

New Feature

New feature: Repeating Instruments and Events: REDCap has the ability to repeat a data collection instrument or an entire event of instruments an unlimited number of times without having to specify the amount needed. This is sometimes called one-to-many data collection, in which a project can have one or more repeating parts. The repeating instruments/events feature can be enabled and set up by clicking the Enable button in the Optional Modules section on the Project Setup page. Enabling Surveys for Repeating Instruments: If one wishes to allow survey respondents to enter their responses in a repeating fashion in survey mode alone, one must enable an optional setting near the bottom of the Survey Settings page (in the survey termination options section) *after* an instrument has been set as a repeating instrument. So it is one additional step to do after enabling the instrument itself as a repeating instrument. When the repeat survey setting is enabled, it will display a button at the end of the survey so that the respondent can choose to enter another response for the survey, thus essentially allowing them to take the survey multiple times in a row. In this way, they will be able to enter as many responses for that same survey as they need. Reports and Data Exports with Repeating Instruments and Events: If one creates a report that contains data from a repeating instrument or repeating event, a field named 'redcap_repeat_instance' will be included that represents the instance number, which is an auto-numbered value (starting with '1') that gets incremented each time the instrument/event is repeated. And if the report contains data specifically from a repeating instrument (as opposed to a repeating event), then a field named 'redcap_repeat_instrument' will additionally be included that represents the instrument name that denotes to which instrument the row of data belongs. These two fields will only be included automatically in the report or data export if data originates from a repeating instrument or event. Note: Each repeated instance of an instrument or event will be displayed as a new row in the report or export file. While repeating instruments/events are fully supported when using Double Data Entry with regard to data entry workflow, please see the following notice for the Data Comparison Tool: “The Data Comparison Tool does not *fully* support the Repeating Instruments and Events feature, which appears to be enabled in this project. Data can be compared (and even merged if using Double Data Entry), but it will only allow comparison and merging of Instance #1 of a repeating instrument or repeating event. Thus all other repeating data will be ignored on this page. Also, all non-repeating data can still be compared and merged.”

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New feature: Field name (variable) auto-suggest when typing branching logic, calculations, or general conditional logic (Survey Queue, Automated Survey Invitation, Data Quality rule, report filter's advanced logic). While typing logic/calculations into the text box, it will auto-suggest a REDCap variable name from your project that is clickable to inject into the text box. If the project is longitudinal, it will also suggest event names to inject unique event names.

- New Feature** New feature: Real-time validator for branching logic, calculations, or general conditional logic (Survey Queue, Automated Survey Invitation) that allows you to run your logic/calculation on a specific record in the project, and it returns the result. For example, if typing branching logic in the Add/Edit Branching Logic popup in the Online Designer, you can select a record, and it will tell you if the field will be displayed or hidden for that record based upon the record's currently saved values. When typing calculations, it will return the actually calculated value of the field for a selected record. This makes it easier to formulate your logic and calculations so that you get them right the first time.
- New Feature** New Action Tag: @PLACEHOLDER - Is used to specify a short hint that describes the expected value of a Text field or Notes field (e.g. a sample value or a short description of the expected format). The placeholder is displayed inside the field before a value is entered. The format must follow the pattern @PLACEHOLDER='????', in which the text to be displayed should be inside single or double quotes. This action tag is compatible with all browsers, including Internet Explorer 8 and 9.
- New Feature** New Action Tag: @SYNC-APP - Can be used only for File Upload and Signature fields. If the project is initialized in the REDCap Mobile App, this will cause any image files uploaded to a record to be sent to the app so that they are viewable in the app when editing the record. NOTE: For use only in the REDCap Mobile App.
- New Feature** New API method: Generate Next Record Name (content=generateNextRecordName) - To be used by projects with record auto-numbering enabled, this method exports the next potential record ID for a project. It generates the next record name by determining the current maximum numerical record ID and then incrementing it by one. Note: This method does not create a new record, but merely determines what the next record name would be. If using Data Access Groups (DAGs) in the project, this method accounts for the special formatting of the record name for users in DAGs (e.g., DAG-ID); in this case, it only assigns the next value for ID for all numbers inside a DAG.
- New feature** New feature: Account Manager user type - Users can now be designated as an Account Manager by an Administrator on the "Designating REDCap Administrators and Account Managers" page in the Control Center. Account Managers are users that can aid Administrators with user-related administrative tasks. Account Managers are normal users that have the extra abilities of creating and accessing user accounts (Browse Users page) and being able to access the Email Users page and User Whitelist page. Account Managers do **not** have access to other users' projects or data. Note: A user cannot be both an Administrator and an Account Manager at the same time.
- New Feature** New feature: Data dictionary snapshot - Users can now click a button on the Online Designer to create a snapshot of their instruments (i.e., CSV data dictionary) that gets stored on the Project Revision History page. Additionally, a data dictionary snapshot is also created automatically whenever a data dictionary is uploaded on the Data Dictionary Upload page or via the API metadata import.

New Feature	New feature: Preview email - When composing an email on the "Email Users" page in the Control Center and also when composing survey invitations (e.g., the Participant List, Automated Survey Invitations set up), there is now a Preview option for viewing the fully-rendered HTML preview of the email that is being composed. Additionally, there is an option to send a test email to oneself in case they want to actually receive a copy the email being composed before officially sending it to others.
New Feature	New feature: Custom Event Labels Custom Event Labels can now be optionally added for any event in a longitudinal project when adding/editing events on the Define Events page. These custom labels can be used for piping data from a given event into the event's table header on the Record Home Page (i.e., Event Grid). For example, if each event represents a single visit of a person, then if you are collecting the date in a field called 'visit_date' on each event, then you can set the Custom Event Label as '[visit_date]' for all those visit events. This will provide useful context for each event when viewing all the events of the record. You can also get more advanced with the piping by using multiple fields and even static text. For example, '[visit_date], [weight] lbs'. The custom_event_label attribute for events has been added to the Export Events API method.
New feature	New feature - "Delete Records" API method - Users may now delete individual records using the API. One or more records may be deleted using a single API request, in which the record name must be explicitly specified. For longitudinal projects having multiple arms, the optional "arm" parameter may be passed in the request so that the record is only deleted from the specified arm, whereas by default it will delete the record from all arms if the record exists in more than one arm.
New feature	New feature - "Import Project Information" API method - Users may now update certain project-level settings via the API, such as the project's title, if it is longitudinal, if surveys are enabled, etc. The following project attributes can be updated: project_title, project_language, purpose, purpose_other, project_notes, custom_record_label, secondary_unique_field, is_longitudinal, surveys_enabled, scheduling_enabled, record_autonumbering_enabled, randomization_enabled, project_irb_number, project_grant_number, project_pi_firstname, project_pi_lastname, display today now button.
Improvement/change	Improvement/change: Assigning a record to a Data Access Group (or unassigning/reassigning a record) is now performed on the Record Home page using the "Choose action for record" drop-down list rather than on the data entry form. The only exception for this is when a record is being created on a data entry form (when the record does not yet exist), in which it will allow the user to set the Data Access Group using the drop-down list at the top right of the form. This is so a record can be assigned to a DAG at the moment of its creation.
Improvement/change	Improvement/change: The \$repeat_instance parameter was added to the two plugin/hook methods REDCap::getSurveyReturnCode and REDCap::getSurveyLink. The parameter is to be used only for projects with repeating instruments/events, in which it is the repeat instance number of the repeating event (if longitudinal) or the repeating instrument (if classic or longitudinal).

