



TUTORIAL - LAUNCHING AND USING THE SERVER

Tutorial version: 2.3 *System used*: ODK Aggregate version 1.4.2; ODK Collect version 1.4.3

Overview

To download your data from the phones to the computer, you will need to

- → Launch your server using a UNHCR computer and router,
- → Use your ODK server on the computer
- → Configure your phones to connect them to the server

This document also contains a section on how to troubleshoot at the end. Downloading data from the server is covered in another tutorial called **Exporting Data for Analysis**. Installing the server for the first time, and reinstalling the server in case of a problem is covered in another tutorial called **Installing**, **Reinstalling the server**.

1. Launch your server using a UNHCR computer and router

Every evening, in order to transfer the data from the phones to the ODK server, the survey manager needs to launch the VM server¹.

Step 1: Before Launching the VM server

- 1) Ensure your router is running. The VM server CAN NOT run without the router being turned on.
- 2) Make sure your computer is connected to the router.

Name: UNHCRAndroid *Password*: UNHCR_Android

¹ VM stands for Virtual Machine.



Step 2: Launching the server

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3) Launch the VM player from the icon on your desktop (see icon). If the icon is not on the desktop, look into your programs under name: *vmware*.



- 4) In the VM player, on the left panel select your ODK aggregate VM (1.) and then play your virtual machine (2.). You can also double-click on the VM that you want to open.
- 5) Once you have launched your virtual server, the window will go black for a moment... your server is launching, be patient, it can take up to 10 minutes.



If a pop-up shows up suggesting to apply updates, reject them.





6) Once your server is running, the VM window should look like this:



Do not attempt to directly login in the Virtual Machine window.
Open an internet browser and type the URL highlighted in orange in the address bar.



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Any time you change the router and hence the network, this url will change. It is not possible to run the VM Server on the same url after you have switched the network, unless this network has been configured exactly the same. Therefore you should always run the VM on the same network.

→ An Aggregate Window will show up, requesting you to log in. Use the "Sign In with Aggregate password" option.







 \rightarrow Another window will open. Use the following identification:

<i>User</i> : aggregate <i>Password</i> : aggregate	
Authentication Required X Image: A username and password are being requested by http://192.168.0.27. The site says: "ODK Aggregate VM 1.4.2.0" User Name: aggregate Password: Image: OK OK	

It is advisable to allow anonymous retrieval of the data. You can check if it's the case on the "Site Admin" tab in Aggregate. Make sure the box "Data collector" is ticked for the User Anonymous:

Submissions Permissions Preferences	Form Management	Site Admin					Log Out aggregate
Configure Site A	ccess						
Users access the site either							
 anonymously (i.e., as the anonymous via a Google account, using OpenID (via an Oauth 1.0 or Oauth 2.0 token (via an ODK account, with a username 	sUser), or (requires an Email account (e.g., (issued by Google with access to e and password that a site admir	, user@gmail.com)), or o userInfo.email), or nistrator has configured for the	em.				
Capabilities are as follows:							
The anonymous/Learnus the grantee Data Viewer - able to log onto the OD Form Manager - all the capabilities of Synchronize Tables - able to downloa Administer Tables - able to administe Site Administrator - all the capabilitie: Edit Users Change usernames, delete usernames, gran	Data Collector rights to accept K Aggregate website, filter and 'a Data Viewer plus the abilities du, upload and atter data records Ir tables and table-access privile s of a Form Manager plus the ab	submissions from unidentified view submissions, and genera to upload a form definition, de within ODK Tables as restric ges from the ODK Tables wel billity to add users, set passwo	d sources (e.g., from (tate csv or kml files for elete a form and its da ted by table-access pi bsite. ords, and grant these c	DDK Collect 1.1.5 and download. ta, and upload submis ivileges granted to the apabilities to other us	earlier, or from ODI sions manually thro user. ars.	K Collect 1.1.7 and lal	ter if not authenticating). ate website.
Username	Full Name		Account Type	Data Collector	Data Viewer	Form Manager	Site Administrator
aggregate	aggregate	Change Password	ODK -		3	\blacksquare	
x root@aggregate.local		Change Password	Google 🔻	-	V	\checkmark	V
😫 anonymousUser	Anonymous Access	Change Password			V		
Allow anonymous retrieval of images, au	dio and video data (needed for G	GoogleEarth balloon displays)					
Allow anonymous retrieval of images, au Save Changes	dio and video data (needed for G	GoogleEarth balloon displays)					





2. Use your ODK server on the computer

Before the beginning of a survey, erase any old form from the server by clicking on the delete button and confirming you want to delete both forms and data.

