How Do I Do Simple Synchronization with Dropbox

Summary

This step-by-step article describes how to synchronize your data and applications between CSPro and Dropbox. This article describes simple synchronization. See the CSPro helps for advanced synchronization options.

When using mobile devices for a survey or census it is important to be able to transfer data collected in the field back to the head office. This allows for faster processing and analysis as well as better monitoring of the progress of the field operation.

In CSPro, transferring data between devices in the field and the head office is referred to as synchronization. CSPro supports data synchronization over the Internet between interviewers' devices in the field and a central server. Interviewers use CSEntry to collect data on tablets, phones, or laptops and then use the Internet to synchronize the data on their devices with a server at the head office or in the cloud. This article focuses on using Dropbox to synchronize.

Requirements

CSPro 7.0 or higher

CSPro Data Entry Application SimpleCAPI.ent

You can find this application in the CSPro examples folder. See the CSPro helps to open the examples folder.

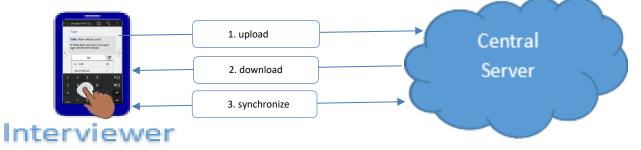
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This article assumes you are familiar with the following topics:

- CSPro Data Dictionary
- Creating and implementing a CSPro CAPI Data Entry Application
- Using Dropbox

Description of the Technique

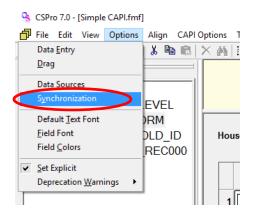
CSPro Synchronization allows the exchange of files between the tablet/phone and an FTP server, web server, or Dropbox directory. You can send the captured data files from your device to the server and download new versions of data entry applications from the server to your device. In addition, if an internet connection is not available, you can exchange files between two Bluetooth devices. Here, we describe how to synchronize using Dropbox



This example assumes that the .pff_and .pen files for the application have already been placed on the device and that you have entered data into a file.

Synchronization using Dropbox

- 1. Set up the application for synchronization in Dropbox
 - a. Select Options/Synchronization from the menu



b. In the resulting dialog box select "Dropbox"

Synchronization Options	×
C CSWeb C Dropbox	C FTP
Test connection	
Synchronize main data file: Upload changes to server	
Download application files (.pen and .pff) Path to application on server:	
OK Cancel	Help

c. In the "Synchronize main data file" drop down select the type of synchronization you wish to do-

Synchronization Options	×	
Synchronization Options Synchronize main data file: Upload changes to server Synchronize main data file: Upload changes to server Download application file: Download changes from server Path to application on service: Service danges from server Path to application on service: Service danges from server Path to application on service: Service danges from server Path to application on service: Service danges from server Path to application on service: Service danges from server Path to application on service: Service danges from server Path to application on service: Service danges from server Path to application on service: Service danges from server S	C FIP	Download changes from server Upload changes to server Download changes from server Sync local and remote changes
OK Cancel	Help	

- Upload changes to server: Only data that are modified on the device will be sent to the server. No data will be downloaded from the server. This is the most common option for interviewers when all interviewers will work on unique assignments.
- Download changes from server: Only receive modified data from the server. Do
 not upload local changes. This might be used for a supervisor who wants to see
 what changes interviewers have made but does not want to make changes
 themselves.
- Sync local and remote changes: Send local changes to the server and download changes from the server. This option can be used when multiple interviewers need to work on the same assignments. Note that if both interviewers modify a case at the same time, one will overwrite the changes made by the other.

d. Download the application (.pen, .pff) files

Check the **Download application files** box if you want to download the .pen and .pff files from the server to the local device in order to support application updates in the field.

In **Path to application on server** specify the path on the server where the latest versions of the .pen and <u>.pff</u> files are stored. This is used **only if the Download application files** option is checked

Sync Synchronize main data file:	Sync local and remote changes
Download application file	
Path to application on ser	rver: /CSPro/DataSync/SIMPLECAPI_DICT/dict

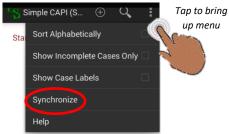
e. **Copy the .pen and .pff files to the CSEntry folder on the target device** as you normally would when creating or modifying a CSEntry application.

2. Synchronizing from the device

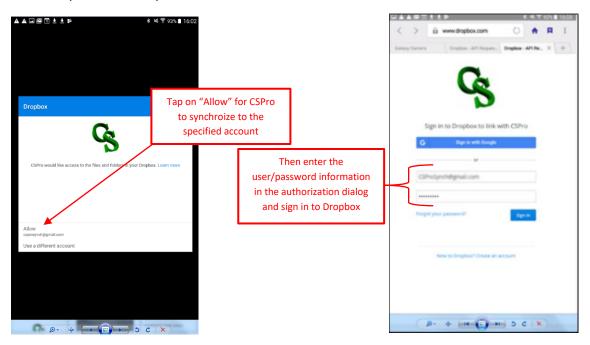
After following the above steps, the application on the device is ready for synchronization. After entering data simply tap on the synchronization icon or select "Synchronize" from the menu. Synchronization can only be launched from the case listing view; "Synchronize" cannot be run while entering case data.



You will see either the synchronize icon or synchronize will be on the menu. Which one you see depends on the device. On larger screens the icon will appear. On smaller screens, you will need to go to the menu to synchronize.



Once you tap "Synchronize", CSPro will transfer data to/from Dropbox based on the selected specification. The first time you synchronize, you will get the Dropbox authorization dialogs. This is done only for the first synchronization. After that, the authorization is saved on the device.



