

Setting up the Samsung SM-T230

Notes on android mobile device setup for data collection

Ernest Guevarra

14 April 2025

Contents

1	Setting up device from reset	1
1.1	Setting up Google account	1
1.2	Installing ODK Collect	3
1.2.1	Allow installation of apps from unknown sources	3
1.2.2	Download the APK file for ODK Collect v1.25	3
1.2.3	Install ODK Collect v1.24	3
2	Setting up ODK Collect for data collection	4
2.1	Open ODK Collect	4
2.2	Reset ODK Collect	5
2.3	Connect ODK Collect to the KoboToolbox server	6
2.4	Get blank forms	8
2.5	Filling blank forms	11

This document provides specific guidance on how to setup the [Samsung SM-T230](#) tablets for data collection using [Open Data Kit \(ODK\)](#). These notes are specific to the five (5) Samsung devices that have been provided.

1 Setting up device from reset

This section describes how to setup a Samsung SM-T230 that is new or has been factory reset. These notes are specific to 2 of the devices (out of the 5) that have been factory reset. These notes focus on specific steps of the setup process and assumes that the user is able to go through the guided setup process provided by Samsung on start-up. For notes on general mobile device setup, please refer to this [guide](#).

These steps will require the internet so please make sure to setup an internet connection first before doing these steps.

1.1 Setting up Google account

Android devices can run without a Google account. However, for the purposes of these specific tablets and for the ability to monitor the use of the tablets remotely, we would like to setup these tablets with a Google account. We will use the same Google account used in the other 3 devices that already has a Google account.

To setup this account on the device, go to *Settings > General > Accounts > Add account* (see Figure 1).

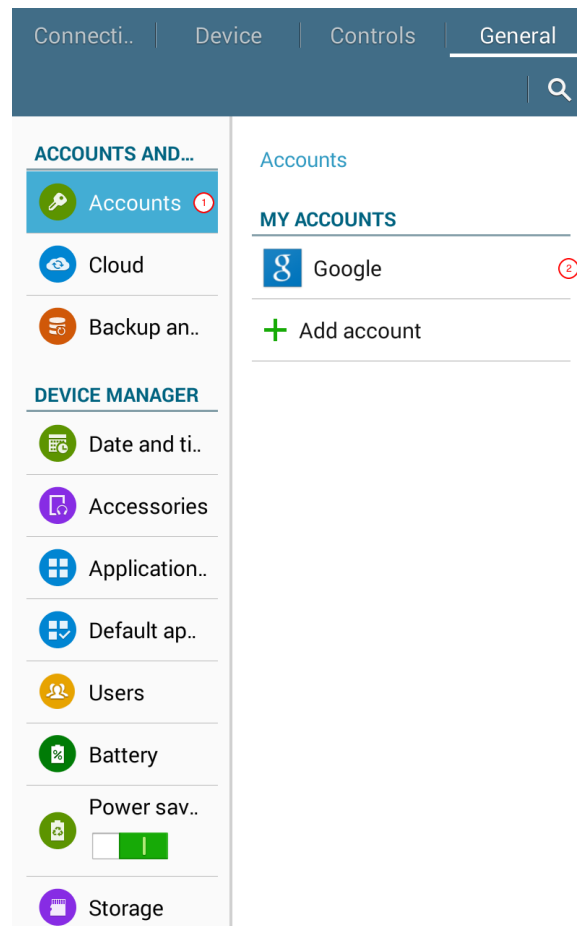


Figure 1: Accounts settings

Click on **Add account** and then follow the instructions after that. Use the following Google account credentials:

username: ernest@validmeasures.org password: TO BE SENT ON EMAIL

This account is an Google Workspace account and is at enterprise level with added security. When this account is used, a security measure for authentication will be initiated and the administrator will have to approve the login. Please notify Ernest Guevarra when devices are being setup so that this authentication can be approved in real time.

Once this has been approved and the account has been authenticated, the device will now be setup for that specific Google account.

