

Save Survey PDF to a Field – How-to Guide

Note: there is a **\$100** one-time fee to activate this module in each REDCap project. This fee does not include setting up the source instrument/target pair fields for your project or building the File Upload fields. There is a \$100/hour fee if you would like the REDCap Team to configure the module for your project's needs.

Introduction:

This REDCap external module generates a PDF of a **survey** upon completion and automatically saves it to a file upload field within that subject's record. It is configured at the project level with source instrument (survey) / target field (file upload) pairs. In the event of save errors, the PDF is sent to a backup email address.

Some use cases of Save Survey PDF to a Field include:

- Storing a copy of a subject's signed eConsent survey in their record to show which version of the ICF the subject signed.
- Storing a copy of any completed survey(s) in the participant's record.
- Having a backup copy of a respondent's survey responses if the survey is changed/modified later.

Requirements to Use/Configure the Module:

- A REDCap project with *at least* one survey enabled and *at least* one File Upload field to save the PDFs on a form that is *not* enabled as a survey.
- Any form that needs to be saved using this module *must be completed as a survey*.
- The User Right of 'Project Design and Setup.'
- Provide the REDCap Team with your fiscal contact information for the \$100 activation fee (to be billed upon module activation).

Before you can configure this module, you will need to create the survey(s) and file upload field(s) needed for configuration. This module can save PDFs for as many surveys as desired, but each survey is saved as its own PDF and needs a corresponding File Upload field. Additionally, the PDFs must be saved to file upload fields on a non-survey instrument. You will need to create a File Upload field for *each* survey that needs to be saved. You may also want to create more than one file upload field for each survey because the *module will not override any existing saved PDF*. For example, if you need to re-consent a subject, you would need *at least 2* File Upload fields: one for the original consent and one for the re-consent. Otherwise, the re-consent will not get saved because the PDF of the original consent will not get written over with the new one.

In the example below, I want the participant's eConsent form to be automatically saved into the 'Saved PDF of eConsent' field. Since I may need to re-consent this subject later, I have created 3 file upload fields to be safe. If I try to consent this subject more than 3 times, the module will fail to save the PDF since there is no more blank File Upload fields.

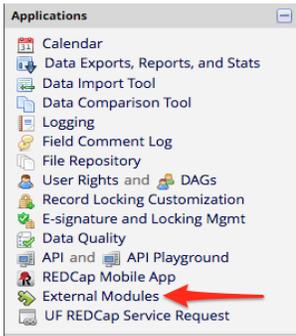
The variable names of these 3 File Upload fields for the eConsent survey must be appended with `_1`, `_2` and `_3`: `[saved_survey_1]`, `[saved_survey_2]`, and `[saved_survey_3]`. The base name, i.e., 'saved_survey,' does not matter, it can be named anything you want, as long as you use the same base name for the file upload fields that will be collecting the same survey.

In the example below, I want the participants completed Geriatric Depression Scale (GDS) survey to be automatically saved into the 'Saved PDF of GDS survey' field. Since I may need to re-administer this survey, I have created 2 file upload fields to be safe. If I try to save this survey more than 2 times, the module will fail to save the PDF since there is no more blank File Upload fields.

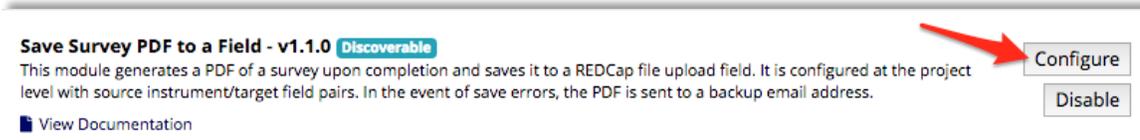
These 2 File Upload fields for the GDS survey must be appended with _1, and _2: [saved_gds_1] and [saved_gds_2]

Steps to enable and use the Module:

- 1) Build all your project's surveys and at least one non-survey form, with the corresponding File Upload fields, to have the PDFs uploaded into them.
- 2) Assign all forms to study events (if project is longitudinal).
- 3) Contact the REDCap Support Team to enable to module (CTSI-REDCAP-SUPPORT-L@LISTS.UFL.EDU) and provide your fiscal contact information in the email for the \$100 activation fee.
- 4) Once activated by the REDCap Support Team, click on the 'External Modules' link under the *Applications* menu in the project.
- 5) Click on 'Configure' next to the *Save Survey PDF to Field*.
- 6) Configure the module.
- 7) Click on 'Save.'
- 8) Test the module configuration using test surveys.
- 9) Request to move the project into Production status.



Note: you will need the User Right of 'Project Design & Setup' to have access to the External Modules page to configure the module.



