Tufts Clinical and Translational Science Institute

REDCap

Research Electronic Data Capture

Version LTS 11.1.8

Upgrade Date: 09/24/2021

Tufts | CTSI

Tufts Clinical and Translational Science Institute

Overview

Tufts CTSI recently upgraded REDCap to version 11.1.8 The new REDCap features are summarized below. If you have questions about these features, please email informatics@tuftsctsi.org:

- Project Dashboard
- Smart Functions
- New Action Tag: @INLINE
- @PREFILL is now @SETVALUE
- Field Bank
- New PDF Print Options
- Calendar View Records
- …and many more features!

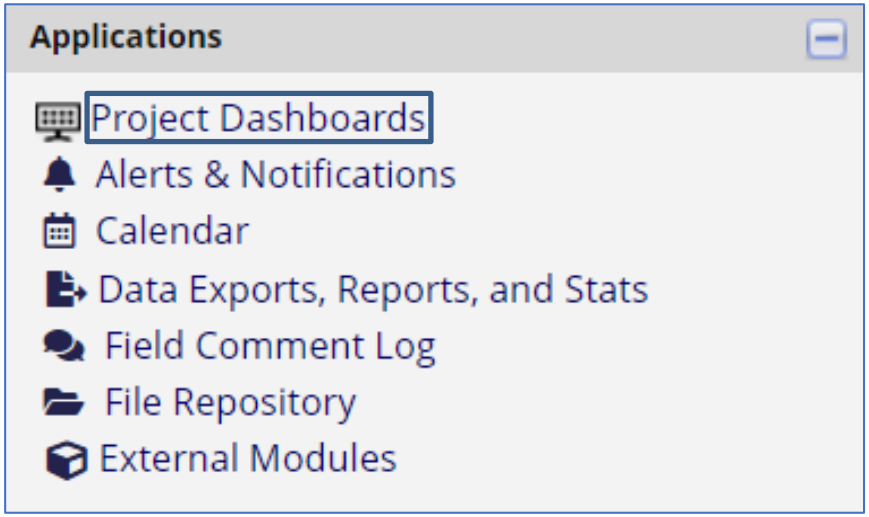
Tufts | CTSI

Tufts Clinical and Translational Science Institute

New Feature: Project Dashboard

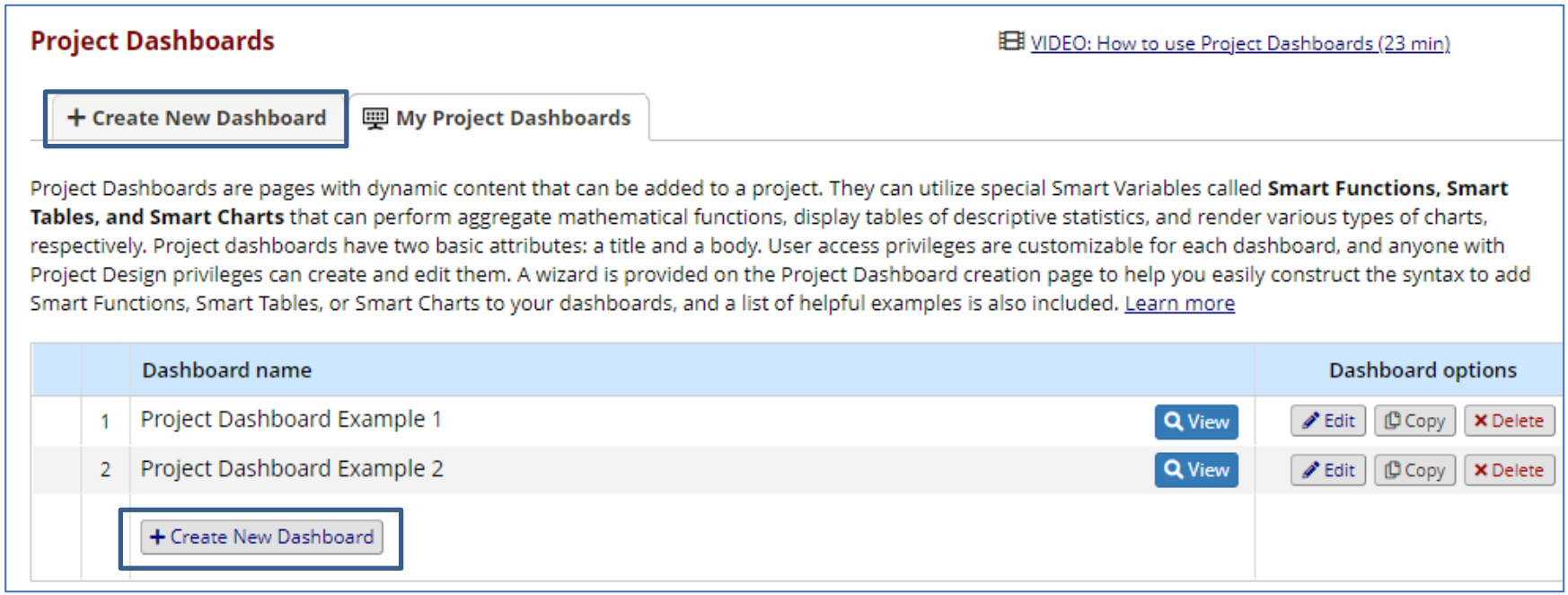
- **Project Dashboards** are pages with dynamic content that can be added to a project. They can utilize Smart Vairabes called **Smart Functions, Smart Tables and Smart Charts** that can perform aggregate mathematical functions, display tables of descriptive statistics and render various types of charts.

- The **Project Dashboard** can be found under the Applications drop down.



Project Dashboard

Create a new Project Dashboard by selecting the **Create New Dashboard** option.



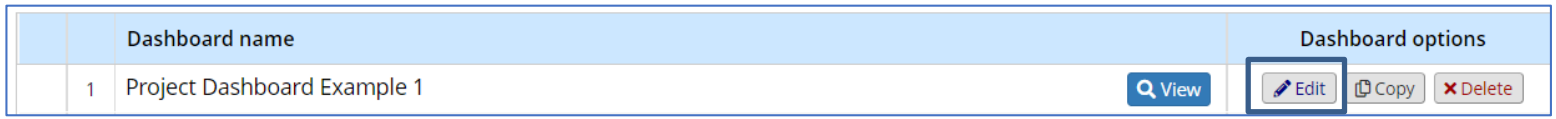
Tufts | CTSI

Tufts Clinical and Translational Science Institute

Project Dashboard: Public Dashboards

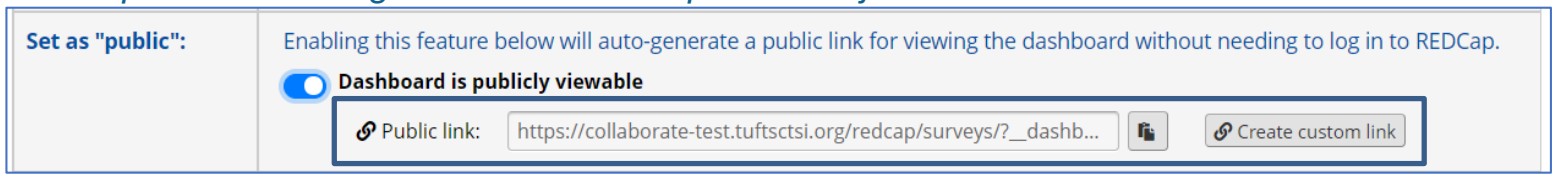
Project Dashboards can be set to public viewing. The dashboard can be accessed via a unique URL that anyone can view without a REDCap account.

*Select the **Edit** button*

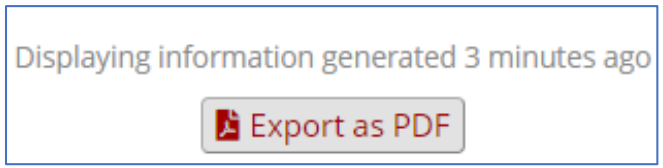


*In the **Set as "public":** option, turn on the **Dashboard is publicly viewable** option*

A unique URL link is generated for this specific Project Dashboard



*Project Dashboards can be saved to a PDF file using the **Export as PDF** feature on the top right of the page*

