

# User manual for the electronic Privacy, Confidentiality and Security Assessment Tool

## Introduction

Health services are being scaled up in many low- and middle-income countries. This has resulted in a substantial increase in the amount of personal health information collected in order to develop and maintain comprehensive health records of a person's use of the services and to monitor and evaluate the use, cost, outcomes and impacts of programmes or services. Detailed personal health information is also needed to evaluate success towards achieving, for example, the 90–90–90 targets, universal health coverage and the Sustainable Development Goals.

However, if personal health information is not held confidentially and securely, people may be reluctant to use health services, owing to fear of being stigmatized or discriminated against. The confidentiality and security of personally identifiable information therefore has to be protected at all levels of the health system. In many countries, this will require the development and implementation of privacy laws and a confidentiality and security framework for protecting personal health information.

Many countries are in the process of developing and implementing national health identifiers (NHIDs) to ensure that each patient has a unique identity within the health system. This facilitates the development of comprehensive medical records and allows users of services to be tracked across health-care sectors. The development and use of NHIDs in a country's health-care system promotes the effectiveness and efficiency of data gathering, but their use further underlines the need to protect the confidentiality and security of personal health information.

While policy-makers and other stakeholders in several countries recognize the need to develop and implement policies for protecting the privacy, confidentiality and security of personal health information, to date few countries have developed, let alone implemented, such policies.

This is the electronic version of the paper-based [\*The Privacy, Confidentiality and Security Assessment Tool: user manual\*](#) and [\*The Privacy, Confidentiality and Security Assessment Tool: protecting personal health information\*](#) published by UNAIDS Geneva, 2019.

## Mobile Data Collection using ODK

Open Data Kit (ODK) is a free and open-source set of tools which helps organisations author, field and manage mobile data collection solutions. Its core developers are researchers at the University of Washington's (UW) Department of Computer Science and Engineering and active members of Change, a multi-disciplinary group at UW exploring how technology can improve the lives of under-served populations around the world.

The electronic version of the Security and Confidentiality Assessment Tool (eSAT) utilizes the Open Data Kit (ODK) platform to field and manage mobile data collection. This electronic tool provides users with the ability to collect data on a mobile device or computer; forward it to the server; aggregate the collected data on a server; and extract it in useful formats for analysis. The ODK platform and electronic surveys are free and can be used on any Android device. (Not available for use on Apple iOS or Windows)

The electronic version of the Assessment Tool has been created and countries will need to set up their own ODK Aggregate, a ready-to-deploy server to store the collected data. ODK Aggregate works in tandem with the ODK Collect Android App, in that it feeds the blank survey forms to the app, accepts the finalized submissions, and exports the data as CSV files for spreadsheets for analysis. ODK Aggregate can be deployed easily and quickly on Google's App Engine on the cloud, or deployed locally on a Tomcat server.

## Prerequisites

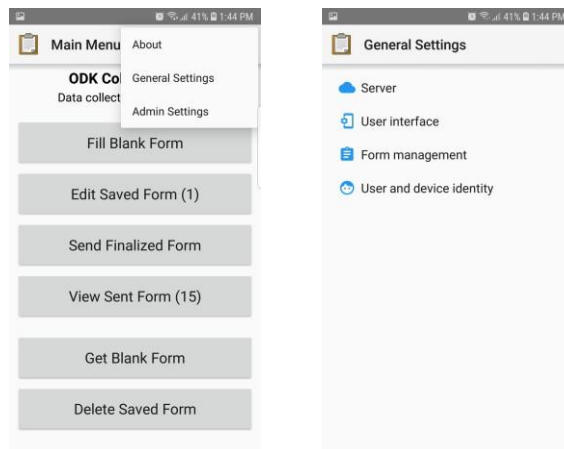
- No programming skills required!
- You will need a web-enabled mobile device running Android OS 1.6 or newer.
- You will need a local Tomcat server or Google Account to create a Google AppEngine instance.
- You will need Java 8 or higher installed and running on your computer for ODK Aggregate (download it [here](#) free).