Improvement/change	Improvement/change: The \$repeat_instance parameter was added to the two API methods "Export a Survey Return Code" and "Export a Survey Link". The parameter is to be used only for projects with repeating instruments/events, in which it is the repeat instance number of the repeating event (if longitudinal) or the repeating instrument (if classic or longitudinal).
Improvement/change	Improvement/change: The \$repeat_instance parameter was added to the three API methods "Export a File", "Import a File", and "Delete a File". The parameter is to be used only for projects with repeating instruments/events, in which it is the repeat instance number of the repeating event (if longitudinal) or the repeating instrument (if classic or longitudinal).
Improvement	Improvement: New interface for Home/My Projects/Control Center pages.
Improvement	Improvement: New font "Open Sans" is available to use for the font on surveys.
Improvement	Improvement: The Project Revision History page is now much faster to load for production projects.
Improvement	Improvement: The results displayed from executed rules on the Data Quality page now display the field label above the variable name and value. This provides better context for users who might not know the variable names.
Improvement	Improvement: Execution of Data Quality rules should now be less intensive on the database server, especially when running them on larger data sets.
Improvement	Improvement: A PDF of record data for all instruments/events for a given record can now be downloaded from the "Choose action for record" drop-down on the Record Home Page if the user has Data Export privileges.
Improvement	Improvement: A zip file containing all uploaded documents (or signature files) for an individual record can now be downloaded from the "Choose action for record" drop-down on the Record Home Page if the user has Data Export privileges.
Improvement	Improvement: File Upload fields that are displayed on reports will no longer display the text "[document]", but will instead provide a "Download" button so that the user can actually download the file from the report.
Improvement	Improvement: When the user clicks the "Save & Stay" button (formerly the "Save and Continue button) on a data entry form, it now says "Record XXXX was successfully edited" at the top of the page to denote that the form was saved.
Improvement	Improvement: For records that have been assigned to a Data Access Group, it will now display their Data Access Group assignment under the record name on the Record Home Page.
Improvement	Improvement: PDF exports of instruments are now able to display inline BMP image attachments for Descriptive fields. In previous versions, it would simply omit the image in the resulting PDF file.

Improvement	Improvement: The biomedical ontology search (via BioPortal web service) is now customizable so that it can now point to a different BioPortal end-point (e.g., "http://data.bioportal.lirmm.fr") by setting the value of <code>bioportal_api_url</code> in the <code>redcap_config</code> database table. (Note: If that value is changed, then it is advised to also set the fields <code>bioportal_api_token</code> , <code>bioportal_ontology_list</code> , and <code>bioportal_ontology_list_cache_time</code> in that table to a blank ("") value.)
Improvement	Improvement: When reviewing drafted changes in a production project, it now provides a "Compare" button for multiple choice fields that have a change in one or more choices. Clicking the button opens a popup with a table displaying each choice on a row and noting if the choice is Unchanged, Altered, Added, or Removed. Additionally, it also displays how many records have a saved value for the given choice. This will help when reviewing draft changes when in production status.
Improvement	Improvement: When reviewing drafted changes in a production project, it will now give a warning on the page if a user has initialized the project in the REDCap Mobile App. It will note that the changes being made <i>may</i> affect the app user's ability to sync data back to the project and recommends that perhaps the app user should first sync all their data back to the server before the changes are committed.
Improvement	Improvement: When reviewing drafted changes in a production project, it now truncates any text (field labels, choices, etc.) in the table that is very long, and provides a "Show more" link if you wish to view the full text.
Improvement	Improvement: The User Access Dashboard now only shows projects with more than one user. Since it makes no sense to display projects in which the user is the only person with access to the project, those projects will no longer be displayed on the page since they are irrelevant for the purpose of the UAD.
Improvement	Improvement: When reviewing drafted changes in a production project, if any fields are being deleted and those fields contain data, it will note how many records will be affected for each field deleted. Also, if fields are being added and those fields previously existed in the project, in which they had data saved or them but then the fields were deleted, then it will note how many records have orphaned data for those fields (because that data will be restored if the fields are re-added - this is sometimes undesirable).
Improvement	Improvement: Data entry forms behave slightly differently when two users are accessing the same record-event-form in the same project. In previous versions, it would completely prevent a user from viewing the form if another user (excluding super users) were already viewing it (note: super users were able to view the page at the same time as any user). However, this has been changed so that it will allow the user to view the form at the same time as another user, but it will make the form read-only/disabled if another user (including a super user) is already viewing it. This is an improvement since it actually lets the user view the form and its data, whereas previously they could not even view it.

Improvement	Improvement: The Data Search feature on data entry forms can now be used to search data over all fields in the project (excluding multiple choice fields). This is now the default option, although users may still choose a specific field to further narrow down their search.
Improvement	Improvement: Slider fields can be displayed as vertical by setting their Custom Alignment to right-vertical (RV) or left-vertical (LV). Note: Any already-existing slider fields will automatically be converted to RH and LH alignment during the upgrade process if they previously had RV and LV alignment, respectively (this is because in previous versions there was no difference between the vertical and horizontal alignments for slider fields).
Change/improvement	Change/improvement: If a user clicks the "Add new record" button on the "Add/Edit Records" page, then it will automatically take them to the data entry form (rather than the Record Home Page) if the project contains only one instrument (or if longitudinal, only contains one designated instrument for the selected arm). This reduces clicks for the user and thus saves time.
Change/improvement	Change/improvement: The Data Dictionary Codebook now displays the unique form name next to the name of the instrument in the gray instrument header in the table.
Change	Change: Minimum PHP version for REDCap 7.0.0 and later is PHP 5.3
Change	Change: REDCap's base font is now Open Sans, and is slightly bigger in size, providing better readability. In previous versions, the base font was Arial. Note: Any plugins or hooks that don't have their own specific stylesheets that set the font-family of their content will be affected by this.
Change	Change: Renaming a record is now performed on the Record Home page using the "Choose action for record" drop-down list rather than on the first data entry form.
Change	Change: The location of the "Design your data collection instruments" step and "Define your events" step (longitudinal projects only) on the Project Setup page will now remain in the same location on the page when in production status as they did when in development status. In previous versions, these two steps were moved to the bottom of the page. This change is to provide more consistency for where things are located during the entire development of a project.
Change	Change: The method in which to delete an entire record has been changed. It is no longer done by clicking a button at the bottom of the data entry form, but rather it is done by selecting the Delete Record option in the record actions drop-down on the Record Home Page.
Change	Change: The method in which to delete an entire event of a record has been changed (this applies to longitudinal projects only). It is no longer done by clicking a button at the bottom of the data entry form, but rather it is done by clicking the red X icons now displayed in the bottom row of the status table on the Record Home Page.
Change	Change: Added check for custom hook specifically for Shibboleth authentication in order to allow e-signatures to work with Shibboleth on data entry forms. (Ticket #10225)

