

REDCap 12.0.13 LTS Changes and Improvements:

- **Multi-Language Management** – Users can create and configure multiple display languages for their projects for surveys, data entry forms, alerts, survey invitations, etc. Users can design instruments and have them be displayed in any language that they have defined and translated so that their survey participants or data entry persons can view the text in their preferred language. This eliminates the need to create multiple instruments or projects to handle multiple languages.
- **Form Display Logic** – An advanced feature that provides a way to use conditional logic to disable specific data entry forms that are displayed on the Record Status Dashboard, Record Home Page, or the form list on the left-hand menu. You might think of it as 'form-level branching logic'. Form Display Logic can be very useful if you wish to prevent users from entering data on a specific form or event until certain conditions have been met. The forms will still be displayed on the page, but they will be disabled in order to prevent users from accessing them.
- **Protected Email Mode** – Users can enable the Protected Email Mode on any project on the Project Setup via the Additional Customization dialog. This setting prevents identifying data (PHI/PII) from being sent in outgoing emails for alerts, survey invitations, and survey confirmation emails.
- **Email Logging** – This is a new project page that contains a search interface to allow users with User Rights privileges to search and view ALL outgoing emails for that project (also includes searching and viewing of SMS messages if using Twilio services).
- **New Action Tag @IF** – Allows various action tags to be set based on conditional logic provided inside an @IF() function:
 - e.g., **@IF(CONDITION, ACTION TAGS if condition is TRUE, ACTION TAGS if condition is FALSE).**
 - Simply provide a condition using normal logic syntax (similar to branching logic), and it will implement one set of action tags or another based on whether that condition is true or false.
- **New Smart Variable: [event-number]** – The current event's ordinal number as listed on the Define My Events page that denotes the order of the event within a given arm.
 - The Define My Events page now displays a new column to display each event's Event ID number. Also, the Smart Variable corresponding to each column in the table on the Define My Events page (e.g., [event-number], [event-label]) are displayed in small gray text below the header text in the table to help users more easily learn where the values of those Smart Variables originate.
- **New Data Export Option: Export Blank Values** – All instrument complete status fields having a gray icon can be exported either as a blank value or as "0"/"Incomplete". In previous versions, they could only be exported as "0". By default, they are now exported with a value of "0", but this option can be changed via a drop-down option in the "Advanced data formatting options" section of the data export dialog.