Migrating REDCap Project

DIY Guide for Users

OARC-REDCap Team

Version: [1.2]

Please read this entire document before you start migrating your project.

For help contact your REDCap administrator via email at:

redcap-help@oarc.rutgers.edu

Table of Contents

Purpose

This guide outlines a general process to transfer a REDCap project from one REDCap instance (REDCap Instance **S**) i.e. "**Source**" to another (REDCap Instance **T**) i.e. "**Target**", including both metadata and data, while following institutional security protocols.

***Please read this entire document before project migration. If you have any question, contact us**

redcap-help@oarc.rutgers.edu.

Definitions

REDCap Instance: A separate REDCap system hosted on its own server, with a unique URL and typically managed by a different institution / entity inside an institute.

Source REDCap Instance (S): The original REDCap instance (Source instance) where the project currently exists.

Target REDCap Instance (T): The new REDCap instance (Target instance) to which the project is being transferred.

Pre-migration Checklist

Ensure the user of REDCap Instance **S** has the following rights:

- ✓ Project Design and Setup
- ✓ Data Access Groups (if applicable) - If you use DAG (Data Access Group) in your project please contact us before you migrate your project to the new server
- ✓ Full Data Export (including identifiers)
- ✓ Logging
- ✓ File Repository
- ✓ Randomization Setup and Dashboard (if applicable)

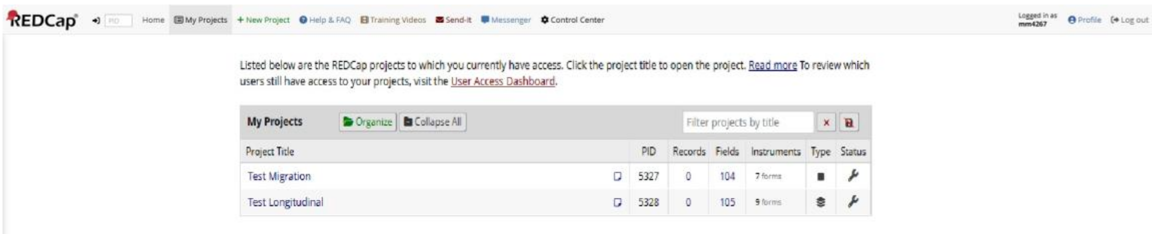
Ensure that the file downloaded is stored securely, especially if it contains PHI/PII. Coordinate with IT or use institutional secure storage.

***It is important to note that after migration, the public survey link will be updated. Any advertisements or recruitment materials will need to be updated with the new link. Also, the survey timestamps cannot be imported; however, they can be stored in a CSV data file. Also locked records do not stay locked after migration.**

Step-by-Step Migration Instructions

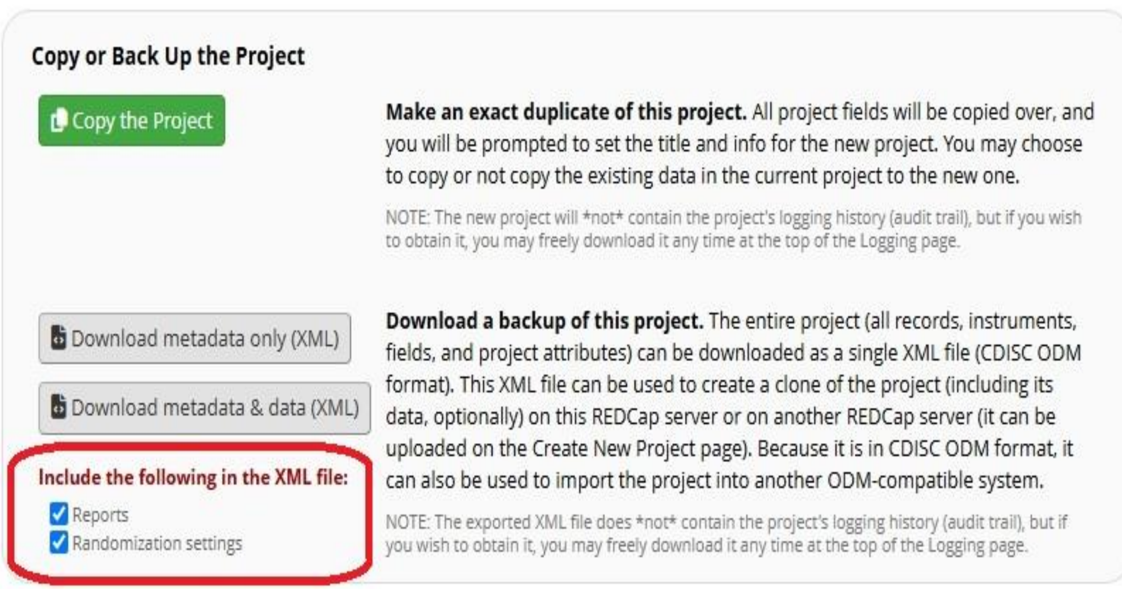
STEP 1: SELECT THE PROJECT/S TO TRANSFER

- Log into REDCap Instance S.
- Navigate to "My Projects".
- Identify a project to transfer.
- Create a folder on your local or shared drive for the project.



STEP 2: DOWNLOAD PROJECT AND DATA FROM REDCAP INSTANCE **S**

- DOWNLOAD PROJECT XML
  1. Go to the project's **Project Home**.
  2. Select **Other Functionality** tab.
  3. Scroll to **Copy or Back Up the Project** section. You can pick the features you want to transfer from a list provided under "Include the following in the XML file:" heading. This list can be different for each project depending on the features being implemented. These features can be selected or deselected using the checkboxes as shown below.



  4. There are two options to download a project, choose one as per the following guideline:

a. **Option A**: Download metadata only (XML) – Better option for larger projects. If you are not sure, then you can use this option. This will be a two-step process; you will separately download the metadata and then the data.
b. **Option B**: Download metadata & data (XML) – Best option for smaller projects where very little data has been collected.

***Please note: if a project has 'Alerts' or 'Automated Survey Invitations', leave the 'Leave Alerts enabled' UNCHECKED when migrating. If not left unchecked, participants will be re-notified upon import of the data.**

♦ **OPTION A** (LARGE PROJECT 2-STEP PROCESS) - DOWNLOAD METADATA ONLY (XML)

Now that you have the metadata (XML) for the project, proceed to download the data.