- Change Change: When viewing the Agenda tab on the Calendar page in a project, it now displays all the text fully for each calendar event when printing the page. In previous versions it truncated it, even in the print view.
- Change Change (technical): Replaced the usage of PHP Pear DB with Pear MDB2 (which supersedes it) for Table-based authentication. This should not affect any behavior at all. This should also allow Table-based authentication to work for MySQL connections over SSL.
- Change Change: In the "Main project settings" step on the Project Setup page in a project, the position of the two choices were swapped to bring survey functionality to the forefront.
- Change Change: Some speed improvements on the Record Home Page if using multiple arms in a longitudinal project.
- Change Change: When editing the choices of a multiple choice field in the Online Designer, the auto-coding behavior is now slightly different when projects are in Development status when replacing the existing choices with brand new ones that do not have explicit coding. In previous versions, if existing choices were completely replaced with non-coded choices (i.e., just the choice labels), it would auto-code the new choices beginning with one number higher than the highest-numbered of the previously existing choices, whereas now (in development only) it will auto-code the choices to begin with "1" if all the choices are replaced. Note: This change is for development status only because it could have disastrous effects on data for projects in production when performing real data collection.
- Change Change: When copying a project that utilizes surveys and Automated Survey Invitations, any ASIs that are copied are now set to "Not Active" by default in the new project. A note was added regarding this on the Copy Project page. The reason for this change is because so many users would copy the project with records and begin testing the new project via data entry, which would mistakenly trigger the ASIs to send emails to real participants copied from the original project. So the change was made to prevent this undesirable situation from happening. So now when copying a project, all ASIs will need to be set as Active individually after the project is copied.
- Change Change: Some extra error handling and error messages were added for the case when very large files are uploaded in REDCap and result in a server error because of their size.
- Change Change: The following text was added for clarification to the @TODAY or @NOW action tags' instructions: "This action tag should not be used with fields that will be hidden by branching logic because it will always prompt the user to erase the value when the field gets hidden".
- Change Change: Replaced all references of "super users" with "Administrators" in all text to be more consistent with the usage of language.
- Change Change/bug fix: Updated "Help & FAQ" page with new content. Also fixed links to the FAQ that pointed to sections that no longer exist.

- Change Change: The "lock all forms" and "unlock all forms" links that appear near the bottom of the "Record Home Page" (formerly known as the "Event Grid") in longitudinal projects have now been replaced with an "Actions" drop-down higher up on the page above the table of events. In this way, users can still perform the same actions as before but by choosing an option in the drop-down near the top rather than clicking the links that used to exist near the bottom.
- Change Change (bug fix for future bug): The Text-To-Speech functionality that can be enabled on surveys will cease to work as of Oct 1st, 2016 since the current TTS service being used (AT&T) will be discontinuing the service. To prepare for this, this REDCap version will instead utilize the IBM Watson text-to-speech API service. The disadvantage of this new service is that it does not yet work on mobile devices, iOS, or the Safari browser, although this will soon be improved (according to IBM). Note: For all REDCap versions 6.9.1-6.16.6 (Standard) or 6.10.2-6.15.7 (LTS), the text-to-speech functionality will still work between now until Oct 1st, 2016, after which it will not work again until you upgrade to the latest release.
- Change Change: When the REDCap web server fails to connect to the database, it now sends an HTTP 500 status in addition to the typical error message that gets displayed. This is especially helpful for API requests being made to the server in case the server goes offline.
- Change Change: The auto-complete option for drop-down fields is no longer enabled by default when creating a new drop-down field in the Online Designer.
- Change Change: Every user's first and last name are now displayed in the drop-down list of users on the "Designate a Super User" page in the Control Center and also in the list of current super users on that page.
- Change Change: Changed the text "Matrix Header Text" to "Section Header Text" when adding/editing matrix fields in the Online Designer to reduce confusion between matrix headers and section headers.
- Change Change: More granular error messages were added for the Import Records API method.
- Change Change: If using the setting "Announcement text to display at top of Home page and My Projects page" found on the Home Page Configuration page in the Control Center, the custom text now displays above the login fields on the login page whereas in previous versions it was displayed below it, thus making it more difficult for users to notice.
- Change Change: The "multiple tabs/windows open" error message now additionally notes that if a Cross-Site Request Forgery (CSRF) was just attempted that it was successfully blocked. This is helpful for any app scanners that are scanning REDCap and believe they have found a CSRF vulnerability when in fact it is a false positive.
- Bug Major bug fix: If importing data using the Dynamic Data Pull (DDP) in which some values on the adjudication screen are unchecked (so that they do not get imported), then it would mistakenly import those values anyway when the Save button is clicked. (Bug emerged in version 6.18.1.)

- Bug Bug fix: If a user in a project had been set to receive Survey Notifications when someone completed a survey, and then the user was removed from the project, then the user would mistakenly still show up in the list of users in the Survey Notifications popup in the Online Designer, even though the user is not selectable there.
- Bug Bug fix: On the "Stats & Charts" page of a report, it would mistakenly display a negative number for the Missing count of each field for longitudinal projects only. (Ticket #11124)
- Bug Bug fix: When clicking the "Create a report" button in the Project Home page's Quick Task box, it takes the user to a non-existent page. (Ticket #11730)
- Bug Bug fix: When attempting to use Send-It to send a file from the File Repository or right after performing a data export, the popup that it opens would mistakenly redirect to the main Home page.
- Bug Bug fix: When downloading a PDF of a survey response, it might on some occasions not display the label "Response was added on [timestamp]" in the PDF for the response.
- Bug Bug fix: When downloading a PDF of a survey response, it would mistakenly not perform piping for the survey instructions if variables were used in the instructions.
- Bug Bug fix: The @PLACEHOLDER action tag was mistakenly not appearing on drop-down fields that have the auto-complete feature enabled.
- Bug Bug fix/change: The Logging page in a longitudinal project now only says Created Record when a record is actually created. In previous versions, it would mistakenly say Created Record for when new events of data were added for existing records, which was confusing.
- Bug Bug fix: The API example file for the File Import API method in PHP had an error in it. This only affects the PHP example of this method.
- Bug Bug fix: The Survey Queue Link header text was missing in the Participant List download.
- Bug Bug fix: The Configuration Check was giving incorrect information about how to install the ZipArchive extension in PHP if the extension is not yet installed on the REDCap server. (Ticket #11749)
- Bug Bug fix: If using Table-based authentication and resetting one's password recovery question on the My Profile page, it would take the user back to the My Projects page and mistakenly not prompt them to enter a new recovery question for certain cases when Two Factor Authentication has been enabled in REDCap.
- Bug Bug fix: When installing, upgrading to, or upgrading higher than REDCap 6.17.0, for certain database configurations it might display an erroneous error message "ERROR: Your REDCap database structure is incorrect!" on the Configuration Check page. (Ticket #12029)
- Bug Bug fix: An error would occur when a developer uses the REDCap::getData method to pull data from one project (specifying the project_id parameter in the method) while inside a hook from another project. (Ticket #12095)