Configuring the Module:

After you click on Configure, you will be taken to the screen shown below:

Configure Module: Save Survey PDF to a Field

Project Settings	Value
Email address that will receive generated PDFs should this module be unable to save the PDF: <small>* must provide value</small>	<input type="text"/>
1. instrument-upload_field pair: +	
1. Name of survey instrument that should be saved to the upload field: <small>* must provide value</small>	<input type="text"/>
1. Field where PDFs of the survey named above should be saved: <small>* must provide value</small>	<input type="text"/>

Cancel Save

To add more than one instrument upload/field pair, click on the [+] sign next to 'instrument-upload_field pair.'

Example Configuration:

In the example below, I want to save the completed *eConsent Example* survey and the *completed GDS Short Form* survey in the subjects' records on the non-survey form called *PDFs* (the name of the form does not matter, only what you name the variables/fields on that form).

Instrument name	Fields	View PDF	Enabled as survey	Instrument actions	Survey-related options
eConsent Example	21			Choose action	Survey settings + Automated Invitations
GDS Short Form	16			Choose action	Survey settings + Automated Invitations
PDFs	5		Enable	Choose action	

Here's what my *PDF* instrument looks like, which will store the PDFs. Note that all the variable names end with *_1, _2, _3*, etc., for both surveys I want to automatically save the PDF of.

Current instrument: **PDFs** Preview instrument

eConsents

Variable: saved_survey_1
Saved PDF of eConsent survey Upload document

Variable: saved_survey_2
Saved PDF of eConsent survey Upload document

Variable: saved_survey_3
Saved PDF of eConsent survey Upload document

GDS

Variable: saved_gds_1
Saved PDF of GDS survey Upload document

Variable: saved_gds_2
Saved PDF of GDS survey Upload document

Here's how the Module was configured for this example:

Configure Module: Save Survey PDF to a Field

Project Settings	Value
Email address that will receive generated PDFs should this module be unable to save the PDF: <small>* must provide value</small>	<input type="text"/>
1. instrument-upload_field pair: +	
1. Name of survey instrument that should be saved to the upload field: <small>* must provide value</small>	econsent_example
1. Field where PDFs of the survey named above should be saved: <small>* must provide value</small>	saved_survey_1 - Saved PDF of eConsent
2. instrument-upload_field pair: + -	
2. Name of survey instrument that should be saved to the upload field: <small>* must provide value</small>	gds_short_form
2. Field where PDFs of the survey named above should be saved: <small>* must provide value</small>	saved_gds_1 - Saved PDF of GDS survey
Save	

Email address: this is who will receive the error messages that a PDF could not be uploaded because there are no more blank File Upload fields in that subject's record. An email address is required.

Instrument-upload_field pair: this is the survey that you want saved and the corresponding File Upload field.

Note: you only need to set the *first* (i.e., '_1') File Upload field for each survey. This module will use the base name of the designated field name and append '_1', '_2', '_3', etc., looking for additional fields into which it can save the PDF. If your original field name has the format [field_name_1], the module will increment the number at the end of field name by 1 and look for [field_name_2], [field_name_3], etc., until it finds an empty file upload field.

Testing the module:

Complete the forms you have enabled this feature on as surveys. Once you have submitted the forms as surveys, find the record(s) that were created and look at the form that saves the PDFs.

Record ID 635

Data Collection Instrument	Status
eConsent Example (survey)	✓ +
GDS Short Form (survey)	✓
PDFs	✗

Editing existing Record ID 635

Record ID	635
eConsents	
Saved PDF of eConsent survey	econsent_example_2019-02-..._1651.pdf (1.27 MB) <small>Remove file or Send-it</small>
Saved PDF of eConsent survey	<small>Upload document</small>
Saved PDF of eConsent survey	<small>Upload document</small>
GDS	
Saved PDF of GDS survey	gds_short_form_2019-02-06_1651.pdf (0.04 MB) <small>Remove file or Send-it</small>
Saved PDF of GDS survey	<small>Upload document</small>

In case of errors

If the module cannot save the PDF it will attempt to send an email with the PDF attached to the email address configured in the module. It will also log an error to the projects REDCap log. Should the email fail, that will also be logged. Those log events look like this in the Logging module:

05/02/2018 11:42am	[survey respondent]	save_survey_pdf_to_field alert Record 1 (stage_one)	save_survey_pdf_to_field sent an email containing the PDF from the 'my_first_instrument' instrument.
05/02/2018 11:42am	[survey respondent]	save_survey_pdf_to_field alert Record 1 (stage_one)	save_survey_pdf_to_field failed to save a PDF from the 'my_first_instrument' instrument to the 'consent' field.

Questions? Contact the REDCap Support Team at: <https://redcap.ctsi.ufl.edu/redcap/surveys/?s=DUPrXGmx3L>