Version 10.7.0 (released on 2021-01-14)
CHANGES IN THIS VERSION:

- **New feature: Field Bank** - When adding new fields via the Online Designer, users will see an "Import from Field Bank" button, which will allow them to search different standardized catalogs of commonly used fields, such as in the U.S. National Library of Medicine catalog. The Field Bank helps users add new fields quickly and easily to their data collection instruments. Over time, more standardized catalogs of fields will be added to the Field Bank.
- **New feature: @INLINE action tag** - Allows a PDF file or image file (JPG, JPEG, GIF, PNG, TIF, BMP) that is uploaded to a File Upload field to be displayed in an inline manner on the survey page or data entry form so that the PDF/image can be viewed by the user or survey participant without having to download it.
    - The PDF/image will be displayed inline on the page immediately above the download link for the field and will be displayed with 100% width by default (i.e., 100% width of the area in which it is contained).
    - Images will be displayed with their native width:height ratio, although PDFs will be displayed with a 300 pixel height by default. If you wish to manually set the width and/or height of the image/PDF, you may put the width/height values inside parentheses after the action tag in the following manner: @INLINE(width) or @INLINE(width,height). The width/height can be a percentage value (e.g., 50%) or a number representing size in pixels (e.g., 400). Thus @INLINE(50%) will display an image at 50% size for the area in which it is contained on the page, and @INLINE(400,100) would display the image always at 400px tall and 100px wide. To make an inline PDF appear taller on the page, you might use @INLINE(100%,600) since 300px is the default height for inline PDFs.
    - The @INLINE action tag also works if the File Upload field is embedded inside another field on the page.
    - Thanks to Andy Martin for his inspiration for this feature, in which it is based on his “Image Viewer” external module. NOTE: Upgrading to REDCap 10.7.0 will *not* automatically disable the “Image Viewer” module if it is installed and enabled on any projects, nor will it conflict with the “Image Viewer” external module.

- **New feature: New ":inline" piping option for File Upload fields**
    - If piping using the ':inline' option for a File Upload field, such as [my_field:inline], in which the uploaded file is a PDF file or image file (JPG, JPEG, GIF, PNG, TIF, BMP), the file will be displayed in an inline manner so that it is viewable on the page.
    - The ':inline' option DOES work inside emails, so you can pipe a field with ':inline' inside the email body, thus allowing you to display inline images inside survey invitations or Alerts & Notifications.
    - The @INLINE action tag does not need to be used on a field in order to utilize the ":inline" piping option.
    - Note: Inline images are not able to be displayed inside a downloaded PDF of a survey/instrument that contains data.
- **Improvement:** In the Online Designer, any fields that have action tags will have those action tags listed immediately below the field in the table on that page. This makes it easier to know if a field has a certain action tag without having to open the Edit Field dialog for the field.

Version 10.7.1 (released on 2021-01-22)

CHANGES IN THIS VERSION:

- **New feature:** New ":link" piping option for File Upload fields - If piping using the ':link' option for a File Upload field, such as [my_field:link], the file's filename will be displayed as a clickable hyperlink for downloading the file, which works on webpages and also inside the body of email text (i.e., survey invitations or Alerts & Notifications).
- **Improvement/change:** When using the ":inline" piping option for File Upload files inside an email body (e.g., survey invitations, alerts), if the uploaded file is not an image file, it will still attach the file to the email but will display the file's filename in the email text as an alternative to displaying it as an inline image.
- Change: Some language on the Survey Settings page was modified for clarity with regard to the Time Limit for Survey Completion feature to note that it is not applicable to survey links sent via Alerts & Notifications.
- Change: For longitudinal projects that are in production, the Define My Events now displays an extra warning that warns that renaming events could cause disastrous effects if any unique event names are utilized in conditional logic, branching logic, calculations, reports filters, data quality rules, etc.