- Bug Bug fix: Fields having "email" field validation would mistakenly not allow for top-level domains exceeding 4 characters (the part of the email domain name to the right of the dot, e.g. john@example.global).
- Bug Bug fix: For certain versions of PHP, the data import process might mistakenly throw a fatal PHP error when assigning records to Data Access Groups via Data Import Tool or API data import. (Ticket #11870)
- Bug Bug fix: For certain versions of PHP, clicking the "View All Projects" button on the "Browse Projects" page in the Control Center will mistakenly throw a fatal PHP error and prevent the page from loading. (Ticket #12148)
- Bug Bug fix: When importing users via the API User Import method, it would fail if the users were being added to the project (were not existing project users) and were not being assigned to a Data Access Group during the import. (Ticket #12031)
- Bug Bug fix: If CURL is not installed on the REDCap web server, then the Configuration Check page in the Control Center would mistakenly display a broken link in the instructions on how to install CURL on the server. (Ticket #11748)
- Bug Bug fix: When executing Data Quality rule H across all records in a longitudinal project, it might mistakenly find false positives of incorrect calc field values in events that have no data. It should instead be ignoring events with no data for each given record. (Ticket #11599)
- Bug Bug fix: For a very small minority of calculated fields, especially those using the IF function, the resulting calculation determined when viewing the calc field on its data entry form might be different than the one calculated during a data import or when running Data Quality rule H. (Ticket #12137)
- Bug Bug fix: If a user puts focus on the text box of an auto-complete drop-down field on a survey or data entry form but does not change the field's value, then it would mistakenly trigger the "Save your changes" prompt if they try to leave the page. Note: This does not affect regular drop-down fields but only those with the auto-complete feature enabled. (Ticket #11725)
- Bug Bug fix: If an auto-complete drop-down field on a survey or data entry form has an option whose option label is "-" (i.e., a single dash), then it will not render that option correctly when the drop-down is rendered on the page. Note: This does not affect regular drop-down fields but only those with the auto-complete feature enabled. (Ticket #12226)
- Bug Bug fix: Text fields that have the field validation of Number 1/2/3/4 decimal place will mistakenly not have its stats displayed on the "Stats & Charts" page. (Ticket #12388)
- Bug Bug fix: When viewing the API Tokens page where it displays when a token was last used by a user, it would mistakenly never load the "Last Used" timestamps in the table, but would always say "Loading..". (Ticket #12477)
- Bug Bug fix: The Advanced Link feature for Project Bookmarks would fail when trying to authenticate the user's REDCap session. (Ticket #12522)

- Bug Major bug fix: If the user has downloaded a PROMIS or Neuro-QoL Auto-Scoring instrument or Adaptive instrument from the REDCap Shared Library, in which some of the questions in the assessment have a "not applicable" type option (e.g., "I did not do this..."), then when submitting a question with that option selected, REDCap would mistakenly say that it could not communicate with the PROMIS server and end the survey prematurely. Note: This only affects a small minority of the PROMIS/Neuro-QoL instruments.
- Bug Bug fix: If importing data using the Dynamic Data Pull (DDP) in which the adjudication screen displays new data that has been pulled from the source system after some values have already been imported via DDP into the REDCap project, it would mistakenly not allow the user to dismiss the new values if the user did not want to import them, thus forcing the values to always be displayed in the adjudication popup until at some point at least one value was selected to import.
- Bug Bug fix: When creating a project via a project XML file, if the project from which the XML file was downloaded was a longitudinal project in which no instruments were designated for any events in the project, then it would display an error and prevent the user from creating a new project from the XML file.
- Bug Bug fix: When "real-time execution" is enabled for Data Quality rules in a project, the processing of the rules on the data entry form can take an unusually long time if there are more than 10 or so rules being executed at a time. (Ticket #8602)
- Bug Bug fix: The Participant List table and the table on the "Set up project bookmarks" page would run off the page if the page was too narrow while not providing any horizontal scroll bars, which prevented the table from being fully viewed.
- Bug Bug fix: If a CSV data file is uploaded on the Data Import Tool with records represented as columns in the file, then if any columns have a header value in the first row but do not have any data in the column, then it would mistakenly display an error that the record ID was missing for a record being imported. (Ticket #10180)
- Bug Bug fix: When attempting to assign a user to a Data Access Group using the User Import API method, it would mistakenly fail to assign the user to the DAG and not return any kind of error message. (Ticket #10292)
- Bug Bug fix: If a user clicks the "Erase All Data" button on the "Other Functionality" page in a project, it would mistakenly delete all user-uploaded files in the File Repository when it should only delete data export files that are stored there. (Ticket #10058)
- Bug Bug fix: If using a version of PHP below PHP 5.5 on your REDCap web server, then the REDCap API and API Playground might not function. This was due to the mistaken usage of the PHP function `json_last_error_msg()`, which only exists in PHP 5.5 and up. (Ticket #10459)

