CommCare Fundamentals

Welcome to CommCare Fundamentals- an overview of what CommCare is and how it works!
If you are new to CommCare, this is a great place to start.

CommCare Fundamentals Course Goal

CommCare Fundamentals will provide:

- an introduction to the key terms associated with CommCare
- a general overview of how the CommCare platform works
- basic context which is relevant for anyone involved in a CommCare project.

The learning objectives covered in CommCare Fundamentals are recommended or required for everyone working on a CommCare project.

Topics

Review each of the following sections to learn more about the main features and principles of CommCare:

- CommCare Overview
- CommCare Structure
- Case Management
- Data in CommCare
- Mobile and Web Users
- Project Roles and Implementation

It is critical that you understand all of the material in these sections before going on to other CommCare tutorials.

GET STARTED!
Welcome to CommCare Fundamentals! If you are new to CommCare, this is a great place to start!

CommCare Fundamentals will provide you with a complete orientation to the basic concepts and terminology of CommCare. By the end of this course, you will be able to explain:

- CommCare's basic structure
- Cases and case management
- General principles of data in CommCare
- CommCare user types
- CommCare implementation process

Once you've completed this course, you can easily go on to other courses like Form Builder, Application Building, Application Design, Worker Monitoring, and CommCare Data Basics, among others.

Learning Objectives

By this end of this unit, you will be able to:

- Provide a general description of CommCare
- Explain the distinction between CommCare Mobile and CommCare HQ
- List the types of mobile devices that run CommCare
- Describe some of the ways in which CommCare can be used
- Identify the company that builds CommCare
- Identify key CommCare Community resources and support
What is CommCare?

CommCare is an easily customizable, open source mobile platform that supports frontline workers in low-resource communities. Frontline workers use CommCare to track and support clients, facilities, transactions, or anything else that needs to be followed over time. It is also a software tool which allows you to create, edit, and deploy mobile applications without a software developer.

CommCare consists of two components:

- **CommCare Mobile** is the mobile-based portion of CommCare used for data collection and service delivery. CommCare Mobile can be used on a phone or tablet and, in rare instances, through a computer. Through CommCare Mobile, a worker is able to access a mobile application. Typical users of CommCare Mobile, include: field workers, community health workers, agricultural extension agents, school inspectors, or surveyors.
- **CommCare HQ** is the website (www.commcarehq.org) used for application management and reporting. Through the CommCare HQ website, users can design applications, access data, and manage mobile workers. CommCare HQ receives the data submitted by frontline workers using CommCare Mobile. CommCare HQ users are typically supervisors, researchers, project managers, or data analysts.

Which Mobile Devices Run CommCare?

CommCare runs as a mobile-based application on two types of devices:

- Android smartphones
- Basic feature phones (like Nokia phones; complete list [here](#))

How is CommCare Used?

CommCare can be used for a number of purposes, including:

- **Data collection** - a tool for mobile users to directly digitize information so that it can be accessed via a computer
- **Decision support** - supports complex logic that can guide a user to asking the right questions and providing appropriate advice
- **Job aid** - CommCare can help users to prioritize tasks, remind users to make visits, and do complex calculations
- **Counseling tool** - with embedded multimedia like images, audio, and video, CommCare can enhance the counseling experience
Better supervision - data on worker activity can be used to inform supportive supervision

Although CommCare was initially developed as a case management tool for Community Health Workers, it is now used in many different areas, including clinics, agriculture extension, microfinance, education, and research.

How Does CommCare Work?

Here is a brief overview:

1. **Build an Application**
   Use CommCareHQ’s Application builder to build a new application or download an existing application from the CommCare Exchange, CommCare’s open source application store.

2. **Install Applications on Phones**
   Download the application to Android smartphones or basic feature phones so that mobile workers can start collecting data and managing records on their phones.

3. **Collect Data and Assist in Work**
   Mobile users can collect many types of data, including text, numbers, dates, GPS, pictures, etc. They can also use CommCare to guide them in decision making and tracking their clients or tasks.