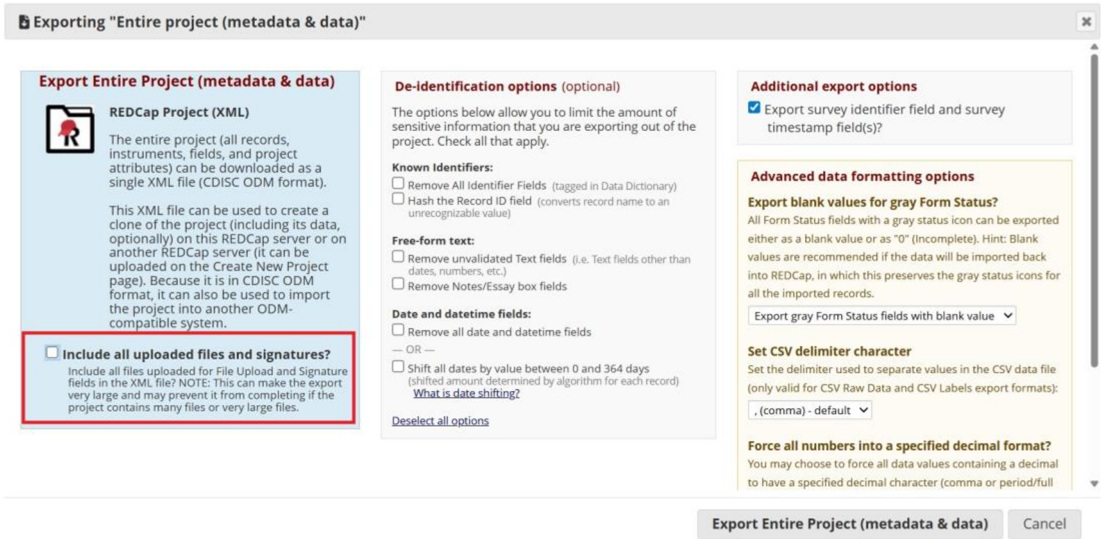
1. In the left-hand menu-window go to the **Applications** section**.**
2. Click on **Data Exports, Reports, and Stats.**

3. From the **My Reports & Exports** table, click on **Export Data** button and choose **CSV / Microsoft Excel (raw data)** option to download the data.

4. Click **Export Data** button on the end right end of the popup window.

♦ **OPTION B** (SMALL PROJECT 1-STEP PROCESS) - DOWNLOAD METADATA & DATA (XML)

1. A new window (as shown below) will pop up, and this offers various options to transfer a project according to specific requirements.



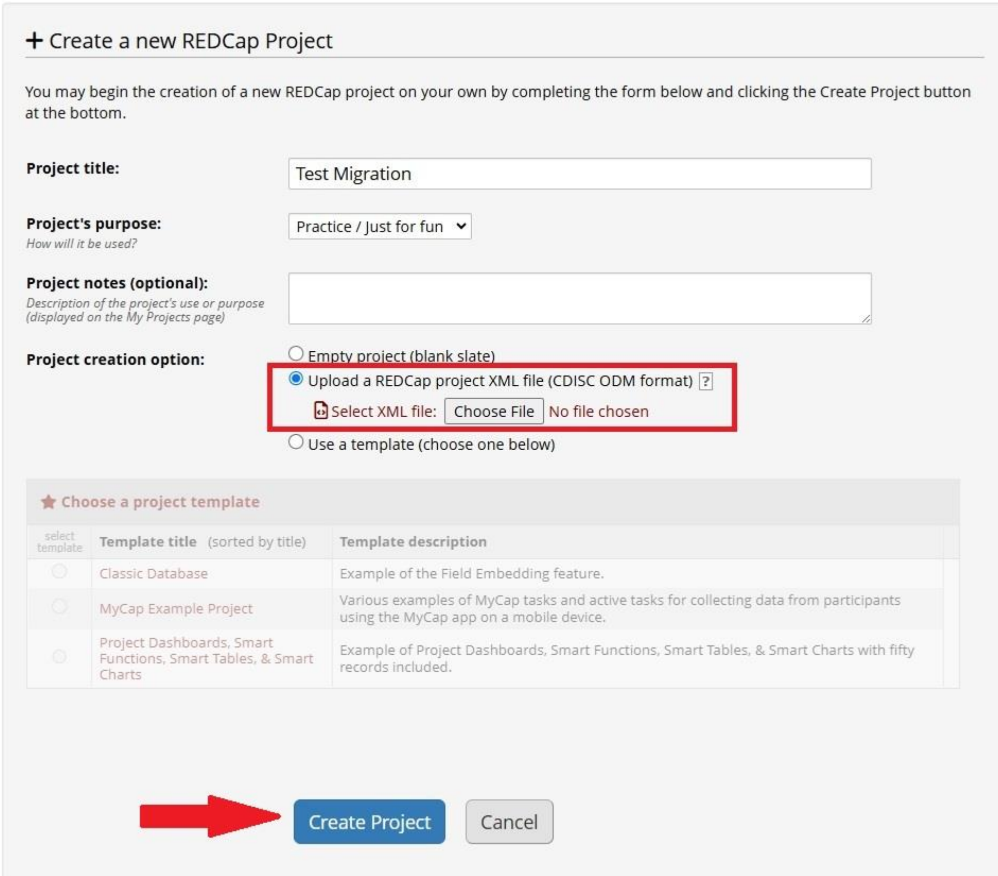
2. Select the option **Include all uploaded files and signatures?** with great CAUTION. If you have a project that stores a substantial number and /or size of files collected, then this will make the export file very large which might fail the export or import process. In this case, it is suggested to use **Option A** and download data and "uploaded files" separately (Instructions for this process are included in this document)

3. In the second column, leave the de-identification options unchecked.
4. Leave the survey identified field and survey timestamp field(s) checked. (The survey timestamp data will NOT be imported. The csv data file can have this information and can be kept with your migrated project if you need this information)

STEP 3: CREATE NEW PROJECT ON REDCAP INSTANCE **T**

1. Log in to target REDCap Instance **T**.
2. Select the **+New Project** button from the menu at the top.

3. On the new screen, fill in Project Title, Project Purpose, and any additional details for the project in Project notes.
4. Select Upload a REDCap project XML file (CDISC ODM format).
5. Click Choose File and select the saved XML file located on your computer from Instance S.
6. Click **Create Project** button at the end of the form.



Check the project in the designer mode and go through all the instruments to validate the structure that is created correctly. If you are satisfied, then we are ready to move the data into this project.