1.2 Installing ODK Collect

[ODK Collect](#) is an open-source Android application used for data collection in the field, often in places with limited or no internet connectivity. It's part of the Open Data Kit (ODK) suite, which is widely used in research, humanitarian work, agriculture, health surveys, and more. The latest version of ODK Collect is v2025.1 and can be installed via the Google Play Store.

However, the Samsung SM-T230 is a relatively old mobile device with Android v4.4.2 (KitKat) version installed. These devices do not support later Android versions (v5 and higher). Because of this, these devices can only install up to a certain version of ODK Collect (specifically [v1.25](#)). Whilst this doesn't have any implications with our being able to run the survey using ODK Collect (v1.25 has all the features that we need for our current form), it does mean that we have to install ODK Collect v1.25 via [sideloading](#) rather than via the Google Play Store.

Following are the steps on how to sideload ODK Collect v1.25.

1.2.1 Allow installation of apps from unknown sources

To allow installation of apps from unknown sources, navigate to Settings > Security, *scroll down to* Unknown sources* option then toggle the button to allow installation of apps from unknown sources.

1.2.2 Download the APK file for ODK Collect v1.25

On the tablet's built-in browser, download the APK for ODK Collect v1.25 using this link - <https://github.com/opendatakit/collect/releases/download/v1.25.0/ODK-Collect-v1.25.0.apk>.

1.2.3 Install ODK Collect v1.24

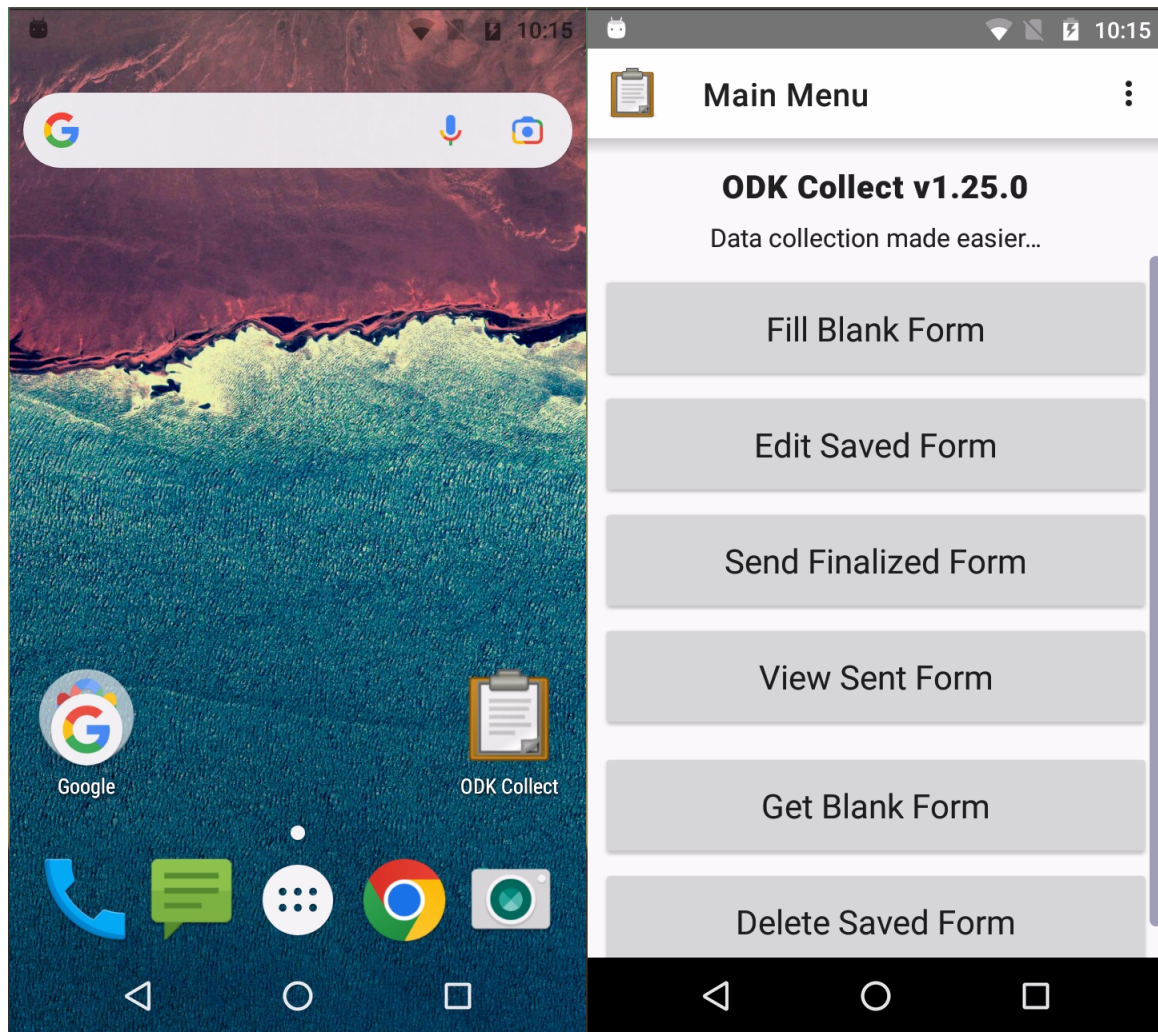
Navigate to the download folder and find the file `ODK-Collect-v1.25.0.apk`. Tap the file and then follow the prompts to install this version of ODK Collect.