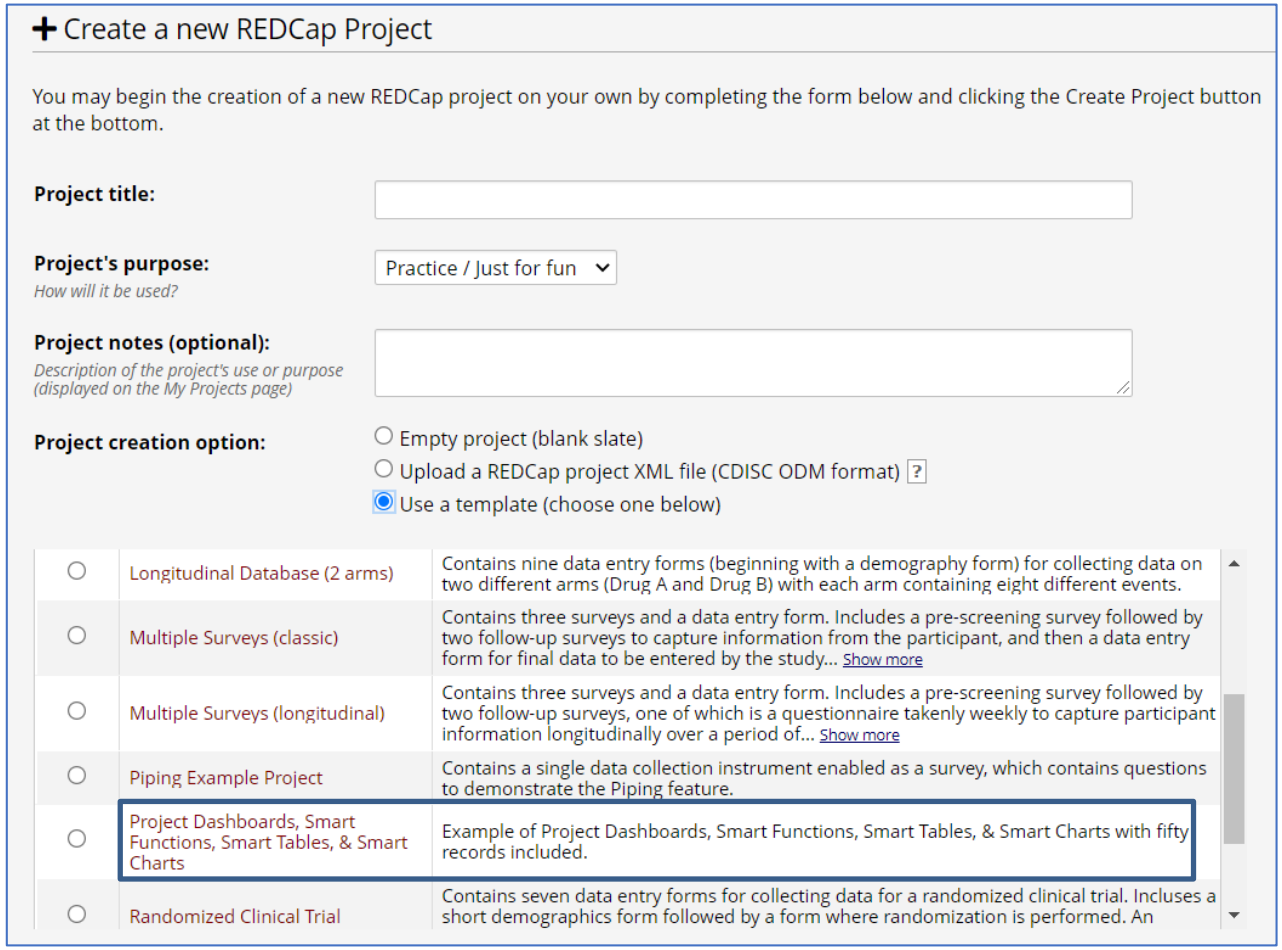


Tufts | CTSI

Tufts Clinical and Translational Science Institute

Project Dashboard Template

There are more customization options, graphs and options for **Smart Functions**, **Smart Tables** and **Smart Charts** that can be seen in the **Project Dashboard** Example template project in REDCap!



Tufts | CTSI

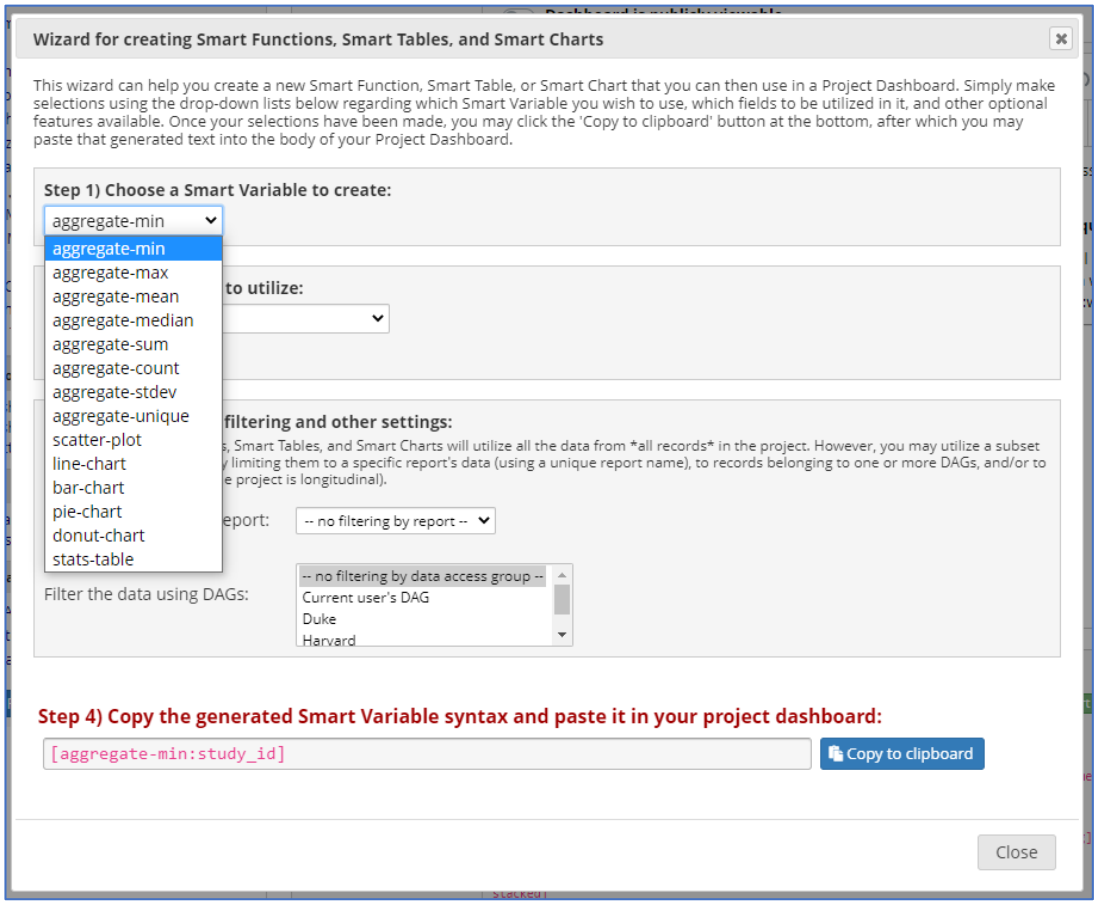
Tufts Clinical and Translational Science Institute

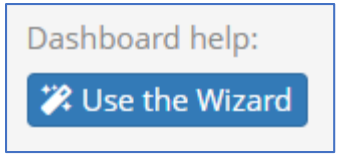
New Feature: Smart Functions

Smart Functions are aggregate mathematical functions that are applied across **all** records in a 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**.

A wizard option for these functions can be found in the project dashboard editing page





Tufts | CTSI

Tufts Clinical and Translational Science Institute

Smart Functions

The following is a list of **Smart Functions** and their equivalent mathematical function:

[aggregate-min] → Minimum
[aggregate-max] → Maximum
[aggregate-mean] → Mean/Average
[aggregate-median] → Median
[aggregate-sum] → Sum
[aggregate-count] → Count
[aggregate-stdev] → Standard Deviation
[aggregate-unique] → Unique Count

To use a **Smart Function**, attach a field to the end of the function preceded by a colon.

*Sample **Smart Function** Body:*

This project contains **[aggregate-count:study_id] records**. The average age of all participants is **[aggregate-mean:age]** (stdev=**[aggregate-stdev:age]**). The median weight is **[aggregate-median:weight]** (min: **[aggregate-min:weight]**, max: **[aggregate-max:weight]**).

Result:

This project containts **50 records**. The avergae age of all participants is **47.38**(stdev=**30.93**). The median weight is **109** (min: **47**, max: **197**).

New Feature: Smart Tables

Smart Tables display descriptive statistics for fields with each field as a row in the table. By default, the following columns will be displayed: **count, missing, unique, min, max, mean, median, stDev, sum.**

To use a **Smart Table**, use the smart variable **[stats-table]** This will accept one or more field types as a parameter such as **[stats-table:age]**

Smart Tables *can be displayed with* ***all*** *columns by default:*

[stats-table:height,weight,race,gender] *will display the following table:*

	Count	Missing	Unique	Min	Max	Mean	Median	StDev	Sum
Height (cm)	50	0	35	133	214	177.22	180	24.64	8,861
Weight (kilograms)	50	0	44	47	197	114.72	109	42.79	5,736
Race	50	0	7						
Gender	50	0	2						

To display with only specified columns, use a colon ***(:)*** *after the fields and specifcy the columns you wish to see:*

[stats-table:age,weight,height:mean,stdev] *will display the following table:*

	Mean	StDev
Age (years)	47.38	30.93
Weight (kilograms)	114.72	42.79
Height (cm)	177.22	24.64

Tufts | CTSI

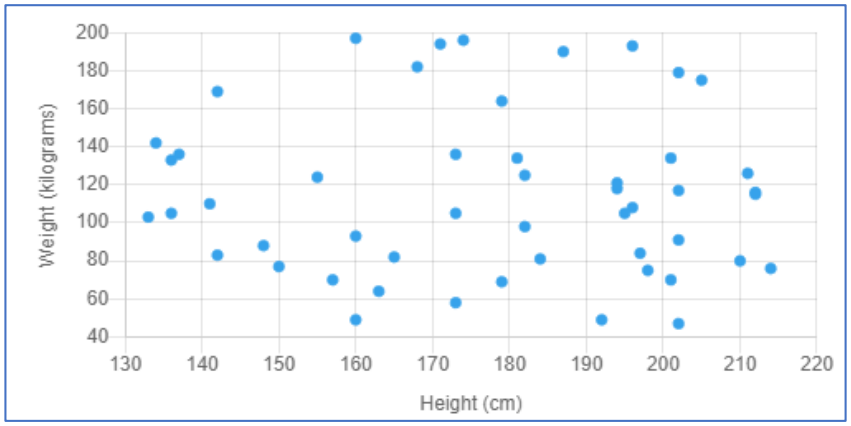
Tufts Clinical and Translational Science Institute

New Feature: Smart Charts

Smart Charts can be used to display many types of charts for one or more fields in the project.