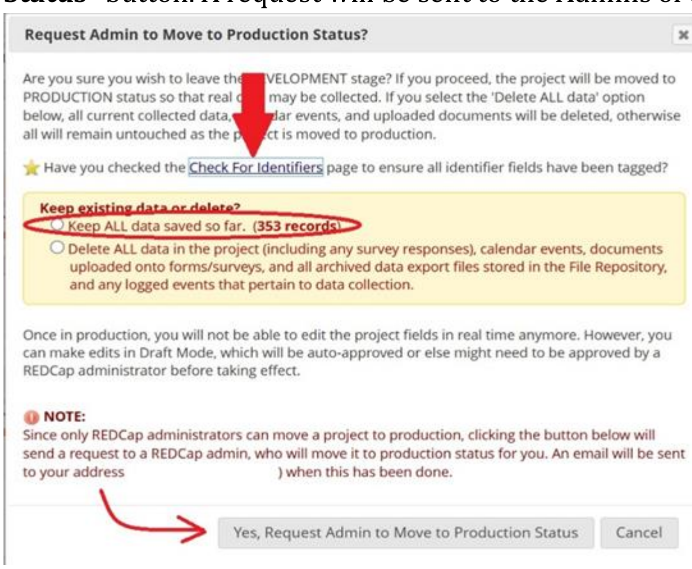
♦ REQUEST TO CHANGE THE STATUS OF PROJECT TO PRODUCTION

This is an important step to perform right after creating your project if you have more than 20 records in your project that you are migrating. **You can skip this for later if your project is in the testing stage with less than 20 records**. The change of status of a project from development to Production needs REDCap administrator approval. To request this change follow the following steps:

1. Go to the home of the project just created and you will see that the status of your project will be "**Development**" as shown in the left menu bar in the "**Project home and Design**" section as shown in the figure below.

2. Click on the "**Project Setup**" tab and scroll down to the "Move your project to production status" section. Click "**Move project to production**" button as shown below.

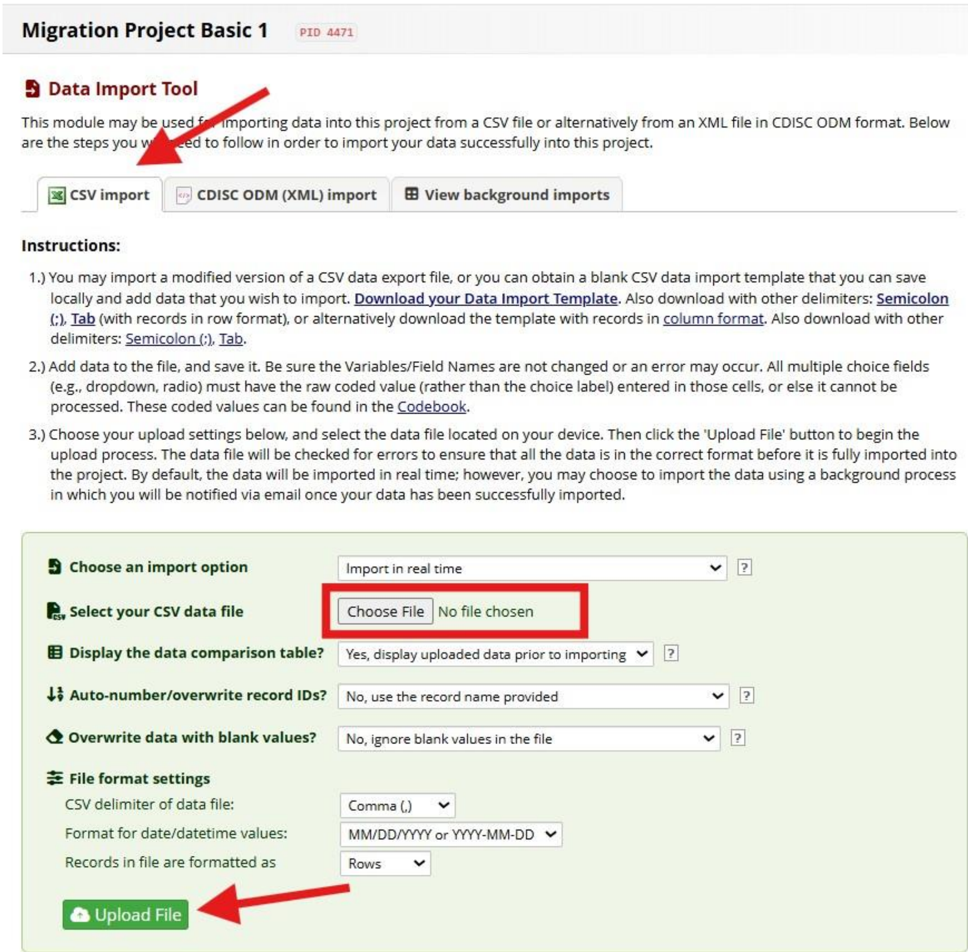
3. The following popup window will appear as shown below. Please click on the "**Check For Identifier**" to check the list of identifiers you want to define out of all the variables in the project. If you are moving a project with your records that you want to keep, then you should choose the first "**Keep All data saved so far**" option. If there is no record (most of the time in a migrated project just created) then it does not matter what you choose. Click on "**Yes, Request Admin to Move to Production Status**" button. A request will be sent to the Admins of the REDCap to review.



4. REDCap Admins usually process the request within a few hours. Please allow **24 working hours** (Holidays and Weekends are excluded) to the REDCap staff to process the request.