2 Setting up ODK Collect for data collection

This section is for all five Samsung SM-T230 devices provided after they have all been setup with a Google account and ODK Collect v1.25 installed.

2.1 Open ODK Collect

Go to the ODK Collect application and then tap on it (Figure 2a). The ODK Collect app menu will then be seen (Figure 2b).



(a) ODK Collect app

(b) ODK Collect menu

Figure 2: ODK Collect app

2.2 Reset ODK Collect

1. Go to *Admin Settings* of ODK Collect (Figure 3a).
2. Select *Reset application...* (Figure 3b) option.
3. Tick the boxes for (Figure 3c):
 - All settings (internal settings, saved settings)
 - Saved forms (instances folder, instances database)
 - Blank forms (forms folder, forms database, itemsets database)
 - Form load cache (.cache folder)

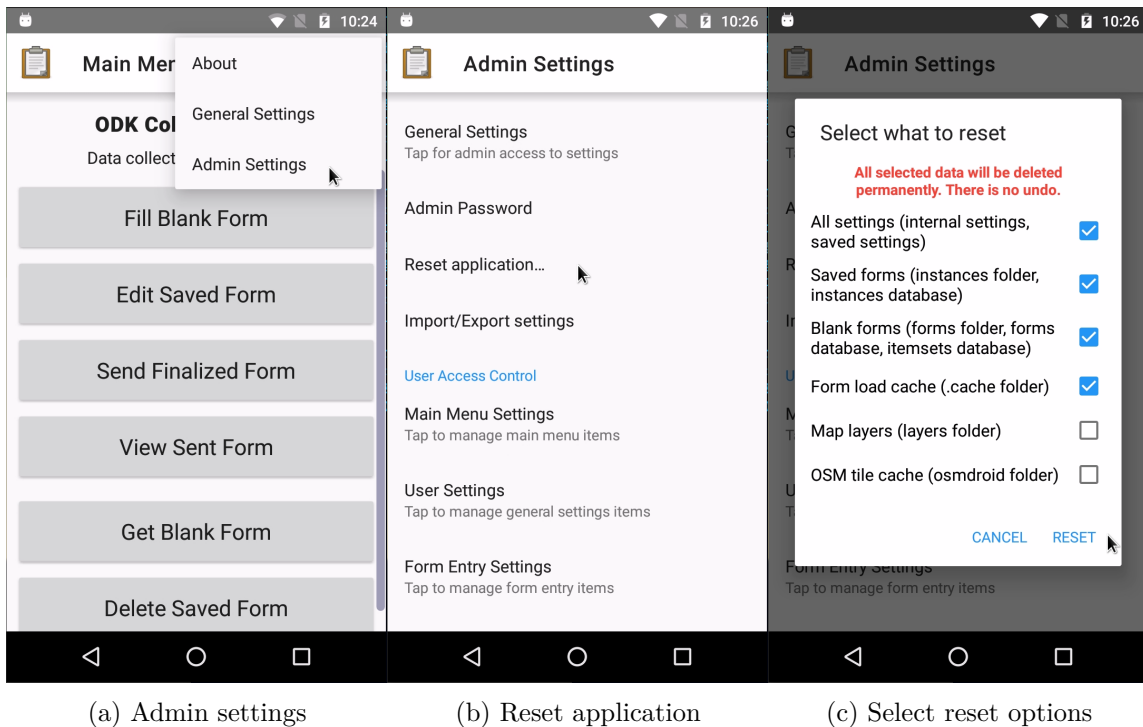
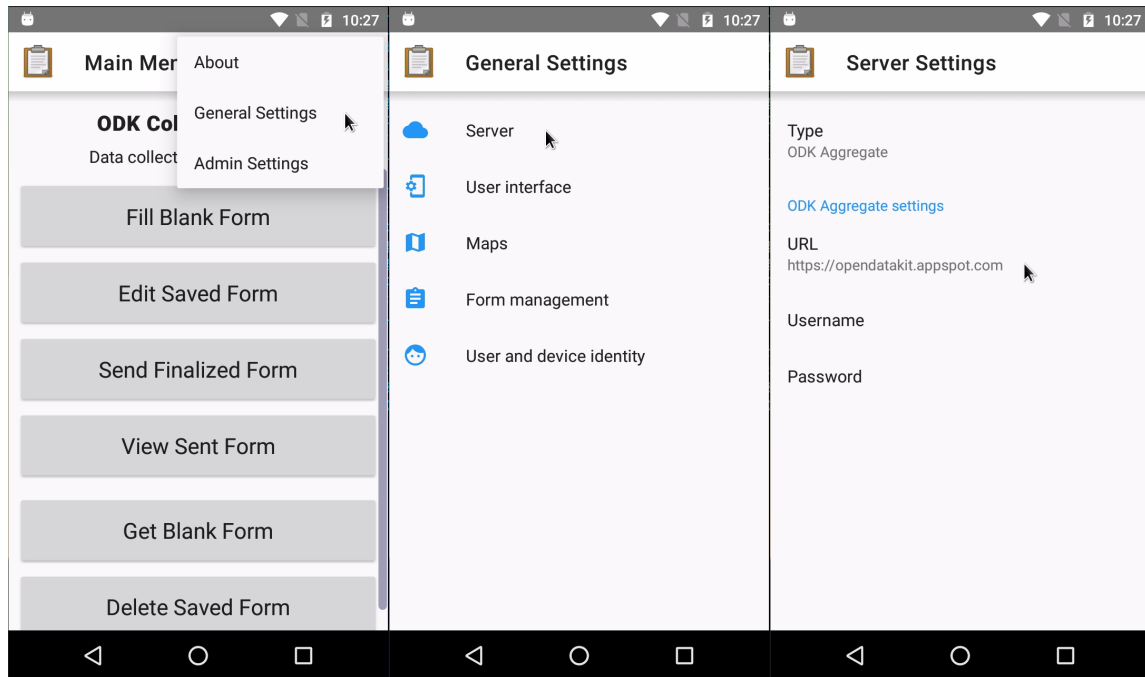


Figure 3: ODK Collect reset application steps

2.3 Connect ODK Collect to the KoboToolbox server

1. Go to *General Settings* of ODK Collect (Figure 4a).
2. Select *Server* option (Figure 4b).



(a) General settings

(b) Server settings

(c) Server settings options

Figure 4: ODK Collect server settings menu

3. Enter URL for the KoboToolbox server (Figure 5a). This should be set to `https://kc-eu.kobotoolbox.org`.
4. Enter username for the KoboToolbox server account (Figure 5b). This should be set to `ihmtbot`.
5. Enter password for the KoboToolbox server account (Figure 5c). Password will be provided separately on an email.