## Getting Started

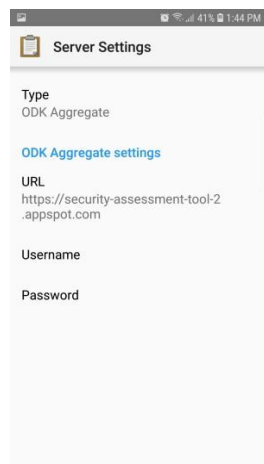
1. Determine whether to deploy ODK Aggregate using the cloud or a local server.
2. See Planning Your Aggregate Deployment' page on ODK's website that outlines all the matters that need to be considered.  
<https://docs.opendatakit.org/aggregate-deployment-planning/>
3. Once the appropriate deployment method is determined, follow the steps provided on the above webpage to install ODK Aggregate on the chosen server.
4. Now that you've set up your ODK Aggregate, you can upload your forms -- the last step before you start collecting data in the field. Follow the steps outlined under 'Using ODK Aggregate':  
<https://docs.opendatakit.org/aggregate-use/> Use the 'Add New Form' button on the 'Form Management' tab to upload the three Assessment Tool survey files provided on the UNAIDS website under at <http://ow.ly/3Rwz30nk4Ps>
5. Using an Android mobile device that is connected to the internet through Wi-Fi or a mobile network, download the free ODK Collect App from the Google Play store.
  - a. Open the app



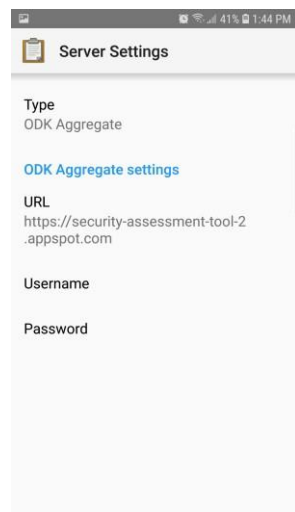
- b. in the top right corner select 'General Settings'.



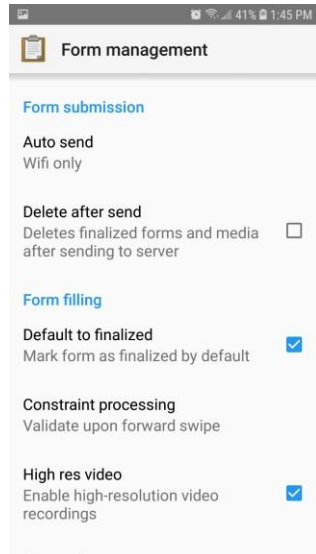
- c. Click 'Server'.



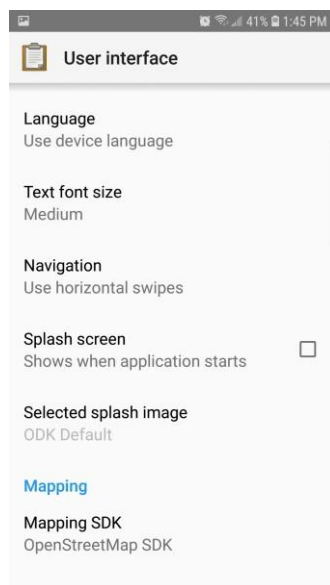
- d. Change the URL to that of your ODK Aggregate site (for example, if you set up using Google App Engine, it would be the name you chose for your application identifier: https://\_\_\_\_\_.appspot.com )



- e. Enter Username (created for collection in ODK Aggregate)
- f. Enter Password (created for collection in ODK Aggregate)
- g. Under 'Form Management', change 'Auto Send' setting to 'Wifi or cellular'. Also, make sure 'Default to finalized' and 'Finalize forms on import' are enabled with a checkmark.

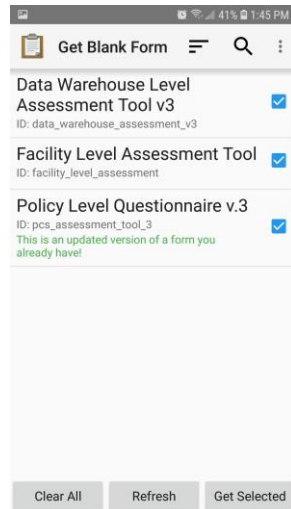


- h. Under 'User Interface' the Navigation preference can be set to 'horizontal swipes' or 'forward/backward buttons' depending on user preference.

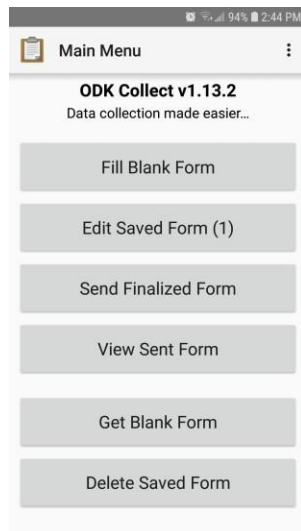


- i. Return to the Main Menu.