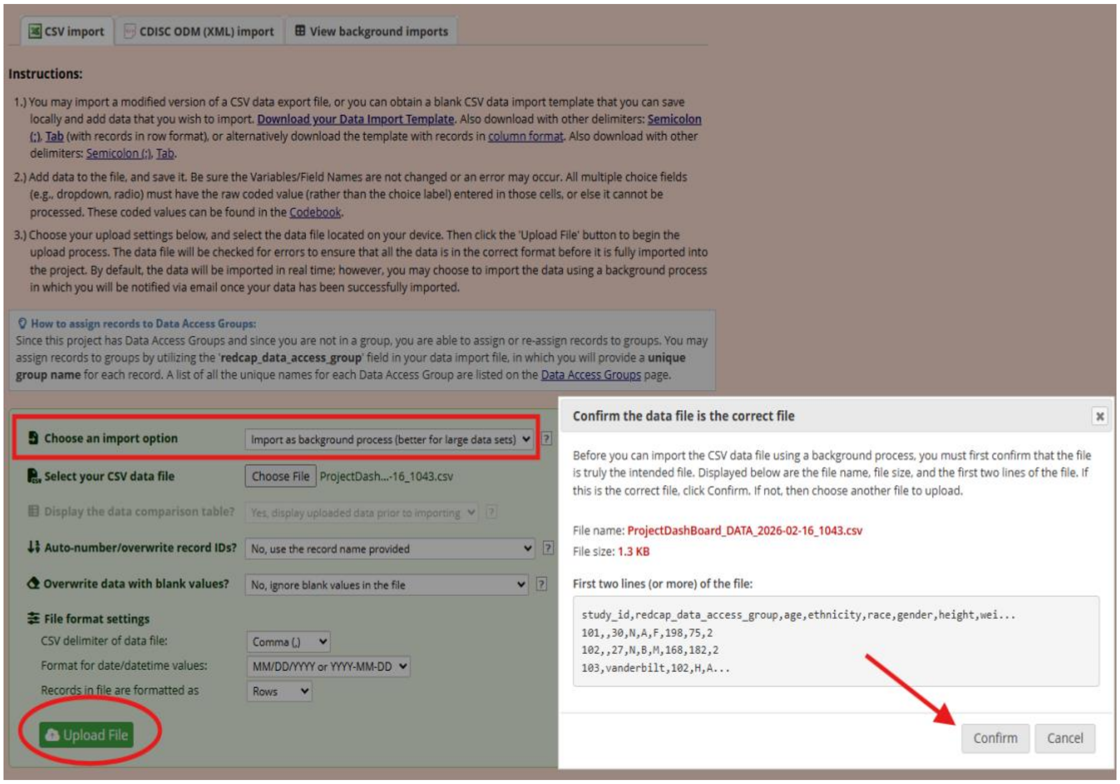
♦ IMPORT DATA DOWNLOADED SEPARATELY AS CSV FILE

1. In the left-hand menu **Applications** section, click **Data Import Tool**.
2. On the new screen, read the instructions carefully and upload the previously saved CSV-data file by clicking on the **Choose File** button using the **CSV import** tab as shown below:

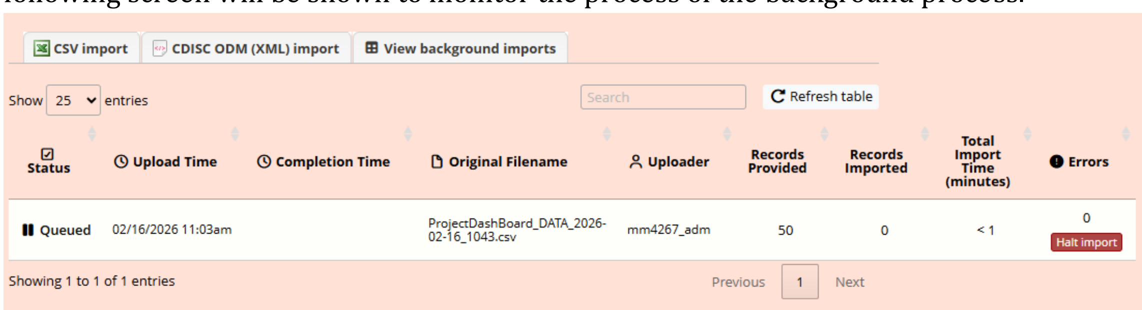


3. Click **Upload File** button at the bottom of this form.
4. A review data screen will appear showing all the data in the CSV file. Review your data and click the **Import Data** button placed down at the end of the screen.
5. It may take some time depending on the size of the data. A message showing the result of the data-import will appear. (Do not navigate to another page until the process is complete)

6. In case the upload fails, it is possible that the data file is too big to upload. In this case, try using "**Import as background Process**" option in the **Data Import Tool** as shown below



7. After choosing this option and selecting the data file and confirming the file, the following screen will be shown to monitor the process of the background process.



8. If the upload fails again with the background upload option stated above, divide the data into multiple batches based on the number of records at the time of data export from source REDCap instance **S** OR divide the data into group of smaller number of instruments.

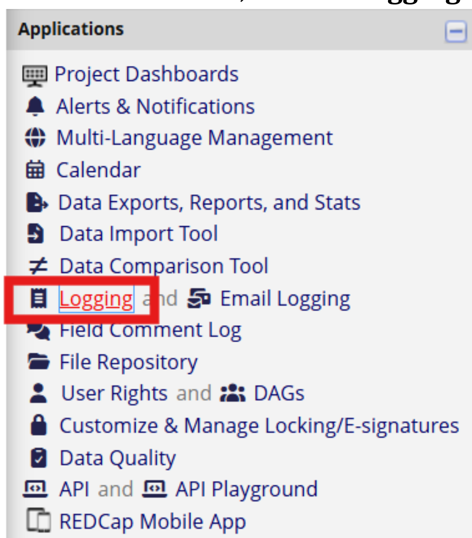
Additional (OPTIONAL) Steps: Transfer Additional Metadata

The XML file downloaded does not include everything for a project that may be useful / required for some users. The following are some of those metadata that you may want to save.

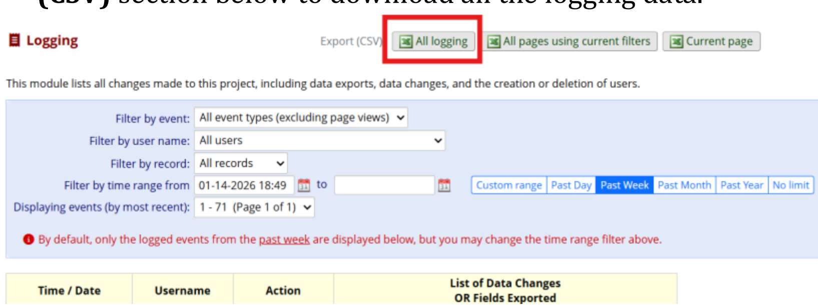
♦ LOGGING (RECOMMENDED)

The XML file downloaded (in the 2nd step) does not include logging activity data. In your new REDCap instance, there will be different logging information. If you want to keep the logging information from your previous instance, you can download that as a CSV file and upload it to the repository in the target instance.

