed survey response. If that feature is not enabled, then their auto-generated return code will be required to allow them to return.

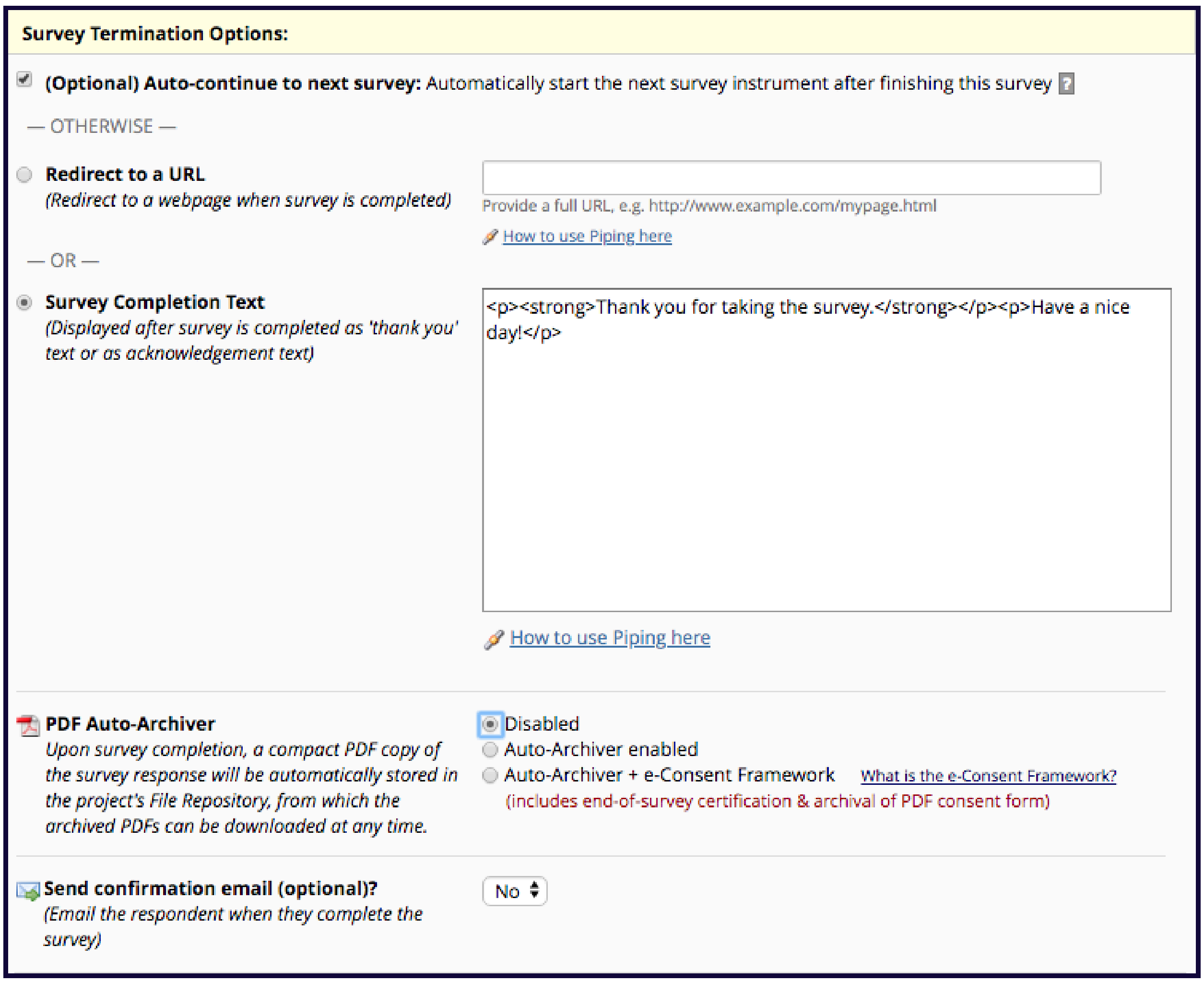


Survey Termination Options – This section allows additional options on what you want to happen when a respondent completes a survey (e.g., auto-continue to next survey, redirect to a URL, specific survey completion text, store completed survey as a PDF, send confirmation email to respondent).

> ***Auto-continue to next survey*** – When enabled this will automatically start the next survey instrument after finishing this survey.
> Linking surveys together is only supported inside the same event and must be enabled for each survey you wish to link. This feature allows you to have separate survey instruments strung together to appear as though they were a single survey to the survey participant. This is especially useful for complex longitudinal project where different combinations of instruments are given in separate events. If enabled and this is the last survey, the selected termination option below will be used. NOTE: If you wish to utilize more advanced conditional logic to control which survey that the participant goes to next, you should use the Survey Queue feature, which can be enabled in the Online Designer.
>
> ***Redirect to a URL*** – This will redirect the respondent to a webpage when a survey is completed.
>
> ***Survey Completion Text*** – This is the text that will appear when the respondent submits the survey. It is not emailed to them, it merely appears on the screen when they click *Submit*. You can edit this text, use piping and some HTML.

PDF Auto-Archiver – When enabled, upon survey completion, a compact PDF copy of the survey response will be automatically stored in the project's File Repository, from which the archived PDFs can be downloaded at any time.
NOTE: This feature is highly recommended to use while eConsenting participants via a survey. This feature only works when the instrument is completed as a survey.

Send confirmation email – When enabled this option will send a confirmation email to the respondent when they complete the survey. You can also select to include PDF of completed survey as an email attachment. Since email is not considered a secure form of communication this is **NOT** recommended if the survey contains identifying information (PHI).



Survey Distribution

Now that the survey settings are done, the survey needs to be distributed. There are two methods of distributing the survey: via the ***Public Survey Link*** and via the ***Participant List***.

Public Survey Link:
Using the *Public Survey Link* is the simplest and fastest way to collect responses for your survey. 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, and REDCap does not keep track of which respondents have taken the survey and which have not since the respondent's emails are not captured within the system. The *Public Survey Link* can be used for longitudinal data collection as long as the '*Designated an email field to use for invitations to survey participants'* has been enabled on the *Project Setup* page under '*Enable optional modules and customizations*,' and the initial survey collects the respondent's email address.