 Image: Second state Image: Second state<	8.0.27/Aggregate.html#manag	gement/forms///					ig layout when grou		↓ ⋒ ≡	1
X	Submissions	Form Management	Site Admin				Log Ou	it aggregate 👔	e 🧇 🧇	
Forms List	Published Data	Submission Admin								
🕂 Add New Form	n									
	Title	Form Id	Media f	ïles User	Downloadable	Accept Submissions	Publish	Export	Delete	
Global Mosquite	o net SENS Questionnaire !				[mail	[-N 8.1.8.1	Sector Export	🗱 Delete	
Global SENS Fo	od Security Questionnaire	Delete all data and the	form definition for	GLO-PH-FS-EN-FI	R-ref-23?	Delete Data and Fo	orm 😫	SZ EXDOLE	🗱 Delete	D
Global SENS Infa	ant and Child Questionnaire	Do you wish to delete a	all uploaded data a	nd the form definition	on for this form?	V	· · · · ·	Export	🗱 Delete	Τ
Global SENS	S WASH Questionnaire V2.4	GLO-PH-WASH-EN	-FR-ref-24 0	anonymousUse	r 🔽	V	S Publish	Section 2 Contemporate Contempo	🗱 Delete	
Global SENS	Women Questionnaire V2.	5 GLO-PH-RepWom	en-ref-25 0	anonymousUse	r 🗸		Publish	Section 2 Section 2	🗱 Delete	

At the beginning of the survey, you have to upload blank forms to the server.

Go to the "Form Management" tab, click on "Add New Form", select the xml file of your form and upload the form. This step DOES NOT need to be repeated every evening, just when you want to add a new form to your server.

Agreed and a state of the st	forms///			*
Submissions Form M	Aanagement Site Adm	in	Xform Upload	
Forms List Published Data Submis	ssion Admin		Upload one form into ODK Aggregate	
Add New Form	Form Id	Media files	Form definition (xmi file) Browse. In file selected.	
Global Mosquito net SENS Questionnaire V2.3	GLO-PH-MAL-EN-FR-ref-23	0 an	O Optional Media file(s): Browse. No files selected. Clear	
Global SENS Food Security Questionnaire V2.3	GLO-PH-FS-EN-FR-ref-23	0 an	Upload Form	
Global SENS Infant and Child Questionnaire V2.5	GLO-PH-ICF-EN-FR-ref-25	0 an	of Media files for the form's logo, images, audio clips and video clips (if any) should be in a single directory without subdirectories.	
Global SENS WASH Questionnaire V2.4	GLO-PH-WASH-EN-FR-ref-24	0 an	o	
Global SENS Women Questionnaire V2.5	GLO-PH-RepWomen-ref-25	0 an	NOTE: If the form definition contains string answers the string data will be truncated to 265 characters. See ODK Aggregate 1.0 I documentation for how to increase (or decrease) this size.	
ŀ			On ODK Collect 1.1.7 and higher, the file named "seem_laspe.geg", if present in the media folder, will be displayed as the form's logo.	

If you click on the Submission tab and you select a form, you can view the data which has been sent so far. In the example below, you can see test data for the Mosquito net form.

← P @ 192.168.0.27/Aggregate.html#sub	issions/filter/// V C 🛛	e	▶ ☆ 自	. ♦ =
Submissions	Form Management Site Admin		Log Out aggregate	🧇 🧇
Filter Submissions Exported s	omissions			
Form Global Mosquito net SENS Questi	naire V2.3 • Filter none •	d Visual	ize 🔷 Export	Publish
Save Save As Delete	Previous Global Mosquito net SENS Questionna	aire V2.3 Next		
Submissions per page 100	DeviceID TimeStartRecorded TimeEndRecorded XMOSQUITO CAMP SECTION ZON	IE BLOCK SURVDAT	E CLUSTER TE	AM HH TNCO
Filters Applied	Image: Contract of the state of th	4 2014-07-21 00:00:00.0	2	4 3 1
🕂 Add Filter	X 012789002082307 2014-07-21 13:39:24.0 2014-07-21 13:40:26.0 AAA 4 2	5 2014-07-21 00:00:00.0	2	6 24 1
Display Metadata	Image: 1012789002082307 2014-07-21 13:38:30.0 2014-07-21 33:39:22.0 AAA 3 2	4 2014-07-21 00:00:00.0	3	4 1 1





You can also apply a filter to display only some of the records based on criteria of your choice, clicking on the "Add filter" button on the left menu. On the following example, only the records from a specific section are displayed:

Submissions Form Management Site Admin	Form: GLO-PH-MAL-EN-FR-ref-23 & Apply Filter
Filter Submissions Exported Submissions Form Global Mosquito net SENS Questionnaire V2.3 • Filter none • Save Save As Delete Previous Submissions per page 100 DeviceID TimeStancement des Filters Applied	Create filter to Display Rows
Cisplay Metadata Cisplay Section where column is equals 2	titled DeviceID TimeStartRecorded TimeEndRecorded XMOSQUITO T

Now you can connect the smartphones to the server.