- Bug Bug fix: When using the Twilio telephony services, on certain occasions it might not always erase the call logs or SMS message logs from Twilio's log on its website as logs are created from REDCap's usage of Twilio. It now does a much better job of erasing the log within the user's Twilio account for the phone number being used for the REDCap project.
- Bug Bug fix: If a field's branching logic contains a line break (or line feed character) in certain places, then it would cause the survey or data entry form not to load and display an erroneous error.
- Bug Bug fix: When exporting the instrument-event mappings of a longitudinal project, if no mappings exist, then it would mistakenly return a blank CSV file. It now instead returns the file with the headers only.
- Bug Bug fix: When a user is copying a project when only administrators can create/copy projects for users (i.e., users must request it), then if the user selected the Survey Queue and Automated Survey Invitations to be copied, it would mistakenly not select that checkbox option when the administrator goes to copy the project. (Ticket #10676)
- Bug Bug fix: When a user is creating a new project from an ODM/XML project file, it will now no longer prevent the import if data validation errors exist for data inside the XML file. Also, it will be more lax about minor metadata issues for fields in the XML file. This should improve the overall experience of importing XML project files.
- Bug Bug fix: The Survey Notifications feature would mistakenly not include the Participant Identifier inside the email to the survey administrator unless the survey that was taken was the first instrument (and first event, if longitudinal) of the project.
- Bug Bug fix: When downloading a PDF containing data for one or all instruments where branching logic is used on all the fields in a given matrix or a given section, in which all matrix fields or all fields in a whole section would be hidden by branching logic based upon the data, then some text in the PDF might mistakenly overlap or alternatively might cause the PDF itself to be corrupt and thus not be able to be opened by a PDF reader.
- Bug Bug fix: The Activity Graphs page in the Control Center would display dates that were mistakenly one month off (e.g., showing dates for November when it's currently October).
- Bug Bug fix: For classic projects only, the Custom Record Label and Secondary Unique Field, if enabled, were mistakenly not displaying next to the record name on the left-hand project menu when a data entry form is being viewed.
- Bug Bug fix: The font resize buttons at the top of survey pages would not always enlarge/shrink the text in correct proportions. (Ticket #9499)
- Bug Bug fix: If a user has been assigned to a Data Access Group, then it would mistakenly allow them to try and add a new user or assign a new user to a role on the User Rights page, even though such is not allowed. And these attempts would inevitably fail and display an error message (or nothing). In that case, it now simply disables the add new user and add new role section of the page.

- Bug Bug fix: The redcap_connect.php file included in the install zip package would mistakenly fail to connect to MySQL over SSL without client certificate authentication. That file has now been updated in the install zip package. (Ticket #9900)
- Bug Bug fix: If a user downloads a PDF of all records from the Other Export Options tab of the "Data Exports, Reports, and Stats" page, then it will result in a blank PDF (no text - completely blank) if the project has no records. This is expected but confusing. It now displays a message to the user in this case that the PDF is not downloadable since no records have been created yet.
- Bug Bug fix: In some rare cases the action of reordering reports on the "Data Exports, Reports, and Stats" page might cause some database queries to overlap and cause a deadlock, thus impacting overall database performance. The process has now been wrapped in a MySQL transaction to prevent this. (Ticket #9716)
- Bug Major bug fix: When performing a data import (API, mobile app, or Data Import Tool) in which one of the fields being imported is a checkbox field, if only some (but not all) of the checkbox options are included in the data import, then those options that are not included in the import will mistakenly get overwritten as "unchecked" (0) if they are currently "checked" (1) in the project. (Ticket #8325)
- Bug Major bug fix: When performing a data import (API, mobile app, or Data Import Tool), in which a field being imported contains a checkbox with negative coded choices (e.g., -3), then in specific situations the values for the negative coded choices might not get successfully saved during the import process.
- Bug Bug fix: The page footer on project-level pages might mistakenly overlay onto the Automated Invitations popup on the Online Designer page. (Ticket #8946)
- Bug Bug fix: On the Configuration Check page in the Control Center, it will no longer automatically try to set the permissions of the temp and edocs directories as "world writable" (777), which could create security issues for some server configurations depending on the institution's local IT policy.
- Bug Bug fix: The API method exportFieldNames and the plugin/hook method REDCap::exportFieldNames were mistakenly not returning calc fields. (Ticket #9041)
- Bug Bug fix: In Step 3 (Filters) when creating/editing a report, if a Form Status field is selected as a filter, the drop-down of choices that appear on the right of it would mistakenly include a blank choice option. Since Form Status fields never have a blank value ("0" is the default value), it should not have an empty option to choose.
- Bug Bug fix: When using the Twilio telephony services in a longitudinal project in which the designated email field or designated phone field is used for survey invitations, then when sending/scheduling new invitations and setting the invitation type as "participant's preference", it might mistakenly deliver the survey invitation via email rather than using their preference.

- Bug Major bug fix: When an API user has been assigned to a Data Access Group, it might mistakenly allow their API request to modify data for existing records that are not in their DAG. It could also allow the API request to reassign an existing record to the user's DAG, which should not be possible if the API user is already assigned to a DAG.
- Bug Bug fix: Some error messages for API data imports were mistakenly not displaying all the error messages back the client but instead were returning a very generic message saying that the data might be in the wrong format.
- Bug Bug fix: If the variable for a checkbox field somehow ends with an underscore (they typically should not, but could due to older bugs that have since been fixed), then their data might not get parsed and interpreted correctly during a data import, thus resulting in an import error. (Ticket #7028)
- Bug Bug fix: If a field (excluding checkboxes) has a value and then the value is later deleted, it would mistakenly leave a blank value in the redcap_data database table rather than removing the whole row in the table. This would not affect data quality in any way but could cause problems for groups that have plugins or reports that query REDCap's back-end directly.
- Bug Bug fix: The page footer on project-level pages might mistakenly overlay onto the Automated Invitations popup on the Online Designer page. (Ticket #7059)
- Bug Bug fix: If a calculated field contains a datediff() function that does not reference "mdy" or "dmy" explicitly as the date format in the function, then on some occasions REDCap might crash due to a fatal PHP error during a data import or when saving a form or survey. (Ticket #7264)
- Bug Bug fix: When attempting to create a longitudinal project using a project XML file, if the XML file contains data on forms that used to be designated for a given event but now are not, in which the data remains orphaned but still exists in the export, then it would display an error that the project could not be created from the XML file because it will not allow data to be imported in undesignated form/events. (Ticket #7794)
- Bug Bug fix: When copying a project and selecting to copy the Automated Survey Invitation settings, it would mistakenly not copy the settings for reminders and the "Ensure logic is still true" setting. (Ticket #7941)
- Bug Bug fix: When entering conditional logic for Automatic Survey Invitations, Survey Queue, etc., it would mistakenly throw an error if a variable inside square brackets was not used in the logic. There are some cases in which logic may not have any variables in them.
- Bug Bug fix: The characters were not displaying correctly for the Friendly Code column of the Spanish characters table on the "Help & FAQ" page. (Ticket #8000)
- Bug Bug fix: When a project's "character encoding for exported files" setting is set to "Japanese (Shift JIS)" on the "Edit a Project's Settings" page, it would prevent Japanese text from displaying properly for field labels, field notes, etc. in the REDCap Mobile App.