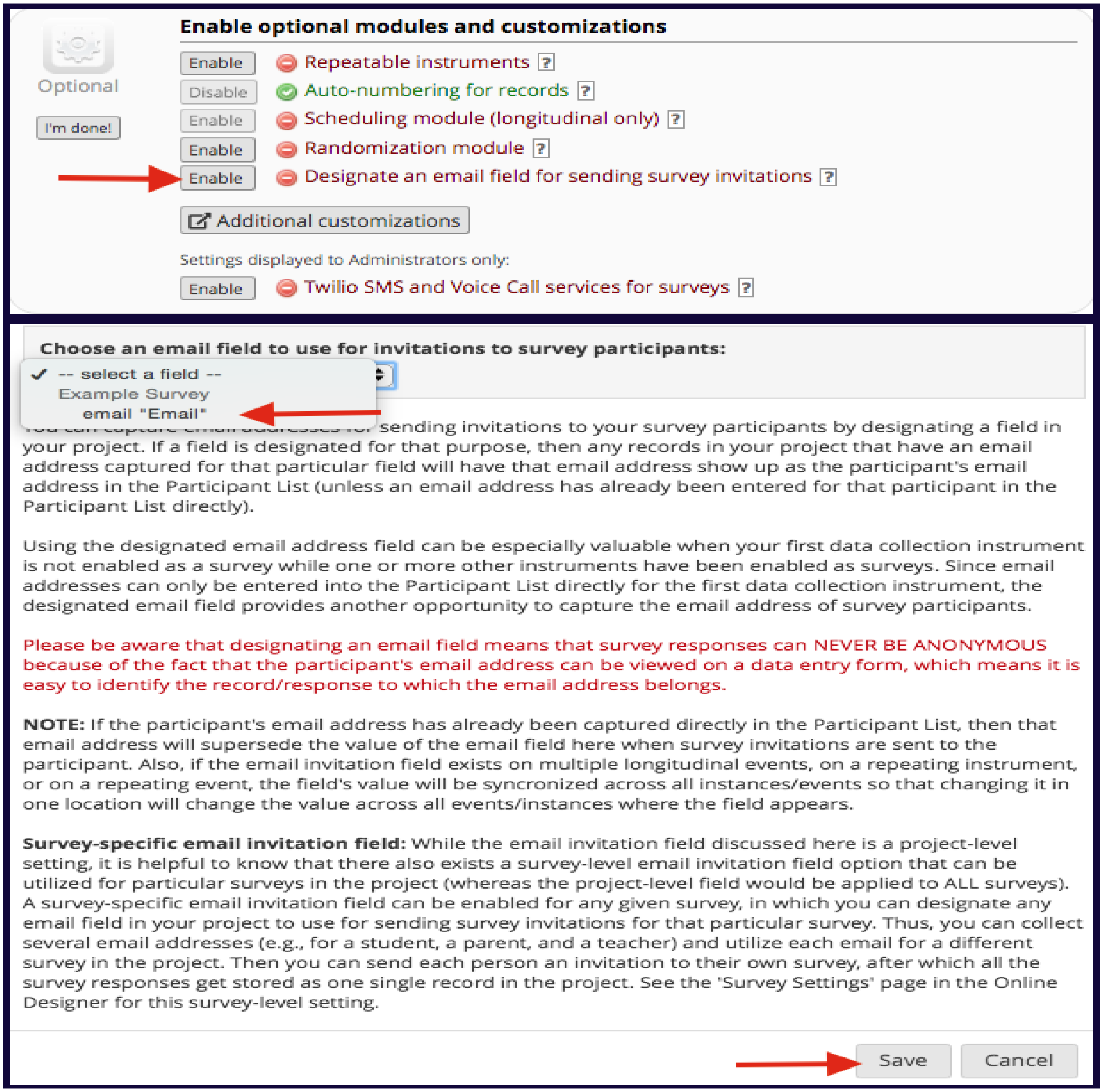
Participant List:
The *Participant List* option allows you to send a customized email to anyone in your list and *track who responds to your survey*. It is also possible to identify an individual's survey answers by providing an 'identifier' for each participant (this feature must first be enabled on the *Participant List* page). Note: All survey responses collected are considered ***anonymous*** unless you 1) are using *Participant Identifiers* or 2) have enabled the *Designated an email field to use for invitations to survey participants* (longitudinal data collection only) on the Project Setup page under *Enable optional modules and customizations*. If the *Participant Identifier* is not enabled, REDCap will track who has responded and who hasn't on the *Participant List* page, but you will not know which individual survey belongs to which respondent.

How can I send multiple surveys to participants and link their responses?

If the responses need to be anonymous, please see the section *Surveys: Anonymous* below. If responses **do not need to be anonymous**, you must at some point collect individual email addresses to send participants multiple surveys and have the data linked. This can be done in two ways:

1. **Project's first instrument is a Survey & Use of Public URL & Designate an email field:** If you want to utilize the *Public Survey URL* to distribute an initial survey and invite participants for future surveys, the survey **MUST** contain a text field with *validation = email* to collect the participant's email address.

    On the *Project Setup* page → *Enable optional modules and customizations* → Enable: 'Designate an email field to use for invitations to survey participants.' Designate the email address field you are collecting on the first survey.



When participants complete the first survey, their email addresses will pre-populate the *Participant List* and will allow you to send additional surveys for the same record. Surveys will be automatically linked by Record ID. The ‘Participant Identifier’ on the *Participant List* will not be editable after the survey has been sent.

LIMITATION: Only participants that answer the first survey with an email address will be able to respond to the follow-up surveys.

2. **Project’s first instrument is a Survey & Use of Participant List**: If you have individual email addresses, you can create a project with multiple surveys. You would add individual emails to the Participant List with or without a Participant Identifier. Then you can send the survey invites through “Compose Survey Invitations”.

LIMITATION: Only participants that answer the first survey will be able to respond to the follow-up surveys. If you wish to collect additional surveys for the non-responders, you will need to create additional REDCap projects with the follow-up surveys.

Surveys: Anonymous

Can I use the Participant List to collect anonymous survey data from participants?
Technically, no. Data is not anonymous when collected using the *Participant List*; but it can be "coded" and "unidentifiable" to the project admins.

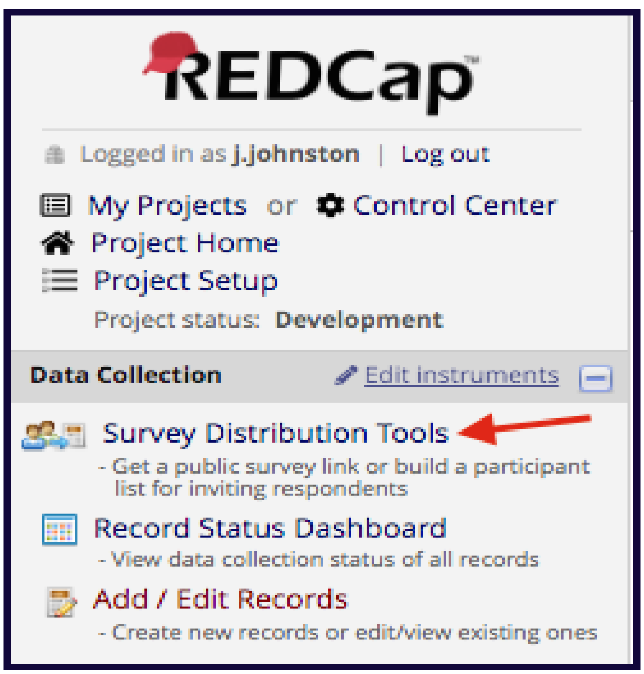
REDCap's user interface has two separate modules for (1) sending emails and tracking responders/non-responders (*Participant List*) and (2) viewing data/responses. Through the REDCap interface, there is *no link between the modules and no connection between the email address entered and the responses collected unless you enter unique values into the "Participant Identifier (optional)" field*. The 'Participant Identifier' field links the email address to the survey responses.