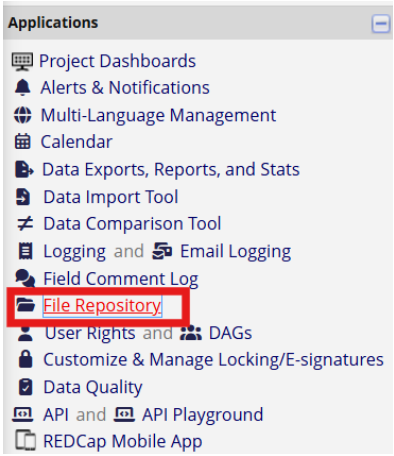
1. From instance **S**, click on **Logging** from the **Applications** menu.



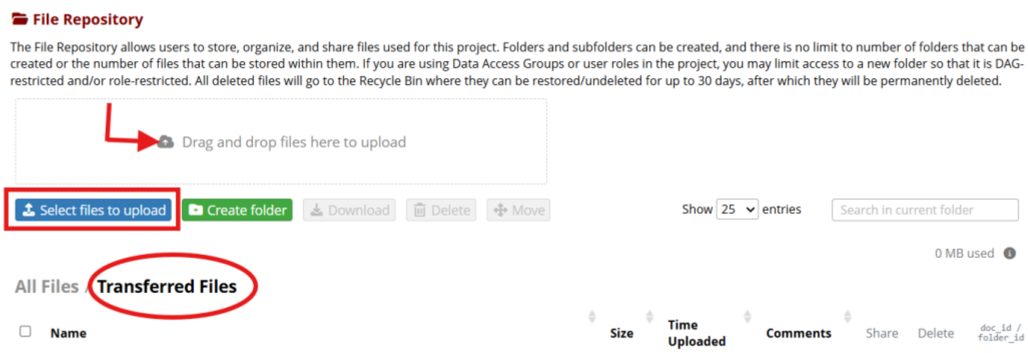
2. Click **All Logging** button from the top of the next screen as shown in the **Export (CSV)** section below to download all the logging data.



3. In instance **T**, go to your new project and click **File Repository** from the **Applications** menu.

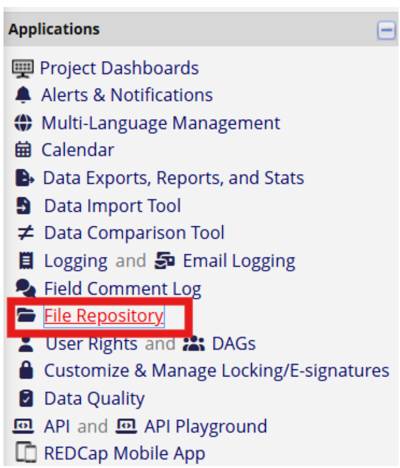


4. Create a new folder named "**Transferred Files**" / any desired name (Best Practice)
5. Use "drag and drop" OR "**Select files to upload**" button to upload files in the "**Transferred Files**" folder OR in the folder of your choice.

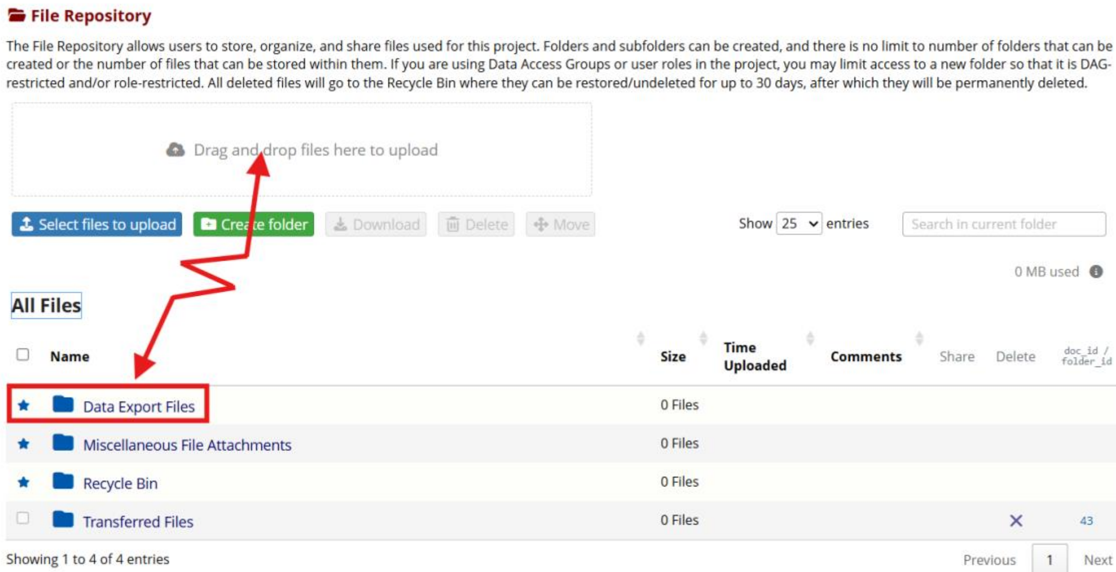


♦ FILE REPOSITORY DOCUMENTS

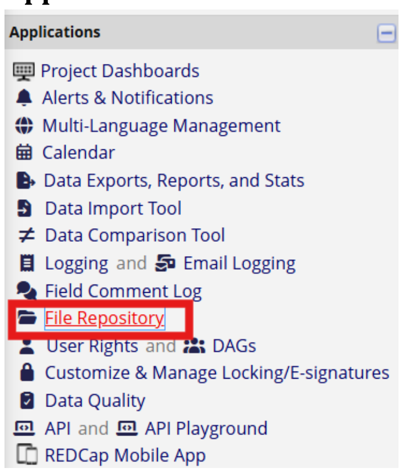
1. From Instance **S**, click on **File Repository** from the **Applications** menu.



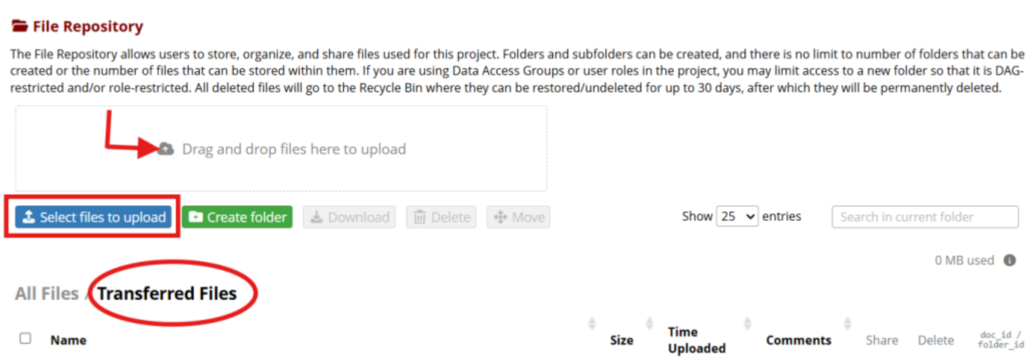
2. Select the files you want to transfer with the project to instance **T** and then click "**Download**" button as shown below.