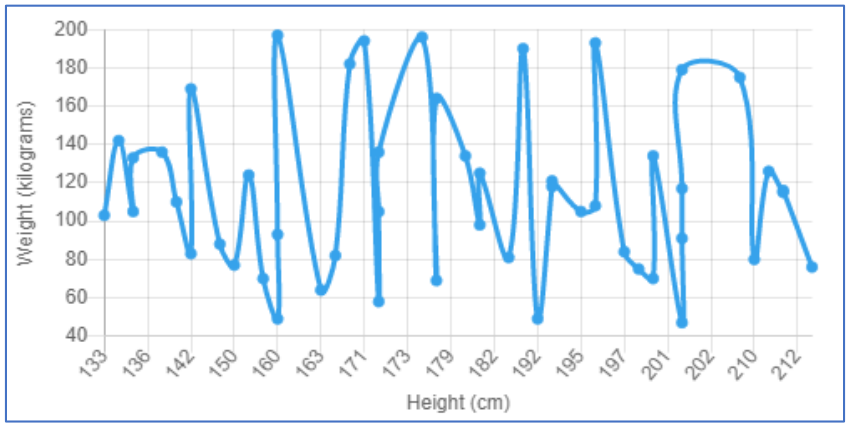
*To display a **scatter plot** of two fields (x vs y):*

[scatter-plot:height, weight] *will display the following:*



*To use **line charts** of two fields (x vs y):*

[line-chart:height, weight] *will display the following:*



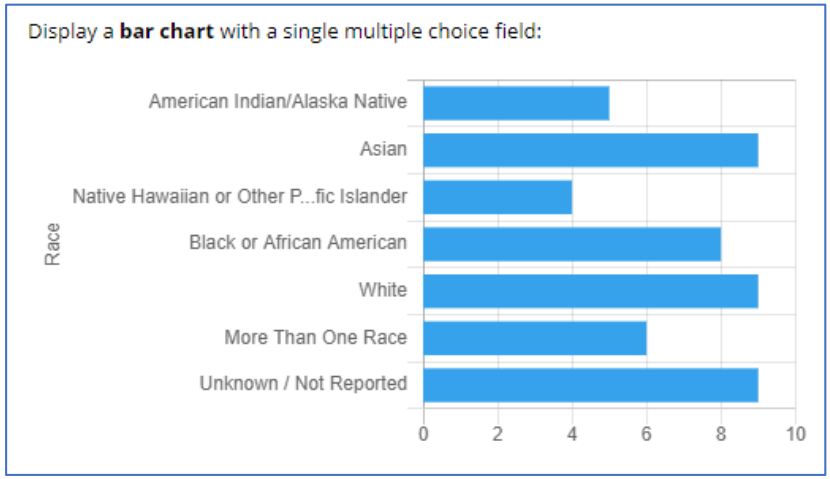
Tufts | CTSI

Tufts Clinical and Translational Science Institute

Smart Charts

*To display a **bar chart** with a single multiple-choice field:*

[bar-chart:race] *will display the following:*



*To display a **pie chart**:*

[pie-chart:race] *will display the following:*

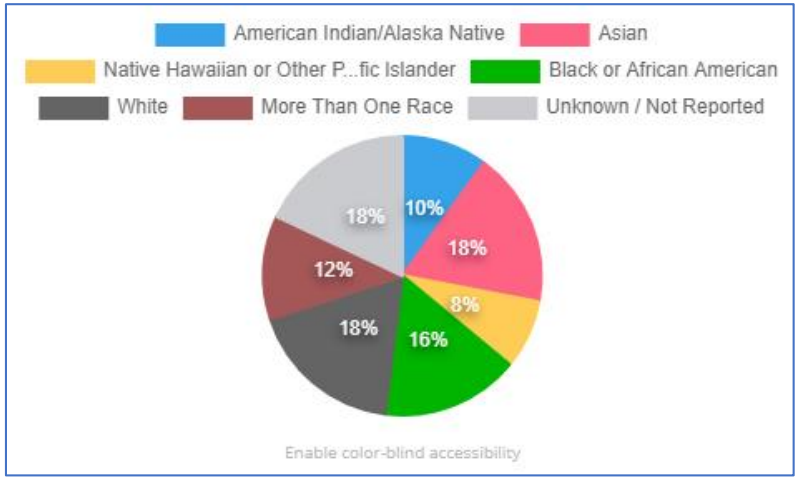
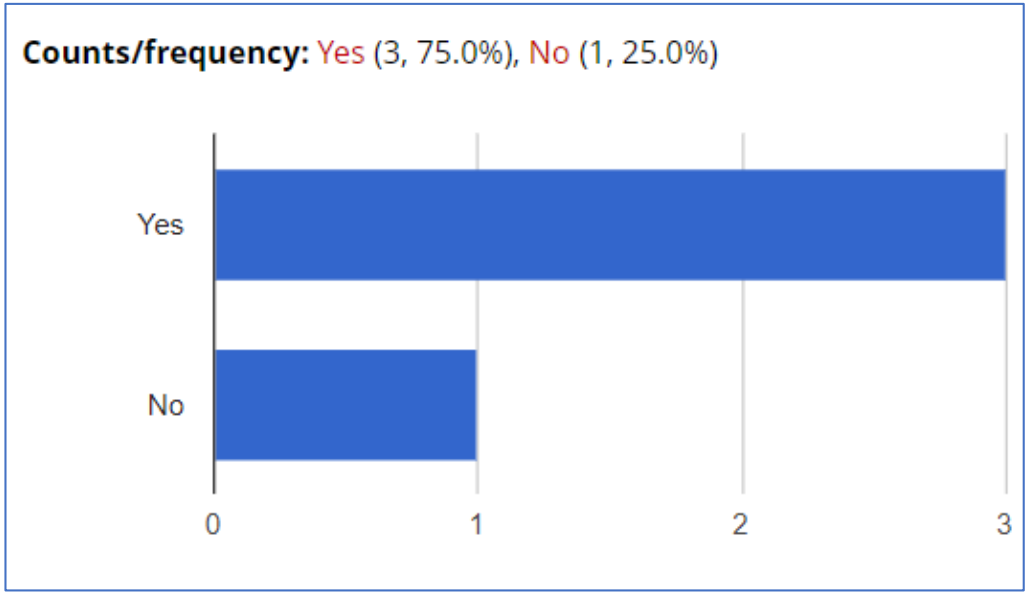
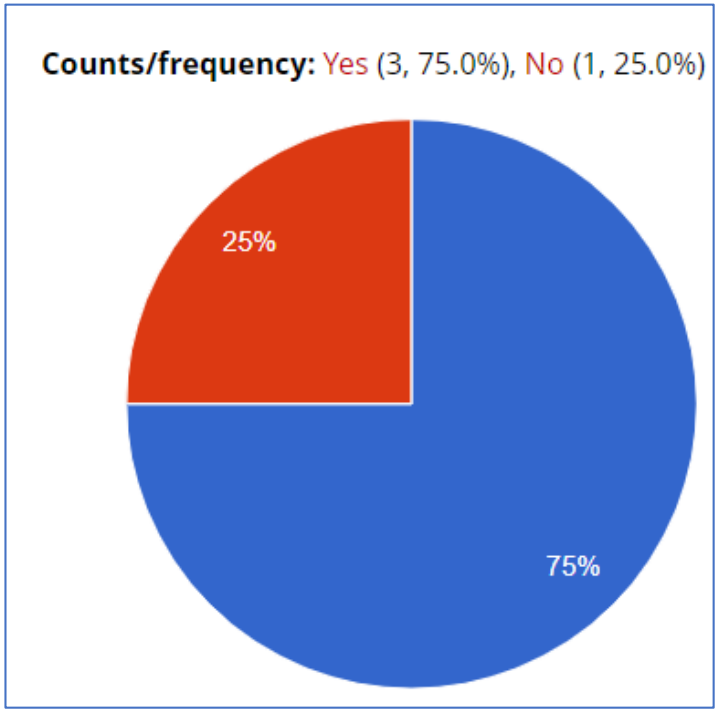


Chart Percentages

Smart Charts now display the percentage value on top of each colored slice in the chart.

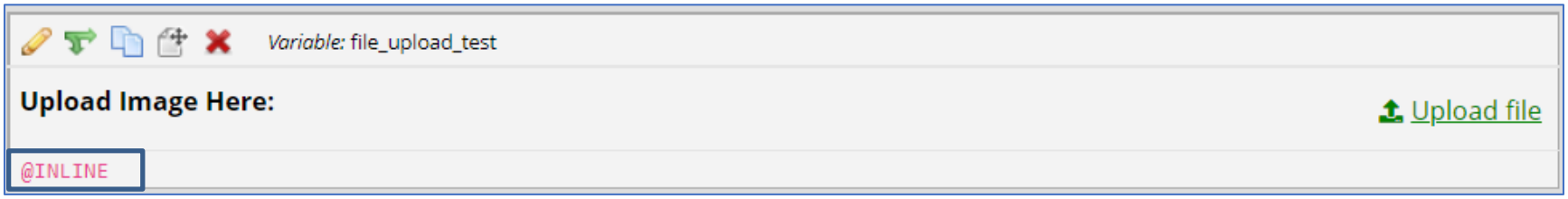




New Action Tag: @INLINE

The **@INLINE** action tag allows a PDF file or image file 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.