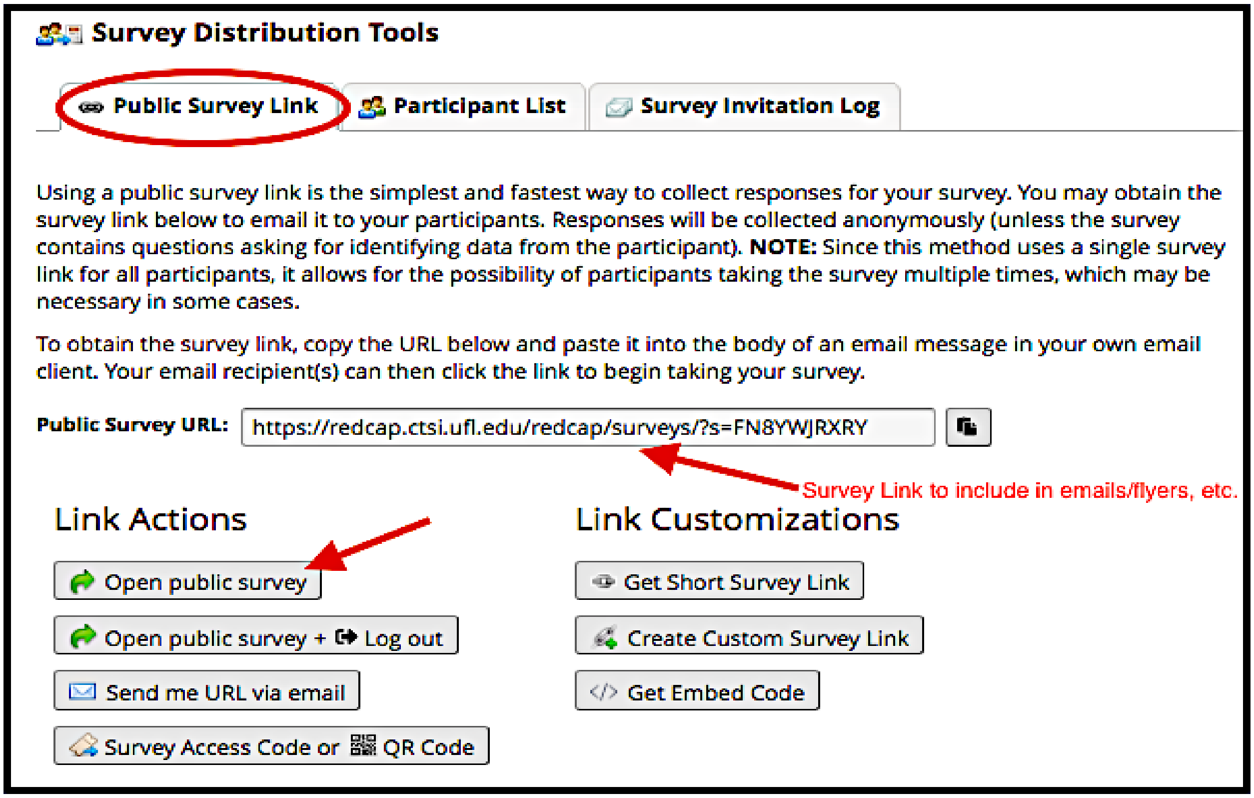
To ensure confidentiality of the data, REDCap tracks responses by attributing it to an email address. If the *Participant List* → 'Participant Identifier' field is not used, the project administrators are not privy to this information.

** **If you truly need anonymous data, use the *Public Survey Link*.** **

Public Survey Link (non-longitudinal data collection)

Public Survey Link: Click on 'Survey Distribution Tools' under *Data Collection* (left-hand menu) on the *Project Setup* page. This will take you directly to the *Public Survey Link* page.



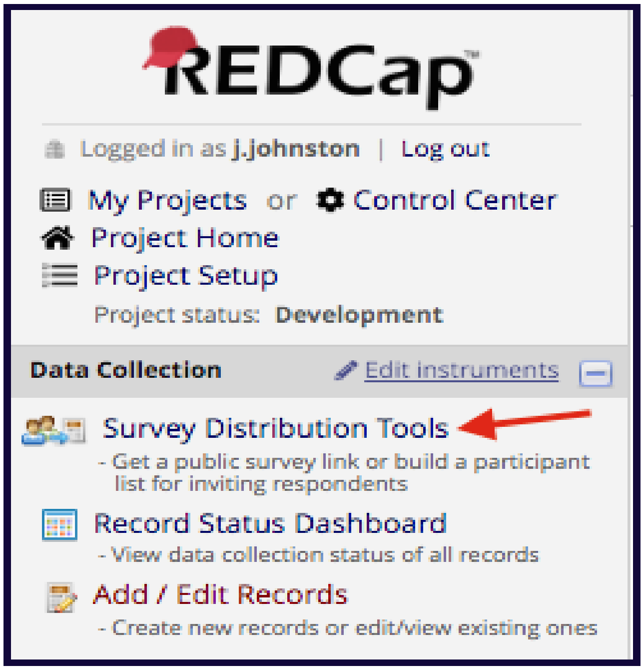


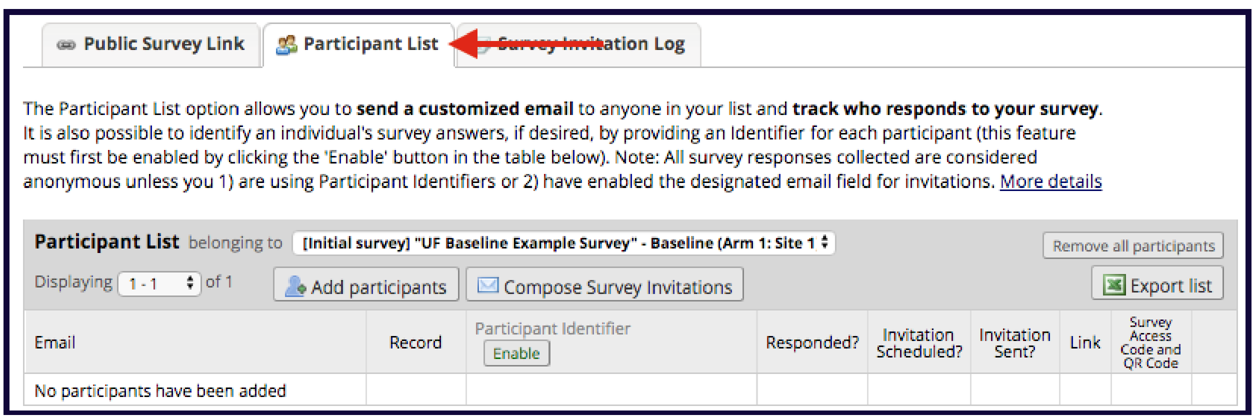
To view what the survey will look like to respondents, click on ‘Open public survey.’

The ‘Public Survey URL’ is the link that you would provide to all the desired respondents. This can be emailed to the participants, posted on a website or recruitment letter, saved to a desktop/device, or opened while the respondent is present.

Participant List (non-longitudinal data collection)

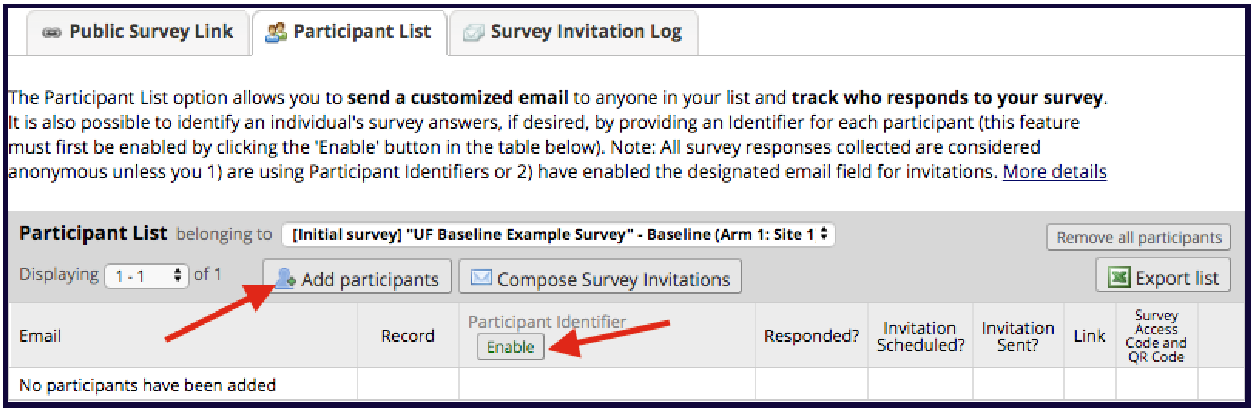
Participant List: Click on 'Survey Distribution Tools' under *Data Collection* (left-hand menu) on the *Project Setup* page. Then click on 'Participant List.'





Participant Identifier: If you need to be able to identify which survey response belongs to which respondent, click on 'Enable' next to *Participant Identifier*. Note: Once you send out the surveys you cannot enable this option for the invites that have already been sent out so the responses will be anonymous.

To add people to the *Participant List*, click on ‘Add participants.’



