CommCare for Android Smartphones

This page provides an overview of how to navigate using CommCare Android, describes different types of settings you can consider, and presents question types that are only available on CommCare (not in J2ME).

This guide assumes that you have already installed CommCare or are going to be building an application for CommCare. The screenshots on this page are from CommCare 2.8.1. You may be interested in the below information about CommCare (for Android) as well:

- Android Phone Setup - Installing CommCare on an Android Device, including GPRS settings, CommCare installation steps and usability settings on the device
- Install CommCare for Android Smartphones - Installation steps for CommCare, with visuals
- CommCare Home Screen Shortcuts - Helpful settings for users
- CommCare Form Management Features - Understand the different CommCare features to help manage forms on the device

One major decision in how to configure CommCare is Sense Mode. Sense Mode, when turned on, disables advanced features that may be confusing to new users, especially form management. Below, those features which are disabled in Sense Mode are indicated. More detail can be found on the page about CommCare for low-literate users.

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Getting to Know CommCare for Android Smartphones

There are some tricks to effectively navigating in CommCare, and some features that are not easy to find. Below are some of the key features you may find useful.

Your Android Device

There may be a number of buttons on your Android device, but as pictured below there are three buttons that are important for using CommCare.
Navigating in CommCare for Android Smartphones

Getting Started

You can log into CommCare for Android as a Mobile User or as a Demo User.

Logging in as a Mobile User

After clicking on the CommCare icon, you will reach the log-in screen. Here you will need to enter a username and password (see left image). Note that unlike J2ME CommCare, there is no "admin" login.
Username:

```
test
```

Password:

```
*
```

Logging in

Contacting Server
You can get information on how to create and manage users [here](#). Please note the following:

- The first time you "Log In" you must have internet connectivity. After pressing "Log In" for the first time, there will be a few moments during which CommCare makes sure that the information on your phone is up-to-date with the server (see right image).
- After you log in the first time, even if you log out and then log back in (with the same username) you do NOT need internet connectivity.
- The username of the last user to log in will remain in the "username" box, even after logging out.

### Logging in as a Demo User

There is a demo mode- to enter demo mode you only need to push the phone's menu button while at the log-in screen. As shown in the left image, there is a small button at the bottom of the screen to log in as a demo user. After selecting it you will see a warning message.
Child Monitoring

CommCare

Username:
test
Password:

.Starting Demo Mode

You are logging into CommCare in Demo mode. Demo mode is for testing and practice only!

I Understand

Enter as Demo User
The Home Screen
The main screen ("home screen") of CommCare has several important features clearly visible (note the above shows CommCare with form management active on the left, and with Sense Mode on the right):

**Get Started:** This is where your users will go in order to access the forms and submit data.

**Form Records** (Note: In CommCareHQ both “incomplete” and “saved” forms are disabled, as in the image on the right, above.):
- **Incomplete:** stores forms that are only partially complete, or have not been submitted in their final form. By clicking here you will get a list of incomplete forms. You can choose a from the list to open and complete it.
- **Saved:** stores forms that have been recently submitted to the server. You can select a form from the list in order to review the data. Pending forms (submitted but not successfully reached the server) will be displayed on the top.

**Sync with Server:** forces to phone to synchronize with data on the server. The text below the button will tell you if there are pending forms. If there are a lot of pending forms the text will turn red to alert the user. If you have forms you want to force the phone to submit, you can press "sync with server." However, you will have to press it again after the forms have been submitted in order to actually sync and for the "last synced" time and date to update.

**Log Out of CommCare:** Logs the user out so that the data on the phone is secure.

You can translate many parts of the home screen into most languages. See our page on user-interface translations to learn more.

**Home Screen Settings**
If you click on the menu button on your phone (often looks like a box with lines, or three dots) you will access the home page settings menu:

- **Settings** allows you to access some advanced tools (see next slide)
- **Update CommCare** tells the device to check CommCareHQ to see if there is a more recent starred build. If there is, CommCare will update (connectivity required) and you will need to log-in again.
- **Call Log** shows a record of all calls/messages that originated from CommCare

**Form Management**

Within the "saved" forms button you can find a list of all forms that were submitted since the last time the application data was cleared. You can further filter this list by submitted forms, unsent forms, or incomplete forms. After you "save a form as complete" it is tagged as "unsent" until CommCare confirms that the form has reached the CommCareHQ server, at which time the tag is removed. In the right image you can see a number next to "Incomplete" which indicates the number of incomplete forms.
Navigation Within Forms
You are at the start of "Screening". Swipe the screen as shown below to begin.

back to previous prompt

forward to next prompt
When you open a form you will get the landing screen (left) that shows users how to navigate within a form by swiping the page. When you try to skip a required question, or enter a value that is outside of the permitted range, a message will alert you that you must correct your answer. If you press the options button/soft key, you will see four advanced options displayed at the bottom of the screen:

- Save Form
- Go To Prompt
- Change Language
- Change Settings

Advanced Menu Options
Is this child being referred to a health facility?

- Yes

Saving Form

Please wait a few moments.

