Guide to publishing forms on CKAN

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Introduction

As well as a site for uploading pre-existing datasets, the CABI CKAN can also connect to the Open Data Kit (ODK) app. This means data may be collected directly into the online repository. To do so, the ODK must be provided with a "form", which controls the interface users of the ODK app see. For guidance on how to build these forms, watch the "Building Forms" video or go to http://xlsform.org/en/. The forms are very flexible, ensuring that data can be collected from a wide range of research disciplines, including monitoring and evaluation and agricultural field work. After completing, forms must be published on the CKAN site. What follows is a guide on how to publish, pilot and create a repository for forms as well as add collaborators to the forms so members of your research team can start collecting data. For selected steps, there is also some guidance for how to circumvent some common errors.

Publishing forms

1. Navigate to the appropriate project and click on the ODK tab. This takes you to the ODK Dashboard.

2. Click on forms. This is where you publish and manage ODK forms related to your specific project. Check the building forms guide or the http://xlsform.org/en/ website for guidance on how to build forms.

3. To publish your form, choose a file to upload and click publish. You will not be able to publish your form if it is open on your PC. Make sure to publish forms in the project with the appropriate permissions; if sensitive data is being collected in the forms make sure the project has appropriate access controls so this data is not made public. This can be checked via email to k.reynolds@cabi.org or t.beale@cabi.org.

4. Common errors:

    a. Sheet names in forms incorrect or punctuated incorrectly, e.g. Survey must be survey (no caps). Change and retry.

    b. Missing or incorrect variable names in the form. CKAN will generate an error to guide you to the error within the sheet. Change according to instruction and resubmit.

    c. There is an existing form with that name already published. Here, either go to the form and update the name (this will be on the settings sheet) or delete the form of the same name in CKAN and submit the replacement.

5. Add media and external CSV files

    a. Click on the Manage media files buttons (paperclip)

    b. Upload the files, ensuring they have the same name as is referenced in your form.

6. The form is initially published in a "testing" stage. Now is the opportunity to pilot your form in the ODK app, as described below. DO NOT SKIP THIS STEP.

Adding Collaborators

Collaborators are users who can access your forms using the ODK app. Don't forget to add them!

1. Navigate to the ODK Dashboard.

2. Click on collaborators

3. Click on Add collaborator

4. Create a User Name, password and Name for your collaborator and click add collaborator. This is the username and password they will use in Server settings to access the form on the app.

Collaborators can be added to groups. This may be particularly helpful if you have a core team of workers with whom you often conduct research.

1. Navigate to the ODK Dashboard

2. Click on Collaborator groups.

3. Click on Add group

4. Add a name of description for your group e.g. "UK Field Researchers". Click Add group

5. Add collaborators to groups by clicking on the person icon on the right hand side of the screen in the collaborator group dashboard. Decide whether individual members can submit, clean or submit and clean data by checking the appropriate boxes.

6. Change the name/description/activity status of the group using the spanner icon. Delete groups using the red X

Now your Collaborators/Collaborator groups have a username and password they can be added onto your ODK form.

1. Navigate to the forms section in the ODK dashboard on CKAN

2. Click on the first button in the third column – the one that looks like a person – to add individual collaborators, and the second button – the one that looks like a group of people – to add collaborator groups.

3. For individual collaborators:

   Click on the button join collaborators. Identify the collaborator from the drop-down list. Decide whether you want your collaborator to be able to submit, clean or submit and clean data by checking the appropriate boxes. Click Join collaborator.

   For collaborator groups:

   Click "Join group". Select the group from the drop-down list and click "Join group." Individual members will have the permission to submit or clean data assigned to them when you created the group.

4. Provide your collaborators with the correct Username and Password for them to able to access the form on the ODK app

Piloting your form

When your form is first published it is in a "testing" phase. During this phase, you can view the form on the ODK app and submit testing data, but it is still possible to change and update the form structure on CKAN. To finalize the form and start collecting your data, you must create a repository (see steps below). After you have finalized the form YOU WILL NOT BE ABLE TO CHANGE IT. To change the form after this stage, you will have to remove it and upload a replacement. Doing so means you may LOSE YOUR DATA. It is therefore important to pilot your form at least once prior to creating a repository for it. This is important to minimise errors and ensure the form is user friendly.

1. Open the ODK app and complete the form. Guidance on how to use the app can be found in the using the ODK app section of this tutorial space.

2. Flag any errors as you complete the form. It may be helpful to use the "Piloting Errors Template" excel document accompanying this guide.

3. After completing your form, return to CKAN and download data in csv format. Ensure the answers are coming through in the correct format.

4. If necessary, make alterations to your form and update it in CKAN using the spanner icon

5. Complete steps 1-4 until all errors are cleared. Make sure to clear the ODK app or previous versions in each iteration of your form, or you will not be able to send finalized forms back to the server.

Finalizing the form and creating a repository

Once you are happy that your form is correct, you are ready to start collecting data! To do so, you need to create a repository.

1. Click on the green star in the third column of the table on your ODK form dashboard.

2. Identify the Primary Key variable of your data. This is the unique identifier with which incoming data will be processed. This is information will be required for ALL forms to create a repository. Whether or not you need to provide the following information is dependant on the structure of the form:

   a. Language

      If your form has multiple languages, you may need to indicate the default language of your forms. This will be the language that will be used later on for cleaning. It is recommended that you use the language that most of your collaborators use. This requires a 2-character code, use those provided by International Organization for Standardization (639 - 1).

   b. Missing support files

      It may be that you have linked to external CSV files in your form which you have forgotten to upload. Close the repository wizard, add the missing files, then repeat steps 1 & 2.

    c. Duplicated options

This reviews the ODK form to check if you have duplicated options. Close the repository wizard, alter the form according to the instructions, then repeat steps 1 & 2.

    d. Normalization

Very large forms will need to be grouped into sections. It is unlikely your form will require this process, however, if you do, please contact k.reynolds@cabi.org for support

3. Now your form has a repository! Creating the repository opens up other options for data management for your form in CKAN. See the data management section of this tutorial space for guidance on how to do so

Happy data collection!