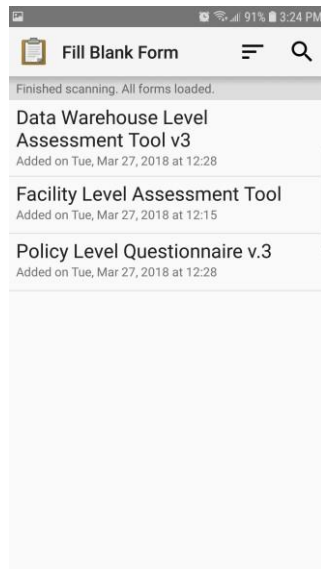
- j. Click 'Get Blank Form'.
- k. The three surveys loaded into ODK Aggregate (Step 3.a) should appear here. Select one or all.



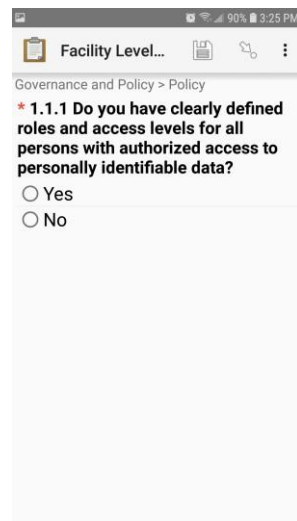
- l. Click 'Get Selected' at the bottom right.
- m. Return to the Main Menu.



- n. Click 'Fill Blank Form'.
- o. Select the survey you would like to complete.

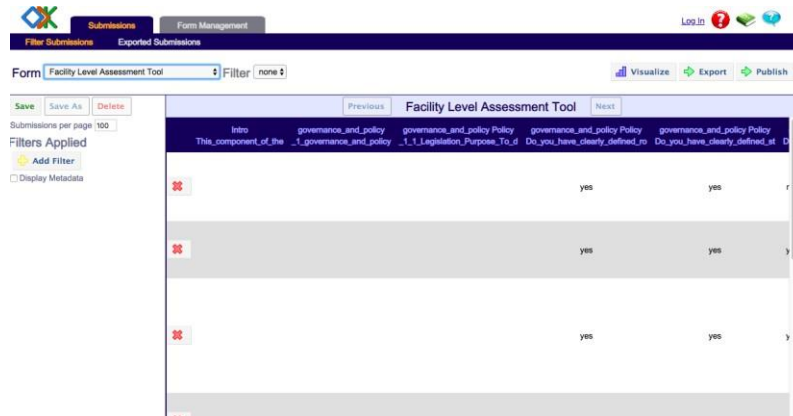


- p. Populate the form selected



6. After the initial setup on an Android device as indicated in Step 4, the surveys will be loaded onto that device and can be completed offline. They will be synced to ODK Aggregate the next time the device is connected to Wi-Fi or a mobile network. The steps would be as follows:
  - a. Open ODK app on your Android device.
  - b. Go to 'Get Blank Form'.
  - c. Select the required form and then 'Get Selected'.

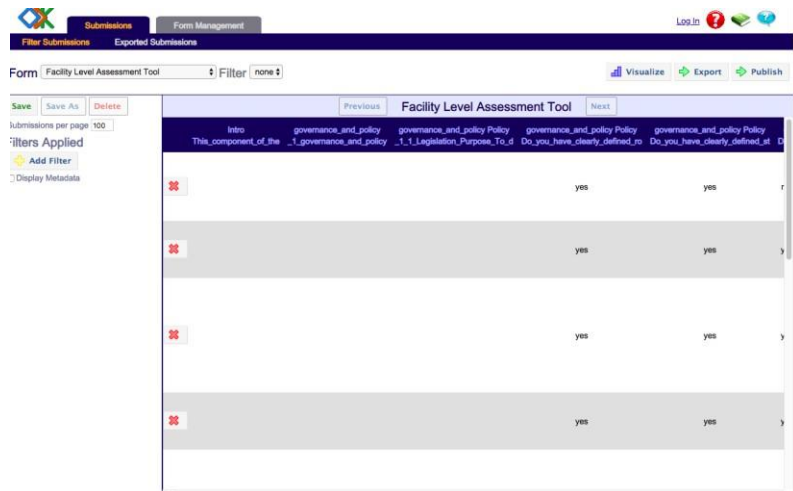
- d. Go to 'Fill Blank Form'.
  - e. When the form is completed
7. Data collected can be viewed under the 'Submissions' tab of ODK Aggregate and exported as CSV, KML or JSON files for further analysis/filter data in Aggregate  
<https://docs.opendatakit.org/aggregate-data/>
- a. Go to the submissions tab and select the form.



