

# Custom User Data

## Overview

Custom User Data is an advanced tool that enables you to store and reference additional information about your mobile workers. By default, when you register a new mobile worker you can specify their username, first name, last name and password. Custom User Data allows any number of additional fields. For example, you could create a category of user, additional location data, or other metadata.

## Usage

Custom User Data is useful if you want to be able to reference additional information about users in forms or cases. For example, you may automatically want to store the user's district or village as part of any cases they register to make future data analysis easier.

## Introduction Video

View the introduction video for Custom User Data

## Configure Custom User Data

In this stage you must define what data fields you want to collect for each mobile user.

- On CommCareHQ navigate to Users -> Mobile Workers.
- Click on the "Edit User Fields" button in the middle of the screen:

The screenshot shows the 'Mobile Workers' configuration page. On the left is a navigation menu with categories: APPLICATION USERS (Mobile Workers, Groups, Web Apps Permissions), PROJECT USERS (Web Users, Roles & Permissions), and ORGANIZATION. The main content area has a header 'Mobile Workers can log into applications in this project space and submit data.' Below this are four buttons: '+ Create Mobile Worker', 'Download Mobile Workers', 'Bulk Upload', and 'Edit User Fields' (highlighted with a red box). A search bar and a 'Show Deactivated Mobile Workers' button are also visible.

You will be brought to Edit User Fields page:

The 'Edit User Fields' page features a table for defining user fields. At the top left, there is a '+ Add a Field' button. The table has the following columns: User Property, Label, Required, Choices, and Delete. A single row is currently defined with 'village' in the User Property column, 'Home Village' in the Label column, an unchecked 'Required' checkbox, and a '+ Add Choice' button in the Choices column. A 'Delete' button is in the Delete column. At the bottom of the page is a 'Save Fields' button.

User Property	Label	Required	Choices	Delete
village	Home Village	<input type="checkbox"/>	+ Add Choice	Delete

On this page you have the option of adding fields to collect for mobile workers. For each field you will need to define the following:

- **User Property:** The unique ID you can use to reference this property in the application builder. The property may not contain spaces. This field is analogous to a "Question ID" in the form builder.
- **Label:** The field label that users will see when adding or editing a User in CommCareHQ.
- **Required:** Indicates whether this field is required for each user. If it is marked as required then you will not be able to create a mobile worker without filling in this field. It will also show up on the main "create mobile worker" page.
- **Choices:** If you want to pre-define choices to appear as a dropdown, you can add those choices here.

To add a new field click on "Add New Field" and fill in the User Property and Label fields.

To remove a field click on delete - but note that if you delete a field that has already been populated for users, the next time that user's information is updated, any data collected for that field will be deleted as well. See below for more on this.

You can change the order of the fields by dragging the vertical arrows on the left side of the screen.

Here is an example with three user properties:

User Fields + Add a Field

	User Property ?	Label ?	Required ?	Choices ?	Delete
⌵	role	Care Team Role	<input checked="" type="checkbox"/>	<span style="background-color: #007bff; color: white; padding: 2px 5px; border-radius: 3px;">+ Add Choice</span> ⌵ nurse <span style="background-color: #dc3545; color: white; padding: 2px 5px; border-radius: 3px;">x</span> ⌵ chw <span style="background-color: #dc3545; color: white; padding: 2px 5px; border-radius: 3px;">x</span> ⌵ doctor <span style="background-color: #dc3545; color: white; padding: 2px 5px; border-radius: 3px;">x</span>	<span style="background-color: #dc3545; color: white; padding: 2px 5px; border-radius: 3px;">x Delete</span>
⌵	village	Village	<input type="checkbox"/>	<span style="background-color: #007bff; color: white; padding: 2px 5px; border-radius: 3px;">+ Add Choice</span>	<span style="background-color: #dc3545; color: white; padding: 2px 5px; border-radius: 3px;">x Delete</span>
⌵	sector	Sector	<input type="checkbox"/>	<span style="background-color: #007bff; color: white; padding: 2px 5px; border-radius: 3px;">+ Add Choice</span> ⌵ 1 <span style="background-color: #dc3545; color: white; padding: 2px 5px; border-radius: 3px;">x</span> ⌵ 2 <span style="background-color: #dc3545; color: white; padding: 2px 5px; border-radius: 3px;">x</span> ⌵ 3 <span style="background-color: #dc3545; color: white; padding: 2px 5px; border-radius: 3px;">x</span>	<span style="background-color: #dc3545; color: white; padding: 2px 5px; border-radius: 3px;">x Delete</span>

This configuration would then update the Mobile Worker Registration Page to look like:

## Create new Mobile Worker account

Username\*

Password\*

Password (reenter)\*

Phone number

Please enter number, including international code, in digits only.