- Bug Bug fix: For unknown reasons in particular MySQL configurations, REDCap projects were mistakenly not getting deleted successfully (when a project had been deleted by a user) and thus the project would forever remain in the database, in which REDCap would continuously try (but fail) to delete them over and over again. (Ticket #4994)
- Bug Bug fix: If a user has Data Access Group privileges in a project but does not have User Rights privileges, then the "DAGs" link on the left-hand menu would mistakenly not get displayed. (Ticket #8381)
- Bug Bug fix: If a data value is somehow saved multiple times within the same second of time for a given record-event-field, then the Data History popup would mistakenly not show all the logged events for that field but instead would only show the last event logged within that second of time. (Ticket #8323)
- Bug Bug fix: When using the Twilio telephony services for surveys, if a participant was sent an SMS message from the Public Survey Link page in order to begin a survey as an SMS conversation, then it would never allow them to start the survey but would mistakenly keep asking for a survey access code. This occurred for public surveys only, and only with SMS conversation surveys.
- Bug Bug fix: The "Custom Application Links for Projects" page in the Control Center would mistakenly not display the "delete" column on the far right of the page, thus making it impossible to delete a custom application link that had been created.
- Bug Bug fix: When using the Twilio telephony services for surveys, the "Auto-continue to next survey" setting would mistakenly not advance the participant to the next survey if taking the survey via SMS or voice call.
- Bug Bug fix: Custom Event Labels were mistakenly not getting copied when doing "Copy Project" or when creating a new project via the project XML file. (Ticket #7835)
- Bug Bug fix: When exporting the project XML file, it would mistakenly not include the Bioportal Ontology attribute of a field in the XML file if the field was utilizing the ontology auto-suggest feature.
- Bug Bug fix: The two gray box sections on the Project Home page would mistakenly display side by side on very wide screens. (Ticket #8093)
- Bug Bug fix: When editing a File Upload field in the Online Designer, in certain circumstances it would mistakenly set the field type as "Text Box" instead of "File Upload" after opening the "Edit Field" popup dialog. (Ticket #8163)
- Bug Bug fix: When on the To-Do List page in the Control Center, clicking on the "Add Users (Table-based only)" link on the left-hand menu mistakenly results in a 404 "page not found" error. (Ticket #6739)
- Bug Bug fix: When adding/editing an SQL field, if the SQL query is pulling two fields and they are both named the same thing in the query (e.g., "select a.value, b.value..."), then it will mistakenly overwrite the first value with the second value, thus making the drop-down values also be the same as their corresponding labels (rather than the actual desired value). (Ticket #6758)

- Bug Bug fix: When a project's "character encoding of exported files" is set to "Japanese (Shift JIS)", the PDF export of instruments will fail if the server is using PHP 7.
- Bug Bug fix: If the @HIDEBUTTON action tag is used for a date or datetime field, the date format note to the right of the field (e.g., "M-D-Y") would mistakenly not be displayed on forms and surveys.
- Bug Bug fix: If a project has been taken offline via the "Edit A Project's Settings" page in the Control Center, it displays a red box at the top of the Home/Project Setup page in the project; however, the link inside the red box that points to the "Edit A Project's Settings" page mistakenly does not load the settings for that particular project.
- Bug Bug fix: The Configuration Check page was not checking to see if the PHP extension named "XMLReader" is installed. This extension is used for some important features, such as project XML export. (Ticket #7128)
- Bug Bug fix: When the survey confirmation email has been enabled for a given survey, but REDCap does not possess the participant's email address, the green box displayed on the Survey Completion page (for the participant to enter their email) is not aligned correctly on the page. Also, the button text inside the green box would mistakenly spill out of the button in Internet Explorer 11 only.
- Bug Bug fix: If using the @READONLY or @READONLY-SURVEY action tag on a survey that has the Enhanced Choices option enabled, the options for those radio button fields and checkbox fields would mistakenly not be disabled but would allow participants to select a choice and save data for the field.
- Bug Bug fix: If executing a rule in the Data Quality module where the rule runs for more than 20 minutes, in which it would have timed out, it might not display an error message to the user but instead might mistakenly appear to run forever (even though it has really stopped).
- Bug Bug fix: If using a literal date or datetime value (e.g., "01-31-2016") inside the datediff() function that is nested inside another function in a calculated field *and* that literal value is also in MDY or DMY date format, then it may mistakenly not perform auto-calculations correctly and may return incorrect discrepancies for Data Quality rule H. (Ticket #1954)
- Bug Bug fix: If a calc field's value was created via Auto-calculation during a data import, then it would mistakenly not include the "(Auto calculation)" note for the logged event on the project Logging page.
- Bug Bug fix: When attempting to edit a matrix of fields in the Online Designer, if one of the field labels contains non-displayable characters (black diamond with question mark), it would mistakenly throw a JavaScript error and prevent the "Edit Matrix of Fields" popup from opening.

- Bug Bug fix: If authentication has not been enabled in REDCap and a new Table-based user is created by an administrator, then if the new user follows the "reset password" link in the email they receive, it will not do anything except load the REDCap Home page. This is due to the fact that authentication must be enabled before the link will work, which is not always obvious and can be very confusing. In this situation, after clicking the link in the email, it now displays a message to the user that the administrator must first enable authentication before the link will work and allow them to log in using their new REDCap account.
- Bug Bug fix: If using the Enhanced Choices setting on surveys, and a choice for a radio or checkbox field has no choice label, then the enhanced choice button on the survey page mistakenly looks flattened and smaller than the intended height.
- Bug Bug fix: If a respondent is returning to a multi-page survey that has the "Save & Return Later" option enabled, it might mistakenly take them to the wrong survey page if the @HIDDEN and @HIDDEN-SURVEY action tags are being utilized on that instrument and also have data saved for fields utilizing those action tags. It now ignores fields that utilize @HIDDEN and @HIDDEN-SURVEY when determining which page to load for the respondent.
- Bug Bug fix: The Data Search functionality on the Add/Edit Record page would mistakenly return duplicate results on some occasions.
- Bug Bug fix: When viewing the Project Setup page on a wide screen, the steps on the page may mistakenly get displayed as two columns instead of one.
- Bug Bug fix: The configuration setting "Contact person web address/URL" on the Home Page Settings page in the Control Center was mistakenly not being used on the login page in place of the "Contact name email". (Ticket #5961)
- Bug Bug fix: Fixed outdated text inside the "Move Project to Production Status" popup on the Project Setup page. (Ticket #5974)
- Bug Bug fix: When exporting data via the API's "Export Records" method in which the data is being exported as "labels" (rather than "raw") and in EAV format, then any Yes/No or True/False fields that used to have a value at one point but then had the value removed, those will mistakenly get exported as "No" and "False", respectively, rather than as blank. It will now not return the row of EAV data if the value is blank or has been removed. (Ticket #6011)
- Bug Bug fix: When exporting data via the API's "Export Records" method in which the data is being exported in EAV format, any values that belong to multiple choice fields that have had an option/choice removed, thus orphaning the stored data value, would mistakenly return a blank value for the field in the data export rather than the raw value that is actually stored. It now returns the raw data value that has been orphaned, regardless of exporting "labels" or "raw" data. This only occurs for EAV format exports. (Ticket #6012)