3. In Instance **T**, go to your new project and click **File Repository** from the **Applications** menu.



4. Create a new folder named "**Transferred Files**" (Best Practice)
5. Use "**drag and drop**" OR "**Select files to upload"** button to upload files in the "Transferred Files" folder OR in the folder of your choice.



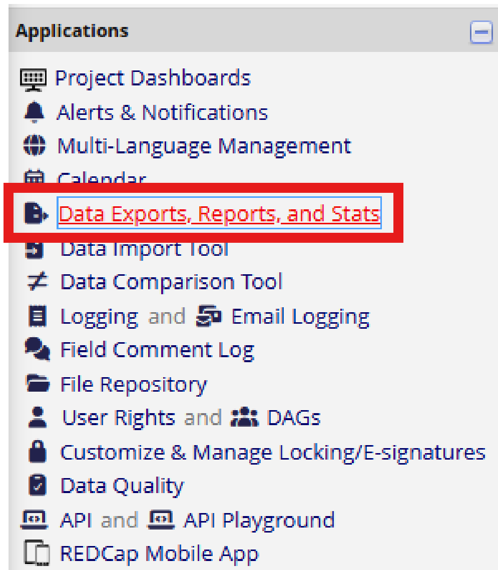
♦ SURVEY TIMESTAMPS

Survey timestamps are part of data-export, but they are not uploaded into the new projects as timestamp fields. It is good practice to keep (by uploading) the data file with timestamps in the **File Repository** of the target REDCap Instance **T**.

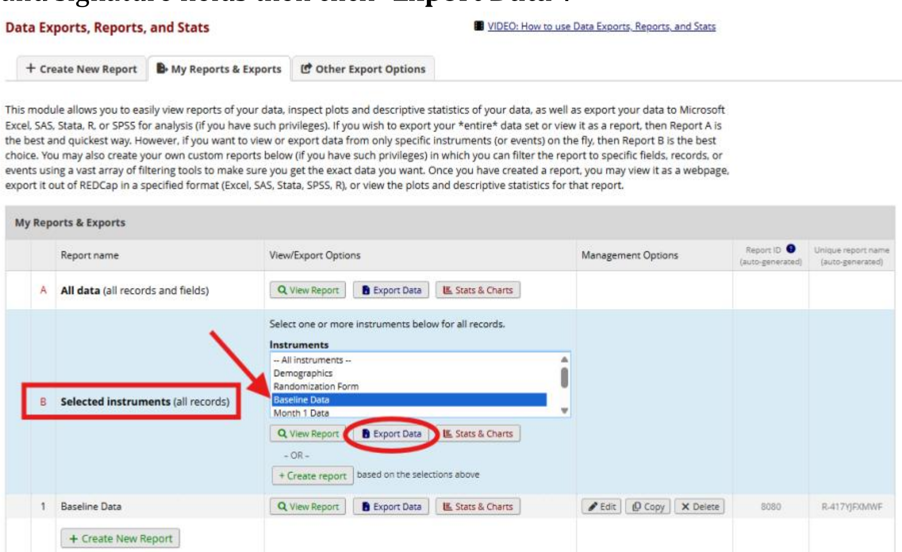
♦ FILE UPLOAD & SIGNATURE FIELDS

If any of your forms/instruments contain signatures or file upload, you must export those as XML to be able to import the files into the target project. Depending on the number of files, and the size of individual files, this can be a time-consuming process. If you need assistance with this part, please contact us for help.

1. Instance **S**, click on **Data Exports, Reports, and Stats** from the **Applications** menu.

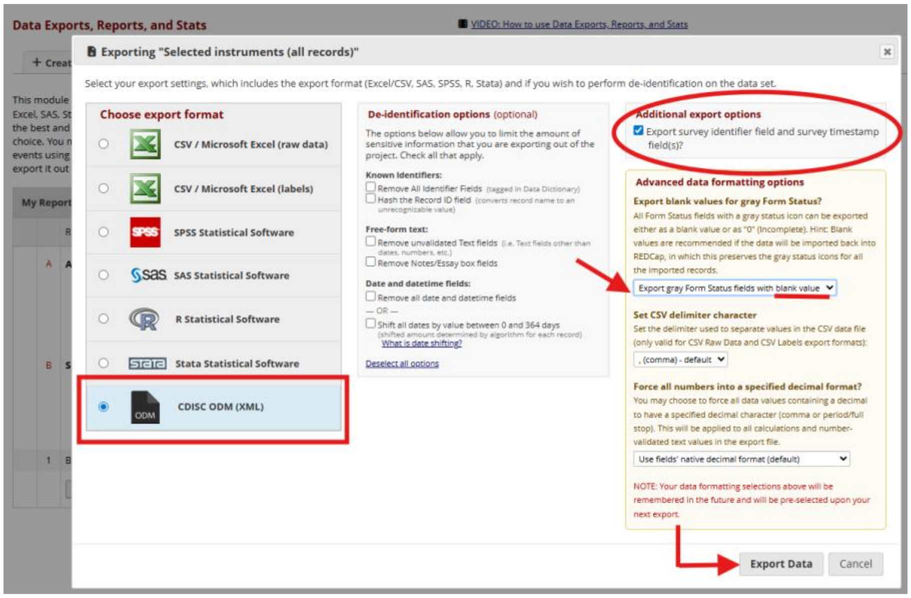


2. In section B. **Selected instruments (all records),** select the instrument that has files, and signature fields then click "**Export Data**".