If not using the ‘Participant Identifier,’ add the email addresses of the respondents, one per line (Figure 1). If using the ‘Participant Identifier,’ add the email addresses of the respondents, one per line, as well as the participant’s identifier (Figure 2). Click on ‘Add participants’ when all emails have been entered.

Figure 1:

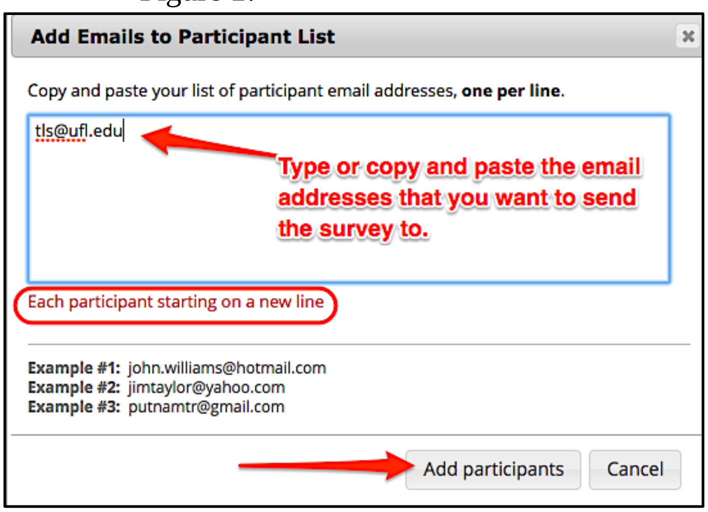
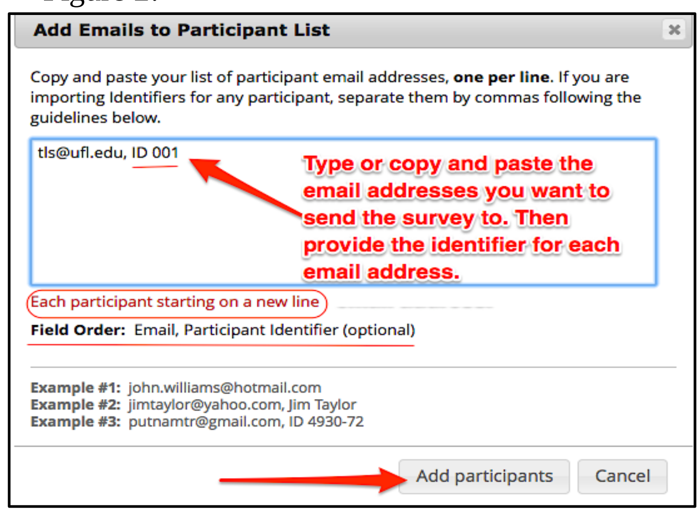
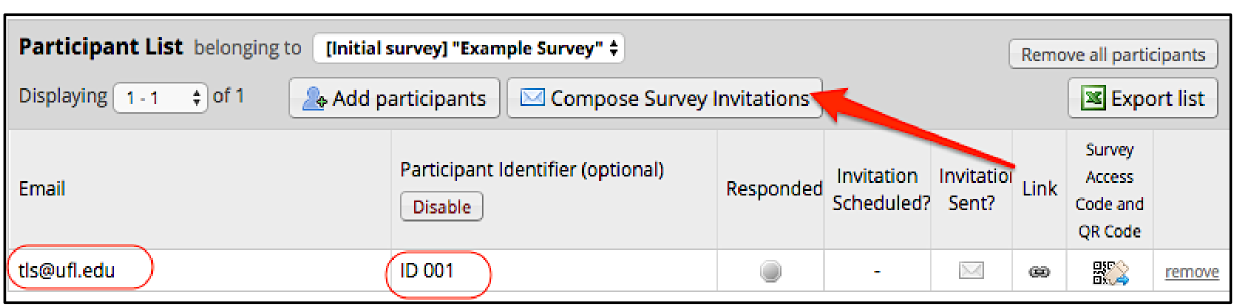


Figure 2:

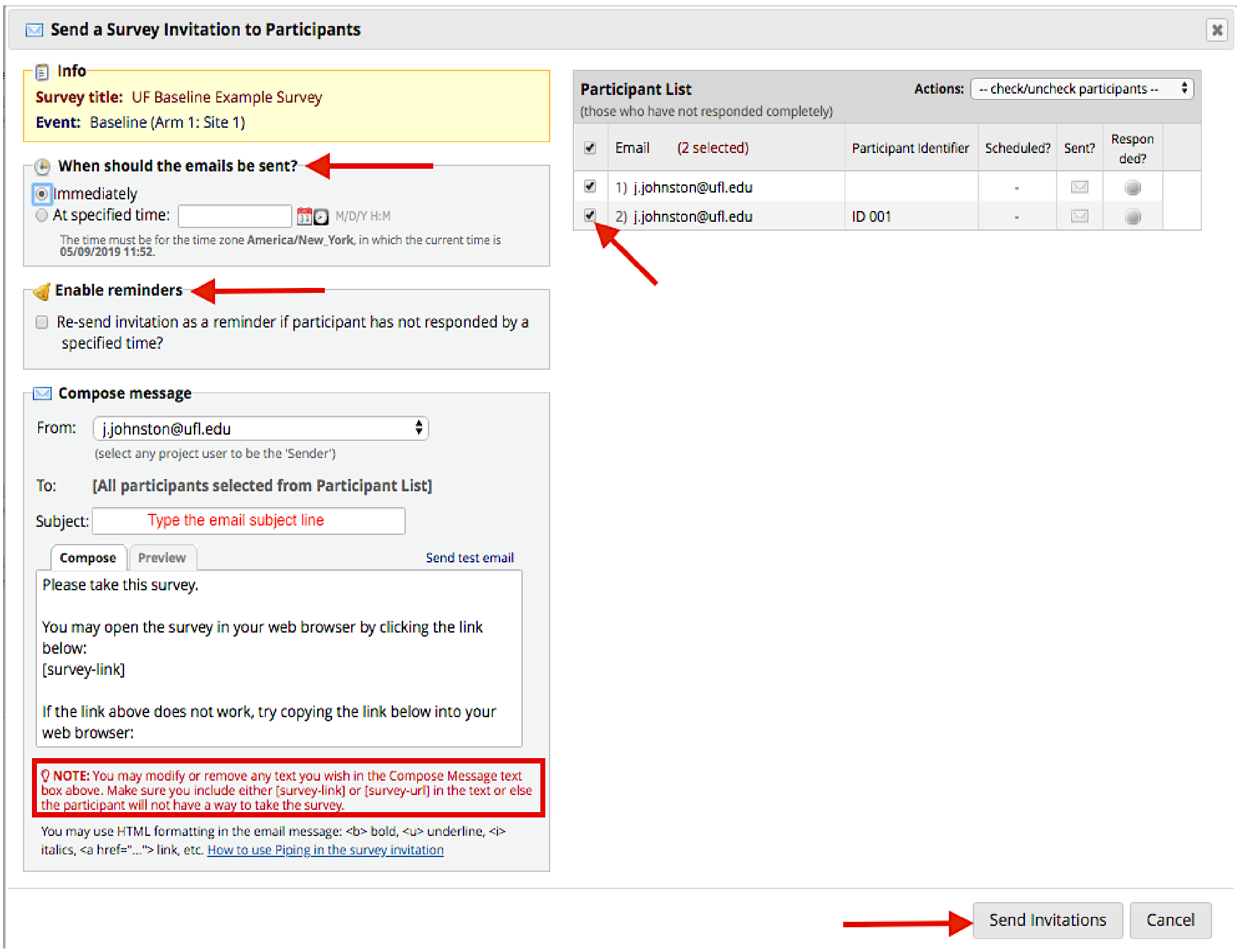


To send the survey to those on the Participant List, click on ‘Compose Survey Invitations.’