- Bug Bug fix: When clicking the "Request delete project" button on the Other Functionality page of a project that is in Inactive or Archived status, it would mistakenly display a popup window that contained a "0" rather than the correct text content, and thus would not function correctly. (Ticket #6031)
- Bug Bug fix: When using the Twilio telephony services for surveys, the following things would mistakenly not get triggered if a survey was completed via voice call or SMS: 1) sending confirmation email to respondent, and 2) sending email notifications to project users.
- Bug Bug fix: When printing the schedule of a record via the "Print Schedule" link at the bottom of the Scheduling page, it would mistakenly not display the Custom Record Label or Secondary Unique Field label on the page to be printed.
- Bug Bug fix: When exporting the To-Do List as a CSV file in the Control Center, the user's name and email address are not correct for the user who made the request. (Ticket #5885)
- Bug Bug fix: When using the Twilio telephony services for surveys, piping might not be successful if data is being piped into a Section Header or Descriptive field.
- Bug Major bug fix: If the Survey Login feature is being used on a survey, if no data exists for the login fields for the given record, then it would mistakenly allow the participant to navigate to the survey without having entered a value for the login field.
- Bug Major bug fix: If a slider on a data entry form or survey had already had its value set, then when returning to the page, the slider would mistakenly be disabled. Fortunately the slider's value would *not* get reset to blank/null if the page was resaved. However, the user might attempt to set the value again if they noticed that the slider appeared not to be set, which might result in a different value being saved from the original.
- Bug Bug fix: On iOS devices, drop-down fields on surveys and data entry forms would have their option text truncated if it is fairly long, thus making it impossible to view the entire choice's label.
- Bug Bug fix: If creating a new report and selecting an instrument from the "add all fields from selected instrument" option in Step 2, it would mistakenly add empty placeholder fields to the report where any Descriptive fields exist. (Ticket #5301)
- Bug Bug fix: If a survey invitation had attempted to send but failed (e.g., email address was not available) for an existing record in a project, it would mistakenly show the send status of the invitation as pending at the top of the data entry form for that record. In this case, it now correctly shows the status as failed to send.
- Bug Bug fix: For multi-page surveys where an entire page has every question hidden due to branching logic, it might mistakenly still display the page (it is supposed to skip the page) even though no questions are visible on the page. (Ticket #5230)

- Bug Bug fix: The action tags @HIDDEN and @HIDDEN-SURVEY were mistakenly not being considered when a survey page is supposed to be skipped due to all questions on the page being hidden, thus possibly displaying the survey page with all questions hidden.
- Bug Bug fix: When editing a matrix of fields in the Online Designer, if a \ (backslash apostrophe) are entered together in the section header, field labels, question numbers, field annotations, or choice labels for any field in the matrix, then the "Edit Matrix of Fields" popup would not open anymore in the future due to a JavaScript error, thus making the matrix no longer editable in the Online Designer. (Ticket #5332)
- Bug Bug fix: Error in API documentation for the Import Records method. (Ticket #5333)
- Bug Bug fix: For certain server configurations, if a user logs out of REDCap, it will correctly destroy their session on the server (thus effectively ending their session), although the session cookie in the client might mistakenly not get deleted and may end up with the value "deleted". The leftover cookie does not pose a security concern since it is orphaned from the user's session after the logout has occurred. But regardless, the cookie should be deleted.
- Bug Bug fix: If the Dynamic Data Pull (DDP) module is enabled in a project, the "Today"/"Now" button and date picker widget of a temporal field would mistakenly not trigger DDP to pull data from the source system.
- Bug Bug fix: If the Dynamic Data Pull (DDP) module is enabled in a project, the "select all" and "deselect all" links on step 1 of the DDP field mapping page would not work correctly, and it would also cause the "number of fields selected" count to be mistakenly incorrect. (Ticket #5624)
- Bug Bug fix: The event grid page in a longitudinal project would mistakenly not display the record name on the page if the form/event table was wider than 800 pixels. (Ticket #5674)
- Bug Bug fix: If a super user is attempting to permanently delete a project via the "Delete it now" link on the Browse Projects page in the Control Center, it would mistakenly not delete the project, even though it says it did.
- Bug Bug fix: If a user opens a link to a project page while they are not yet logged in to REDCap, in which it displays the login page, then on certain occasions it might mistakenly display a dark overlay over the login page, thus making it impossible to put one's cursor into the input fields or click the "Log In" button".
- Bug Bug fix: In the email that users are sent via Survey Email Notifications when a survey is completed, the date format of the timestamp contained in the email would not be in the format of the user's preference but instead would mistakenly always be in M/D/Y format. It now displays the date in the user's preferred date format in the email. (Ticket #4540)
- Bug Bug fix: More fixes for the floating project page footer, which would sometimes cover page content if some of the page was loaded via AJAX. (Ticket #4781)

- Bug Bug fix: For compatibility purposes, bare line feeds that exist in emails sent from REDCap are now replaced by a space + carriage return + line feed. (Ticket #3944)
- Bug Bug fix: When copying a longitudinal project via the Copy Project button on the Other Functionality page and selecting the option to copy reports, then if a report in the project contains a filter that specifies a field on an explicit event, then the event designation will be mistakenly converted to "all events" in the same subsequent report in the new project. (Ticket #4779)
- Bug Bug fix: Corrupted line feeds (carriage returns) can sometimes get added to Section Headers and Choices in data dictionaries. This was originally fixed in Ticket #4148 for Field Labels, but mistakenly still exists as a bug for Section Headers and Choices when uploading or downloading data dictionaries.
- Bug Bug fix: When undesignating a super user on the "Designate a Super User" page in the Control Center, the user's row in the table would mistakenly not get removed after they had been undesignated if their username contained a dot or @ sign. Although it would still successfully undesignate them, the change would not be reflected on the page until the page was reloaded.
- Bug Bug fix: If a user had requested an API token in a project, it would mistakenly allow them to send a duplicate request on the API Playground page and on the Mobile App page in a project.
- Bug Bug fix: The page footer on project pages would sometimes obscure page content. (This bug was mistakenly thought to have been fixed in version 6.16.2, but was not.)
- Bug Bug fix: If all the fields in a given section of a data entry form have the action tag @HIDDEN-APP or @HIDDEN-SURVEY, then when viewing the form, the section header above that section would mistakenly be hidden even though some of the fields in the section are still displayed. The section header should only be hidden if all fields in the section are hidden. (This bug was mistakenly thought to have been fixed in version 6.16.2, but was not.)
- Bug Bug fix: Corrupted line feeds (carriage returns) can sometimes get added to Field Labels in data dictionaries. Their origin is unknown, although Microsoft Excel is suspected. This can sometimes cause line breaks to double (i.e., two carriage returns instead of one) when uploading data dictionaries, or can cause line breaks to completely disappear if editing a field in the Online Designer. Any existing corrupted line feeds will now be properly converted and fixed when importing or exporting data dictionaries and when editing a field in the Online Designer. (Ticket #4148)
- Bug Bug fix: When using min/max range validation on a field having a validation type of datetime or datetime w/ seconds, in which a user enters an out-of-range value on a survey or data entry form, the error message popup that is displayed would mistakenly mangle the format of min/max values in the error message. (Ticket #4478)

