NHG Research Database Platform

ASKED

OUESTIONS

FREQUENTLY

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REDCap FAQ Series

"How do I export and share my REDCap Project Forms (or Instruments) with my colleague?"

"How do I transfer my REDCap Project from the STAGING Server to the PRODUCTION Server?"

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Introduction

About this Guide

This Guide is intended as a FAQ on how Users can share their REDCap Project Forms (Instruments) and transfer REDCap Projects from the Staging Server to the Production Server.

This Guide has been written for only internal use by the National Healthcare Group (NHG) and her Institutions.

This User Guide is written based on REDCap Version 8.5.27.

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Important Information for all NHG REDCap Users



IMPORTANT

The HUMAN BIOMEDICAL RESEARCH ACT (HBRA) (Section 27) states that:

"Every person who has obtained <u>individually-identifiable information</u> or human biological material for the purposes of human biomedical research <u>must take</u> all reasonable <u>steps and safeguards</u> as may be necessary, including rendering information or material non-identifiable, to <u>protect such information</u> or material against accidental or unlawful loss, modification or destruction, or unauthorised access, disclosure, copying, use or modification. Any person who contravenes these requirements in HBRA shall be guilty of an offence and shall be liable on conviction to a fine or to imprisonment or to both."

- All REDCap Project data collection activities must be carried out in strict adherence to the requirements by the NHG Domain Specific Review Boards (DSRB), Human Biomedical Research Act (HBRA), Personal Data Protection Act (PDPA) and any other applicable regulations where applicable to protect the data and Study Participants' privacy and confidentiality.
- All Users of the NHG REDCap system must abide by the all applicable Legislation, Regulations and Policies governing human biomedical research activities, the use of computer systems as well as the collection, storage, protection and use of data in Singapore and in NHG.
- All REDCap users must read the NHG REDCap System Usage Agreement (<u>available for download here</u>) to understand their obligations and responsibilities before using the NHG Research Database Platform (REDCap).

Acknowledgements

The NHG REDCap Team would like to acknowledge the REDCap Consortium and its Members for providing the valuable guidance and reference resources that have enable this Guide to be written.

Important Pre-Requisites

In order for you to access the REDCap Project's Data Dictionary file, or to be able to carry out the steps described in this FAQ, you must first meet the following requirements.

- Able to login to the appropriate NHG-REDCap Server
- Have access to the appropriate REDCap Project
- Have been assigned the [Project Design and Setup] User-Right for that REDCap Project.

IMPORTANT

The "Project Design and Setup" User-Right is a Highest-Level Privilege in the REDCap Project.

For all new REDCap Projects on the Production Server, only the Project Owner and one Project Administrator are initially assigned this User-Right.

We recommend that only a limited number of users (such as senior Project members who are familiar with REDCap) are assigned this User-Right. The

All Users and their assigned User-Rights and User-Roles, **must be properly documented** in your Site Study File, under the '**Study Delegation Log**'.

FAQ 1: How do I export and share my REDCap Project Forms with my colleague?

If you want to share your *entire* REDCap Project (*ie: all Forms and Data Variables, except Project Settings*), you can share the Project's **Data Dictionary** file with your colleague.

- See Section (A) to understand what a REDCap Project's Data Dictionary is.
- Download the Data Dictionary file by following the instructions in <u>Section (B)</u> and <u>Section (C)</u>.
- Import the Data Dictionary file into a REDCap Project by following the instructions in Section (D).
- If you encounter errors when importing the Data Dictionary file, you can see <u>Section (E)</u>.

FAQ 2: Can I share the Data Dictionary file?

Generally, you should be able to share the Data Dictionary file as there is **NO COLLECTED DATA** from your REDCap Project contained inside the Data Dictionary file.

The Data Dictionary file only includes information that **ONLY** defines <u>ALL</u> of the **FORMS** and **DATA VARIABLES** found in a REDCap Project. (See <u>Section (A)</u> to understand what a REDCap Project's Data Dictionary is.)

However, you may need to consider the following factors before sharing your Data Dictionary file.

- Copyright issues
- Confidentiality of any Proprietary information and Intellectual property
- Disclosure of sensitive Questions, Data Variables or Research activities
- Restrictions by Institution policy or processes

Do consult with your Head of Department or appropriate equivalent authority if any of these apply to you.

FAQ 3: How do I transfer a REDCap Project from the STAGING Server to the PRODUCTION Server?