4. **Analyze Data and Monitor Workers**
   Export collected data for further analysis and use CommCareHQ’s worker monitoring reports to view the performance of a project’s mobile workers.
WHO DEVELOPS COMMERCIAL?

CommCare is developed by a software company called Dimagi:

CommCare is developed by a software company called Dimagi. CommCare is Dimagi’s biggest and most well-known product, but the company also develops other mobile-based, open source technologies. Dimagi’s mission is to deliver open and innovative technology to help underserved communities everywhere.

CommCare Community of Users

CommCare is used by thousands of people all around the world. To assist users, we have developed several resources through which you can learn more about CommCare and participate in the community of users!

- **CommCare Help Site:** You can get a good overview of what CommCare is by reading through the CommCare Help Site. The Help Site is maintained by Dimagi staff and some CommCare users. It has material on everything from building applications to project implementation, and even data analysis.

- **CommCare Users Group:** CommCare users globally are connected through Dimagi’s CommCare Users Group. When you join the CommCare Users Google Group, you can ask questions, get questions answered, and learn from the experiences of others.

Other resources and support can be found here.
CommCare Fundamentals - CommCare Structure

Learning Objectives

- Define the terms application, CommCare Exchange, project space, form, and module
- Describe the basic structure of CommCare
- Identify the best Internet browsers to use for accessing CommCareHQ
- Describe what can be done in each of the main sections of CommCareHQ
- Describe the structure of CommCare applications in terms of forms and modules

CommCare Software

CommCare is a software program that allows people to create and manage mobile applications through the website, CommCareHQ. CommCare is the overall tool for building applications, making changes, downloading applications to phones, registering the application users, and viewing data submissions.

A CommCare Application (“app”) is the mobile-based tool which is used for data collection and service delivery. An application can take many shapes and levels of complexity -- there are CommCare apps for maternal and child health, for simple surveys, for agricultural extension agents, nutrition, education, and all sorts of programs where there is a need to provide support to frontline workers and collect data digitally. To explore some applications that have been made with CommCare, please visit the free CommCare Exchange. The CommCare Exchange is a part of CommCareHQ where anyone can share CommCare applications they have created or download and use applications that other people have developed. There is additional information about the CommCare Exchange here.

Applications are built on the CommCareHQ website. It is not necessary to download any software; you can just create an account from any computer and start using CommCare.

Please note that CommCareHQ works best on the following browsers:

- Google Chrome
- Mozilla Firefox
- Internet Explorer Version 10 or higher.

If you have an older version of Internet Explorer CommCareHQ will not work well. You can find more hints on using Internet Browsers for CommCareHQ here.
CommCare Projects

Each program has its own project space on CommCare HQ with its own name. A **project space** is a secure web portal in the CommCare system that contains all data related to your CommCare applications, as well as tools that help you create, manage, and deploy your applications and mobile workers. Anyone can create their own project space, and can choose to let other people have access to their project space.

For example, there is a project called “helpsite” where we keep applications that are used on the help site. We decided to name the project "helpsite" because it is simple and easy to remember.

You will see all project spaces in CommCareHQ have a similar structure. Here are some of the key parts of each CommCare HQ Project Space:

- **Reports** - view and download worker activity, error reports, and individual form submissions
- **Data** - download raw data exports
- **Users** - manage the web and mobile users for the project
- **Applications** - create, update, and deploy applications

![CommCare HQ](image)

A project can have one application or many applications. Applications can all be separate, or they can communicate with each other using “case management,” which we will discuss later.

To have access to any project space, you must have a CommCare HQ account.
As illustrated below, a CommCare HQ user, you can create or be invited to multiple project spaces. If you belong to multiple project spaces, after logging into CommCare HQ you will be able to choose which space you want to work in at that time. Data is not shared among project spaces, so unless you invite someone else to your project, no one else will be able to see your application or your data.