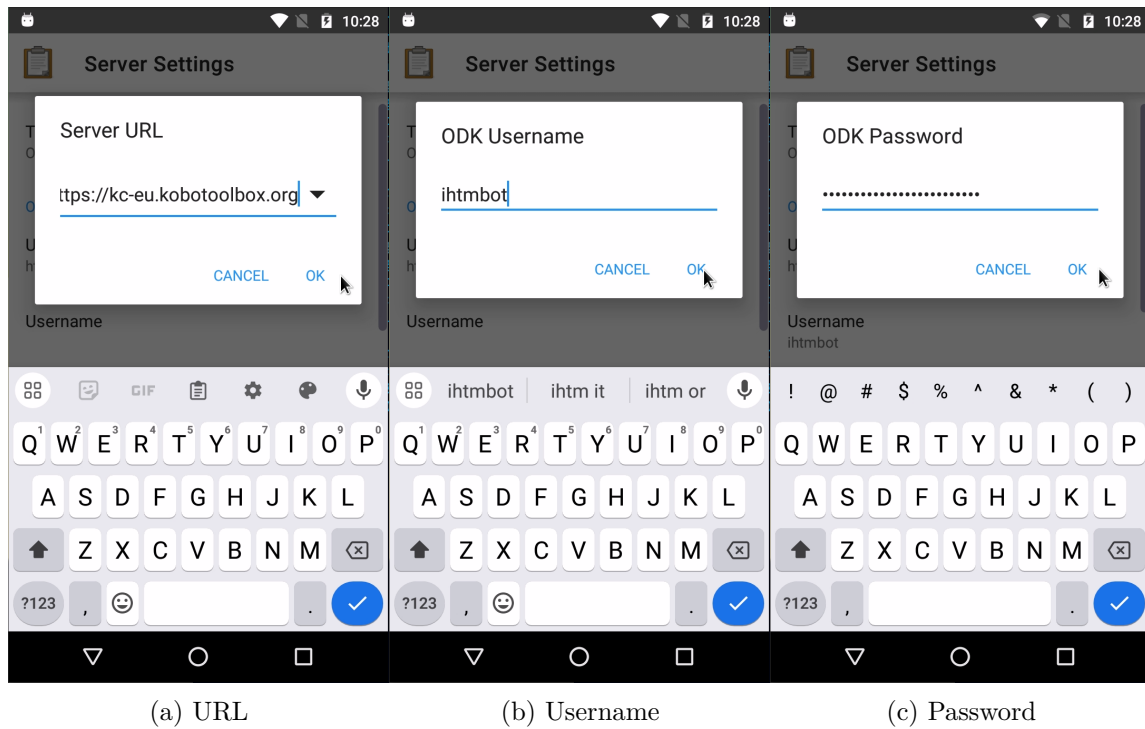


Figure 5: ODK Collect server settings

The ODK Collect server settings has now been set/updated (Figure 6)