Download the Data Dictionary file of your Project on the **STAGING Server** by following the instructions in <u>Section (B)</u> and <u>Section (C)</u> of this Guide.

Once you have requested for, and obtained your REDCap Project* on the PRODUCTION Server, just import the downloaded Data Dictionary file into the Project by following the instructions in <u>Section (D)</u>.





IMPORTANT

Clarification of function: [Move Project to Production]

Not started

Move your project to production status

Move the project to production status so that real data may be collected. Once in production, you will not be able to edit the project fields in real time anymore. However, you can make edits in Draft Mode, which will be auto-approved or else might need to be approved by a REDCap administrator before taking effect.

Go to Move project to production

- The function [Move Project to Production] is used to change the <u>DATA-PROTECTION</u> Mode of the REDCap Project, from <u>Development-Mode</u> to <u>Production-Mode</u>.
- This Function **DOES NOT** "TRANSFER" OR "MOVE" a REDCap Project from the Staging-Server to the Production-Server.
- In addition, this Function **DOES NOT** submit any request to ""TRANSFER" OR "MOVE" a REDCap Project from the Staging-Server to the Production-Server.
- If you have created a REDCap Project on the Staging Server (and you want to use it for actual data collection), you will need to 'manually' transfer your REDCap Project from the Staging Server to the Production Server (as described in FAQ 3) AFTER you have requested for a Project for the Production Server.

FAQ 4: How do I export the entire REDCap Project (all Forms, Data Variables and Project Settings BUT WITHOUT any project data) to my collaborators OUTSIDE of NHG?

If you want to share your *entire* REDCap Project (*ie: all Forms, Data Variables and Project Settings BUT WITHOUT* any *project data*), you can share the Project's XML file with your collaborators.

Simply download the Project XML file by following the instructions in <u>Section (I)</u> and <u>Section (J)</u> in this Guide.

Your collaborators can import the Project XML file as a new REDCap Project by following the instructions in <u>Section</u> (K).

FAQ 5: How do I export and share a specific Form?

If you want to export and share a single, specific Form from your REDCap Project, you can do so by following the instructions in <u>Section (F)</u>.

To import a single, specific Form into a REDCap Project, you can do so by following the instructions in Section (G).

SECTION (A): What is the Data Dictionary of a REDCap Project?

The **Data Dictionary** is a system-generated spreadsheet (*in .CSV file format*) that **ONLY** defines <u>ALL</u> of the **FORMS/INSTRUMENTS** and **DATA VARIABLES** found in a Project.

It is important to remember that the Data Dictionary **DOES NOT** define:

- Any of the collected data points/records in the Project
- Users, User-Rights, User-Roles and Data Access Groups
- Reports
- Events (for Projects in Longitudinal mode)
- Surveys (including survey settings and queues)
- Schedules and Events/Appointments (from the Project calendar)
- Subject Randomization settings
- Custom Data Quality rules
- Any other Project Settings or attributes

SECTION (B): Where is the REDCap Project's Data Dictionary file for download?

The Data Dictionary can be found by going to the [Project Setup] section (see Fig 1).

Click on the [Data Dictionary] button. The Data Dictionary section will then be shown onscreen (see Fig 2).



Fig 1: Project Setup section

A Project Home	j ⊟ Project Setup	🛃 Online Designer	对 Data Dictionary	
			\mathbf{k}	VIDEO: How to use this page
This module will allow using the Online Desig Designer may help you more helpful if you will	you to create new dat g ner or Upload Data get some initial field: be adding a large nu	a collection instrument: Dictionary (see tabs ab s/forms built quickly or mber of fields for this p	s/surveys or edit existing oove), in which you may to make quick edits, but roject.	g ones. Changes may be made by either use either method or both. The Online using the Data Dictionary file may be
This module may be us offline method called t you may construct you	ed for making chang he Data Dictionary. Th r project fields and af	es to the project, such a ne Data Dictionary is a s terward upload the file	s adding new fields or m pecifically formatted CS ^V here to commit the char	nodifying existing fields, by using an V (comma delimited) file within which nges to your project.
Click the 'Browse' or 'Cl Once your file has been that all the formatting of your project's curren the new Data Dictionar	hoose File' button bel n uploaded, changes v in your Data Dictionar nt Data Dictionary will y. The snapshot can l	ow to select the file on y will NOT immediately be y is correct before offic be created automatical ater be accessed and do	your computer, and uplo e made but will be displa ial changes are made to ly during the Data Dictio ownloaded from the Proj	bad it by clicking the 'Upload File' button. iyed and checked for errors to ensure the project. Snapshot note: A snapshot onary upload process before committing ject Revision History page.
Need some help? If you wish to view an e demonstration file, or y also see the instructior	example of how your l you may view the <u>Data</u> is listed on the <u>Help 8</u>	Data Dictionary may be a Dictionary Tutorial Vid « FAQ.	formatted, you may dov leo (10 min). For help set	vnload the <u>Data Dictionary</u> tting up your Data Dictionary, you may
Steps for making proj 1.) <u>Download the cur</u> 2.) Edit the Data Dict 3.) Upload the Data 1 4.) The changes will b	ect changes: rrent Data Dictionary ionary (see the <u>Help &</u> Dictionary using the fo be made to the projec	EFAQ for help) form below thatfer the Data Diction	ary has been checked fo	r errors
Upload your Data Format for min/ma Browse No fi Upload File	a Dictionary file (CSV ax validation values fo le selected.	file format only) r date and datetime fie	lds: DD/MM/YYYY or YY	YY-MM-DD