**FORMS**

The basic unit of work in CommCare is called a **form**. It’s just like most paper-based systems— if you want to complete a task like registration, a transaction, or updating information, you often have to fill out a form. Sometimes a project requires lots of forms.

A form will usually contain a series of questions like this:

```
- ⌂ # Full name
- # Age
- # Number
- ⌂ # Husband name
- ⌂ # Hamlet name
- ⌂ # Block?
  - ○ 1. Manjhanpur
  - ○ 2. Mooratganj
```

In CommCare, you can build all of the forms we need over the course of a particular project and link them together into one application.
For example, if you are monitoring the condition of a farm, you might have to fill out one form the first time you visit the farm to collect basic data about it. When you return to the farm, you may have to take measurements that require filling out a different form. If there is a flood, there is a third type of form you have to fill out. Your CommCare app would also have at least three forms which would update the record of the form.

A CommCare form is a group of questions and messages that the user views sequentially on the phone. This is the core content of CommCare applications. When users submit data, they submit completed forms. They are fully customizable and support all kinds of useful features like multiple languages, skip logic, validation, and multimedia content.

A form can contain many types of questions. For example:

- Text
- Number
- Date
- Multiple Choice

There are also advanced question types like:

- GPS - This question type allows a user to capture their gps location.

- Media Capture (Photo, Video, Audio) - CommCare for Android can be used to capture or upload images, videos and audio to a form.

- Barcode Scanner - This allows data stored in an external barcode to be captured
You can find a complete list of all supported question types [here](#).

**MODULES**

CommCare also uses **modules**, which are groups of forms that are all related to the same type of thing. A module can have one or many forms, and an application could have many modules; it is like a folder full of forms that are all about the same thing. A module about the farm that is being tracked could contain a registration form, a yield and an income form. Each form has a different purpose but they are all related to the farm.

A single CommCare application can contain multiple modules. So here is what an application's structure might look like:

![Diagram of CommCare application structure](#)

In the example above, Forms 1 and 2 are probably referring to the same type of individual, facility, or thing—maybe about a child—so they are grouped into the same module. Form 3 may refer to something or someone different—maybe a village—so it is in a different module. Sometimes two modules may be about the same type of person, facility, or thing, but it depends upon how the application is being used.
The key points to remember are:

- The unit of data submission and work is a form. Every time a mobile phone user fills out a form, it is marked as completed and sent over to the CommCareHQ server via an Internet connection, such as a mobile data network, or a WiFi network.
- Forms can be grouped into modules and applications to match the overall workflow and responsibilities of the worker.

There are lots of tutorials on the CommCare Help Site to help you navigate the structure of an application. Now you know all of the basics!

The next piece of CommCare Fundamentals is to learn about Mobile and Web Users.
CommCare Fundamentals - Web and Mobile Users

Web and Mobile Users: Learning Objectives

In this unit, you will learn about the two main types of CommCare users and the tasks that can be accomplished by each user type. As you go through this unit, start to think about what tasks you need to accomplish using CommCare and which kind of user you will be.

At the end of this unit, you should be able to:

- Name the two types of CommCare users
- Describe the tasks that can be accomplished by CommCare HQ/Web Users
- Explain the different ways Mobile Users can access mobile applications and submit data

CommCare User Types

In CommCare, there are two types of users: mobile users and web users. Generally, each user type interacts with CommCare differently and, therefore, has different permissions.

**Mobile Users:** use CommCare Mobile to complete their work, which involves collecting data and following up with clients. Mobile users have accounts which allow them to access a CommCare application on their mobile phone or tablet. (or, for using CloudCare). These users are also known as Mobile Workers.

**Web Users:** use CommCare HQ to complete their work. Web users have accounts which allow them to access the CommCareHQ website, where they can build and change applications, manage users and settings, and view data. These users are also known as CommCare HQ users.