Version 10.8.0 (released on 2021-01-29)

CHANGES IN THIS VERSION:

- **Improvement: Custom ranges (min/max) for slider fields** - Users may now set a custom minimum and/or custom maximum integer value for slider fields. The default min and max is still 0 and 100, respectively. If no value is entered for the min or max value, it will assume the default value. These can be set via the Edit Field popup in the Online Designer, and via the "Text Validation Min" and "Text Validation Max" columns in the Data Dictionary.
- **New feature: New API "Export Logging" method** - This new API method allows users to export a project's logging via the API using very similar methods and filters as in the project's user interface. See the documentation for all filter parameters that are available.

- **New feature: Ability to to import/export user rights** via a CSV file on the User Rights page - Users can download a CSV file to view all the user privileges of the existing users in a project, including their instrument-level user rights. Users can upload a CSV file to grant new users access to the project and/or to modify the user privileges of existing users, including their instrument-level user rights.
- **Improvement:** The Email Users page in the Control Center now has a new quick-select link to select and email only the currently logged-in users. (Ticket #99532)
- Change/improvement: The maximum repeating instance number that can be added for a repeating instrument or repeating event has been increased from "9999" to "32767".

Version 10.8.2 (released on 2021-02-12)

CHANGES IN THIS VERSION:

- Change: New “Applications Overview” video added to Training Videos
- Change/improvement: When viewing the Survey Settings page for a repeating instrument, the "Location of the button on survey" option for the "Allow respondents to repeat the survey" setting now includes a new choice not to display the repeating survey button at all on the survey page. This is useful if users are utilizing the Survey Queue as the path for participants to enter new responses for the repeating responses instead of displaying the repeating survey button on the survey page itself.

Change: Added a tip in Step 3 when creating a new report to inform users how to use [X-instance] Smart Variables to filter repeating data. This tip is only displayed in projects that have repeating instruments and/or repeating events

Version 10.8.3 (released on 2021-02-19)

CHANGES IN THIS VERSION:

Change: In addition to the stock Action Tags that come bundled with REDCap, the field view in the Online Designer now displays custom action tags (in pink text below the field) that are utilized by hooks or external modules.

Version 10.8.4 (released on 2021-02-26)

CHANGES IN THIS VERSION:

- **New feature: Export Data Quality rule results** - After running a data quality rule, users may export the results/discrepancies of the rule as a CSV file. The CSV file will be structured exactly like a date export/import file, which should allow for faster and easier cleaning of data so that values can be fixed and then re-uploaded as a data import.
- **Improvement:** The rich text editor is now utilized when editing the following system-level custom text settings on the "Edit a Project's Settings" page in the Control Center: "Custom text to display at top of Project Home page in project" and "Custom text to display at top of all Data Entry pages in project".
- Change: The input element for @CALCTEXT fields was made wider on survey pages and data entry forms to be able to fit more viewable text.

Version 10.9.0 (released on 2021-03-26)

CHANGES IN THIS VERSION:

- **New feature: Field that maps to a participant’s Twilio delivery preference -** When using Twilio for surveys, users can control each participant's invitation preference automatically using a