Fig 2: Data Dictionary section

SECTION (C): Downloading the Project's Data Dictionary file

When you download the REDCap Project's Data Dictionary file, you are actually downloading a file (.csv file) that defines <u>ALL</u> of the current FORMS/INSTRUMENTS and DATA VARIABLES found in a Project.

Here are the steps to download a REDCap Project's Data Dictionary file.

- (1) See the area marked as [1] in Fig 2.
- (2) Click on the link [Download the current Data Dictionary] and save the resulting file to your computer.

SECTION (D): Uploading a Data Dictionary file into a REDCap Project

When you upload a Data Dictionary file into a REDCap Project, you are actually importing <u>ALL</u> of the Forms/Instruments and Data Variables that are being defined in that Data Dictionary file.



Uploading a new Data Dictionary WILL <u>OVERWRITE</u> (NOT UPDATE) the current Data Dictionary present in the REDCap Project.

Any pre-existing Forms/Instruments and Data Variables present in the REDCap Project **WILL BE** <u>OVERWRITTEN</u> by the imported Data Dictionary.

Here are the steps to upload a Data Dictionary file to a REDCap Project.

- (1) See the area marked as [2] in Fig 2.
- (2) Click on the [Browse] button to locate the Data Dictionary file on your computer.
- (3) Once that is done, click on the [Upload] button to upload the Data Dictionary file into the REDCap project.
- (4) The REDCap system will inform you of the changes to be made (if any), and ask for your **confirmation to proceed** (see Fig 3).
- (5) See <u>Section (E)</u> if there are errors found in the Data Dictionary.
- (6) If there are no errors, click on [Commit Changes] to proceed, or [Cancel] to stop the process.

🕲 Your document was uploaded successfully and awaits your confirmation below.
No errors or warnings were found in the document.
 The uploaded data dictionary contains 180 fields, which will replace the 2 fields that currently exist in the project (excluding 'Form Status' fields, which are automatically generated by REDCap).
Are you ready to commit the changes to the project from the uploaded Data Dictionary? (Click the button below to submit the changes.)
Commit Changes Cancel

Fig 3: Uploading a Data Dictionary – Confirmation dialogue

SECTION (E): Errors found in your Data Dictionary

After clicking on the [Commit Changes] button, do note that the changes are **NOT IMMEDIATELY** made to the Project.

Instead, the REDCap system will first check the uploaded Data Dictionary file for any errors to ensure that all the formatting in your Data Dictionary is correct before the changes are made to the project.

If you have not opened and changed anything in the downloaded Data Dictionary, it is unlikely there will be any errors when the Data Dictionary is uploaded.

However, if there are errors found in the uploaded Data Dictionary, the changes will be rejected and no changes will be made to the Project.

The REDCap system will then list all the errors and their corresponding cell locations in the Data Dictionary (Fig 4).

You will **need to resolve these Errors** in the Data Dictionary file before you can use it for uploading to the REDCap Project.