A Community Health Worker (CHW) is using a mobile phone to complete a registration form. She then submits the form via CommCare and the data submitted by the CHW can be viewed on CommCare HQ when a supervisor logs in. In this example, who is the mobile user?
What Web Users Can Do

As mentioned, CommCare web users have access to the CommCare HQ website. Users login to CommCare HQ using the email address and password that they entered during registration. Upon entering the website, a web user can select the project that they need work on. Web users, unlike mobile users, can belong to more than one project.

In a given project, you may have a number of people with access to CommCare HQ. Depending on their permissions, these web users may:

- Create, modify, download, and deploy CommCare applications
- Create, manage, and delete mobile user accounts
- View and export data submitted by mobile workers
- Send text messages to mobile workers
- Manage workspace settings

If you're interested in exploring the capabilities available to web users but haven't created your CommCare HQ account, now would be a great time! It's free and easy to sign up. Just click on the button that says Try CommCare. Then, have fun exploring!

Web users can do a lot...except One thing

While web users have a range of tasks that they are able to complete through CommCare HQ, there is one thing they cannot do: submit data. For this, they need a mobile user account (in addition to their web user account) or an advanced CommCare tool.

CommCare Mobile Users

While web users do really important work for their CommCare projects through CommCare HQ, CommCare mobile users equally complete important tasks through CommCare Mobile.

Through a CommCare Mobile User account, a mobile worker can access CommCare Mobile, which allows them to access a CommCare application on their phone. Mobile users then use the application to collect and submit data, follow up with clients, or otherwise use CommCare as part of their work. When a mobile worker wants to open a CommCare application on their mobile device, two options are available for viewing it:

- **Standard Mode** - this allows the mobile user to login with their username and password; once logged in, the worker can enter and submit data
- **Demo Mode** - also known as a demo user; allows the mobile worker to practice using the application without submitting real data (ideal for training purposes)
Like web users, mobile users must belong to a project in order to use an application on their phone. However, **mobile users can only belong to one project.**

**A Quick Note on Form Submissions**

In Unit 4: Data in CommCare, we discussed worker activity data. This is data about how and when a mobile worker submits a form. When a mobile worker submits a form via CommCare, the form will have their username on it. This allows the web user to view, within CommCare HQ, which mobile user sent the data. The web user can see this information in one of the worker activity reports.

Now it is time to learn a bit about one of the key concepts of CommCare: Case Management
CommCare Fundamentals - Case Management

Case management is one of the most powerful features of CommCare- and also one of the most complex! In this section we will not get into technical details about case management; we are only focused on the fundamental concepts.

Case Management Learning Objectives

Case management is one of the most powerful features of CommCare -- and also one of the most complex! In this unit, we will not get into technical details about case management; we will only focus on the fundamental concepts. At the end of this unit, you will be able to:

- Define the terms case and case management as used in CommCare
- Explain the uses, benefits, and importance of case management
- Demonstrate an understanding of case management by providing examples of how it can be used
- Explain when it is appropriate to use case management in an application
- Describe the different ways in which CommCare forms can affect a case (register a new case, modify/update an existing case, or close a case)
- Explain how the case list and case details aid the mobile worker in navigating between different cases

Cases

In CommCare, a case is something that you track over time with your CommCare mobile application. Below are some examples of things that might be considered cases in CommCare:

Cases store information about something over time. You can think of it as a file about that thing. For example, you can imagine a case or file about a mother. When you are registering a mother in the system, you will want to keep some key information in her file. This may include her name, age, and health history. When you visit her again you may add some more details about her to that file. And if that mother moves away, you may remove her file from your system.
Every time you visit or interact with that specific mother, you are completing a CommCare form about that woman. But you are also updating the "case" which links all of those forms together - this process of creating case records and updating them over time is called **case management** in CommCare.

A case could be like a mini patient record on the phone, or like a doctor's chart. Keep the following in mind: a case contains data you have chosen to save because it will be useful to access during future visits. For example, you might collect various details on the mother on your first visit, but choose to only save some of that information in the mother’s file for future visits. In this way, all data collected for that mother is not necessarily saved in her file. Only data relevant for future use will be saved.