multiple choice field. If survey participants require using different methods (e.g., email, SMS w/ link, voice call survey) for receiving survey invitations and/or taking surveys, users can select a multiple choice field whose choices represent each survey invitation delivery method. After mapping the invitation preferences to a field, whenever the value of the field is added or modified, the participant's invitation preference will automatically be changed accordingly. IMPORTANT: The multiple choice codings for the selected field must be defined exactly as delineated below, although their corresponding choice labels can be modified to be whatever text the user desires. Also be aware that if the value of the field that is mapped is set to blank/null, then the invitation preference for the participant will revert to the project's default invitation preference (as defined in the Twilio configuration on Project Setup). Additionally, if a participant's invitation preference is modified via the Participant List, that change will also change the value of the mapping field selected above. Mapped field choice options:
    - EMAIL, Email invitation
    - SMS_INVITE_WEB, SMS invitation (contains survey link)
    - SMS_INITIATE, SMS invitation (take survey via SMS)
    - VOICE_INITIATE, Voice call (participant receives voice call)
    - SMS_INVITE_MAKE_CALL, SMS invitation (contains phone number to call)
    - SMS_INVITE_RECEIVE_CALL, SMS invitation (reply via SMS to receive voice call)
- **New feature: Custom offline message for surveys in offline status**- Users can provide custom text that is displayed to participants only when the survey is offline. This custom text will be displayed in place of the default offline text on the survey while the survey is in offline mode. This text can be set at the top of the Survey Settings page.
- **New feature: Survey-level Stop Action controls** (new section on Survey Settings page)
    - **Alternative survey completion text** - Users can optionally set alternative survey completion text that is displayed in place of their standard survey completion text whenever a survey is ended via a Stop Action on any field. This is useful when it doesn't make sense for non-eligible participants to see the same survey completion text as those who completed the survey fully.
    - **Prevent survey responses from being saved if the survey ends via Stop Action** - Users can optionally choose to prevent submitted responses from being saved as data in the project if the survey ends via Stop Action. This is useful if survey administrators do not wish to keep the data for ineligible participants, for example. This means that if a one-page public survey is started but ends via Stop Action, no data from that response will be saved into the project (i.e., no new record will be created), but it will log this event on the project Logging page (so that users are at least aware of this happening despite no data being saved).
        1. NOTE: If any data has been saved on the survey instrument for a given record prior to the Stop Action being triggered, that data will be deleted from that instrument. For example, if the survey is a multi-page survey in which data has been entered on previous pages prior to triggering the Stop Action, all data collected thus far in that survey will be deleted as if the survey was never taken. Additionally, if the record does not contain data in any other instruments, the

entire record itself will be deleted during this process. If data does exist in other instruments, the record will not be deleted.

2. PRIVACY NOTE: If the option for Data Privacy/GDPR has been enabled in the project, in which it removes the contents of the log for a record that is deleted from the project, then if an entire record is deleted via this particular survey setting via a Stop Action, then all logged data values for the record will be removed from the log as per this project's data privacy setting.

- **Improvement:** If a project contains more than 25,000 records, the Logging page will no longer display the record filtering drop-down at the top of the page but instead will display an auto-complete text box to allow the user to enter the record name if they wish to filter the logging by record. This behavior is similar to the "Add/Edit Records" page when not using record auto-numbering if a project contains more than 25,000 records.

Version 10.9.1 (released on 2021-04-02)

CHANGES IN THIS VERSION:

- **Change/improvement:** The "Phone (North America)" field validation now allows phone numbers that begin with "800" and “811”.
- Change: Removed the "up arrow" and "down arrow" icons used to represent Field Embedding because the arrow was potentially confusing to some users, especially in the Online Designer. (Ticket #103988)
- Change: If a user in a project with lots of calc fields and/or lots of records attempts to execute Data Quality rule H in which it ends with an error after running too long or running out of server memory, it will now display the "Fix calcs now" button inside the results dialog (despite the error occurring) to at least allow the user to attempt to fix the calcs little by little even though the initial evaluation process of the calcs has failed.

Version 10.9.2 (released on 2021-04-09)

CHANGES IN THIS VERSION:

- **Improvement:** Assign a user to a DAG at the same time as adding the user to the project - Whenever a user is being added to a project via the User Rights page, if Data Access Groups are being utilized in the project, a new option will appear (whether if adding the user with custom rights or if assigning them to a user role) that allows you to assign the user to a DAG at the same time as adding them to the project. This helps prevent a common issue where a newly added user might temporarily have access to the records of *all* DAGs in the project prior to the user being assigned to a DAG immediately after getting added to a project. By making this two-step process a single step, it avoids possible data access issues for users who need to be assigned to a DAG.
- **Improvement:** When exporting a PDF of all record data via the "Other Export Options" page, a copy of the downloaded PDF will now be archived and stored in the File Repository, similar to how other data exports (i.e., CSV, SPSS) are archived. This will help REDCap users keep better track of exactly what data was downloaded by someone when they export a PDF of all records in the project. Note: This does not apply to other PDF exports but only to the "all records" PDF export on the "Other Export Options" page.

