### Open Data Kit (ODK) Suite

#### Answers to Homework Problems

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In collaboration with the WHO VA Reference Group

#### Quick Review

- Questionnaires can be created as XLSForms (in MS Excel)
  - 3 worksheets in the MS Excel workbook
    - 1. *survey* includes questions, question types, constraints, etc.
    - 2. choices includes options for multiple choice questions
    - 3. settings includes form ID (needed as option for Briefcase CLI)
  - ➤ XLSForm Online is a tool for for converting Excel → XML
  - Humans can understand the form as an Excel file, but ODK Aggregate needs the XML form
- ▶ Field workers can use the **ODK Collect** app on an Android phone/tablet to conduct the interview (lists the questions for the intervierwer to ask and records the responses).

### Quick Review (continued)

- Completed questionnaires can be sent from ODK Collect to ODK Aggregate
  - ▶ ODK Aggregate computer server that stores the data
  - Users can access ODK Aggregate through the website or with ODK Briefcase
- ▶ ODK Briefcase a computer program written in Java (must have Java installed on your computer)
  - ▶ ODK Briefcase can be run through a windows-type interface
  - ► Also possible to run ODK Briefcase from a terminal

### Homework (1): First question

#### **ODK Aggregate Server**

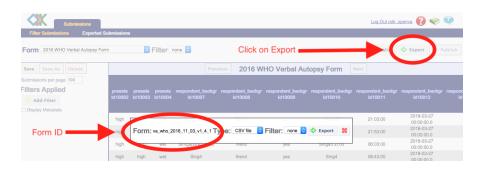
https://odk.swisstph.ch/ODKAggregateOpenVa

- Use a web browser to connect to the SwissTPH ODK Aggregate server
  - username: odk\_openva, password: openVA2018
  - List the Form IDs.

Options for ODK Aggregate's website interface depends on the user's permissions. The user account **odk\_openva** does not have "Form Manager" permission, so we need to figure out the Form ID another way.

- 1. Click on the Export button
- The little window that pops up contains the Form ID (see next slide)

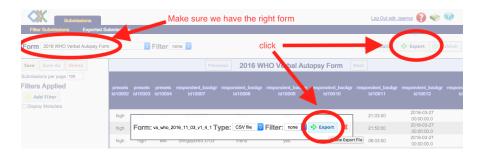
# Homework (1): First question (cont.)



# Homework (1): Second question

- Download all of the records for the form: 2016 WHO Verbal Autopsy Form
- ► Make sure the correct form is selected and then click on Export; finally click export again on the window that pops up
- ► Then switch to the *Exported Submissions* tab and click on the file name to download the CSV file.

# Homework (1): Second question (cont.)



# Homework (1): Second question (cont.)



### Homework (1): Third question

3. Use **ODK Briefcase** to download the same form. Compare the two files with the downloaded records (obtained using the website and Briefcase) to confirm they have the same records.

In virtual machine, run the following command in the terminal (the backslashes allow you to split the command over several lines - i.e., after "\" you can hit "return" and the terminal will wait for more options)

```
$ java -jar ODK-Briefcase-v1.12.2.jar -plla \
-url 'https://odk.swisstph.ch/ODKAggregateOpenVa' \
-u 'odk_openva' -p 'openVA2018' \
-id 'va_who_2016_11_03_v1_4_1' -sd . \
-e -ed . -f 'odk_download_who141.csv'
```

(just compare files visually)

### Homework (1): Fourth question

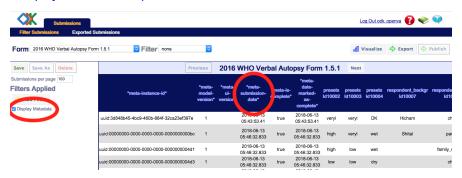
 Use ODK Briefcase to download records from the form: 2016 WHO Verbal Autopsy Form 1.5.1 but only download forms submitted AFTER June 15th of 2018.

This is a different form (compared to the previous question) so we need to change the parameter for the -id option; and we need to use the -start option. In virtual machine, run the following command in the terminal

```
$ java -jar ODK-Briefcase-v1.12.2.jar -plla \
-url 'https://odk.swisstph.ch/ODKAggregateOpenVa' \
-u 'odk_openva' -p 'openVA2018' \
-id 'va_who_v1_5_1' -sd . \
-e -ed . -f 'odk_download_who151.csv' \
-start '2018/06/15'
```

# Homework (1): Fourth question (cont.)

To double-check our use of the -start options, be sure check the "Display Metadata" option...



### Homework (2): First Question

#### ODK Aggregate Server https://odkaggtest1.appspot.com

- 1. Connect to the ODK Aggregate server on Google App Engine
  - username: usersToT, password: ColumbusOH!
  - List all of the Form IDs

Our user account on this ODK Aggregate server has the "Form Manager" privilege, so it is *much* easier to get the Form IDs. Just click on the "Form Management" tab and check the "Form Id" column.

# Homework (2): First Question



### Homework (2): Second Question

- 2. Use ODK Briefcase to download all of the records from all of the forms and make sure that:
  - ▶ VA records from each form are located in separate directories
  - the CSV file containing the VA (i.e., the Briefcase export file) has the form ID in the file name

We can use the -ed option (export directory) to put the downloads in different folders. In virtual machine, run the following commands in the terminal

#### Form: va\_who\_2014\_final10

```
$ java -jar ODK-Briefcase-v1.12.2.jar -plla \
-url 'https://odkaggtest1.appspot.com' \
-u 'usersToT' -p 'ColumbusOH!' \
-id 'va_who_2014_final10' -sd . \
-e -ed 'Form_va_who_2014_final10' \
-f 'odk_download_who2014.csv'
```

# Homework (2): Second Question (cont.)

#### Form: va\_who\_2016\_11\_03\_v1\_4\_1

```
$ java -jar ODK-Briefcase-v1.12.2.jar -plla \
-url 'https://odkaggtest1.appspot.com' \
-u 'usersToT' -p 'ColumbusOH!' \
-id 'va_who_2016_11_03_v1_4_1' -sd . \
-e -ed 'Form_va_who_2016_v141' \
-f 'odk_download_who2016_v141.csv'
```

# Homework (2): Second Question (cont.)

#### Form: va\_who\_v1\_5\_1

```
$ java -jar ODK-Briefcase-v1.12.2.jar -plla \
-url 'https://odkaggtest1.appspot.com' \
-u 'usersToT' -p 'ColumbusOH!' \
-id 'va_who_v1_5_1' -sd . \
-e -ed 'Form_va_who_2016_v151' \
-f 'odk_download_who2016_v151.csv'
```

# Homework (2): Second Question (cont.)

#### Form: WHO\_VA\_2012

```
$ java -jar ODK-Briefcase-v1.12.2.jar -plla \
-url 'https://odkaggtest1.appspot.com' \
-u 'usersToT' -p 'ColumbusOH!' \
-id 'WHO_VA_2012' -sd . \
-e -ed 'Form_va_who_2012' \
-f 'odk_download_who2012.csv'
```

#### Final Notes

- ▶ In the previous ODK Briefcase commands, we excluded the options
  - ► -oc : overwrite CSV export file if it already exists
  - -em: exclude media (not an issue with the Aggregate servers we worked with because they did not have any additional media files – e.g., pictures, sound recording, videos)
- All of the ODK Briefcase commands can be found at https://docs.opendatakit.org/briefcase-using/
- You can also print them out at the terminal as follows
  - \$ java -jar ODK-Briefcase-v1.12.2.jar --help