Cancel

ODK Collect > Screening

Anganwadi Number
121

SI House Number (If don’t know use 999)
256

House floor A,B,C,D,E or 0
A

Child ID number (1,2,3,4)
2

This child's ID is 121256A2
OK

Anganwadi Sevika Name
Tess

Go Up  Go To Start  Go To End
• Pressing “Save Form” (left) will store the form as incomplete in its current state. You will be able to access this incomplete form from the home screen.

• Go To Prompt calls up a list of all the questions/labels in the form. If you have already entered values they will be displayed below the question text.
  • You can scroll up and down to review your answers, and is the preferred way to quickly review a form prior to submitting.
  • You can click on any question in order to go directly to it and update/enter a value
  • Go To Start brings you to the first page of the form, and Go To End brings you to the last page where you can submit the form
  • Go Up is only applicable in repeats.

• Change Language allows you to toggle between the display text languages.

• Choosing Settings presents several additional options:

Form Settings
<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLIENT</strong></td>
<td></td>
</tr>
<tr>
<td>Text Font Size</td>
<td>Medium</td>
</tr>
<tr>
<td>Default to Finalized</td>
<td>Mark form as finalized by default</td>
</tr>
<tr>
<td>Display Rich Help Inline</td>
<td></td>
</tr>
<tr>
<td>Display Progress Bar</td>
<td></td>
</tr>
<tr>
<td>Show Intro Help Screen</td>
<td>If this is unchecked, the first screen that explains swiping will not be</td>
</tr>
<tr>
<td></td>
<td>displayed</td>
</tr>
<tr>
<td>Show Splash Screen</td>
<td>Shows when application starts</td>
</tr>
<tr>
<td>Selected Splash Image</td>
<td></td>
</tr>
</tbody>
</table>
Settings includes the following options:

- **Link to the Open Data Kit website (ODK)**
- **Text Font Size** for changing the size of the display text. You only have to do this once in an app and all forms will default to the text size you have chosen.
- **Default to Finalized** should be left as is because it determines whether a form is automatically saved as finalized when clicking "save" at the end of the form.
- **Display Progress Bar** determines whether this is a progress bar shown while filling out the form (see next section).
- **Display Intro Help Screen** determines whether or not the first screen in the form explains how to navigate by swiping. It can also be configured directly on that screen of the form.
- **Show Splash Screen** currently has no effect on anything.

**Progress Bar**

By default, starting in CommCare 2.14, there is a blue progress bar across the screen that indicates the portion of the form that is complete. It dynamically updates based upon changes in display logic.

Starting with CommCare 2.15 you can disable the progress bar. You may want to disable the bar in forms that are very large or complex as it can cause performance issues.

To disable the progress bar open the desired form and open the Form Settings from the menu. Uncheck the box (see images above). You only need to make this change one time per form and then the progress bar setting will be the same next time you open the form.
Exiting a Form

Initializing Resources

Application found. 4 resources loaded, of 22 total

- Keep trying if connection is interrupted
Within a Form:
When you hit the “back” button in a form you are working on, you will get three options (note that “save changes” is not displayed while in sense mode):

- **Save Changes**: stores a version of the form as incomplete. This can later be opened and updated
- **Ignore Changes**: deletes any changes you made/data you entered and brings you back to the home screen
- **Cancel**: brings you back to the form you were working on

End of a Form:
On the last page of a form there will be a button to save the form and exit, as well as a box to “Mark form as finalized”. If you remove the check mark, the form will show up in your “incomplete forms” and will NOT be sent to the server. If you are in Sense Mode this option will not be exposed. After choosing “save form and exit” you will see a message stating whether or not your form was successfully submitted. If your form was not successfully submitted it will remain on the phone until a network signal is found. The check box on the last screen for “This Form is Completed” is not visible if the application is in Sense Mode.

Common Question Types
This section goes through some common question types to show how they will appear on the phone.

Labels
Labels are used to display messages. In CommCare for Android there is an option to also have a standard message and checkbox displayed on the screen. By default, the message reads “OK. Please continue.” If you set the label to “required” then the user will have to check the box next to the message before continuing to the next screen. The message can be changed or translated through the User Interface Translations.
Child Nutrition
All Children or
S

This child's ID is 121256A2
OK. Please continue.
Single Select

Single select questions are fairly easy; you simply select the desired option and the circle will show as filled. If you hold your finger continuously on an option you will get a pop-up screen that says “Edit Prompt: Remove Response.” If, for example, you accidentally answered a question that you wanted to leave blank, you can remove your choice through the “remove response” tool. It is also common for users to “accidentally” get the remove response message by holding their finger too long when selecting an option.
Multiple Choice

In Multiple Choice questions you can select more than one option, which is usually indicated by square boxes. You can create useful constraint messages as well.
Date and Time Questions

You can ask for a date, time, or a combination of date and time. You can use the up/down arrows to adjust the values. Time values are always shown in a 24 hour clock.

Is this child currently experiencing any of the following illnesses or conditions?

- None
- HIV
- TB
- Convulsions during the last three days
- Intractable vomiting
- High fever
- Bipedal Oedema

Is the child currently experiencing any other illnesses or conditions?