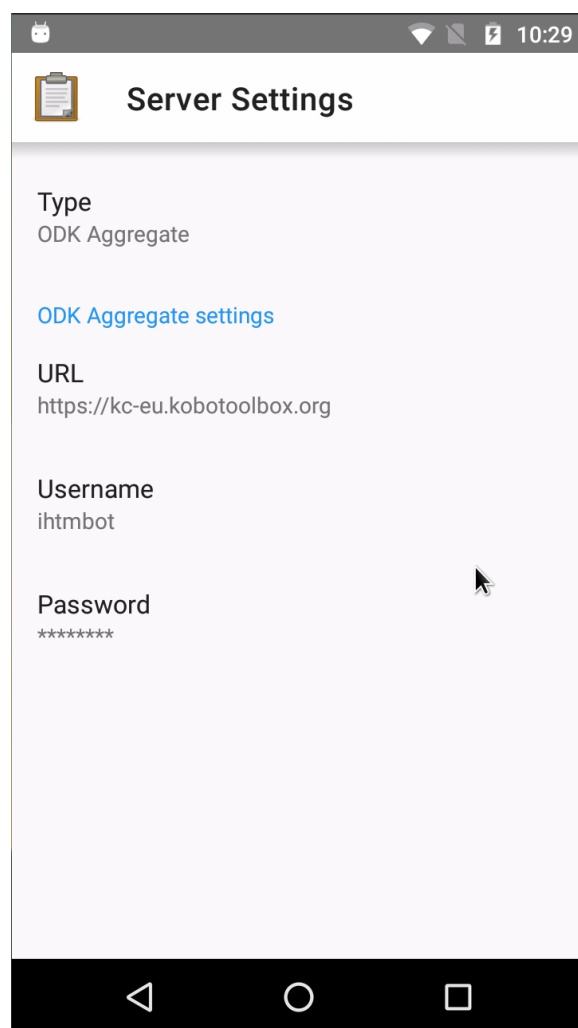
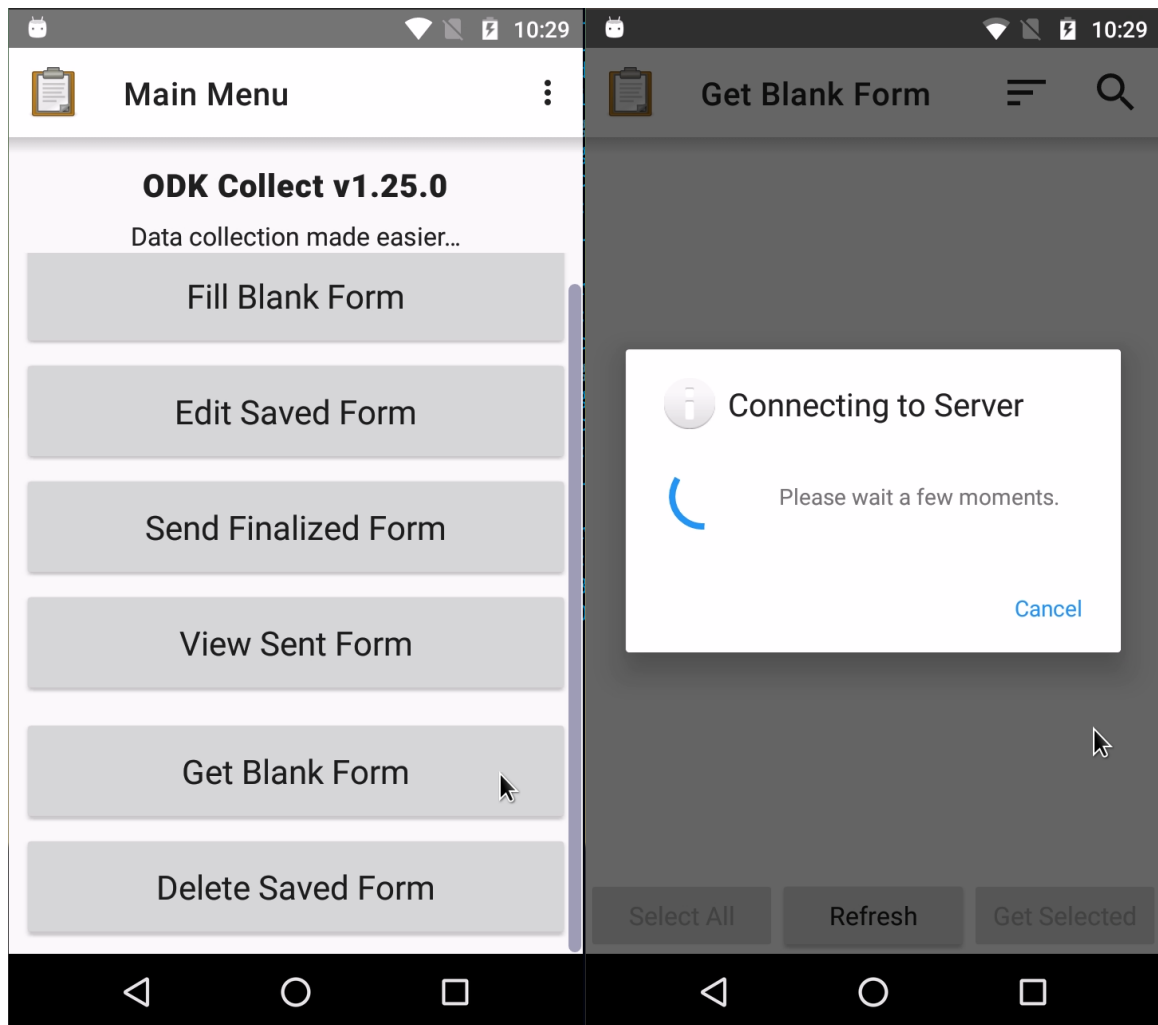