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### Additional Information

Care Team Role\*

Village

Sector

Select one
⌵

Select one
⌵

1

2

3

Create mobile worker

Add Custom User Data

There are two ways to add custom user data - through the Mobile Workers section of CommCareHQ, or through Bulk Upload

## 1 - CommCareHQ Mobile Workers Page

After you configure the user data, each time you add a new mobile worker the CommCareHQ user will be prompted to populate the field, in addition to the standard username and password fields. Required fields will have to be populated at time of creating the mobile worker, while other fields are optional. These can be filled-in during registration, or when editing a worker account.

Basic   Groups   Password   Permanent Actions

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### Information for rita@jeremy-test.commcarehq.org

Username

First Name

Last Name

E-Mail

Language  ▼  
ⓘ Becomes default language seen in CloudCare a

Role  ▼

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### Additional Information

Care Team Role\*

Government District

Home Village

## B - Bulk User Upload



### This feature requires a CommCare Software Plan

This feature (Bulk User Management) is only available to CommCare users with a **Standard Plan** or higher. For more details, see the [CommCare Software Plan page](#).

You can use the [Upload Mobile Workers in Bulk](#) tool to add and update custom user data in bulk.

Before using the spreadsheet to update user data you will need to follow the instructions above to set up your user fields.

1. Download the your current *users* excel file
2. Add data to the custom user data columns and any other fields you want to populate.
3. Save and upload it!

#### Notes:

- You cannot add new user data fields by just adding a new column in the Excel file. You must use the edit user fields page to set it up.
- If a field is required and you upload a spreadsheet that does not have a value for that field for all users, the upload will fail.
- If you change the Custom User Data for a user, the new values should sync down to the user's phone, any time the user syncs with the server as long as the user has filled in at least one form since the last sync.

## Using Custom User Data in an Application

### Storing Custom User Data in a Hidden Value

You will have to reference the user data through the `commcaresession`. The format is generally *instance('commcaresession')/session/user/data/custom\_user\_data\_name*

So for example, to put the value of the custom user data **village** in a hidden value, add the following to the calculation:

```
if(count(instance('commcaresession')/session/user/data/village) > 0, instance('commcaresession')/session/user/data/village, "Unknown")
```

### Use a Custom User Data in a Display Condition

For example, to only show a particular question if the user is a supervisor (using the custom user data `is_supervisor`), add the following to a question's display condition. Replace **is\_supervisor** with the name of your custom user data and **yes** with the value you want to check for.

```
count(instance('commcaresession')/session/user/data/is_supervisor) > 0 and instance('commcaresession')/session/user/data/is_supervisor= 'yes'
```

### Accessing Phone Number and the User Name

The user's first and last name, and phone number are also available through custom user data. They are automatically added to the data:

- `commcare_first_name`
- `commcare_last_name`
- `commcare_phone_number`

For example, to combine the user's first and last name into a single name in a hidden value, you can do the following:

```
concat(instance('commcaresession')/session/user/data/commcare_first_name, " ", instance('commcaresession')/session/user/data/commcare_last_name)
```

## Removing Custom User Data and Handling "Uncategorized" Data

As described above, you can remove fields on the "Edit User Fields" page. Removing a field does not necessarily remove the data that is attached to users.

The bottom of the page includes a checkbox to remove unused fields:

Remove unused fields from existing data. [?](#)

Save

If you remove a field and **do** check this box, all data for the removed field will be removed from users.

If you **do not** check this box, the field will be removed, but users will still have the related data, which is now called "unrecognized" or "uncategorized." If you created a field called "size," assigned a value to a user, and then deleted the field, when you view the user you will see this section of "unrecognized" data. As described in the warning, if you save this user, the "size" value will be deleted.

#### Unrecognized Information

**Warning!** This data is not part of the specified user fields and will be deleted when you save. You can add the fields back [here](#) to prevent this deletion.

size	10
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Update Information

This unrecognized data will still appear in mobile worker downloads and can still be edited. It will appear in columns marked "Uncategorized."