Exporting Data from Illinois REDCap

During or at the end of the data collection process, it will be necessary to export data from a REDCap project for statistical analysis, reporting, or long-term storage. Whenever data is exported, we recommend following the "minimum necessary" standard to limit the amount of data that is downloaded and shared. In general, do not export data you do not need to export. Exported files should not be distributed or saved in unsecure locations.

There are several methods and formats for exporting data from REDCap. This document focuses on manual export from REDCap using the "Data Exports, Reports, and Stats" Application. Another method of exporting is through REDCap's Application Programming Interface (API). For more information on general API use in REDCap, see our API Document.

The structure and format of your export will vary depending on the features enabled in your REDCap project. For example, projects that utilize the longitudinal module or repeating instruments/events will export in a long format, meaning each row will represent a record-event. For more information on these features, see our Longitudinal Data Collection and Repeating Data Collection documents.

Depending on your user rights, access to various reporting and exporting features may be limited.

Exporting Reports

Select "Data Exports, Reports, and Stats" from the "Applications" menu on the left-hand panel to access the "My Reports & Exports" tab.

1. From here, you can create, view, and export reports. The report module is a useful tool for filtering data down to the "minimum necessary" required for sharing with other users and exporting. There is also a "Stats & Charts" module here that can be used to view basic statistical information.

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a. "A – All data (all records and fields)": Selecting "View Report" will generate a report with *all data* in the project. When viewing this report, you can filter by the record ID field, event (if the project is longitudinal), and Data Access Group (if the project contains DAGs and the user is not assigned to a DAG).

   i. **Note:** If a project has a large number of fields and records, this report may be too large to load.

b. "B – Selected instruments (all records)": Selecting "Make custom selections" will allow you to generate a report of all records filtered by the instrument(s) and/or event(s) selected. If longitudinal data collection is enabled, this will say "Selected instruments and/or events (all records)". When viewing this report, you can also filter by record ID, event, and DAG.

c. "Create New Report": Brings you to the "+ Create New Report" tab where you can customize which fields and records are included in the report, the order in which data appears, and set user access to the report.

   i. REDCap will save all reports made. You can view existing reports by pushing the "View Report" button next to each report's name.

2. The data you can export is determined by your instrument-level Data Export Rights. More information on setting up Data Export Rights can be found in our User Rights and Roles document. To export a report, select the "Export Data" button to open the export settings window. If you do not have Data Export Rights for any instrument in the project, the "Export Data" button will not be visible.

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a. There are several export format options. Consult with a statistician or the Illinois REDCap team if you are unsure which export format is best suited for your research or operational needs. Two common ones are CSV/Microsoft Excel (raw data) and SPSS Statistical Software.

b. De-identification options:

    i. Depending on your instrument-level Data Export Rights, some fields may be automatically removed from the data you try to export and selecting any of the de-identification options below will be applied to all remaining fields in your resulting data export; or export options may be pre-selected for you.

    ii. Known Identifier options:

        1. *Remove all tagged Identifier fields* – Checking this option will automatically remove any field that was marked as an "Identifier" on the "Check for Identifiers" page (while in development mode) or "Online Designer" page.

            a. **If you must export and/or transfer data with identifiers**, please contact your unit's IT professional(s) for assistance *prior to export/transfer* about secure data transfer options and local requirements. For more information, see our Protecting High Risk Data document.

        2. *Hash the Record ID field* – This will convert the record name (the first field in a project) to an unrecognizable value made of letters/numbers (e.g., b34b698cd49b8).

    iii. Free-form text options:

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1. *Remove unvalidated Text fields* – Removes any "Text Box (Short Text, Number, Date/Time, ..." fields that do not have validation. Validation can be added on the "Edit Field" screen in "Online Designer."
2. *Remove Notes/Essay box fields* – Removes any "Notes Box (Paragraph Text)" fields.

c. *Shift all dates by value between 0 and 364 days* – If dates must be included, consider **date shifting**. With date shifting, any date related to a record is shifted by a consistent length of time, thus preserving the interval between dates but masking the date itself. For example, if an individual had three sequential test dates on April 2, April 15 and April 26, when the dates are shifted, the test dates may appear as November 16, November 29, and December 10.

3. Once you select "Export Data", a pop up saying "Data export was successful!" will appear. Depending on your data export format, you may need to download multiple files to convert your data to your preferred statistics package. Click the icon(s) presented to download the file(s).
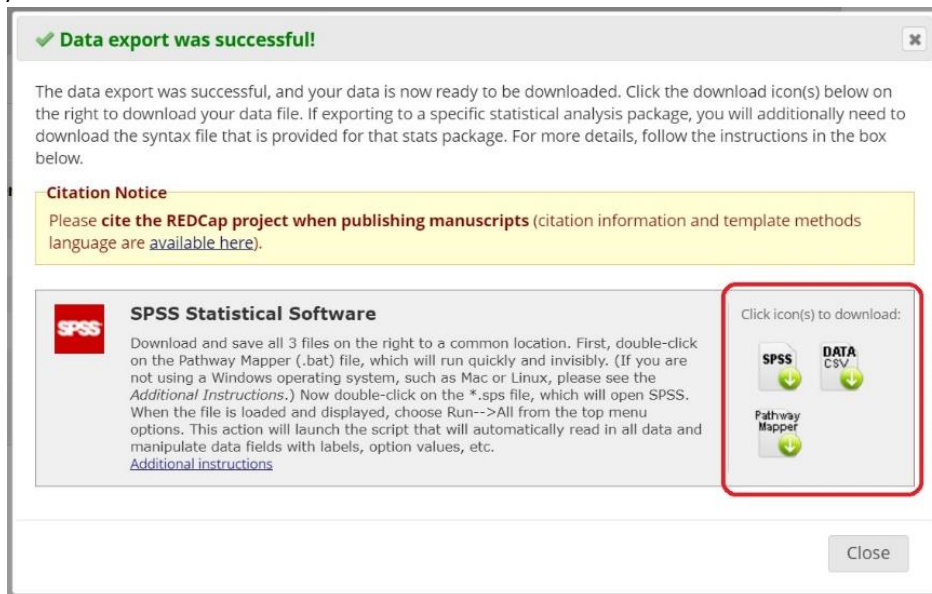
i. Note that even if you do not click the icon and download the file, selecting "Export Data" will automatically log the data export into the project logging records.

b. REDCap automatically places backup copies of all exported files in the "File Repository."

Other Export Options

Other export options are listed in the "Other Export Options" tab. Clicking the icon next to the option you need will either trigger a pop up with further instructions or download the data file.

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Some of the export options included here are:
- *Export entire project as REDCap XML file (containing metadata & data)***:** This option is for copying an <u>entire</u> REDCap project, whether to back it up or to transfer it to another REDCap instance. Selecting the icon will trigger a pop up with options specific for this type of export.
  - **Note**: REDCap at other institutions may or may not support various features available on the Illinois REDCap instance, which may affect project import.
  - **Note**: If you are transferring a REDCap project to another institution, you may need a Data Transfer Agreement. Contact the Office of Technology Management to see if you need such an agreement.
- *ZIP file of uploaded files (all records)*: Selecting the icon will download a single ZIP file containing all files uploaded to any "File Upload" fields or questions in all surveys and forms in the project, including signature fields.
- *PDF of data collection instruments containing saved data (all records)*: Selecting either icon (PDF or Compact PDF) will download data, including all section headers and descriptive fields, for all records into a single PDF. The compact version excludes any fields without data and unselected multiple choice questions. Fields with the @HIDDEN-PDF action tag will not appear.

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