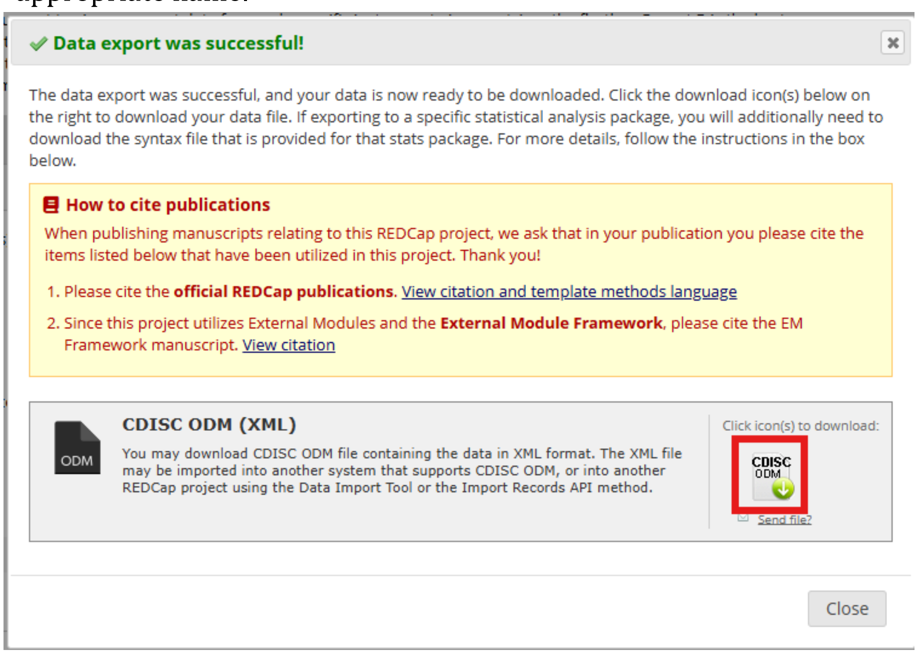


3. You should see an image like the image below. Choose **CDISC ODM (XML)** as export format, change the Advanced data formatting option to "**Export gray Form Status**

fields with blank value" and click "**Export Data**" button.



4. On the next screen, click the "CDISC ODM" icon to download the data file for the selected instrument containing signature fields. Save that file for the next step with an appropriate name.

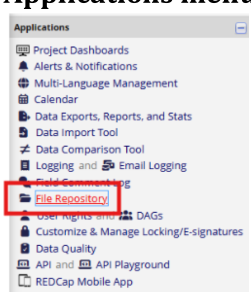


5. To **import** this data (files and signatures fields) into your migrated project, go to **Data Import Tool**. Click on the **CDISC ODM (XML) import** tab. Choose the file that was downloaded in the last step and upload this file. The files and signature data are also uploaded into migrated REDCap project.
6. Another alternative option to export files that were uploaded into a project is to download a zip file of all the files. Go to **Other Export Options** tab on the next screen as shown below.

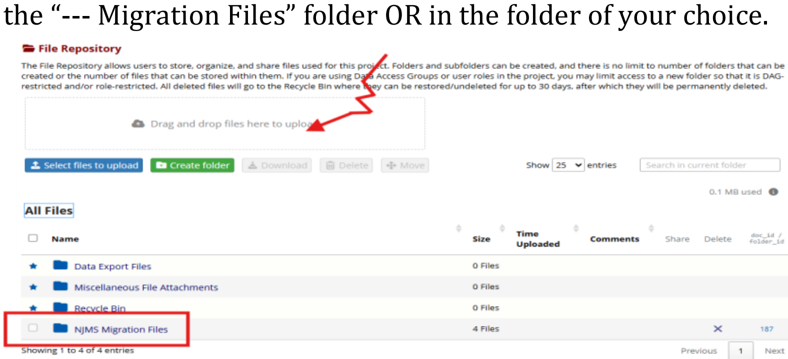
7. Click the **Zip** icon in front of **Zip File of uploaded files (all records)**. This will be downloaded as a zip file onto your local computer.
8. There are two options to keep these files in the target Instance T. These options are as follows:

   Option 1: Upload the .zip to **File Repository** as archive.

   a. In Instance **T**, go to your new project and click **File Repository** link from the **Applications menu**.



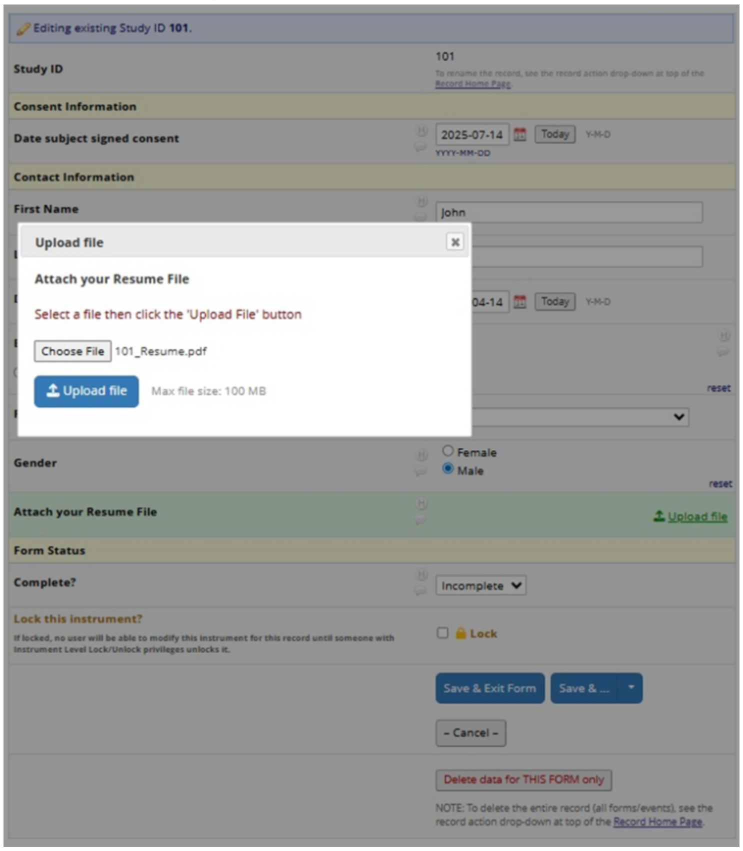
   b. Create a new folder named "--- Migration Files" (Optional)
   c. Use "**drag and drop**" OR **Select files to upload** button to upload the Zip file in the "--- Migration Files" folder OR in the folder of your choice.



   Option 2: (Not recommended) Manually upload each file to each record/field. This option can be very time-consuming and challenging to match records with files.

a. Unzip the zip file containing the files of the transferred project. It is highly suggested to frame a sound system for keeping track of all the files to ensure the entirety and integrity of the upload process. It is suggested to have filenames based on the study id, instrument and field name.

b. In the target instance T, click on Record Status Dashboard from the Data Collection menu. Click on the study id and then the instrument. A screen looks like the following will appear.