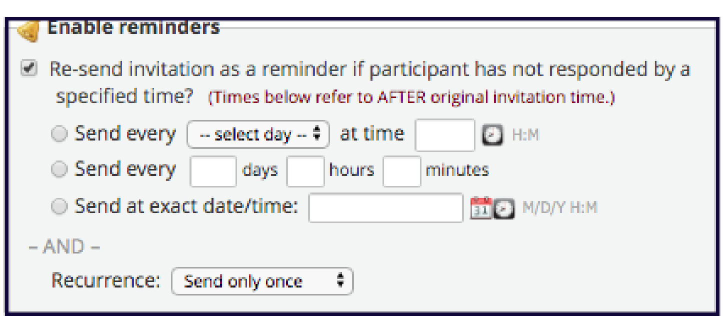


The ***Compose Survey Invitations*** page is where you set up when the survey should be sent (immediately vs. a specific date and time), reminder emails if the participant has not responded by a specified time and the email that will go out with the survey invitation. **<u>Note</u>**: Reminder emails must be set up *before* the survey is sent out and cannot be set up retroactively. If you forget to set up reminders, you'll have to re-send the survey to the participant if they do not respond.

The email addresses with a checkmark under the 'Participant List' heading are the email addresses that will be sent the invitation to the survey. You can uncheck an email address if you do not want an invitation to be sent to this address.

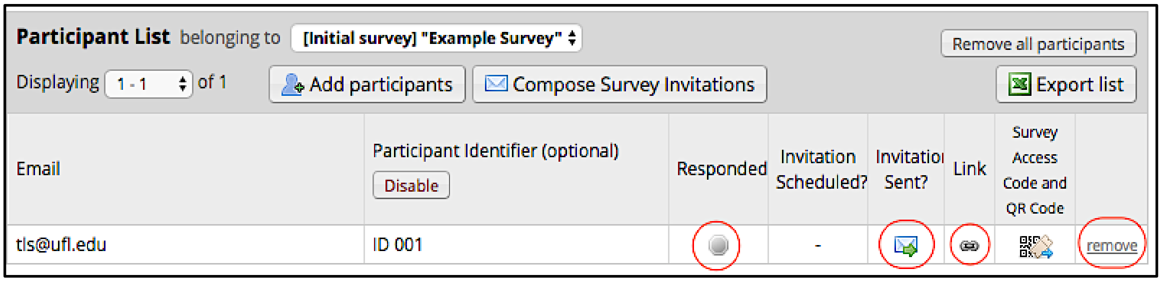


Email Reminders Box



Click on ‘Send Invitations’ when finished. The survey invites have now been sent!

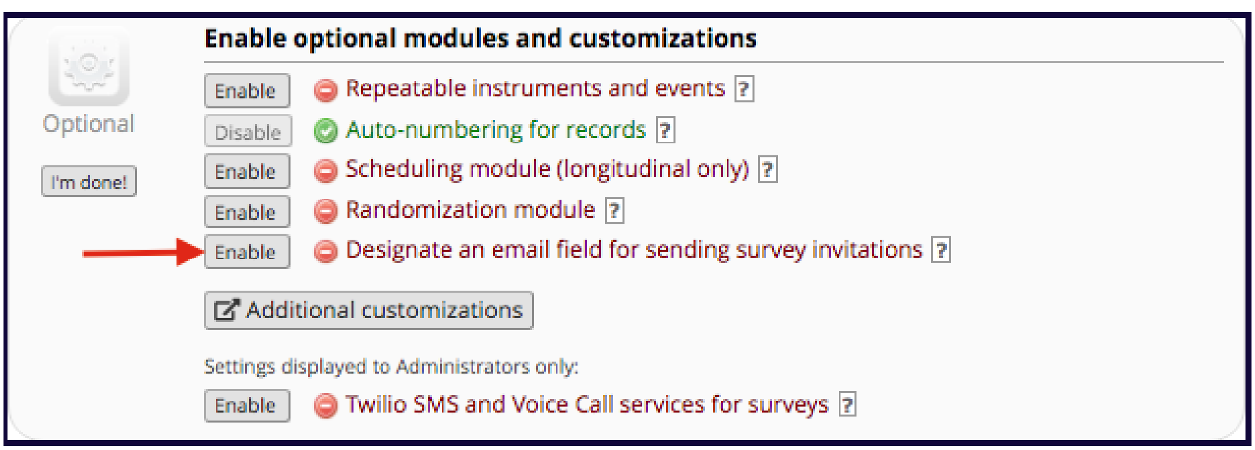
You can go back to the *Participant List* page to see who has responded to the survey, if an invitation has already been sent and the unique survey link for that participant. The grey bubble under ‘Responded’ will turn green when the survey has been submitted. If there is an envelope icon with a green arrow under ‘Invitation Sent’ then the invitation has already been sent to the individual. To view the unique survey link for the individual, click on the icon under the ‘Link’ column. To remove an individual from the Participant List, click on ‘remove’ in the far-right column.



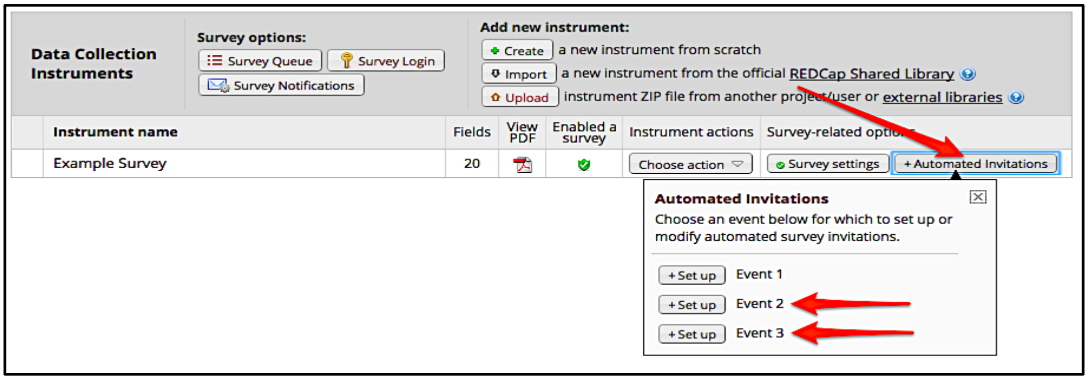
Public Survey Link (longitudinal data collection)

You can use the *Public Survey Link* for collecting longitudinal data, and have all the surveys linked to the individual, but only if you are collecting the email addresses of the respondents in the initial survey *and* enable the ‘Designate an email field’ under *Optional Modules and Customizations*. The project must also be set up longitudinally, with *at least* 2 events (see below).