The screenshot shows the ODK Aggregate interface for the 'Facility Level Assessment Tool' form. The 'Submissions' tab is active, displaying a table of collected data. The table has columns for 'Intro', 'governance\_and\_policy Policy', and 'Do you have clearly defined...'. The first three rows of data are visible, each starting with a red 'X' icon in the first column. The interface includes a 'Filter' dropdown set to 'none', 'Visualize', 'Export', and 'Publish' buttons, and a 'Save' button on the left.

Intro	governance_and_policy Policy	governance_and_policy Policy	governance_and_policy Policy
This component of the	governance_and_policy	Do you have clearly defined...	Do you have clearly defined...
	yes	yes	
	yes	yes	
	yes	yes	

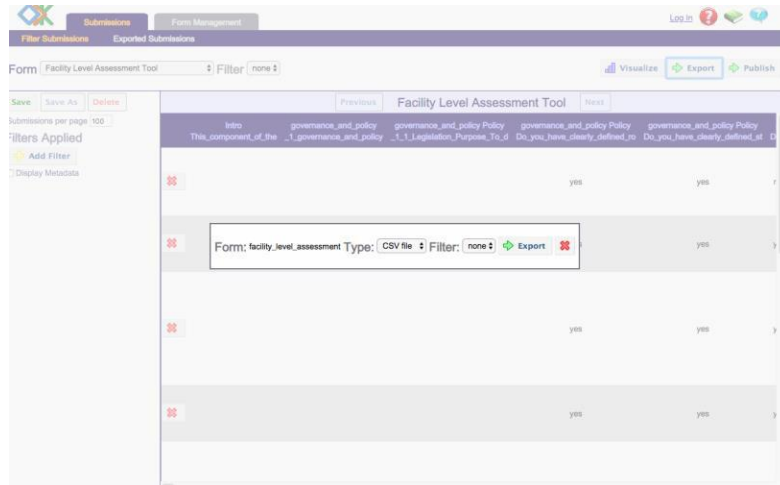
- b. Click on 'export' on the right-hand side of the page.



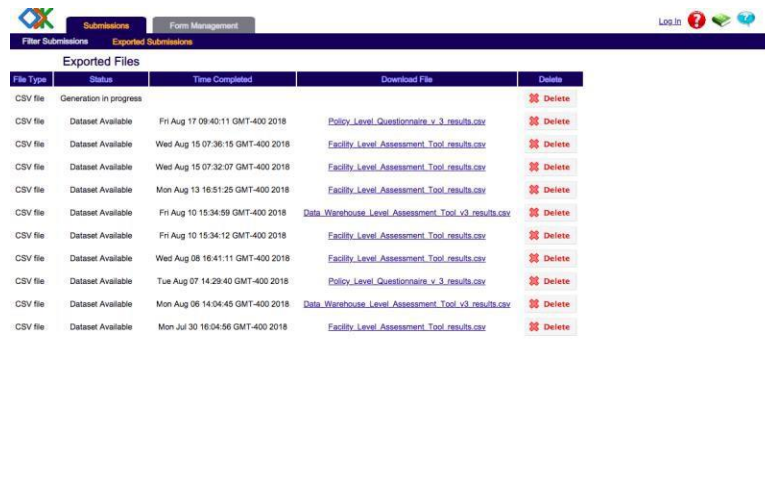
This screenshot is identical to the one above, showing the ODK Aggregate interface for the 'Facility Level Assessment Tool' form. The 'Submissions' tab is active, and the 'Export' button is visible on the right-hand side of the page, next to the 'Visualize' and 'Publish' buttons. The table of data is also visible, showing the same three rows of data.

Intro	governance_and_policy Policy	governance_and_policy Policy	governance_and_policy Policy
This component of the	governance_and_policy	Do you have clearly defined...	Do you have clearly defined...
	yes	yes	
	yes	yes	
	yes	yes	

c. Click on 'export' once again.



d. Wait till the generation process is completed then click on the 'Download' file in blue font.



e. The following is a sample of the downloaded CSV file, which can be further analyzed in MS Excel, Google Fusion Tables or BIRT.