Figure 6: Server settings set/updated

2.4 Get blank forms

1. In the main ODK Collect menu, select *Get Blank Form* (Figure 7a). ODK Collect will connect to the KoboToolbox server (Figure 7b).

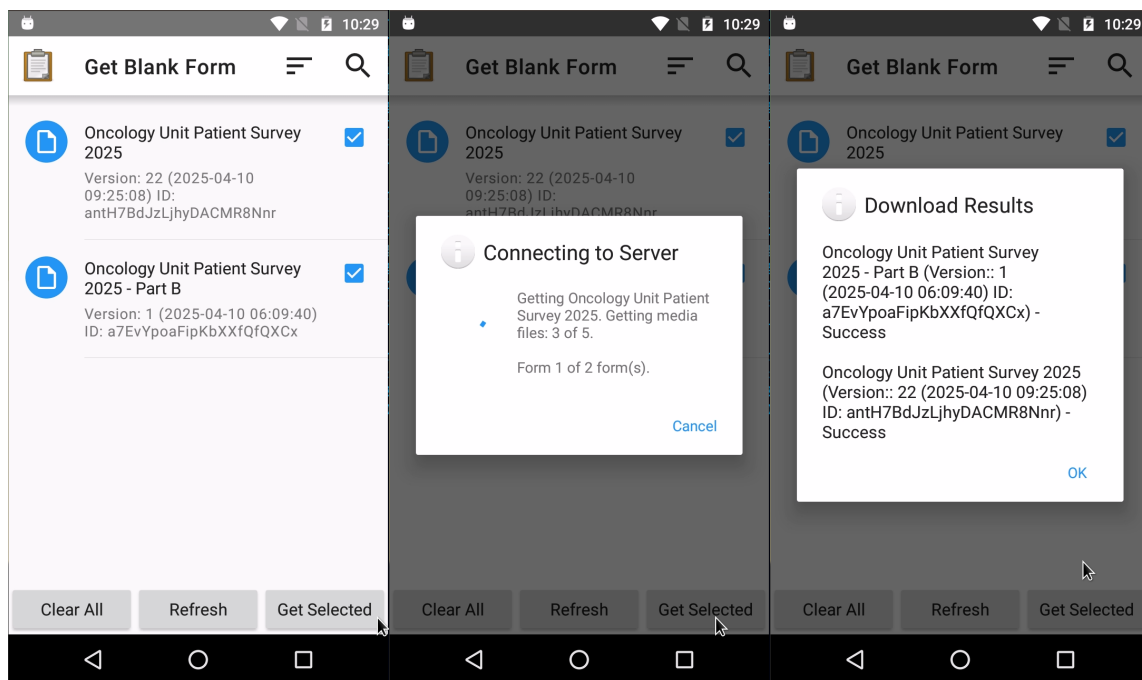


(a) Get blank form option

(b) Connect to server for blank form information

Figure 7: ODK Collect retrieving selected blank forms

2. Select the blank forms to retrieve and tap *Get Selected* (Figure 8a). ODK Collect will retrieve the selected forms from the server (Figure 8b).