*In a **File Upload** field, add the **@INLINE** action tag to the field*



When the participant uploads a PDF or image, it will now appear in the survey/form as show below:

Tufts | CTSI

Tufts Clinical and Translational Science Institute

New Action Tag: @INLINE

It is also possible to set **width** and **length** dimensions on files uploaded. These can be **percentages** or **pixels**. In action tag below, the **@INLINE** tag is set to **50% Width:**

Action Tags / Field Annotation (optional)

@INLINE(50%)

*Now when the participant uploads a file, it will be displayed at **50% width** rather than the original dimensions:*

The **@INLINE** action tag dimensions are set using the format **@INLINE(width, length)**

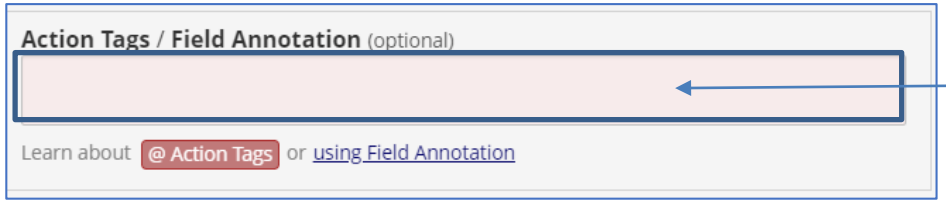
@INLINE(50%,300) will set the file/image at 50 percent width and 300 pixels length.
@INLINE(500,250) will set the file/image at **500 pixels width** and **250 pixels length**
@INLINE(325,70%) will set the file/image at **325 pixels width** and **70 percent length.**

Tufts | CTSI

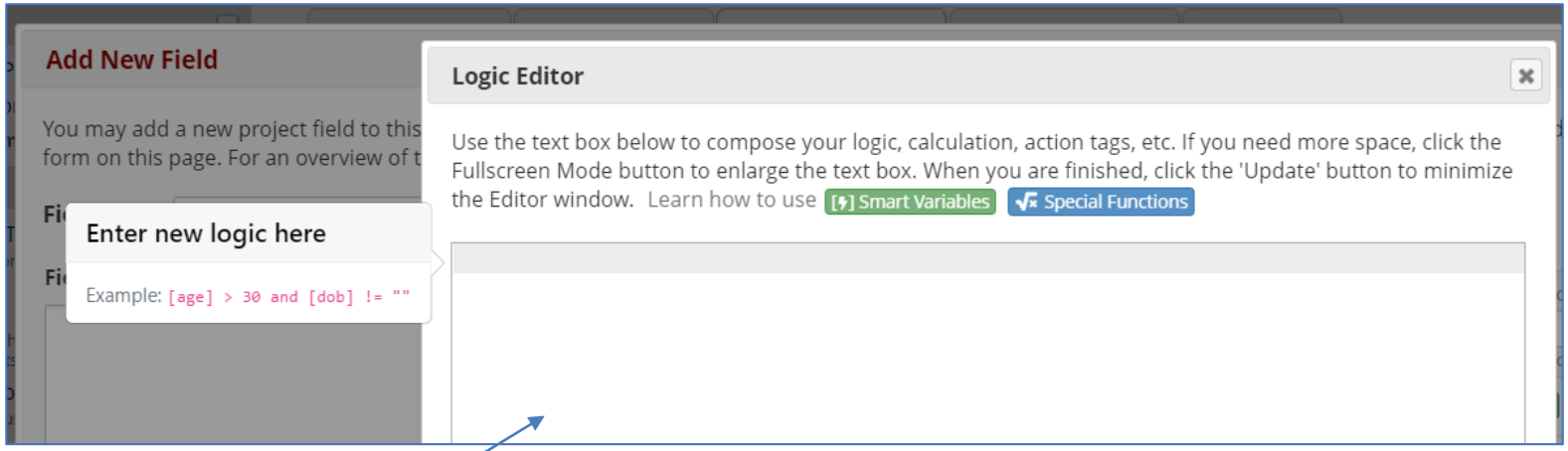
Tufts Clinical and Translational Science Institute

Action Tags

The Logic Editor popup is now utilized when editing the **Action Tags/Field Annotation** text box in the Online Designer



Clicking on this box...



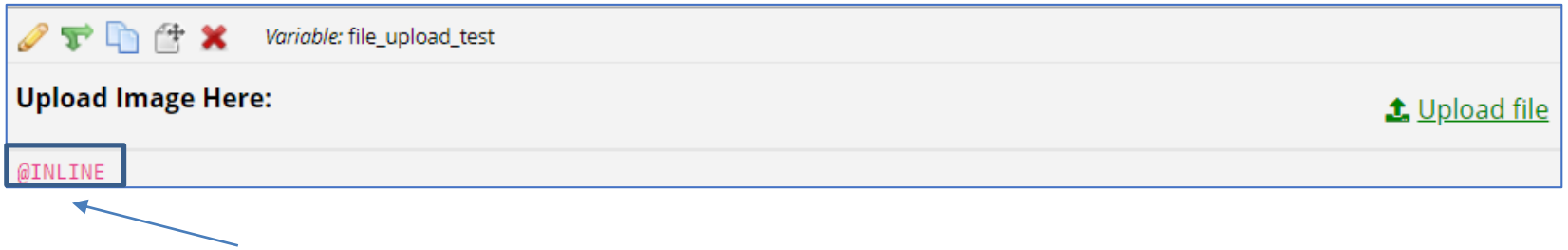
Opens the Logic Editor now!

Tufts | CTSI

Tufts Clinical and Translational Science Institute

Action Tags

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.



Action Tags now appear underneath the field in the online designer!

@PREFILL is now @SETVALUE

The **@PREFILL** action tag has been renamed to **@SETVALUE**, which more accuractly 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 **backwards compatible** so that projects already using **@PREFILL** will still work with its legacy counterpart. **@SETVALUE** will be the preferred name going forward. The documentation notes for action tags have been updated to reflect this.

Old

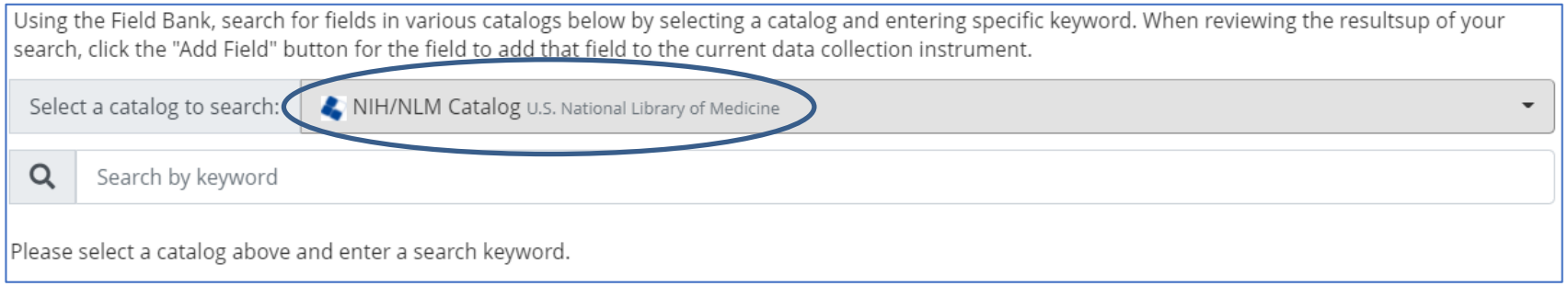
New

New Feature: Field Bank

Users will see an **Import from Field Bank** button when adding fields in the Online Designer. This button will allow users to search different standardized catalogs of commonly used fields, such as the **U.S National Library of Medicine** catalog. The **Field Bank** helps users add new fields quickly and easily to their instruments. Over time, more catalogs will be added. The **Field Bank** allows a better emphasis on **standardization** within their projects.