There are three major ways you can interact with a case:

1. Opening a new case ("registering a case")
2. Updating an existing case ("followup with a case")
3. Closing a case

Let's walk through an example. Please proceed to the next page.

### 2. Shaila the Pregnant Woman

**Part I: Registration ("opening a new case")**

Imagine you are a Community Health Worker and you go to meet with your neighbor Shaila, who you just found out is pregnant. You take out your phone and open your CommCare application. You log in as a mobile worker and navigate to your Registration form. The form has a series of questions about Shaila - including details like name, date of birth (DOB), and weight. At the end of the form you hit "submit" and the form is sent to the CommCareHQ server.

![Create a Case](image)

However, some pieces of information are copied and kept on the phone. Later on you will be able to provide more information about Shaila.
Part II: Follow-up ("update an existing case")

It is a month later and it is time to visit Shaila again. You make your way to Sahila's house and take out your phone.

After you open CommCare and log in as a mobile worker, you go to the Home Visit form. However, this time you have to choose Shaila's name from a list of all of the pregnant women you are visiting. You have 15 women you are currently providing care for, so you search for Shaila in your list and then choose her name to open up her file. You can see some of the details that were kept on the phone, like her date of birth (DOB) and weight. You review those details and open up the form. Again there are a series of questions in the form and you gather additional information, like whether or not Shaila was vaccinated. You complete the form and the data is again sent to the CommCareHQ server. Again, some pieces of information that you collected are copied and kept on the phone so that you can review them next time.

Back on CommCareHQ, your supervisor can open Shaila's file and see that you registered her a month ago, and that today you made a home visit. Your supervisor can also see all of the information that Shaila provided in her answers to your questions!

Part III: Close

Shaila's estimated date of delivery arrives, so you go to her house. You arrive and find that she is there with her new baby!
You open up your CommCare application and again Shaila's name on your "case list." You pick her name and open up a different form, the "pregnancy outcome" form. Again, there are a series of questions for you to fill out. You submit the form and it is sent to the CommCareHQ server. But this time something different happens- the outcome form is configured so that when you fill it out, it removes Shaila's file from your phone! All of the data is still on the CommCareHQ server, but you no longer want Shaila's name in your phone, since you are done caring for her.

**Cases on CommCare Mobile**

**Case List**

Once a case is created, a mobile worker will be able to locate it on the mobile application by accessing the Case List. This can be configured while designing the application on CommCareHQ to contain key information about the case. The Case List can be sorted or filtered in different ways (for example, in alphabetical order of the mother's name or in order of the mother's expected delivery date)

Here are examples of what a case list looks like on CommCare for Android and Java feature phones:
After a mobile worker chooses a case from the case list they will see the **Case Details**. The case detail screen can also be configured on the CommCareHQ Applications section, and will contain additional information about the selected case.

Here are examples of what a case detail screen looks like on CommCare for Android and Java feature phones:

![Android Phone](image1.png) ![Feature Phone](image2.png)

The case list and details screens will be updated when new cases are added, old cases are removed, or details about an existing case are updated.
CommCare Fundamentals - Data in CommCare

Data in CommCare - Learning Objectives

We know that data is incredibly important for your work. It helps you identify what's working and what's not, and equips you with the information necessary to make decisions and solve problems. In this unit, you'll learn all about data in CommCare. We'll explain how data gets from a phone to CommCare HQ, what types of data can be accessed, and provide examples of how the data can be used.

By the end of this unit, you will be able to:

- Describe the flow of data in CommCare
- Explain how CommCare functions when there is no network
- Define and provide examples of the different data types in CommCare: worker activity data and raw data
- Distinguish between the two types of raw data available in CommCare: form data and case data
CommCare Data Flow

Let's begin this unit on Data in CommCare by answering this question: How is data collected on the phone made accessible on CommCare HQ?