- **Improvement:** The project logging page now displays more information for PDF Exports that contain data, such as displaying the record name, event, and instrument for the downloaded PDF.
- **Change/improvement:** When using the “Upload Users (CSV)” option on the User Rights page, it now displays a checkbox option in the dialog to allow the user to optionally send an email notification to all new users being added to the project via this import process. In previous versions, no users would be notified via email if they were added to the project via the “Upload Users (CSV)” option but only if added using other methods.

Version 10.9.3 (released on 2021-04-16)

CHANGES IN THIS VERSION:

- **Improvement:** When viewing files in the File Repository that are archived from a data export, it now displays the data export details (as seen on the Logging page) for each export listed in the table on the "Data Export Files" tab. This provides more context regarding the contents of the data in the archived export files.
- Change: The @PREFILL action tag has been renamed to @SETVALUE, which more accurately captures how it behaves. Some confusion had occurred regarding this action tag's behavior simply because of its name. This change to the name is backward compatible so that projects already using @PREFILL will still work with its legacy counterpart (i.e., @PREFILL and @SETVALUE will work equivalently), but @SETVALUE will be the preferred name going forward. The description of the @SETVALUE action tag in the Action Tags documentation notes this name change.
- Change: Any fields using the @PREFILL/@SETVALUE action tag will no longer be read-only/disabled on survey pages and data entry forms but will be editable. Some users had complained of the read-only attribute as being too restrictive and inflexible, thus preventing some valid use cases. If users wish to make the field read-only, it is recommended they simply add the @READONLY action tag as a means of maintaining the previous read-only behavior.
- Change: In many places in the REDCap code where MD5 hashing is performed on non-security-related things, the MD5 function has been replaced with the SHA1 function. (Note: MD5 is never used on any security-related code in REDCap.)
- Change: Added a recommendation in the "Configure Twilio Settings" popup to suggest that the users consider adding a field that says, 'I agree to be contacted by text or phone' (or something similar) as means of them consenting participants to being contacted by text or phone.

Version 11.0.0 (released on 2021-04-30)

CHANGES IN THIS VERSION:

- **New feature: Project Dashboards**
    - **INTRO:** Project Dashboards are pages with dynamic content that can be added to a project. They can utilize special Smart Variables called Smart Functions, Smart Tables, and Smart Charts (described below) that can perform aggregate mathematical functions, display tables of descriptive statistics, and render various types of charts, respectively. User access privileges are customizable for each dashboard, and anyone with Project Design privileges can create and edit them. A Wizard is provided on the Project Dashboard creation page to help users easily construct the syntax for Smart

Functions, Smart Tables, or Smart Charts, and a basic list of helpful examples is also included. Example dashboard: https://redcap.link/dash1

- **Setting project dashboards as "public"**
    1. If enabled at the system-level (described in detail below), any project dashboard can be enabled as "public", which means it can be accessed at a unique URL that does not require any authentication. Making a dashboard public is useful if you wish for people to view it without having to be REDCap users or log into REDCap. Public dashboards are simply standalone pages that can be viewed by anyone with a link to them.
    2. Users can opt to create a custom/short url (via the https://redcap.link service) for any project dashboard that is enabled as "public".
    3. **System-level setting to allow/disallow public dashboards** (on the User Settings page in the Control Center) - By default, normal users will be able to set any project dashboard as public. If you do not want users to do this or even know about this feature, you can completely disable it on the User Settings page. Alternatively, it can be set to "Allow public dashboards with admin approval only". If set to allow public dashboards after approval by an admin, the admin will receive the request from the user via the To-Do List page (and via email, if the email notification setting is enabled on the To-Do List page), and after the admin approves the request, the user will receive an email regarding the response to their request.
- **Setting to control data privacy on public dashboards and other public pages**
    1. The User Settings page in the Control Center has a setting to define the "Minimum number of data points required to display data for any Smart Charts, Smart Tables, and Smart Functions on a *public* project dashboard, survey queue, or survey page". **By default, it is set to a value of "11".** While only aggregate data is displayed in Smart Charts, Smart Tables, and Smart Functions, if any of these utilize very few data values, it might pose a threat to an individual's data privacy if these are being displayed on *public* dashboards and other public pages (i.e., where authentication is not used).
    2. If someone is viewing a public page that has Smart Charts, Smart Tables, and Smart Functions that utilize data that does not meet the minimum data point requirement, instead of displaying the chart/table/number on the page, it will instead display a notice saying "[INSUFFICIENT AMOUNT OF DATA FOR DISPLAY]" with a pop-up note with details about the minimum data requirements.
    3. **Project-level override:** While this behavior is controlled by a system-level setting, the system-level setting can be modified by an administrator via a project-level override for any given project on the "Edit A Project's Settings" page.
    4. Note: This setting does not get used when viewing project dashboards inside a project (i.e., at a non-public URL).