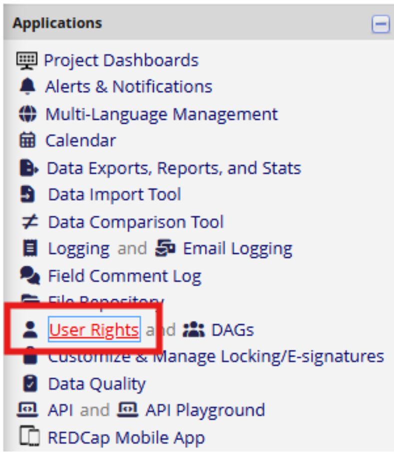
c. Click on the **Upload file** link, a dialogue box as shown above will appear. Click on the Choose File button and select the file to upload, and then click Upload file button on the dialogue box.

d. This process should be repeated for all instruments and fields.

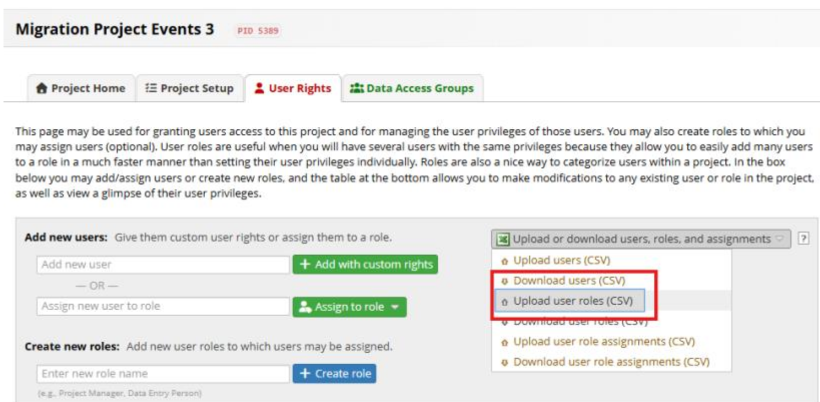
♦ USER RIGHTS (OPTIONAL)

The User Roles (if defined) will be downloaded as part of XML project file. Some of the user settings will NOT be part of the XML file, they are limited to the REDCap instance. It is a good idea to download 'User' information as CSV file and keep that file in the **File Repository** of the project in the new instance, i.e. Instance **T**.

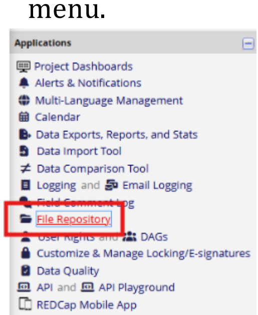
1. Instance **S**, click on **USER Rights** from the **Applications** menu.



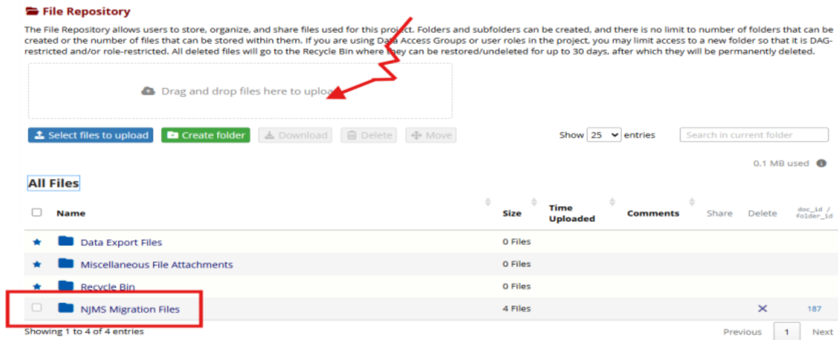
2. Go to **User Rights** tab from the top of the next screen as shown below and click on the **Upload or download users, roles and assignments** drop down menu depending on what you want to do.



3. In Instance **T**, go to your new project and click **File Repository** from the **Applications** menu.



4. Create a new folder named "--- Migration Files" (Optional)
5. Use "**drag and drop**" OR Select files to upload button to upload the Zip file in the "--- Migration Files" folder OR in the folder of your choice.



♦ RANDOMIZATION (IF APPLICABLE)

- INACTIVE PROJECTS: Projects where data collection is complete; no further steps need to be taken. The data stored is intact as produced by randomization. However, you can choose to archive the production allocation table from the source REDCap instance **S** in the file repository. This archived file can then be transferred to Target REDCap instance **T**.
- **ACTIVE PROJECTS**: Please contact REDCap administrators at **redcap-help@oarc.rutgers.edu** to export and re-establish randomization settings.

♦ e-CONSENT (IF APPLICABLE)

*Please contact your IRB to determine the protocol and you may need to make changes to your existing IRB protocol. The following instructions are only helpful for the REDCap technical side.

1. In Instance **S**, download consent files from **PDF Survey Archive** directory in the **File Repository**.
2. In Instance **T**, upload PDFs downloaded in the previous step to **File Repository** in the **Applications** section of the menu on the left. It is recommended to store these files in a separate folder.

⚠ Consult your IRB before proceeding with eConsent transfer. Some IRBs may require re-consenting in the new instance.

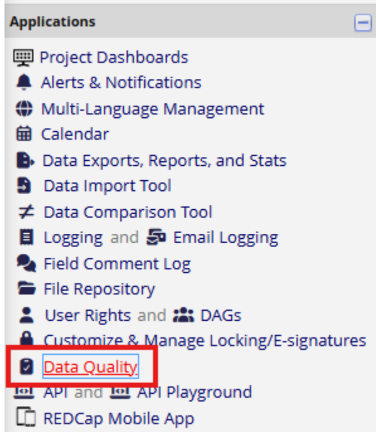
♦ SURVEY ALERTS and AUTOMATED SURVEY INVITATIONS (IF APPLICABLE)

- It is recommended that the Checkboxes for Alerts and Automated Survey Invitations should be unchecked / disabled before the project migration import. Re-enable these options in the Instance **T** project after migration process is completed and ready to collect the data.

Best Practices

- Not all metadata is included in the XML export.
- Always validate data accuracy and user permissions after transfer.

- The 'Data Quality' tool can be useful for this step. Run this tool for the projects in each instance. The results should be similar.



- Test with a dummy project if needed to practice.
- Change the status of the project in **Instance S** (Original Instance) to complete.

Contact Information

For questions, contact your REDCap administrator: **redcap-help@oarc.rutgers.edu**