As you can see in the figure above, there are three main steps in the data flow process:

**First** - Data is entered into forms via CommCare Mobile

**Second** - Data is submitted via cellular phone networks or Wi-Fi networks to the CommCare HQ server

**Third** - Data is accessible and downloadable via the CommCare HQ website
Sending data

Getting data from the phone to the server, and making it accessible on the CommCare HQ website requires connectivity via cellular phone networks or Wi-Fi networks.

So what happens to the data collected on a phone when there is no signal?

CommCare Without Connectivity

When there is no signal, data stays on the phone until there is signal! CommCare was designed to function in places where there is not always consistent access to the network.

As soon as the mobile user is able to connect to a network, all the data on the phone is sent to the server and available on CommCare HQ.

ACCESSING DATA

Once the data is sent, who can access and download the data?

In most projects, data is accessed and downloaded by any CommCare HQ/web user with permission to view it. In some instances, where mobile users are sharing the same case list, one mobile worker may be able to see some of the data that was submitted by another mobile worker. This is called case sharing. However, case sharing is an advanced concept so we won't review it here. If your project will be using case sharing or you are simply interested in the concept, you can learn more about it here.

We used some terms here that you may not yet be familiar with: web user and mobile user. You'll learn more about the differences between web and mobile users in the next unit, Unit 5, in this course.

For now, let's learn more about the types of data accessible in CommCare: raw data and worker activity data.
Types of Data Captured by CommCare

In general, two types of data are captured by CommCare:

**Raw Data** – this is data from the questions and answers contained in a form. Raw data is also sometimes called key indicator data or programmatic data. Raw data, once analyzed, can help you understand progress towards your indicators and program effectiveness.

**Worker Activity Data** – this is data about how and when mobile workers submit forms. The technically inclined can think of this as metadata. Worker activity data can help you understand mobile worker performance and enable you to provide supportive supervision.

RAW DATA

What is raw data?

For example, if you have a question like “what is the patient’s birth date” and the answer is "14 September 2012," that data -- both the question and the answer -- are then visible in CommCare HQ as raw data. These are also sometimes called key indicator data or programmatic data.

Raw, or programmatic, data includes anything that is specific to the form design, including questions, answers, hidden values, and calculations. Examples include text, numbers, dates, and GPS coordinates.

Types of Raw Data

Two kinds of raw data can be downloaded or exported:

1. **Form Data**: data collected in a single form. A form data export will allow you to download submissions from any single form in an application.
2. **Case Data**: data collected for an individual case. A case data export will allow you to download all of the data which has been flagged as part of a case file (across all forms within the application).

More details about CommCare Data can be found in this section of the Help Site
WORKER ACTIVITY DATA

What is Worker Activity Data?

The technically inclined can think of this as metadata. From viewing worker activity data, you can find out things like:

- Which mobile worker submitted the form
- How long it took the mobile worker to complete the form
- When the form was sent to the CommCareHQ server over the mobile data network or Wi-Fi network
- Whether the form is related to a case and, if so, which one (see Unit 3: Case Management for more about cases)

Using Worker Activity Reports

For your convenience, Dimagi has developed a variety of reports using worker activity data. Collectively, we refer to them as "Worker Activity Reports," and have made them available on CommCare HQ. Across numerous CommCare projects, worker activity reports have been very useful in monitoring workers and providing supportive supervision. These reports can be generated and viewed within CommCare HQ, exported to Excel, or sent via email.

Reports available to you include, but are not limited to:

- **Case Activity** - how frequently does a given mobile worker submit a form related to a given case
- **Submissions by Form** - which forms are being submitted by a given mobile worker over a time period
- **Daily Form Activity** - how many forms does a given mobile worker submit over a time period

Below is an example of a report based on worker activity data. This report is called Daily Form Activity, and it shows the number of forms each mobile worker submitted on each day over a specified time period. This report is useful for a number of reasons. For example, you can see that user06 has not submitted any forms during this time frame, while user07 has submitted 22 forms. Using this report can inform decisions about which workers may need extra attention. But remember: these reports are just a starting point. You should always engage a mobile worker in a conversation to understand all the factors impacting their performance.
You can learn more about Worker Monitoring on the CommCare Help Site.