- **PDF export:** Each project dashboard can be exported as a one-page PDF file.
- **Dashboard cache:** To prevent server performance degradation, each project dashboard will have its content cached (stored temporarily) automatically for up to 10 minutes at a time rather than generating its content in real time every time the dashboard is loaded. It will note at the top right corner of the dashboard page when the dashboard content was last cached. If a user is viewing the dashboard inside a project (i.e., not via a public dashboard link), they have the option at the top right to "Refresh" the dashboard at will, which will refresh/generate its content in real time. Note: The refresh option will only be displayed on the page when the dashboard content is at least 30-seconds old.

- **New feature: Smart Functions**
  - Smart Functions are aggregate mathematical functions that are utilized as Smart Variables. The following Smart Functions exist: [aggregate-min], [aggregate-max], [aggregate-mean], [aggregate-median], [aggregate-sum], [aggregate-count], [aggregate-stdev], and [aggregate-unique]. Each represents the mathematical functions minimum, maximum, mean/average, media, sum, count, standard deviation, and unique count, respectively. Each must have at least one field attached to it that follows a colon - e.g., [aggregate-mean:age]. Multiple fields may be used in each one, which will perform the function over all the data values of all the fields. By default, the functions will utilize all data values for all records in the project. To limit the data values being utilized to a subset of the total project data, see the Smart Variable documentation on how to apply filters, such as attached unique report names, DAGs, and other parameters
  - Note: When using [aggregate-count:record_id], in which "record_id" in this example represents whatever the variable of the Record ID field is, it performs a special count that does not literally count the number of data values but instead returns a count of the total number of records in the project. This is a quick way to display the total record count of the project.
  - Smart Functions can be used anywhere in a project where piping is allowed, and can even be used inside calculations, branching logic, and other conditional logic (report filters, alert conditions, etc.).