Logging in/out of Dropbox through the browser has no effect. CSPro only uses the credentials you entered for the initial connection to Dropbox.

If you get this screen click "Allow"	CSPro will indicate that it is synchronizing the files	When the synchronization is complete CSPro will issue the "Successfully synced" message
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Sign out	0001	Start New Case
C		Household #1 Head: Leataua
CSPro would like access to the files and folders in your Dropbox. Learn more Cancel Allow Signed in as: csprosynch@gmail.com	Synchronizing Simple CAPI Data.csdb Cancel	Household #12 Head: Tailo
← ඕ →	\leftarrow \square \square \rightarrow	Successfully synced \leftarrow $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$

3. Dropbox folder structure

The first time you synch with DropBox, CSPro will create the following folder structure

Dropbox > CSPro > DataSync > SIMPLECAP	I_DICT > data > dict
CSPro DataSync SIMPLECAPI_DICT	Dictionary Name This comes from the name of the dictionary associated with the file
50548370%2444550450054-0247-68as-beas-bib 50548370%24445509503-038e-4ao3-ao3rt-00786 dict sumPLECAPL/DICTAr/	

and place the data in the "data" subfolder.

If you plan on downloading the application from the survey to the devices, create a folder for the application files and place the application files (.pen, .pen, and any reference files) in that folder. In the below example, we create folder "/CSPro/DataSynch/SIMPLE_CAPI**/app"** for the application files

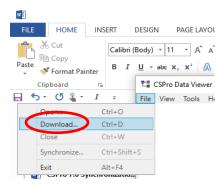
f	DataSync >	SIMPLECAPI_DICT	Dictionary Name
N	lame 🔺	This folder created to hold the application files (.pen, .pff)	
	data		
If "Download application file (.pen and .pff)" is checked, th application is downloaded fro	he		
the specified folder to the dev	vice. Synchronize main	lication files (.pen and .pff) tion on server: //CSPro/DataSync/SIMPL	

4. Getting the data from Dropbox

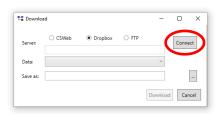
To get data from Dropbox use the use the Data Viewer tool from the tools menu



a. From the file menu of the Data Viewer select "Download"



- b. In the resulting dialog box
 - i. Select "Dropbox and click on the "Connect" button.



ii. CSPro will populate the "Data" dropdown using the data file list from Dropbox



iii. Select the dictionary label associated with the files you wish to download

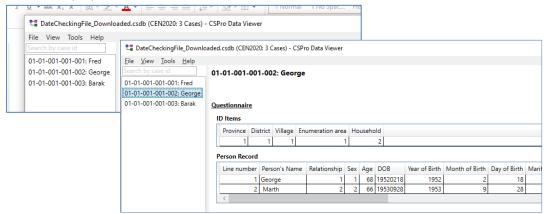
iv. In "Save As", navigate to the folder in which to store the file and give the file a name. Click the "Save" button.

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Save as <u>t</u> ype:	CSPro Data Files (*.	csdb)				\sim
∧ Hide Folders				<u>S</u> ave	Cancel	

v. The download dialog box will appear

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Server:	O CSWeb	Dropbox	⊖ FTP		Conne	ect
Data				~		
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				Download	San	cel

vi. Click "Download". CSPro will download the file to the specified folder/file name and will display the contents of the file.



VII. Once you have downloaded the file, to get updated data you can open the csdb file again in DataViewer and choose "Synchronize" instead of "Download". This should be faster since it will only download cases that were updated since the file was last synced.

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Notes

- When CSPro stores data in Dropbox it stores the data in a format specific to CSPro. CSPro uses this format to allow synchronization at the case level. The only way to access these data is using the Data Viewer tool or using synchronization from a CSPro application.
- CSPro Data Viewer populates the "Data" drop down using the Dictionary Label. Design data labels so the source (application) can be easily identified and is not ambiguous.

References

www.dropbox.com CSPro Helps

Properties

This article applies to ...

- Data Entry
- CSEntry
- CAPI (Computer Assisted Personal Interviewing
- Synchronization

Frequently Asked Questions

How to I synchronize external data files and other application files?

If you have additional files associated with the application such as image files or lookup files, place them in the Resource Folder. CSPro will package these files in the .Pen file. When you download the application files these files will be included. See the CSPro helps for more details about the **Resource Folder**.

If you have a large lookup or other big files (such as manuals), it is better to use sync from logic to sync each file separately. Placing these files in the pen file can make the pen file very large and slow to update. Using sync from logic, you can download only the changed file. You can find details on sync from logic in the CSPro helps.

Why do I get "Error downloading file xxx"?

The most common reason for this error is that the path to .pen and .pff is incorrect.

Sync Synchronize main data file: Sync local and remote changes	
Download application files (.pen and .off) Path to application on server //CSPro/DataSync/SIMPLECAPI_DICT/dict	Verify that the path is correct
OK Cancel <u>H</u> elp	

I don't see my data file in Dropbox?

CSPro's Dropbox sync does not store a single data file in the Dropbox. Instead, it stores multiple files in the directory CSPro/DataSync/ folder, one for each sync. Because of this, you will not see the data as a single file. In order to obtain the combined data file, use the DataViewer to download the data from Dropbox.

How do I switch to a different Dropbox account?

• Windows:

- Go to Control Panel
- Credential Manager
- Remove "Dropbox".

• CSPro will with ask for the Dropbox account when trying to synchronize

• Android:

- Go to Settings
- Application Manager
- CSEntry
- Click on Clear Cache (this removes the Dropbox information)
- CSPro will with ask for the Dropbox account when trying to synchronize.