The next section is not about CommCare technology, but how projects are structured for effective implementation.
CommCare Fundamentals - Project Planning and Implementation

CommCare Projects take lots of different shapes and sizes. However, there are some key roles and practices that are associated with successful projects.

**Learning Objectives**

Implementating a CommCare project is an exciting and rewarding experience. It can also be a challenging one. So, it's important to prepare: **build a solid team, understand the phases of implementation**, and know where to **access useful resources** along the way.

This unit will provide you with a brief overview of each of these areas. By the end of this unit, you will be able to:

- Name and define the main roles in a CommCare project
- Describe the main phases in the deployment of a CommCare project

**KEY ROLES AND RESPONSIBILITIES**

Like most projects, CommCare projects require a team effort to be successful. Everyone must do their part. But what does a CommCare project team look like?

Over time, Dimagi has identified **7 key project roles**. In some projects, a single person may have more than one role -- that's okay. What's important is that each team member knows their role and has received the appropriate training and resources to do their part well.

Below are the roles and their core responsibilities:
<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager (PM)</td>
<td>Oversees the entire execution of the CommCare project and supervises at a high level the various roles described below</td>
</tr>
<tr>
<td>Mobile Worker (MW)</td>
<td>Uses the CommCare mobile application to collect data and follow up with cases</td>
</tr>
<tr>
<td>Project Coordinator (PC)</td>
<td>Manages mobile workers on the CommCare HQ website and supervises their worker activity data.</td>
</tr>
<tr>
<td>Application Manager (AM)</td>
<td>Makes updates to applications and creates new version; may also be able to design and build applications</td>
</tr>
<tr>
<td>M&amp;E Officer (MO)</td>
<td>Uses data from CommCare HQ for analysis and reporting</td>
</tr>
<tr>
<td>Technical Officer (TO)</td>
<td>Manages the phone, installs applications, and resolves technical issues encountered by mobile workers.</td>
</tr>
<tr>
<td>Trainer</td>
<td>Leads training, often along with the Dimagi team</td>
</tr>
</tbody>
</table>

You will notice from this list that each role covers a distinct and important area of responsibility, and that different roles require different levels of project engagement over time. Additionally, depending on your project, certain roles may require technical skills. For example, a M&E officer should have data analysis skills; a Trainer should be comfortable speaking publicly and explaining complex ideas in a simple way. When assigning roles, be sure to consider each person's skills and time availability.
PHASES OF IMPLEMENTATION

CommCare projects vary a lot -- in size, complexity, and geography -- but each one transitions through **4 major phases of implementation**. Below are the 4 phases with some examples of what must be accomplished in each phase, though not everything is listed here.

**Phase 1: Design and preparation**
- Complete Project Needs Assessment
- Design and scope application
- Determine who will fill each project role

**Phase 2: Refinement and Iteration**
- Build prototype application based on needs assessment and scoping
- Pilot with users to gather feedback
- Refine application based on user feedback

**Phase 3: Training and Deployment**
- Prepare all training materials and logistic
- Prepare phones and applications
- Train all users - mobile workers as well as those who will be using CommCareHQ

**Phase 4: Maintenance and Monitoring**
- Monitor workers' performance
- Address technical issues
- Consider changes to application based on post-deployment feedback

You can find much more detail about CommCare Implementation plans [here](#).

An example of a key step in implementation is developing a user contract with whoever will be using phones in your program. This allows you to discuss and set policies related to what will happen if a phone is broken, lost, or needs additional airtime/balance. You can find lots of example contracts [here](#).
You have completed CommCare Fundamentals. Return to the main page.

Interested in taking the Certification Test for CommCare Fundamentals? See CommCare Fundamentals - Test.