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- **New feature: Smart Tables**
  - Smart Tables are tables displaying aggregate descriptive statistics in which the results of any or all of the following stats functions can be displayed for one or more fields: minimum, maximum, mean/average, media, sum, count, standard deviation, count of missing values, and count of unique values.
  - Smart Tables are represented with the Smart Variable [stats-table], which accepts as a parameter the variable names (comma delimited) of all the fields to be displayed as separate rows in the table. There is no limit to the number of fields that can be used. For example, [stats-table:field1,field2,field3].
  - By default, all available columns will be displayed in the table and are as follows: Count, Missing, Unique, Min, Max, Mean, Median, StDev, Sum. To display only a subset of the columns, you may provide any of the following designations (comma-separated) that represent a specific column in the table: count, missing, unique, min, max, mean, median, stdev, sum. For example, [stats-table:field1,field2,field3:mean,max].
  - By default, each stats table will have an "Export table (CSV)" link displayed immediately below it to allow users to download the table as a CSV file. But if users wish to hide the export link, they can simply attach ":no-export-link" to the Smart Variable, which will cause the link not to be displayed. For example, [stats-table:field1,field2,field3:no-export-link].
  - Smart Tables can be used anywhere in a project where piping is allowed.
- **New feature: Smart Charts**
  - Smart Charts are various aggregate plots and charts utilized as different Smart Variables. The following plots are available for use: bar charts, pie charts, donut charts, scatter plots, and line charts. These are all represented by the following Smart Variables, respectively: [bar-chart], [pie-chart], [donut-chart], [scatter-plot], and [line-chart]. These Smart Variables accept one or more field names and also other optional parameters, as described below for each.
  - **Bar charts** - Displays a bar chart for a single multiple choice field. It can optionally perform color grouping if a second field (multiple choice only) is provided. The fields must be comma-separated. For example, [bar-chart:field,grouping-field:parameters]. Bar charts have optional parameters that can be applied to alter their appearance. By appending the parameter ":bar-stacked" when two fields are used, the bars in the chart will appear stacked on top of each other rather than side by side. By default, bar charts are displayed with their bars going horizontally, but by appending the parameter ":bar-vertical", the orientation will be changed to display vertically instead.
  - **Pie charts** - Displays a pie chart for a single multiple choice field. For example, [pie-chart:field:parameters].
  - **Donut charts** - Displays a donut chart for a single multiple choice field.Note: A donut chart is essentially the same as a pie chart but with the center removed. For example, [donut-chart:field:parameters].

- **Scatter plots** - Displays a scatter plot of one number/date/datetime field for the x-axis and a second field (number field only) for the y-axis. (If a second field is not provided, a random value will be assigned for the y-axis.) It can optionally perform color grouping if a third field (multiple choice only) is provided. All fields must be comma-separated. For example, [scatter-plot:x-axis-field,y-axis-field,grouping-field:parameters].
- **Line charts** - Displays a line chart of one number/date/datetime field for the x-axis and a second field (number field only) for the y-axis. It can optionally perform color grouping if a third field (multiple choice only) is provided. All fields must be comma-separated. Note: A line chart is essentially the same as a scatter plot except with dots connected with a line. For example, [line-chart:x-axis-field,y-axis-field,grouping-field:parameters].
- **Color blindness accessibility:** Pie charts and donut charts have the ability for the user to enable color blindness accessibility, via a gray link displayed immediately below each chart, in which it overlays different patterns onto the colored pieces of the chart to make each color more distinct for many types of color blindness. This option to enable color blindness accessibility is stored in a secure cookie on the user's device and will be used to remember this choice anytime a pie/donut chart is displayed on any page for any REDCap project for that REDCap server.
- The colors displayed in each chart/plot are preset and are not modifiable.
- Smart Charts can be used anywhere in a project where piping is allowed *except* for inside the body of outgoing emails.

- **Optional parameters for Smart Functions, Smart Tables, and Smart Charts**
  - There exist various optional parameters that can be used with Smart Functions, Smart Tables, and Smart Charts to either filter the data used in them (e.g., via a unique report name) or to change their appearance (e.g., bar-vertical). See the descriptions for each below, which are all documented in the Smart Variables documentation.
  - **:R-XXXXXXXXXX Unique Report Name** - For Aggregate Functions, Charts, and Tables, filter the data being used by appending a Unique Report Name. Next to each report on the 'My Reports & Exports' page is its unique report name, which has 'R-' following by alphanumeric characters. By default, all Aggregate Functions, Charts, and Tables will use the values of all records in the project, but if a unique report name is appended to any of them, only data from that specific report will be used. Using a report as a surrogate to filter data is a very useful technique of performing complex filtering logic for Aggregate Functions, Charts, and Tables.
  - **:record-name "record-name"** - For Aggregate Functions, Charts, and Tables, filter the data being used to the *current record* by using the literal value 'record-name'. Note: This parameter will only work in a context where a single record is being viewed/accessed, such as on a survey page, data entry form, etc. This parameter can be used with any of the other parameters except unique report names.
  - **:event-name "event-name"** - For Aggregate Functions, Charts, and Tables, filter the data being used to the *current event* (longitudinal projects only) by using the literal value 'event-name'. Note: This parameter will only work in a context where a single record/event is being viewed/accessed, such as on a survey page, data entry form, etc.