3. Configure your phones to connect them to the server

3.1. Connect the phone to the Wi-Fi network

The phones must be in **Wi-Fi mode**: click on the Wi-Fi icon on the status switch widget, so that the icon is lightened and the status bar becomes green (1.). If the widget is not visible on your phone home screen, open the Settings menu (2.), then press the "OFF" button on the Wi-Fi line to turn it to "ON" (3.).

If the Wi-Fi network has never been set up on your phone, you will need to enter the log in details:

Network: UNHCRAndroid *Password*: UNHCR_Android

To do so, open the Settings menu and press the Wi-Fi line (except on the ON/OFF button) (4.).







Press then on the name of the network you want to connect to (5.) (should be "UNHCRAndroid"), and enter the password in the pop-up that appears (6.), and click on "Connect":



3.2. Configure ODK Collect

Open ODK Collect. Press the menu key of the phone: on the Sony Xperia Pro, it is the bottom right button on the front of the phone (1.). Two options will appear,

"Admin Settings" and "General Settings". Press on "General Settings" (2.).

Select "URL" and enter the IP address of your server, in this example it is http://192.168.0.27 (it

is the same address we used before while connecting with ODK Aggregate).

No username and password are required.



Sony Ericsson
ODK Collect > Main Menu
ODK Collect 1.4.3 (1041)





4. Download new forms from server

Select *Get Blank Forms* at the bottom and select the forms you want to load on the smartphone (1.).

The forms are now on the phone, ready for the surveys.

5. Send filled forms to server

Once the survey is completed and you are connected again to the network with the Aggregate server, you can send the completed submissions to the Aggregate server. Select "Send Finalized Form" (2.). Toggle all and send. A summary comes up where it should say "Success" behind all forms. The forms will now be in the server. All forms that have been successfully sent will disappear from the ODK Collect interface.

The forms are still on the SD card in XML format. So if there has been an issue with synchronization, it is still possible to upload them manually. However, if you delete them from the "Delete Saved Form" folder, they will have been deleted permanently from the SD card.

🛋× 🛯 🛜 💵 💷 17:00
DDK Collect > Main Menu
ODK Collect 1.4.3 (1041) Data collection made easier
Fill Blank Form
Edit Saved Form
Send Finalized Form 2.
Get Blank Form 1.
Delete Saved Form



6. Troubleshooting

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- → Remember that your VM Server needs a network connection, Make sure you have first started the router, connected your computer to the network and then launched the VM. Doing those steps in any other orders is incorrect.
- → If you are trying to open your ODK Aggregate VM with the desktop icon and an error "browse for VM or remove VM from library" appears, it means the Aggregate has been moved on your



- computer. You need to browse it using the search function of the Start menu.
- ➔ If the server does not start correctly, or your ODK Aggregate browser displays "This webpage is not available", you may have to check whether your router is still working and your computer is connected. If they are not working/not connected, you will need to reset the server by clicking on the pause button and selecting "Reset". If you have to shut down the computer, you should always "Power Off" your VM Server.
- ➔ If your ODK Aggregate browser still displays "This webpage is not available" after trying that, try to temporarily turn down your Firewall and/or Antivirus. As a last resort, try to shut down the VM and restart your computer.
- → If your VM still does not work after trying all these solutions, it may be corrupted. Possible causes for that are a switching off WIFI network while the VM is running, wrong extraction, moving the VM's directory improperly (it does not like drag & drop) or placing it on a FAT32 partition (after several uses, the VM becomes too big). You then need to create a new VM, see tutorial on Installing, Reinstalling the server.
- → If a connection to the router fails (resetting the router by switching it off for at least 30 seconds needs to be attempted first!) and there is not an alternative router at hand, you can also run the server and the synchronization through a spare phone. You will need to change the Wifi server settings on all phones including the ODK server settings and the WiFi network will be much less powerful, so only use it as a last resort solution.
- This does not work with all Android phones; the concept has been successfully tested with the Sony Ericssons Xperia Pro. The phone which is being used as a hotspot CANNOT synchronise, therefore you will need to use a spare phone.





the other phones to

connect.

Follow the steps outlined below:



Now you can connect your server to the Hotspot (here: network ODK). Restart the server, open your browser for ODK Aggregate interface and connect all your phones to the Hotspot, change the ODK server settings and synchronise them.