# Backing Up a Project in REDCap

Backing up projects in REDCap is an important step in data management. While archiving a completed study is one common reason for creating a backup, it is also important to back up your project before making any significant changes to its design or structure. This ensures that you have a reliable restore point and helps safeguard the integrity of your data throughout the research process.

When backing up data, it is important to abide by any approved IRB or other compliance measures. For example, if your approved IRB documentation says you <u>will not</u> export identifiers from REDCap, then you should create reports with <u>only</u> the variables approved for export.

### User rights

Before proceeding with the creation of a backup, verify that anyone with data backup responsibilities has the appropriate export permissions for the relevant instruments in the project. Within REDCap, go to the User Rights module located in the left-hand applications menu, under Applications.

Applications
🕎 Project Dashboards
Alerts & Notifications
Multi-Language Management
🗰 Calendar
B> Data Exports, Reports, and Stats
-🛃 Data Import Tool
≠ Data Comparison Tool
📕 Logging and 🗗 Email Logging
🗣 Field Comment Log
📂 File Repository
💄 User Rights and 🐏 DAGs
🗎 Customize & Manage Locking
🗙 Randomization
🖻 Data Quality
API and API Playground

In the pop-up, click on your Role name or username which displays in the user rights table. In the dialogue box that opens, under "Privileges for Viewing and Exporting Data", make sure that "Full Data Set" is selected under "Data Export Rights".



### **Privileges for Viewing and Exporting Data**

Data Viewing Rights pertain to a user's ability to view or edit data on pages in the project (e.g., data entry forms, reports). Users with 'No Access' Data Viewing Rights for a given instrument will not be able to view that instrument for any record, nor will they be able to view fields from that instrument on a report. Data Export Rights pertain to a user's ability to export data from the project, whether through the Data Exports page, API, Mobile App, or in PDFs of instruments containing record data. Note: Data Viewing Rights and Data Export Rights are completely separate and do not impact one another.

	Data Viewing Rights				Data Export Rights			
	No Access (Hidden)	Read Only	View & Edit	Edit survey responses	No Access	De- Identified*	Remove All Identifier Fields	Full Data Set
Baseline (survey)	0	0	۲		0	0	0	۲

### Downloading project data

For research sharing purposes, it's important to retain both the collected data and the accompanying data dictionary. At a minimum, a backup should include both.

To download the project dictionary, click on "Dictionary" under the "Project Home and Design" tab in the left-hand menu, and then select "Download the data dictionary."

Project Home and Design					
📌 Project Ho	me · ž= Proiec	<u>Setup</u>			
🗹 Designer	Dictionary	E Codebook			
Project status: Production					

To download the entire dataset, click on "Data Exports, Reports, and Stats" from "Applications" tab in the left-hand menu.



Logging and 🗗 Email Logging





In the page that follows, select "Export data" from the "Export all data (all records and fields)" line, and specify your export format.





Researchers have the option to download the data to their local devices. However, to minimize the number of local copies with identifiable data, use this option cautiously. Users have full access to every report that is created in REDCap since every export is saved in the File Repository in the Data Export Files folder.





The file repository serves as the central location for storing and accessing all project files and documents. User permissions must be explicitly defined to enable access. Files generated during the data export step are also available here, reducing the need for duplicate or repeated downloads of identifiable data.

### **All Files**



### Downloading a whole project

A copy of the project, including all records, instruments, fields, and project attributes, can be downloaded by selecting "Copy the project" from the "Other functionality" tab. The entire project can be downloaded in a single XML file, which can then be used to duplicate the project. Because the download is in the CDISC ODM format, the REDCap project download can also be transferred to another ODM compatible system.



# Copy or Back Up the Project Copy the Project Copy the Project Copy and the Project Download metadata only (XML) Download metadata & data (XML)

Metadata is "data about data". In REDCap, it includes information like form definitions, field types, validations rules, and project settings. There are two options for download, metadata with or without data.

*Download metadata only:* This option is useful when you want to copy the project's structure, but you don't want to transfer the existing data. This is common for setting up a new project based on an existing one or for creating a backup of your project structure without any data.

*Download metadata and data:* This option is useful when you need to copy the entire project, including the existing data records. This is useful for creating a backup of your project including all the data.

If selected, additional project components, such as data quality rules, pop-ups, and others based on specific project characteristics, can also be included in the XML file download.

Include the following in the XML file:

Data Quality Rules
 Descriptive Popups
 Surveys and survey settings

# Downloading project documents

Any documents provided by the research team related to the project, including consent forms, study protocols, or embedded images and files from surveys, can be downloaded for archiving. To download the desired documents, click on "File Repository" in the left-hand menu, select the appropriate folder, and then click "Download All."



Files which have been uploaded by participants to a project, including data from file upload fields on a survey or form, can be downloaded in a single ZIP file by accessing the "Data Exports, Reports and Stats Module" in the left-hand menu and selecting the "Other Export Options" tab.

+ Create New Report H My Reports & Exports C Other Export Options

#### B: PDF of data collection instruments containing saved data (all records)

The data for all records in this project may be downloaded in a single PDF file. This file contains the actual page format as you would see it on the data entry page or survey and includes all data for all records for all data collection instruments. Click the icon to the right to begin downloading the file. Also, you may optionally click the Compact option to download a PDF that excludes fields that have no data saved and excludes unselected multiple choice options. (Note: Section headers and descriptive fields will still be included.)



## Restoring project data in REDCap

REDCap provides detailed audit trails to track changes at both the record and field level. Each field in a record has an associated history log. To view the log, navigate to the desired record, and click on the "History" icon next to the specific field.



Any change, including previous values, user, time stamp, and action type are available in this log.

Date/Time of Change	User	Data Changes Made
05-19-2025 16:20:31	su- fahmed81@il linois.edu	season(2) = checked
05-19-2025 16:20:41	su- fahmed81@il linois.edu	season(2) = unchecked season(3) = checked
05-19-2025 16:20:51 (most recent data change)	su- fahmed81@il linois.edu	season(3) = unchecked season(4) = checked

Another way to track changes in a project is to audit user activities. This can be done by navigating to "Logging" in the left hand applications menu. This feature offers a comprehensive overview of all



actions performed within the project. Filters by event type, username, record, and date make it easier to pinpoint specific activities.

pplications	
🕎 Project Dashboards	
Alerts & Notifications	
🌐 Multi-Language Management	
🗰 Calendar	
🕒 Data Exports, Reports, and Stats	
-🖥 Data Import Tool	
≠ Data Comparison Tool	
📕 Logging and 互 Email Logging	
🗣 Field Comment Log	
🗁 File Repository	
Filter by event: All	event types (excluding page views) v

Filter by event:	All event types (excluding page views) v	
Filter by user name:	All users 🗸 🗸	
Filter by record:	All records 🗸	
Filter by time range from	05-12-2025 16:25 👫 to	31
Displaying events (by most recent):	1 - 5 (Page 1 of 1) 🗸	

Backing up and restoring projects in REDCap is an important part of responsible data management. Whether archiving a completed study or addressing significant project modifications, maintaining regular backups ensures you have reliable restore points to protect data integrity. Combined with REDCap's built-in tools such as the reports, logging, record-level data history, and structured data import options, these practices allow research teams to efficiently recover from errors and maintain accurate, trustworthy datasets throughout the lifecycle of a project.

# Importing project data into REDCap

For guidance on importing a project into REDCap, please refer to our how-to document titled <u>Importing</u> <u>Project Data and Metadata into Illinois REDCap.</u>