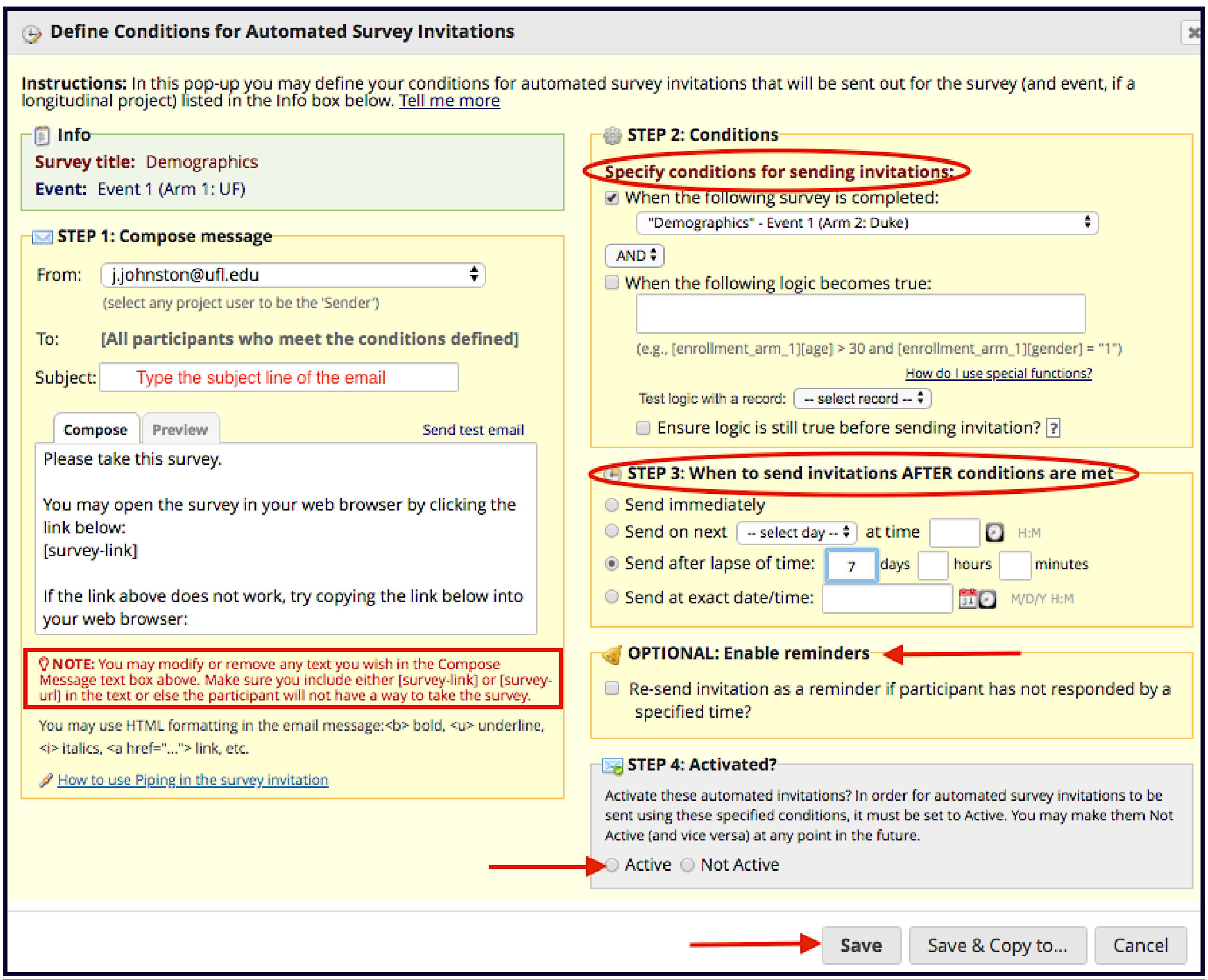
On the *Project Setup* page → *Enable optional modules and customizations* → Enable: ‘Designate an email field to use for invitations to survey participants.’ Designate the email address field you are collecting on the first instance of the survey.



The next step is to set up ‘Automated Invitations’ for the surveys that will be sent out *after* the ‘first’ survey is sent out. The ‘first’ instance of the survey (i.e., Event 1) will still be sent out using the *Public Survey URL* method. Click on ‘Automated Invitations’ to set up the following surveys (i.e., Events 2 and 3).



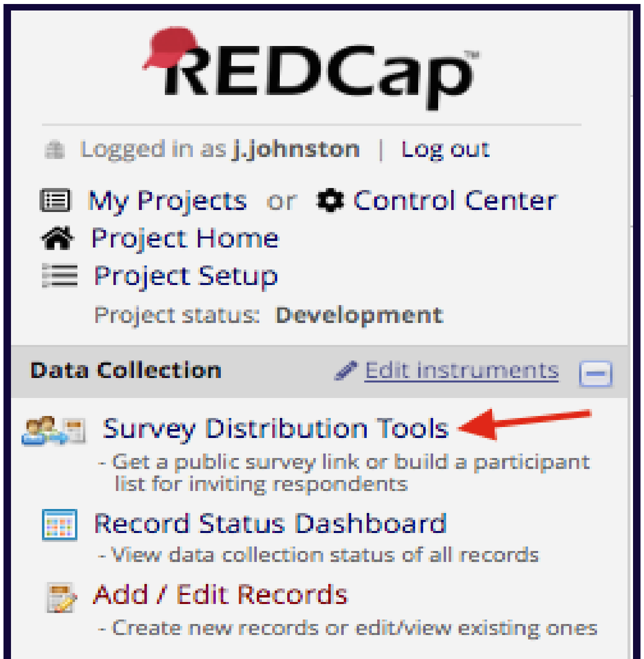
Automated Survey Invitations set up page:

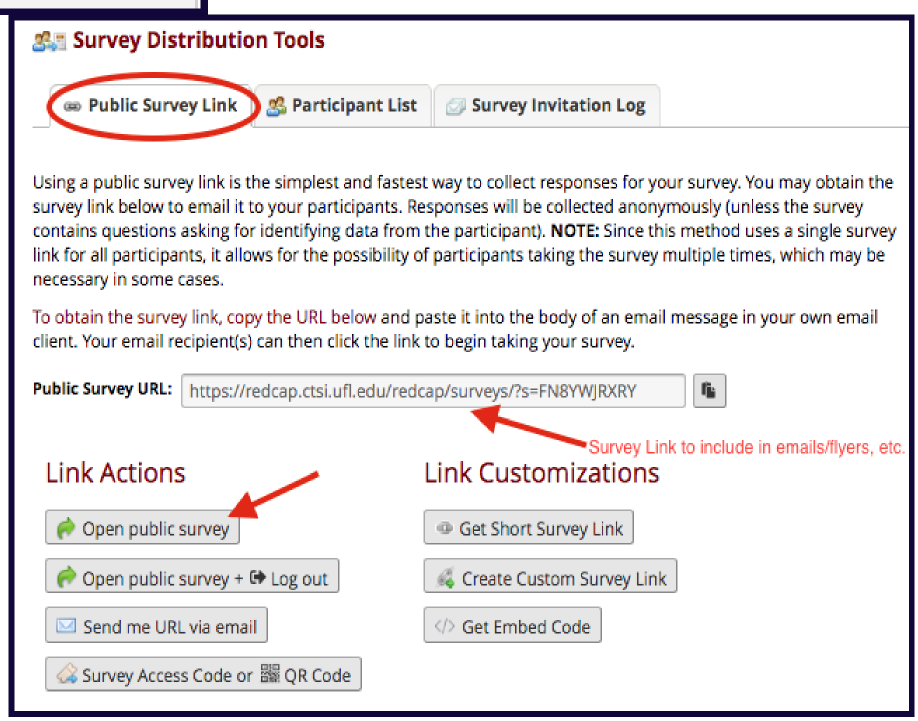


<u>Step 1</u>: Compose your survey email message.

Step 2: Specify the conditions for sending the invitations. For the second survey, you would specify '*When the following survey is completed: "Survey" – Event 1*.' For the third survey, you would specify '*When the following survey is completed: "Survey" – Event 2*.'
Step 3: Specify when the next survey should be sent out once the person completes the previous survey.
Step 4: Active your surveys by clicking on 'Active.' The automated survey invitations will not be sent until they are activated.

Click on 'Save' once finished. To send the initial survey, go to the *Public Survey Link* page to obtain the survey's URL.