- None
- Diarrhea

You cannot select "none" and another option!

- Illness
- Pneumonia
- Vomiting
- Other
**Special Question Types**

**Media Capture (Image, Audio, Video)**

CommCare for Android can be used to take capture or upload images, audio, or video to a form. CommCare cannot accept large image files. Anything greater than 1MB could cause issues including slow syncing and failure to upload the picture to CCHQ. The best rule of thumb is to use a small (<1MB) file size when taking pictures within CC. VGA files seem to work particularly well. You may have to manually adjust this in your camera app if you prefer to take larger size pictures outside of CommCare. If you are looking at a report in CCHQ and you either can’t find an image you know you captured, or you see an image file name but it is not linked to anything, make sure that you did not take a very large image that could not be submitted over the network.

When you get to a screen with a media capture question you will have the option of either capturing the data in real time (i.e. opening a camera app to take a picture) or choosing a file from you phone (i.e. navigating to a folder on your device to find a specific file).
Signature Capture

The Signature Capture question type can be used to capture a client's signature and send it to the CommCareHQ server. It can then be accessed as an image file in the form submission report from the attachments tab. Clicking on Gather Signature will open a screen where you can write a signature with your finger or a stylus. Then choose Save and Close to capture the signature. You can replace it by clicking on Gather Signature again.
Please enter patient’s signature to confirm receipt of medicine.

Gather Signature

Reena
GPS Question

When you reach a GPS question, the user will be presented with a "Record Location" button. Upon selecting the button, a loading screen will indicate the accuracy of the GPS coordinates. A spinning circle icon will be displayed while the device searches for the location, and is replaced by a green check mark when the location is locked in. When accuracy gets to 5 m the coordinates will automatically be captured and displayed on the screen. If you do not need such high accuracy, you can record the location earlier. Once the location is displayed in your form, you simply swipe to go on to the next screen. Selecting "Record Location" again will re-initiate the GPS capture process and can overwrite the first set of coordinates.

The first time you try to do a GPS capture in a new location it can take a long time to find the location, sometimes as much as 10 minutes. Subsequent captures will likely be much faster.

Please enter patient's signature to confirm receipt of medicine.

Gather Signature

Reena
Barcode Question

The barcode question will call out to a barcode scanner application to capture data stored in an external barcode.
Android App Call Out

In CommCare you can call out to a different Android application to get an input. Instructions are at [Integrating Android applications with CommCare](#).

Case List and Details

In CommCare case list view it is important not to put too much text or data in the case list as this will make it very difficult to navigate through the case list. Below you can see examples of a case list (left) and case details (right). Click [here](#) for more information on case lists.
Special Formatting and Tools

This section describes formatting and question types that are specific to CommCare for Android.

Using Multimedia (Images, Audio) in Your App

For instructions on how to use and install multimedia in CommCare click here. When you add an audio or video file you can play it by selecting the button in the upper right-hand corner. Clicking on the button will start playing the file, and you can press it again to pause the playback.
Generating a QR code in your form

In the place of an image, a question can be configured to display a QR code which contains text that is dynamically set in the form.

To configure a question to display a QR code in the Form Builder, find Add Other under the question’s Content header, and click “custom”. When prompted for a content type, enter qrcode, then enter the text you want to be encoded in the QR code into the new label.

If you want the code to contain data from the form (like a case ID or a computed value), you can use advanced <output> features as outlined in the Hidden Value Calculations Tutorial. You can test the content by displaying it first in a question's normal label if needed.

This feature is only available in CommCare 2.8 or higher.

Hint Text

In CommCare you can use "hint text" which will appear in a smaller font underneath your display text. To add hint text in the app builder, open the "Advanced Properties" tab and put your text in the "hint" field.
Question List

You can group questions on one screen by putting all of the relevant questions in a "Question List" group. This group type is available in the Form Builder under the Group set of question types. Note that you cannot run a calculation within a screen (i.e. you cannot have the outcome of a question at the top of a screen affect the display condition of one on the bottom of the same screen).
Frequently Asked Questions

Q: Can you group questions horizontally to improve display on a tablet?
A: No, this is not possible at present.

Q: How do you change the font in CommCare for Android?
A: You can adjust the font by pushing the settings button while inside any form. Once you change the font size one time from within any form, CommCare will remember the new font size and display it in all other forms. You can make the menu text larger by changing your phone's font settings (Settings -> Display -> Font Size).

Q: Can I have more than one CommCare app on my phone at the same time?
A: No, you cannot have more than one app on Android devices. This is on the CommCare development plan but there is no time estimate at present.

Q: When using the signature question type I notice that a copy of the signature is saved to the phone's gallery. Is there any way to prevent this or to encrypt the image?
A: Unfortunately neither of these is possible within CommCare at the moment. You can tell Android that you don't want media in a certain folder being indexed by adding a file called .nomedia to that folder (read more here). However, you'd have to do this yourself - enter CommCare's domained folder on the SD card and add this file either via USB or an Android text editor app. Its also worth noting that this is basically a voluntary opt out that "well behaved" applications will respect, but are not forced to.