This parameter can be used with any of the other parameters except unique report names.

- **:unique-event-names Unique Event Names** - For Aggregate Functions, Charts, and Tables, filter the data being used to specific events (longitudinal projects only) by providing an event's unique event name (found on the Define My Events page). You may use one or more unique event names (comma-separated). Note: This parameter can be used with any of the other parameters except unique report names.
- **:user-dag-name "user-dag-name"** - For Aggregate Functions, Charts, and Tables, filter the data being used to the records assigned to the *current user's Data Access Group* by using the literal value 'user-dag-name'. Note: This parameter will only work in a context where an authenticated user belongs to a project and has been assigned to a DAG in the project (this excludes survey pages and public project dashboards). This parameter can be used with any of the other parameters except unique report names.
- **:unique-dag-names Unique DAG Names** - For Aggregate Functions, Charts, and Tables, filter the data being used to the records assigned to specific Data Access Groups by providing a DAG's unique group name (found on the Data Access Groups page). You may use one or more unique DAG names (comma-separated). Note: This parameter can be used with any of the other parameters except unique report names.
- **:bar-vertical "bar-vertical"** - Display a bar chart with the bars going vertically instead of horizontally (the default) by using the literal value 'bar-vertical'. Note: This parameter can be used with any of the other parameters.
- **:bar-stacked "bar-stacked"** - Only for bar charts using two fields, display the bar chart with the bars stacked on top of one another for each choice. Whereas the default view is that the bars of each field are displayed side by side to show the color grouping. To enable this, use the literal value 'bar-stacked'. Note: This parameter can be used with any of the other parameters.
- **:no-export-link "bar-stacked"** - Only for bar charts using two fields, display the bar chart with the bars stacked on top of one another for each choice. Whereas the default view is that the bars of each field are displayed side by side to show the color grouping. To enable this, use the literal value 'bar-stacked'. Note: This parameter can be used with any of the other parameters.

- **NOTE: Using Smart Functions/Tables/Charts elsewhere in a project -** While project dashboards are an excellent place to use Smart Functions, Smart Tables, and Smart Charts, it is important to know that Smart Functions/Tables/Charts can actually be used *almost anywhere* in a project, such as on data entry forms, on survey pages, and in report instructions (to name a few). You can use Smart Functions/Tables/Charts anywhere that piping can be used. Click the green "Smart Variables" button on the Project Setup page to learn more about them. Note: The only place that Smart Charts cannot be used is inside the body of outgoing emails.
- **NOTE: Smart Functions/Tables/Charts do not yet work in the REDCap Mobile App;** however, it is planned that they eventually will (to a certain degree).
- **NOTE regarding permissions for Smart Functions/Tables/Charts:**