RETURN TO PREVIOUS PAGE	
Your data dictionary could NOT be uploaded be errors and try uploading your data dictionary again Errors found in your Data Distionary.	ecause of the errors listed below. Please correct these in.
The following variable/field names were duplicated. P once. first_icu_date (A4)	lease rename these field names so that they only appear
There are syntax errors in some calc field equations. Tused in the calc field equation. Please remove all synt errors in their equation. rit_diff2 (F14)	This may occur if illegal characters or illegal functions are ax errors. Below are the calc fields that contain syntax This refers to the Cell location in the Data Dictionary file. (CSV format)
There is a syntactical error in the branching logic for t L127, L128, L129, L150, L153, L154 There are syntax errors in some branching logic. This in the branching logic. Please remove all syntax errors branching logic. first_rit_cul (L9) cul1_spec1 (L10) rit_infection2 (L12) rit_diff2 (L14) text_cul1 (L15) text_cul2 (L16) fio2_2 (L118) urine_cul (L123) month_doe (L127) date_doe (L128) iuc_status (L129) lcbi_symp (L150) month_doe_clabsi (L153) date_doe_clabsi (L154)	he following cells: L9, L10, L12, L14, L15, L16, L118, L123, may occur if illegal characters or illegal functions are used s. Below are the fields that contain syntax errors in their

Fig 4: An example of Errors found in your Data Dictionary

SECTION (F): How to export a single, specific Form (Instrument)

If you are only intending to export a **<u>SINGLE</u>** specific Form from your REDCap Project, then you **CANNOT SHARE** the Data Dictionary file, as the Data Dictionary contains <u>ALL</u> of your Project's Forms and Data Variables.

To export a single Form, you will need to download the [Instrument ZIP] of the Form/Instrument you want to share. This can be done by going to the [Online Designer] section (See Fig 5).

A Project Home	j ⊒ Project Setup	Online Designer	😹 Data Dic	tionary	,	
The Online Designer wi web browser. NOTE: W	ll allow you to make p hile in development s	project modifications to tatus, all field changes	Create snaps Last fields and data will take effect	ihot of in t snapsho a collect immedi	strumer t never	TTS VIDEO: How to use this page struments very easily using only your n real time.
Data Collection Instruments	Add new instrume Create a new ir O Upload instrum	nt: nstrument from scratch nent ZIP file from another	r project/user or	externa	al libra	ries 😡
Instrument name	•			Fields	View PDF	Instrument actions
Demographics				1	*	Choose action 🗢
Baseline Measure	ements			0	7	Choose action 🗢
Blood Test Result	s			0	7	Choose action 🤝
						P Rename
						🖺 Сору
						* Delete
						Download instrument ZIP

Fig 5: The [Online Designer] section

SECTION (G): Downloading a single, specific Form (Instrument ZIP)

Here are the steps to download the [Instrument ZIP] of a specific Form for sharing.

- (1) Go to the [Online Designer] section (see Fig 5).
- (2) Click on the [Choose action] button of the specific Form you want to share.
- (3) Click on [Download Instrument ZIP] from the dropdown menu, and save the resulting file to your computer.

SECTION (H): Uploading a single, specific Form (Instrument ZIP)

Here are the steps to upload the [Instrument ZIP] of a specific Form into a REDCap Project.

- (1) Go to the [Online Designer] section (see Fig 5).
- (2) Click on the [Upload] button.
- (3) Click on the [Choose File] button to locate the [Instrument ZIP] file on your computer (see Fig 6).
- (4) Once that is done, click on the [Upload Instrument ZIP] button to upload the file into the REDCap project.

Select a REDCap instrument ZIP file on your computer that you downloaded from an <u>external instrument library</u> or from another project/user, and then click the Upload button below. Once it has been successfully uploaded, it will be added as the last data collection instrument in the project. Choose File No file chosen DISCLAIMER: By uploading your instrument ZIP file here, you hereby represent and warrant that to the best of your knowledge, you are not uploading any copyrighted material of a third party to which you do not have an expressed written license or consent from the owner of the said copyright.	Upload instrument ZIP 🛛 🗶
Choose File No file chosen DISCLAIMER: By uploading your instrument ZIP file here, you hereby represent and warrant that to the best of your knowledge, you are not uploading any copyrighted material of a third party to which you do not have an expressed written license or consent from the owner of the said copyright.	Select a REDCap instrument ZIP file on your computer that you downloaded from an <u>external instrument library</u> or from another project/user, and then click the Upload button below. Once it has been successfully uploaded, it will be added as the last data collection instrument in the project.
	Choose File No file chosen DISCLAIMER: By uploading your instrument ZIP file here, you hereby represent and warrant that to the best of your knowledge, you are not uploading any copyrighted material of a third party to which you do not have an expressed written license or consent from the owner of the said copyright.
Upload instrument ZIP Close	 Upload instrument ZIP Close

SECTION (I): Sharing the ENTIRE REDCap Project

If you want to share the ENTIRE REDCap Project, you can do so by downloading the REDCap Project as a [REDCap XML file].