New Option

Users can search and new fields via these standardized catalogs

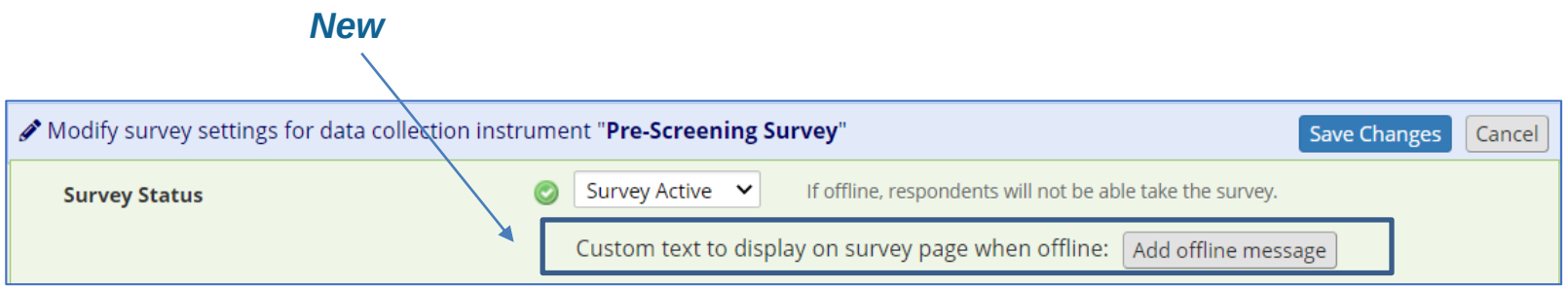


Tufts | CTSI

Tufts Clinical and Translational Science Institute

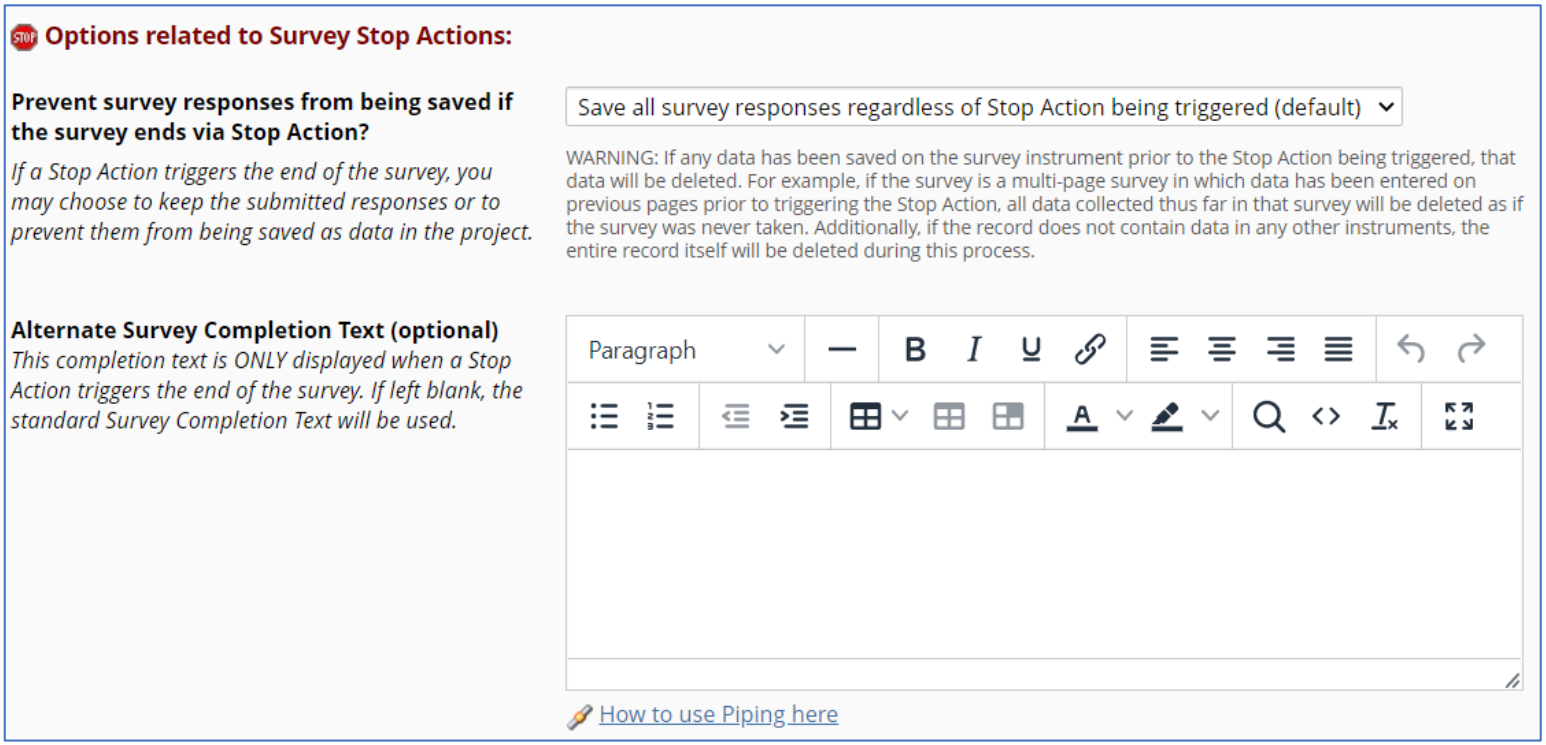
Survey: Custom Offline Message

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.



"Survey Stop Actions" Controls

The new **Survey Stop Actions** give users more flexibility with survey controls. You may now prevent survey responses from being saved if the survey ends via Stop Action. In addition, you maybe now set **alternative text** upon survey completion.

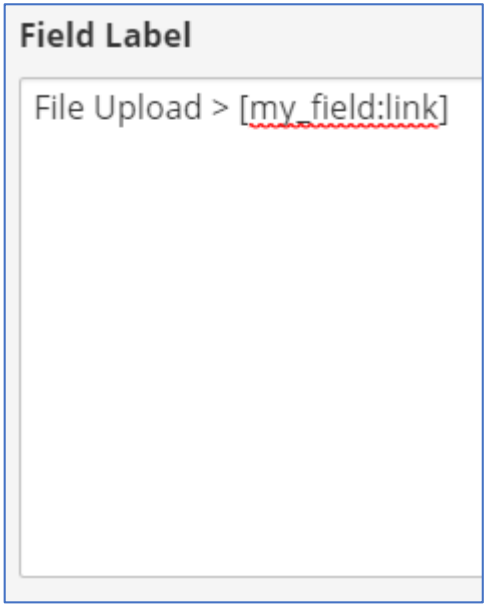


Tufts | CTSI

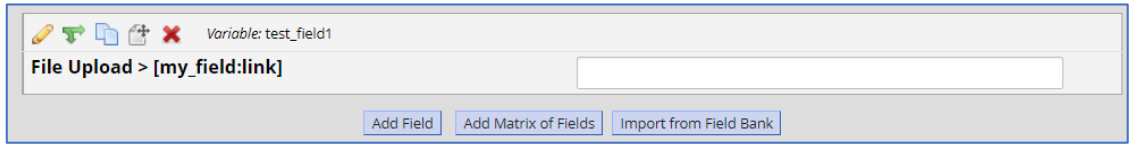
Tufts Clinical and Translational Science Institute

":link" Pipping Option for Field Upload

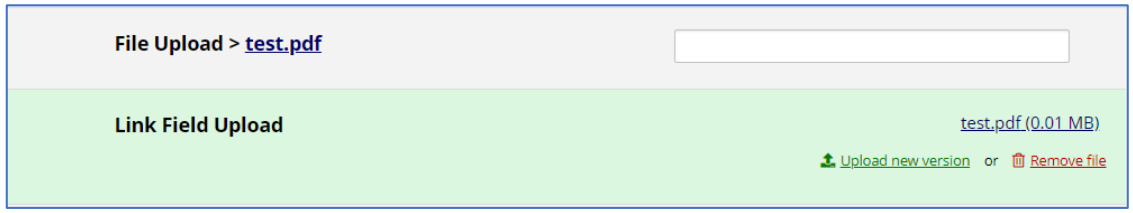
A new **pipping** option for the **Field Upload** field has been added. If pipping using the **":link"** option for a **Field Upload** field, such as **[my_field:link]**, the file's filename will be displayed as a clickable hyperlink for donwloading the file, which works on webpages and inside the body of email text.



How it appears in the instrument



How it appears in the survey



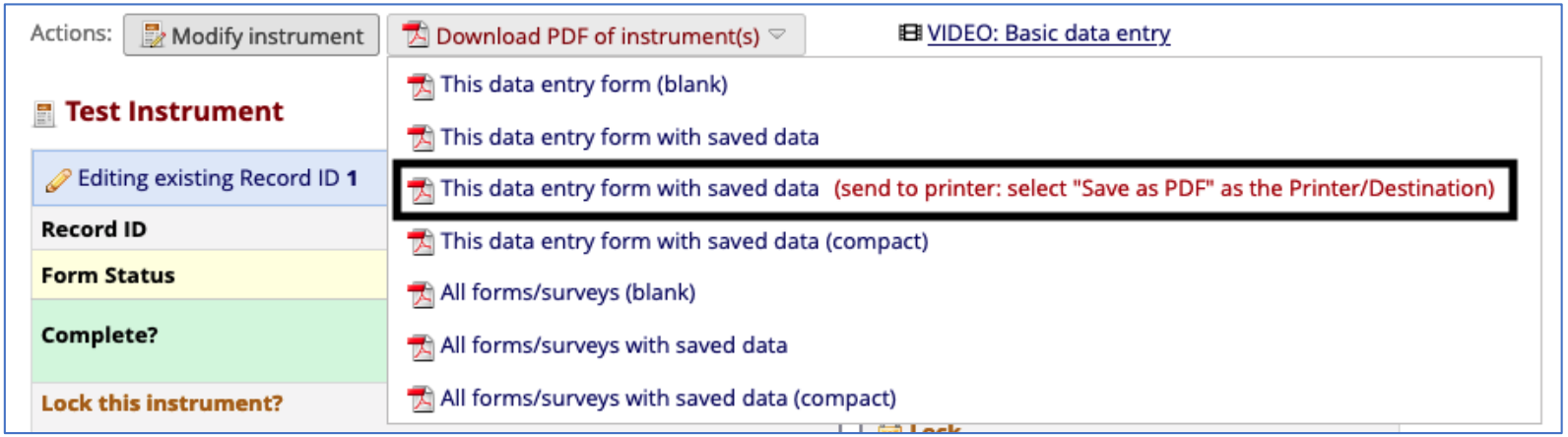
Tufts | CTSI

Tufts Clinical and Translational Science Institute

New PDF Print Option

A new option (highlighted below) has been added to the "Download PDF of instrument(s)" dropdown. This option will produce an improved **web-based PDF** of the selected instrument(s) that better preserve formatting options.