(a) Select blank forms

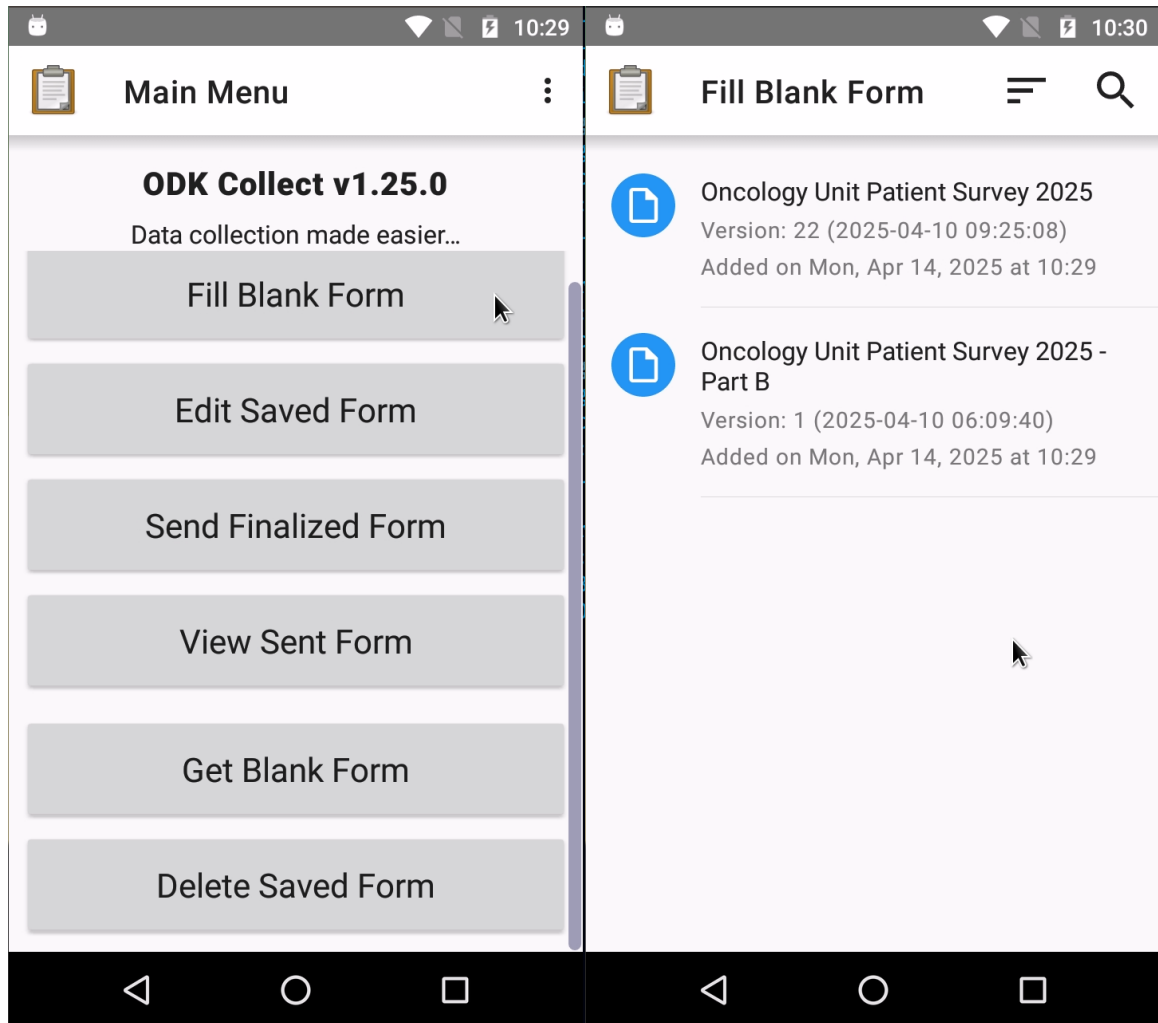
(b) Retrieving from server

(c) Retrieved from server

Figure 8: ODK Collect retrieving selected blank forms

2.5 Filling blank forms

1. In the main ODK Collect menu, select *Fill Blank Form* (Figure 9).
2. Select blank form to fill (Figure 9b).



(a) Fill blank form option

(b) Select blank form to fill

Figure 9: ODK Collect filling selected blank form