The XML file contains all **Forms**, **Data variables** and **Project settings** in a single file, which can be used for importing the Project to another REDCap system (or to other ODM-compatible systems).

However, do note that the XML file **DOES NOT** export the **Project Log files, Project Users, Project User-Rights** and **User-Roles** (if any).



- While the REDCap XML file is fully compatible in NHG (for both the Staging and Production Servers), the XML file can only be imported by other REDCap Systems which are version 6.12.0 or higher.
- The REDCap XML file is in CDISC-ODM format (ODM version 1.3.1) for ODM-compatible systems.

SECTION (J): Downloading the Project XML file

The REDCap Project's XML file can be found by going to the [Other Functionality] section as shown in (Fig 7).

Here are the steps to download the Project XML file.

(1) Go to: [Project Home] → [Other Functionality]

There are two options to download the XML File (see Fig 7).

- (a) Download metadata only (XML) ← [RECOMMENDED OPTION] This option contains only the full Project setup (including all the Forms, Data Variables and Project Settings).
- (b) Download metadata <u>& data</u> (XML) ← [NOT RECOMMENDED! DO NOT USE!] This option contains the full Project setup AND <u>ALL</u> Project Data.
- (2) Click on the Download metadata only (XML) button, and save the resulting file to your computer.



Fig 7: Project 'Other Functionality' section to download the Project XML file

IMPORTANT

- <u>DO NOT USE</u> the <u>second</u> button labelled as [Download metadata <u>& data</u> (XML)] as this option includes <u>ALL of the collected data</u> into the XML File.
- This is very risky, especially if your Project Data contains personally-identifiable information.
- You could <u>unintentionally expose identifiable information</u> to unauthorized parties if the wrong button was used to download the XML file.

IMPORTANT

The HUMAN BIOMEDICAL RESEARCH ACT (HBRA) (Section 27) states that:

"Every person who has obtained <u>individually-identifiable information</u> or human biological material for the purposes of human biomedical research <u>must take</u> all reasonable <u>steps and safeguards</u> as may be necessary, including rendering information or material non-identifiable, to <u>protect such information</u> or material against accidental or unlawful loss, modification or destruction, or unauthorised access, disclosure, copying, use or modification. Any person who contravenes these requirements in HBRA shall be guilty of an offence and shall be liable on conviction to a fine or to imprisonment or to both."

SECTION (K): Uploading the Project XML file as a new Project

Here are the steps to upload a Project XML file to create a new REDCap Project in your destination REDCap system,

- (1) Go to [Create a new REDCap Project] and fill in the necessary fields (see Fig 8).
- (2) Select the [Upload a REDCap Project XML file] option, and click on the [Browse] button to locate the Project XML file on your computer.
- (3) Once that is done, click on the [Create Project] button to create the new Project with the Project XML file.

+ Create a new REDCa	p Project
You may begin the creation of a button at the bottom.	new REDCap project on your own by completing the form below and clicking the Create Project
Project title:	
	Title to be displayed on project webpage
Purpose of this project: How will it be used?	Select One Y
Assign project to a Project Folder?	
Project notes (optional): Comments describing the project's use or purpose that are displayed on the My Projects page.	
Start project from scratch or begin with a templat	O Create an empty project (blank slate) O Upload a REDCap project XML file (CDISC ODM format) ?
	Select XML file: Browse No file selected.
	Use a template (choose one below)

Fig 8: Uploading the Project XML file

ΝΟΤΕ

- NHG Users <u>CANNOT CREATE NEW PROJECTS</u> on the Production Server.
- Please contact the NHG REDCap Administrator (redcap@nhg.com.sg) if you need to create a Project with an XML file for the Production Server.

Contact Us

If you have any queries, or have encountered any technical difficulties with the REDCap System, please contact us (*redcap@nhg.com.sg*) with your **REDCap username**, **Project Title**, and a **description of the problem** together with **screen-capture of the error message/problem** where possible.

Please provide as much information as possible about the problem (*eg: steps/actions leading to the error; the error message*) so that we can efficiently pin-point and troubleshoot the problem for you.

-- END --