*Note: This "Print to PDF" option correctly hides fields that have the @**HIDDEN-PDF** action tag*

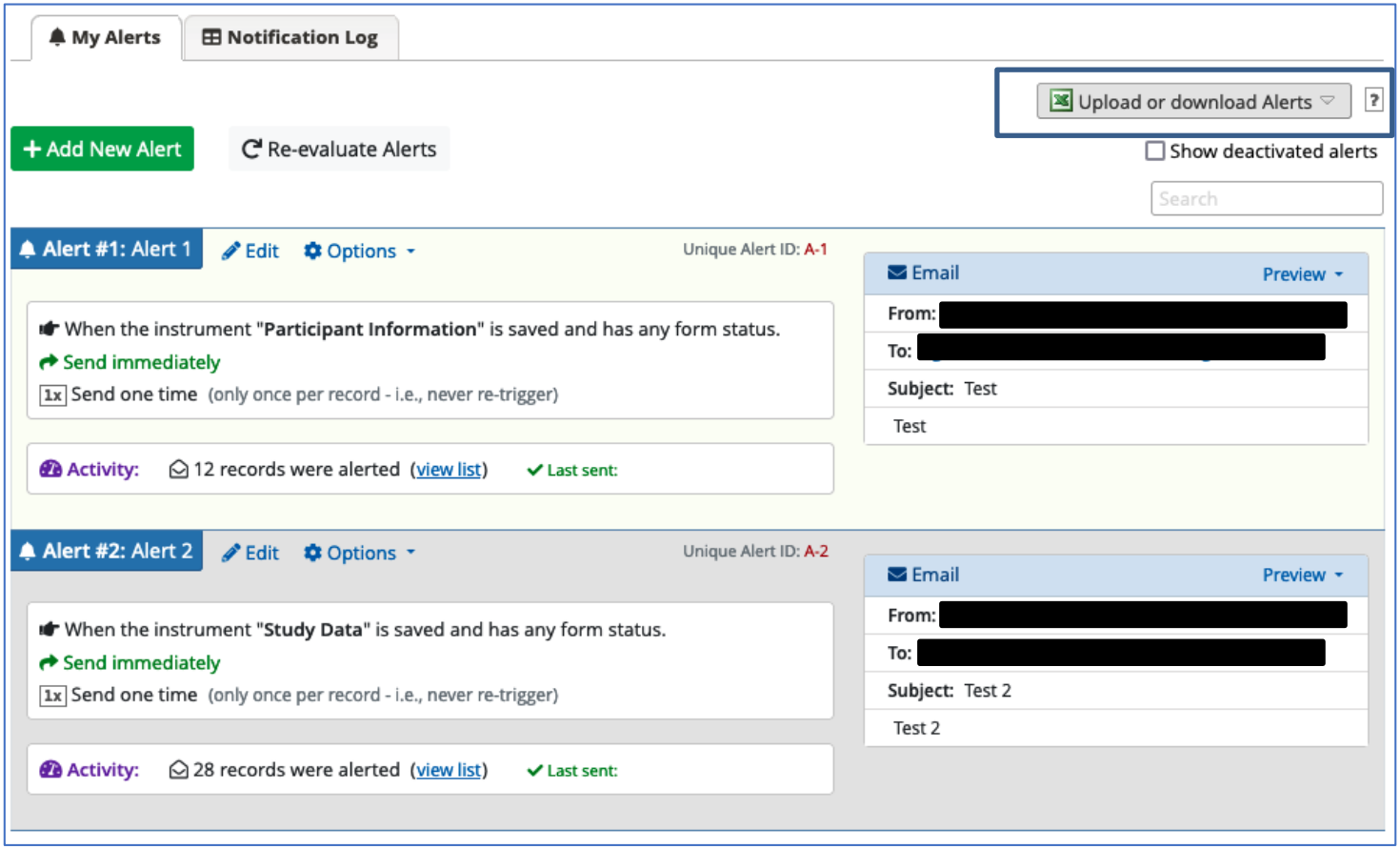


Tufts | CTSI

Tufts Clinical and Translational Science Institute

Import/Export Alerts

Users may now 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.



Tufts | CTSI

Tufts Clinical and Translational Science Institute

Import/Export Alerts via CSV

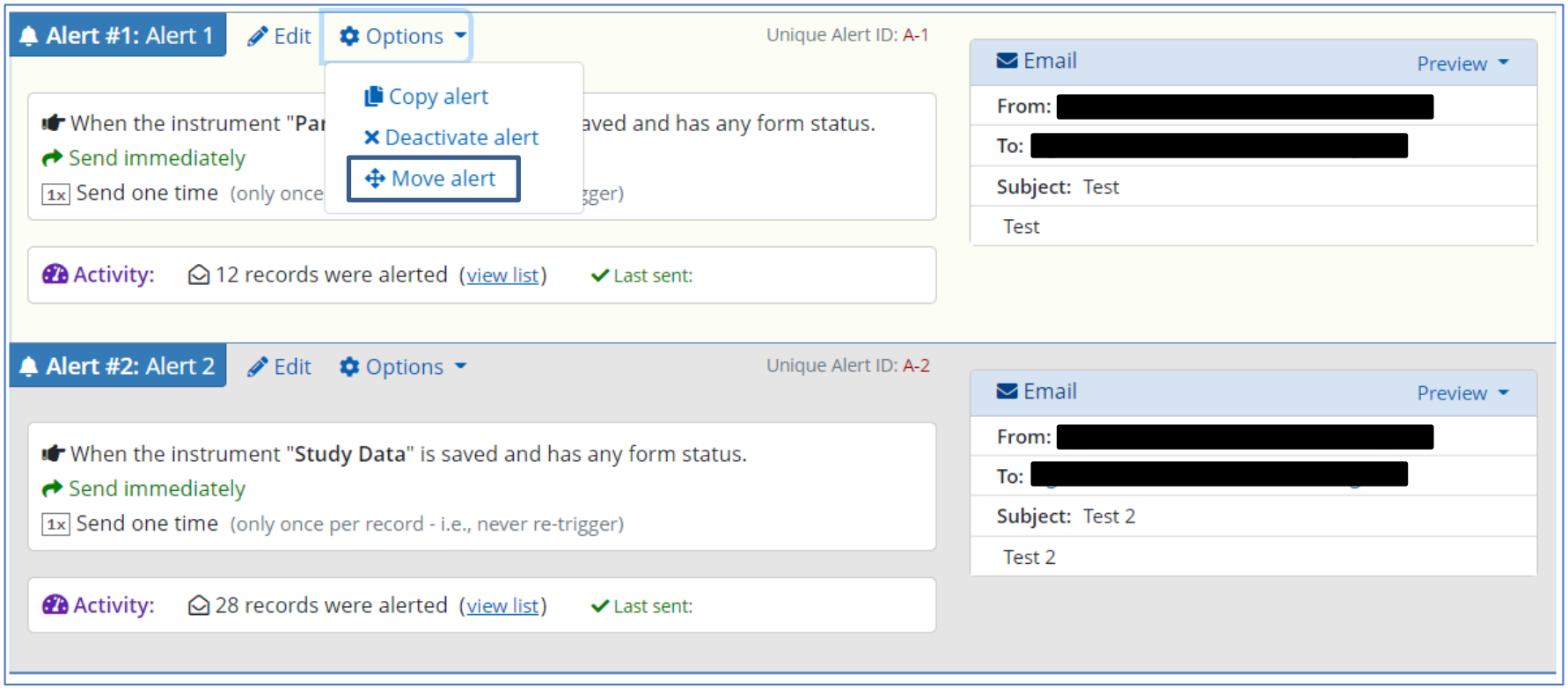
Users may now export and import alerts to the same project or another project using a CSV file. If updating an existing alert, the unique alert ID must be included in the CSV file to identify the alert that the user wishes to modify. If the unique alert ID is left blank in the CSV file being uploaded, it is assumed the at the user wishes to create a new alert.

Old

New

Reorder Alerts

Users can now reorder alerts in the options menu of individual alert. When this is done, you will be notified that moving the alert will cause alert numbers to be renumbered. The **alert title and unique ID** will no change during this process.