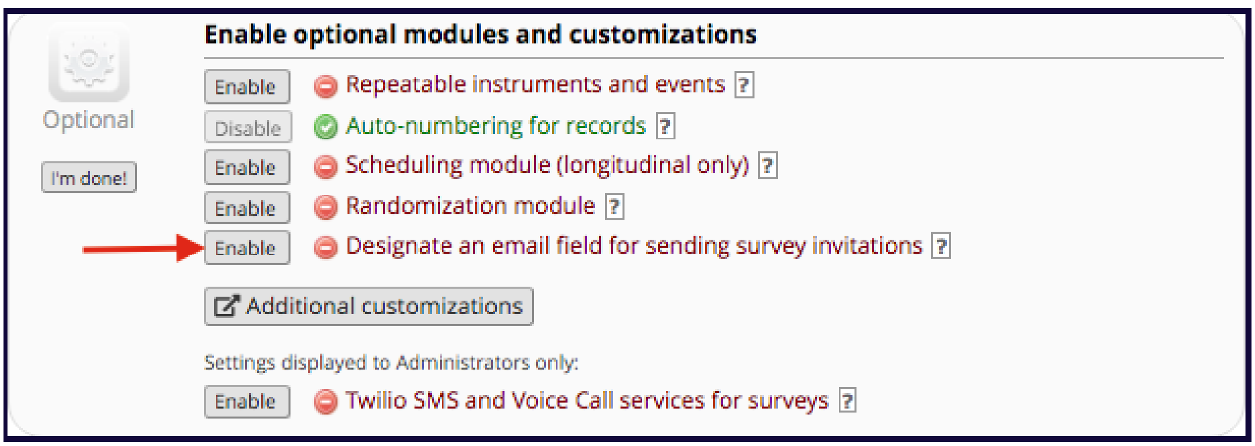




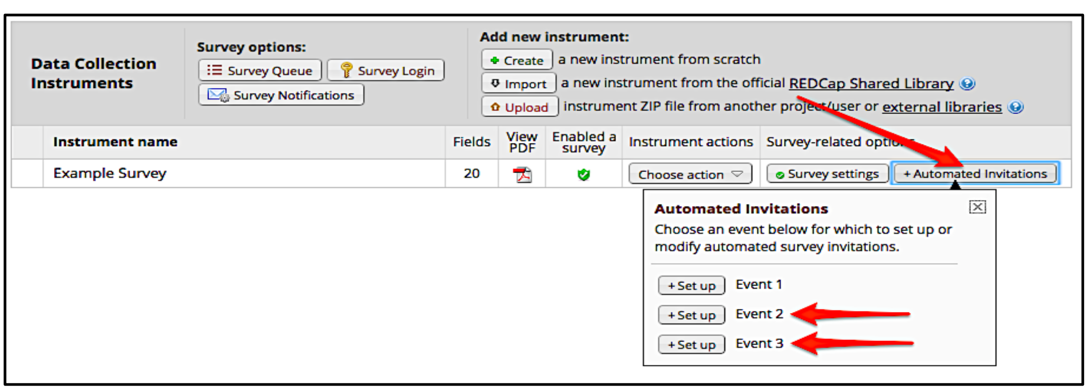
Participant List (longitudinal data collection)

You can use the *Participant List* for collecting longitudinal data, and have all the surveys linked to the individual, by entering the email addresses of the respondents into the Participant List *and* by enabling the 'Designate an email field' under *Optional Modules and Customizations*. The project must also be set up longitudinally, with *at least* 2 events (see below).

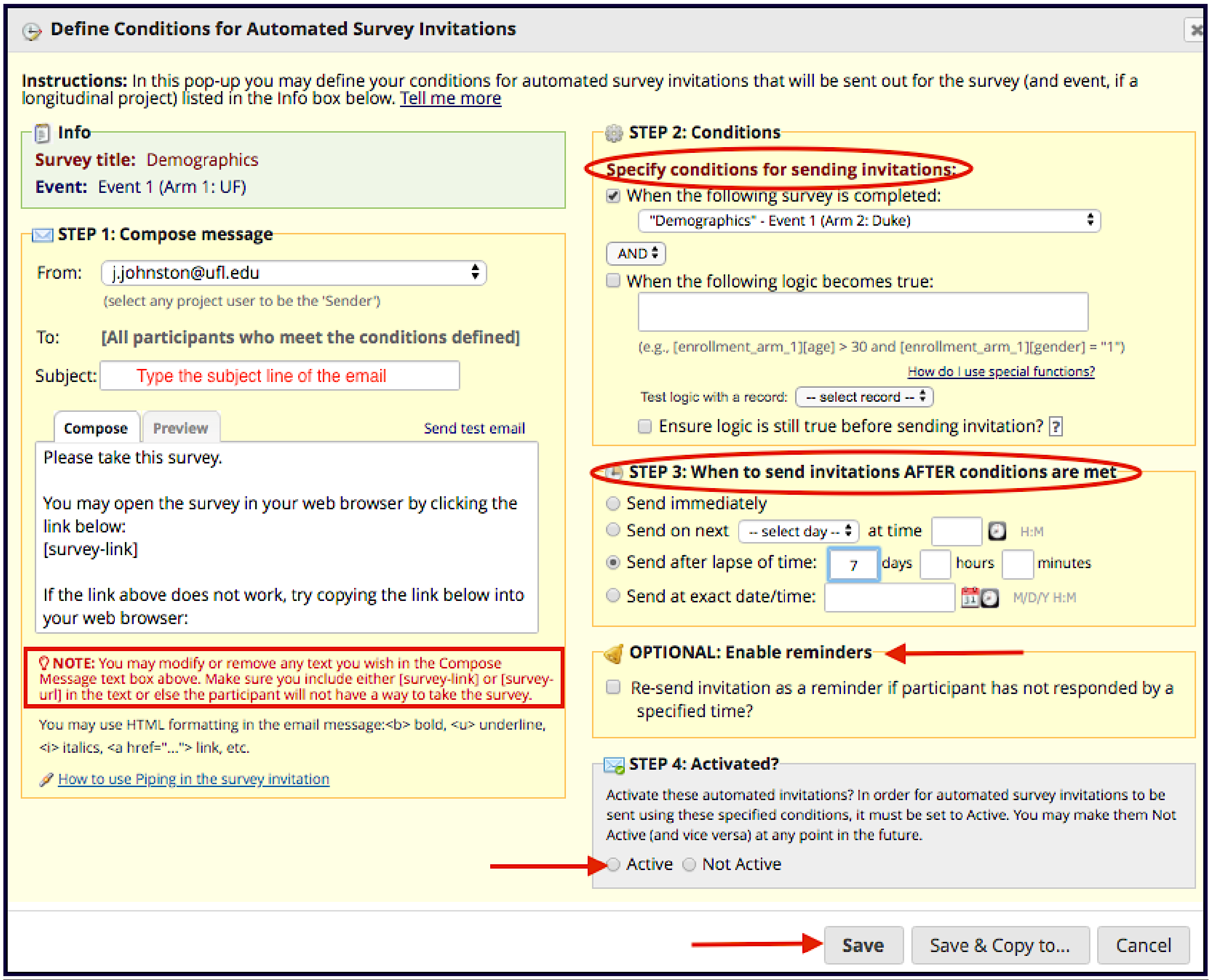
On the *Project Setup* page → *Enable optional modules and customizations* → Enable: 'Designate an email field to use for invitations to survey participants.' Designate the email address field you are collecting on the first instance of the survey.



The next step is to set up 'Automated Invitations' for the surveys that will be sent out *after* the 'first' survey is sent out. The 'first' instance of the survey (i.e., Event 1) will still be sent out using the *Participant List/Compose Survey Invitations* method. Click on 'Automated Invitations' to set up the following surveys (i.e., Events 2 and 3).