- Bug Bug fix: If the Duo option is enabled for Two-Factor Authentication, then it would mistakenly always return the user to the page "index.php" of the current directory they are in after they log out or after their session times out, even if that page does not really exist in REDCap, which could be very confusing to users. (Ticket #3592)
- Bug Bug fix: If using the @NOW or @TODAY action tags for date, time, or datetime fields, it would mistakenly set the text field to full width on a survey or data entry form rather than shortening the text field to its typical width based upon its specific validation type. (Ticket #3742)
- Bug Bug fix: In older versions of Internet Explorer, if a survey respondent opens a survey link, then completes the survey, and then clicks the "Close survey" button afterward, then it might throw a JavaScript error. (Ticket #3721)
- Bug Bug fix: If a user with E-signature privileges was attempting to e-sign a data entry form that had been previously locked, it would display an erroneous error.
- Bug Bug fix: The page footer on project pages would sometimes obscure page content.
- Bug Bug fix: If all the fields in a given section of a data entry form have the action tag @HIDDEN-APP or @HIDDEN-SURVEY, then when viewing the form, the section header above that section would mistakenly be hidden even though some of the fields in the section are still displayed. The section header should only be hidden if all fields in the section are hidden.
- Bug Major bug fix: When editing a survey's settings via the Survey Settings button on the Online Designer, it might mistakenly fail to save the settings for certain MySQL configurations. (Ticket #3003)
- Bug Bug fix: Minor formatting error in API documentation for Export Records method. (Ticket #4059)
- Bug Bug fix: When using Enhanced Choices for radios/checkboxes on surveys, if a choice label has long words, it might mistakenly causes horizontal scrollbars to appear around the choice in certain web browsers.
- Bug Bug fix: When viewing a survey response on a data entry forms that contains a slider field, if the user has not clicked the "Edit response" button yet to make the form editable, then the page would throw a JavaScript error. However, this would not have any adverse effects on the page.
- Bug Bug fix: When loading a public survey, it now employs stricter checking to doubly ensure that a public survey link does not get confused with a participant's unique survey link (since there might be a one-in-a-million chance that it could get confused under very specific and rare circumstances).
- Bug Bug fix: If vertically-aligned slider fields have a lot of text for their slider labels, then the text would wrap too early and thus be too narrow. The slider labels are now displayed a bit wider for vertically-aligned sliders and are dynamic to look best based on the user's screen size.
- Bug Bug fix: Fixed compatibility issues specifically related to MySQL 5.7 and its default sql_mode setting.

- Bug Bug fix: If a File Upload field has the @READONLY action tag, and the field already contains an uploaded file for a given record, then when viewing the survey page or data entry form, it would mistakenly allow the user to delete the file and even upload another file afterward. (Ticket #3263)
- Bug Bug fix: The server-side field validation would mistakenly get triggered on the record ID field when submitting a data entry form or survey if a record's name did not follow its specific field validation format. This would cause the server-side field validation message to constantly appear for that record unnecessarily whenever a form or survey was saved for the record. It now skips the server-side field validation for the record ID field when saving existing records.
- Bug Bug fix: On the Administrator To-Do List page in the Control Center, the page navigation for the "Completed & Archived Requests" table would become unwieldy if there existed more than 20 pages, thus causing all the page numbers to overflow and take up too much space. It now only displays the first and last handful of pages for navigation.
- Bug Bug fix: Fixed incorrect language in the "Move project to production" popup on the Project Setup page.
- Bug Bug fix: When using calculated fields that utilize cross-event calculations in a longitudinal project, Auto-Calculations and Data Quality rule H would mistakenly not be able to process any calculation that references a field on an event that did not contain any data (i.e., an empty event) for a given record. Thus, DQ rule H would not find any discrepancies even when they exist, and Auto-Calculations would not properly get performed. (Ticket #2898)
- Bug Bug fix: The action tags @HIDEBUTTON and @PASSWORDMASK were mistakenly not being employed on the Online Designer page when utilized for a given field.
- Bug Bug fix: If using MySQL-over-SSL secure database connection while on PHP 5.1 or 5.2, it might not be able to make successful database connections since REDCap was using the MYSQLI_OPT_SSL_VERIFY_SERVER_CERT flag, which was introduced in PHP 5.3. It now only applies that flag if on PHP 5.3 or higher.
- Bug Bug fix: If importing data via the Data Import Tool or API import for a longitudinal project in which multiple events are being imported for a record whose record name is mistakenly in different cases (e.g., "mea-101" vs "MEA-101") in the data being imported, then after importing that data, some of the data will never be displayed in reports in exports and will thus be orphaned. However, all the data is still accessible and viewable on data entry forms and surveys, but just not in exports and reports.
- Bug Bug fix: If REDCap is configured so that only super users are allowed to create projects and thus normal users must request new projects be created for them, then if a user knows how to send a specifically-crafted request to a certain page in REDCap, they could bypass the request process and actually create a new project on their own without a super user's permission.

- Bug Bug fix: The option to enable "enhanced radio buttons and checkboxes" on surveys was mistakenly not taking effect on CATs (computer adaptive tests) and Auto-scoring instruments, such as PROMIS assessments, that were downloaded from the REDCap Shared Library.
- Bug Bug fix: In a production project when a user clicks the "Request delete project" button on the Other Functionality tab of the Project Setup page, it would mistakenly not disable the button after being clicked, which would mistakenly allow users to click it multiple times (although it would correctly be disabled if they left the page and then returned).
- Bug Bug fix: On survey pages, the submit buttons at the bottom of the page were causing the page to become too wide on small screens in some cases if both the Previous Page and Next Page buttons were displayed at the same time.
- Bug Bug fix: A survey page would not automatically widen if the browser window was widened if the page was initially loaded with a narrow width.
- Bug Bug fix: When a project's metadata is exported as an ODM/XML file, if a field contains a range validation min or max with a value of "0", it would mistakenly be omitted in the resulting XML file.
- Bug Bug fix: When creating a new project using an uploaded ODM/XML file, if a field contains a range validation min and max value, then the max value would mistakenly overwrite the min value and leave the max value blank, resulting in incorrect validation range values for the field.
- Bug Reverted the bug fix for Ticket #1100 since it did not ultimately fix the issue. More work will need to be done in a near-term version to ultimately remedy this. (Refers to bug fix: If a Data Quality rule returns more than 10,000 discrepancies, which is the maximum that it will return, if there have been any discrepancies that have been excluded, then when displaying the discrepancy count to the user, it would mistakenly subtract the excluded count from 10,000 rather than subtracting it from the actual total discrepancy count.)