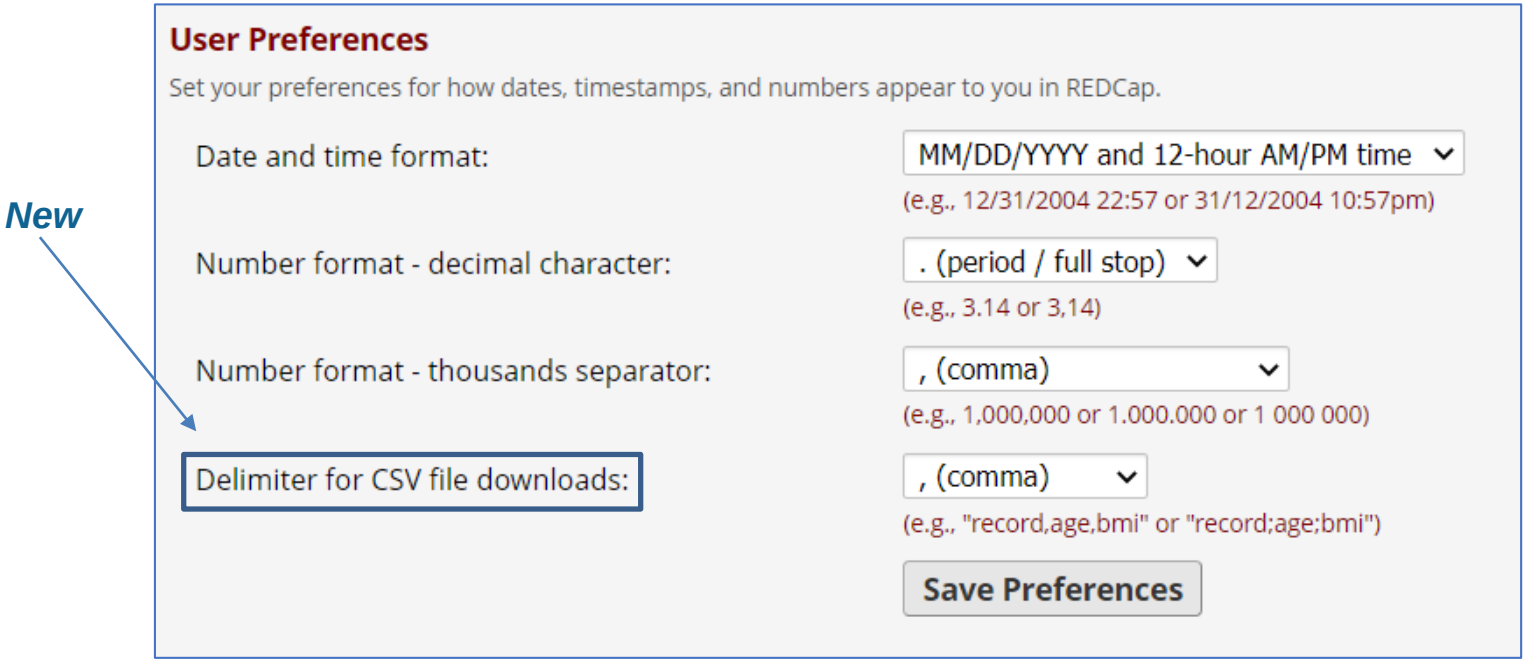


Tufts | CTSI

Tufts Clinical and Translational Science Institute

User Preference CSV Delimiter

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 throughtout REDCap, such as data dictionary import/export, event import/export, etc.



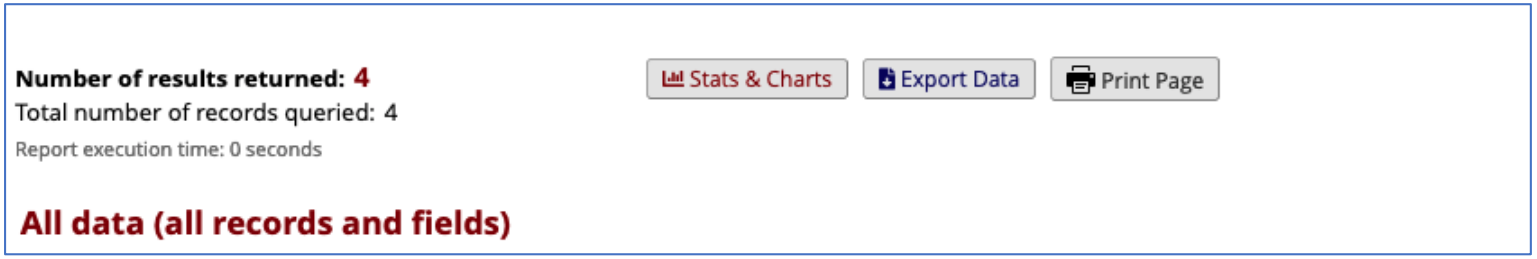
Tufts | CTSI

Tufts Clinical and Translational Science Institute

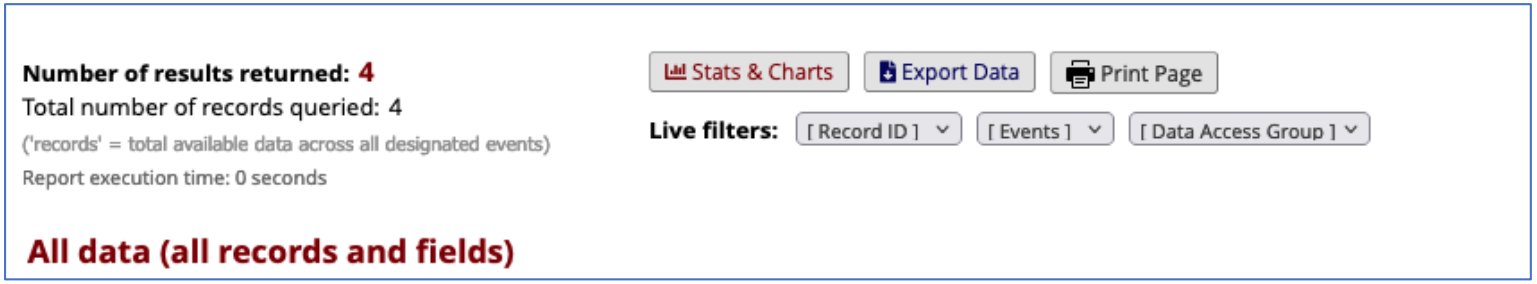
Reports: Built-in Live Filters

When viewing reports, A or B a new **live filters** option is available. Options for filtering include record_id, events and DAGs (only appears if DAGs are enabled for current project.)

Old



New



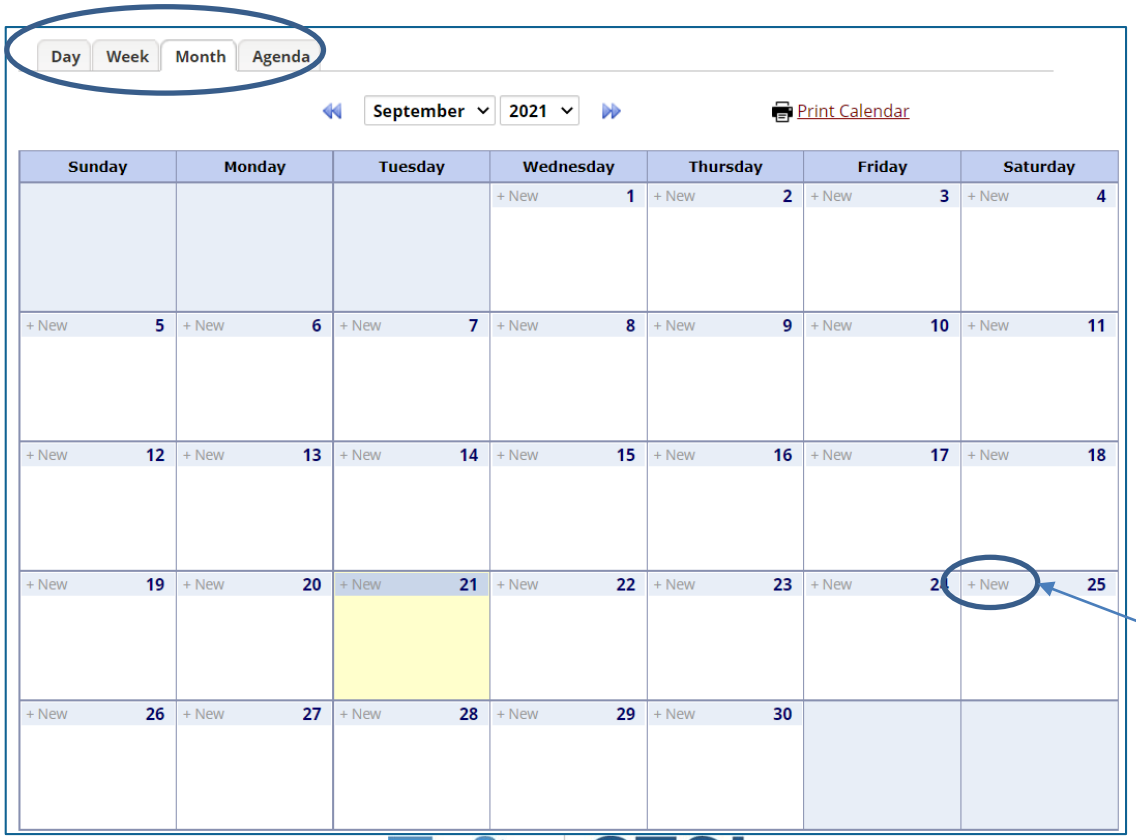
Tufts | CTSI

Tufts Clinical and Translational Science Institute

Calendar View

The **Calendar** application can be used as a project calendar within projects to help organize your schedule and keep track of any upcoming events, including participant visits. It will allow you to add or modify calendar and then view them either in a daily, weekly or monthly format.