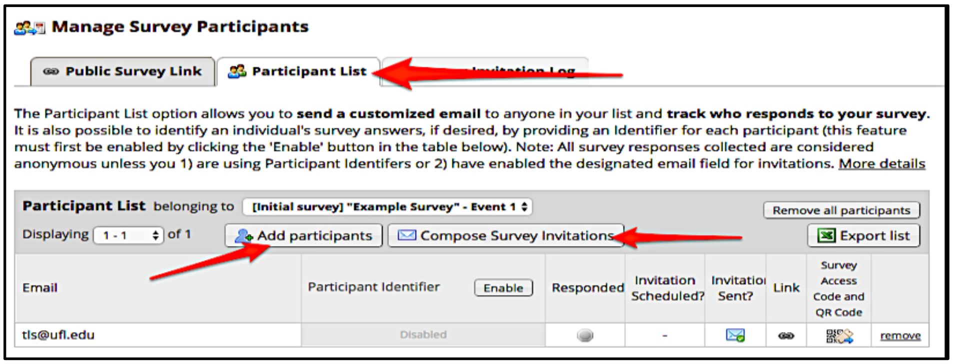
Automated Survey Invitations set up page:



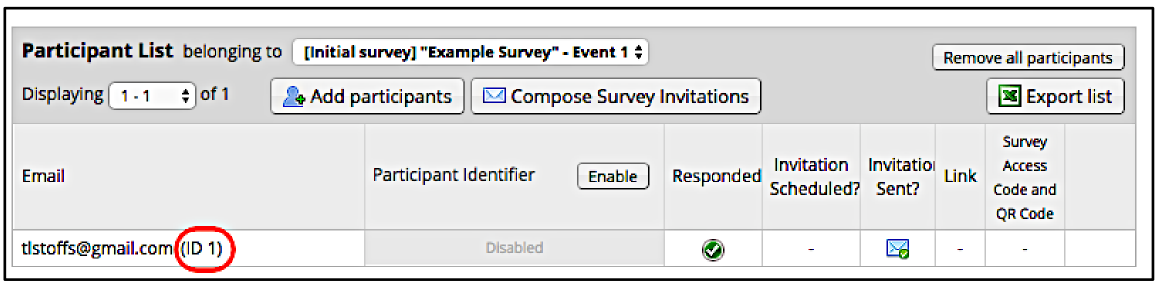
Step 1: Compose your survey email message.
Step 2: Specify the conditions for sending the invitations. For the second survey, you would specify '*When the following survey is completed: "Survey" – Event 1*.' For the third survey, you would specify '*When the following survey is completed: "Survey" – Event 2*.'
Step 3: Specify when the next survey should be sent out once the person completes the previous survey.
Step 4: Active your surveys by clicking on 'Active.' The automated survey invitations will not be sent until they are activated.

Click on 'Save' once finished.

To send the initial survey, go to the *Participant List* page to enter the email addresses and compose the initial survey invitation.



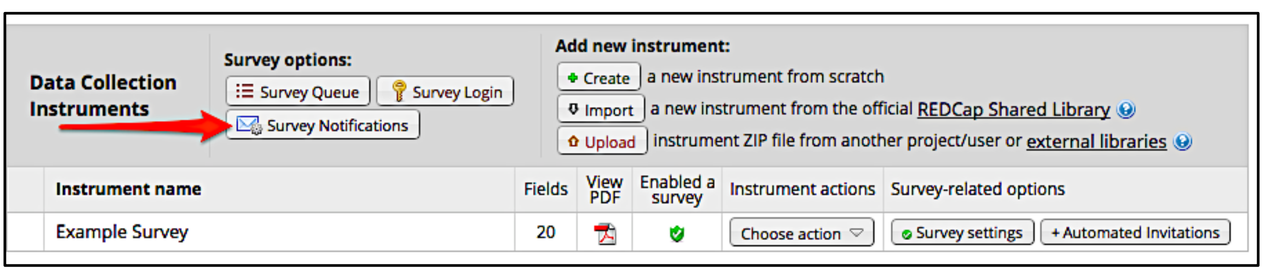
It is recommended that you **DO NOT** enable the Participant Identifier if collecting data longitudinally using the Participant List. Because you are using the *Designate email field* option, REDCap knows which record the email belongs to and will notate the subject's Record ID when the survey is completed (see below).



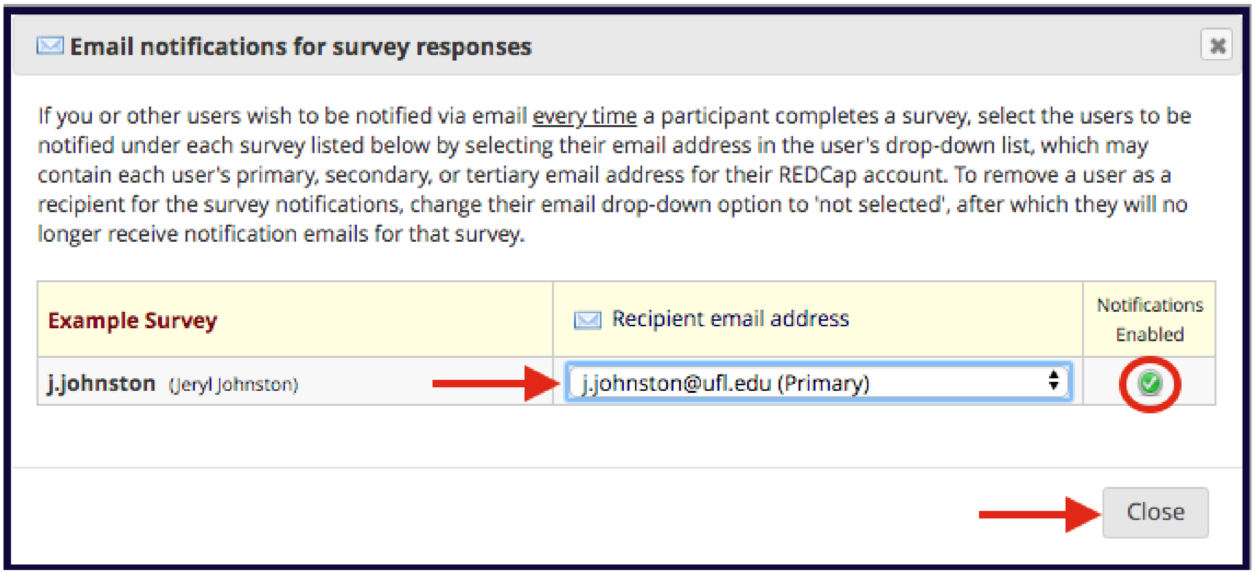
If you do enable the 'Participant Identifier' field, the identifier you give them will appear next to their email address instead of their Record ID, making their Record ID number harder to find if you needed to pull up this respondent's survey results.

How to get notified when a survey has been submitted:

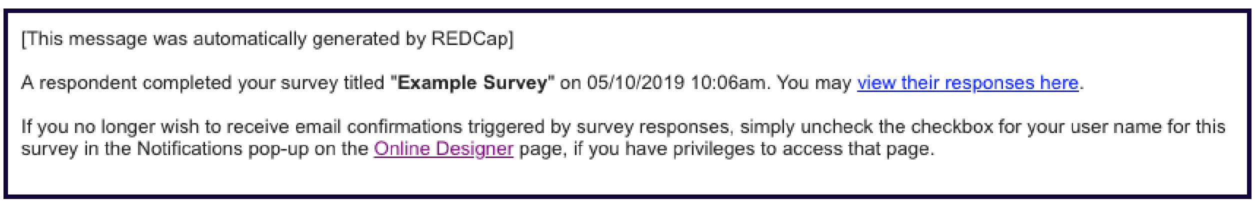
Go to the *Online Designer* page and click on 'Survey Notifications.'



A list of all project users and their email addresses will be listed here. To select who gets the survey notification emails, select their email address under the *Recipient email address* column. Once enabled, there will be a green checkmark under *Notifications Enabled* column.



Example email from a survey notification:


[This message was automatically generated by REDCap]

A respondent completed your survey titled "**Example Survey**" on 05/10/2019 10:06am. You may view their responses here.

If you no longer wish to receive email confirmations triggered by survey responses, simply uncheck the checkbox for your user name for this survey in the Notifications pop-up on the Online Designer page, if you have privileges to access that page.