    - DAG permissions (i.e., filtering out records not assigned to the current user's DAG) are **NOT applied by default** to Smart Charts/Tables/Functions but are only applied when the Smart Chart/Table/Function utilizes a unique report name as a parameter (thus mimicking the natural DAG-filtering behavior of reports themselves) OR when the Smart Chart/Table/Function utilizes the "user-dag-name" parameter. This means that if a user is assigned to a DAG and views a project dashboard with the Smart Chart [scatter-plot:weight], for example, the plot will display data for ALL records in the project and not just the user's DAG. To limit the plot to just data in the user's DAG, it could be changed to [scatter-plot:weight:user-dag-name] in this case.
    - Smart Charts/Tables/Functions that utilize a unique report name as a parameter for data filtering purposes will still function and display normally even if the user does not have explicit access to view that specific report referenced as a parameter.
- **New feature: CSV Delimiter as a user-level preference** - The My Profile page now has a new user preference to allow a user to set their own preferred CSV delimiter (e.g., comma, semi-colon) that will be used as the delimiter character in all CSV file downloads throughout REDCap, such as data dictionary import/export, event import/export, user rights import/export, etc. This setting is not used by data imports and exports because those already have a way to specify the CSV delimiter manually. The system-level default value for this user preference can be set on the User Settings page in the Control Center, in which all new users created afterward will have their user-level preference set with this system-level default value. To modify all existing users' preference after upgrading (if your users would not want a comma delimiter), it will require running an "update" query in the database, such as this: UPDATE redcap_user_information SET `csv_delimiter` = ';' ;
- **Improvement:** Report "description" text now utilizes the rich text editor. Additionally, users may perform piping into a report's description, such as project-level Smart Variables, including Smart Charts, Smart Functions, and Smart Tables.
- **Improvement:** New option for Project Templates called "copy records", which will copy any existing records in the template to the new project created from the template. This option can be enabled for any new or existing Project Templates.
- **Improvement:** A new Project Template was added to illustrate new features in 11.0+. The new template is named "Project Dashboards, Smart Functions, Smart Tables, & Smart Charts".

Change/improvement: The Logic Editor popup is now utilized when editing the "Action Tags/Field Annotation" text box in the Online Designer.

Version 11.0.1 (released on 2021-05-07)

CHANGES IN THIS VERSION:

- **Improvement: The Smart Charts [pie-chart] and [donut-chart] now display the percentage value on top of each colored slice in the chart.**
- **Improvement: On the Calendar page when viewing the "View/Edit Calendar Event" popup for a calendar event that is attached to a record, the popup now displays a "View Record Home Page" link next to the record name to allow the user to easily navigate to the record.**

Version 11.1.2 (released on 2021-06-11)

CHANGES IN THIS VERSION:

- **Improvement: New alternative PDF print option in the "Download PDF" drop-down at the top of data entry forms, in which there is a new PDF export choice: "This data entry form with saved data (send to printer: select "Save as PDF" for Printer/Destination)". This will produce a much improved browser-based print option to print/save the webpage as a PDF that serves as a suitable alternative to the existing server-side PDF rendering options, which can sometimes be very limited and inaccurate (e.g., when representing field embedding). Note: This "Print to PDF" does correctly hide fields that have the @HIDDEN-PDF action tag.**
- **Change: Due to concerns about sending identifying information from REDCap in outgoing emails, Survey Notification emails will no longer include the Participant Identifier in the email body (if a Participant Identifier was entered in the Participant List for a given participant).**
- **New feature: Fields that are "sql" field type (Dynamic Query - SQL field) now work in the REDCap Mobile App. In previous versions, they were not functional at all in the mobile app. Now when a project is loaded into the mobile app, any "sql" fields will be converted into static drop-down fields in the app. If new choices get dynamically added to the sql field on the server afterward, the project will need to be loaded again in the mobile app to obtain those choices for the sql field. (Ticket #107409)**
- **New feature: Import/export alerts via CSV file on Alerts & Notifications page - Users may export and import alerts to the same project or another project using a CSV file. If updating an existing alert, the unique alert ID must be included in the CSV file to identify the alert that the user wishes to modify. If the unique alert ID is left blank in the CSV file being uploaded, it is assumed that the user wishes to create a new alert.**
- **New feature: Reorder alerts on Alerts & Notifications page - In the options menu for any given alert, a user can select an alert to be moved to another position on the Alerts & Notifications page. When this is done, it notifies the user that moving the alert will in most cases cause the alert numbers to be renumbered for many existing alerts (since they are numbered based on their order). However, their alert title and unique alert ID will not change during this process.**

Version 11.1.3 (released on 2021-06-18)

CHANGES IN THIS VERSION:

- **Improvement: Reports A and B now have built-in Live Filters: 1) the record ID field, 2) a list of all events (if the project is longitudinal), and 3) a list of all Data Access Groups (if the project contains DAGs and the current user is not assigned to a DAG).**