*The **View Tab** lets you adjust your calendar view*



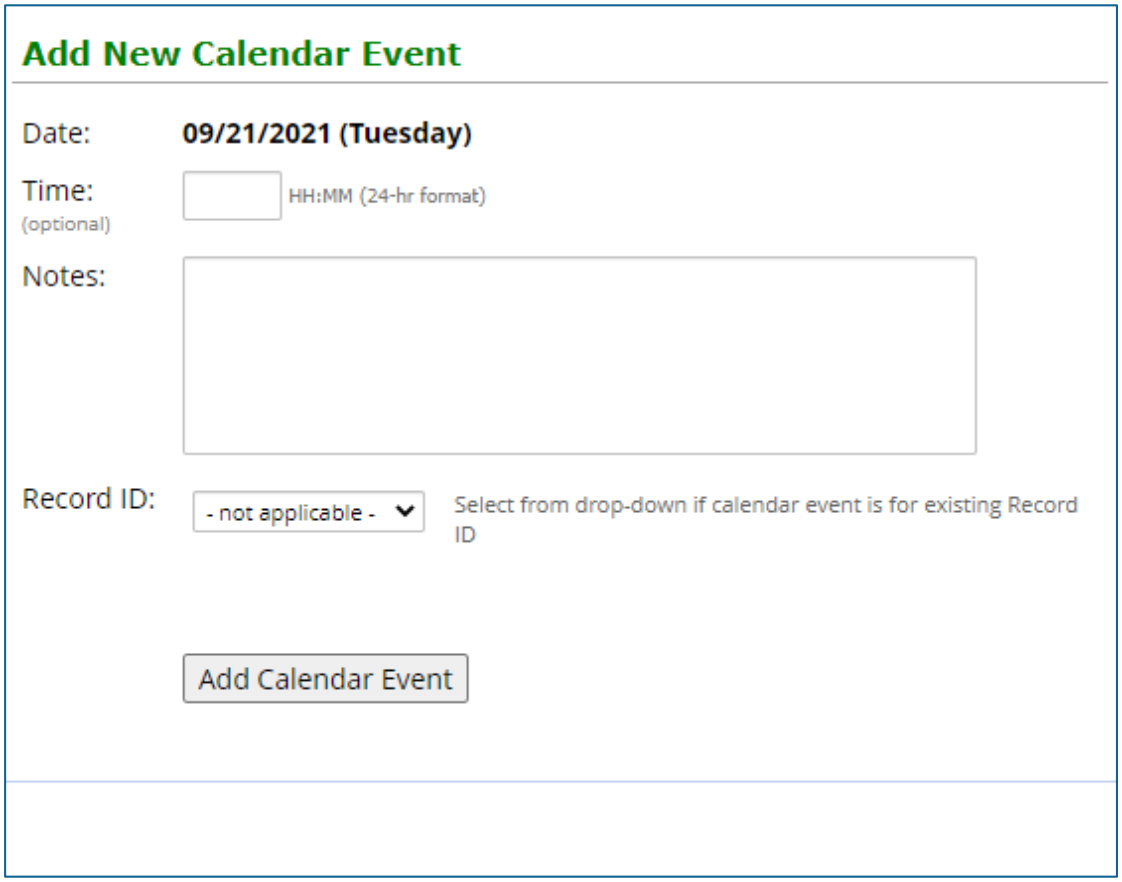
*The **+New** button lets you add new events to the calendar*

Tufts | CTSI

Tufts Clinical and Translational Science Institute

Calendar View

When you select on the **+New** button on the calendar, a popup will appear for you to input the **Time, Notes** and **Record ID** if applicable.

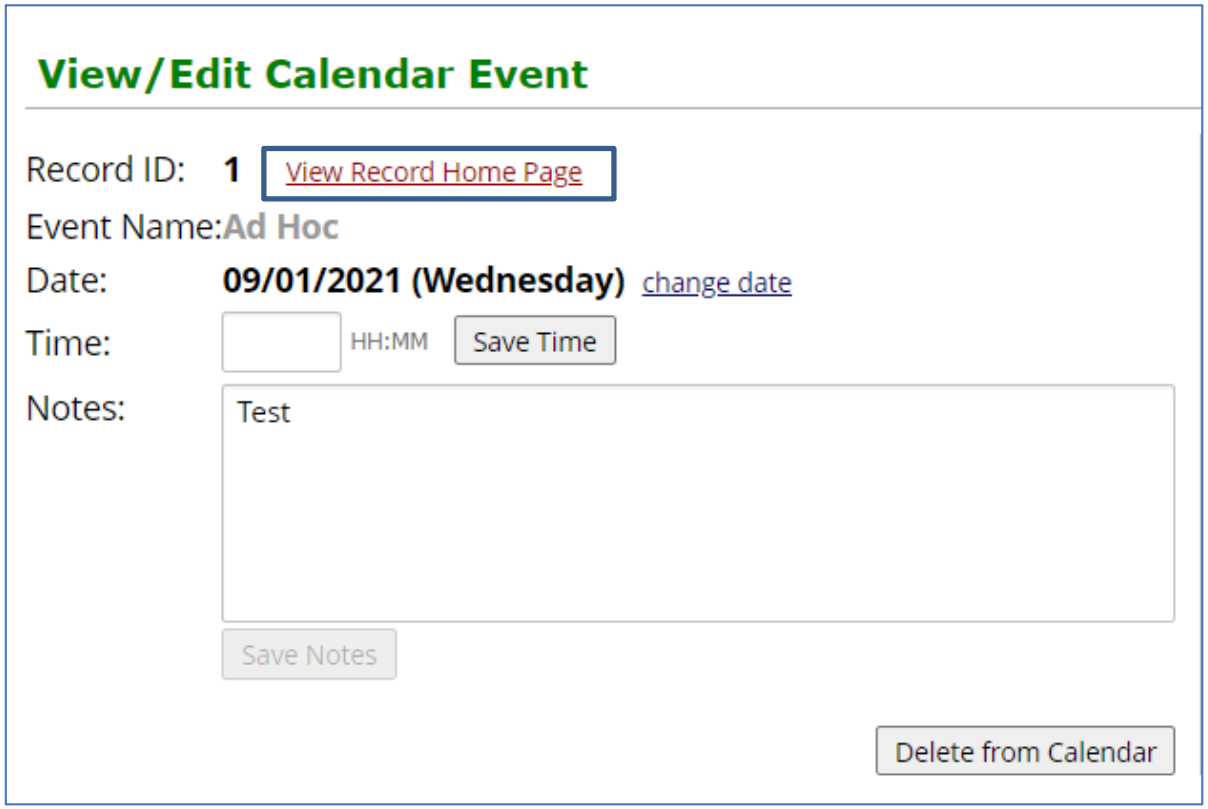


Tufts | CTSI

Tufts Clinical and Translational Science Institute

New Feature: Calendar View Records

When viewing the "View/Edit Calendar Event" popup for a calendar event that is attached to a record, a new option **View Record Home Page** allows users to easily navigate to that record.



Tufts | CTSI

Tufts Clinical and Translational Science Institute

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 structred 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.**

Old

	A	Blank values*	-		192	view

New

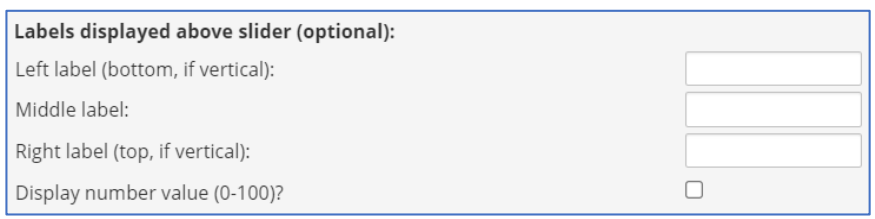
	A	Blank values*	-		178	export | view	0

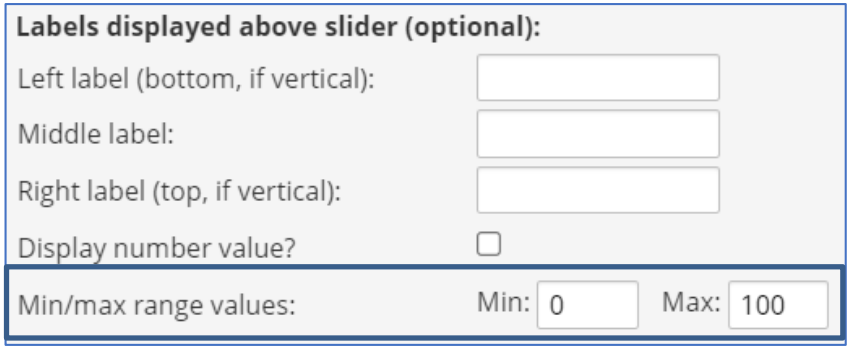
Tufts | CTSI

Tufts Clinical and Translational Science Institute

Custom Ranges for Slider Fields

Users may now set a custom **minimum and/or custom maximum** integer for slidier fields. 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

Tufts | CTSI

Tufts Clinical and Translational Science Institute

…and Many More Features!

- New option for Project Templates called “copy records”, which will copy any existing records in the template to a new project created from the template.
- Assign a user to a DAG at the same time as adding the user to the project.
- 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.
- The project logging page now displays more information for PDF Exports that contain data, such as displaying record name, event, and instrument for the downloaded PDF.
- The User Access Dashboard now displays “Last logged activity” for each project displayed on that page.
- The “Phone(North America” field validation now allows phone numbers that begin with “800” and “811”.
- 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 to filter the log by record.

To see the full release notes, please look at our website at

https://www.tuftsctsi.org/research-services/informatics/redcap-research-electronic-data-capture/

Tufts | CTSI

Tufts Clinical and Translational Science Institute

Request a REDCap Account

To request a REDCap user account or receive other REDCap support, please follow the Request Services link located on our website at www.tuftsctsi.org and we will contact you within 48 hours.

Thank you!

Tufts | CTSI

Tufts Clinical and Translational Science Institute