

User Guide: Extra Topics

In this 14-page tutorial we will look at:

- Register
- Organisations and Members
- Applications: Extra Topics
- CyberTracker Mobile: Extra Topics
- View Data: Extra Topics
- Who can see my data?
- Can CyberTracker be used in other languages?
- Areas where there is low or no internet connection
- Migrate CyberTracker Classic to CyberTracker Online?

Register

[Registration](#) involves only providing your email address and choosing a password.

You will receive an email to confirm your email address. Click on the confirmation link in the email. If you do not receive the email within a few minutes, please check your junk or spam folder.

You will now be able to [log in](#) with your email address and the password you chose.

Please read the [Terms of Service](#) and the [Privacy Policy](#)

Accept Invite and Register

If you have been invited to join an existing organisation by its Admin, and you don't yet have a CyberTracker Online account, you can accept the invitation and register your CyberTracker Online user account in one step. In this case you will not create your own organisation, but rather join the existing one.

Existing CyberTracker Online users can accept invitations to new organisations in the Memberships tab without re-registering for CyberTracker Online.

Manage Users

Users

A **User** is a person with a CyberTracker Online account with a username (email address) and password.

Each person should **only have one user account**. A user (using single username and password) can be a member of multiple organisations.

Organisations

An **Organisation** is typically a formal organisation, (institution, reserve, company), a community (an indigenous community or community science project) or an individual working alone (student or researcher).

A **CyberTracker Online Organisation** is a collection of projects, applications and collected data. While working within an organisation, you can only access projects, applications and data belonging to that organisation.

Members

An Organisation can have multiple **Members**. If you create an organisation, you will be the first member. You can then invite other users to be a member of your organisation.

Your organisation's **data is only available to invited members**. Your data will not be shared with people who are not members or made public unless you decide to make it public.

Data collectors who will collect data for you on their mobile phones in the field do not need to have user accounts in CyberTracker Online.

Access levels

Three access levels define what you can do and is specific to your membership of an organisation:

- **Admins** can do everything
- **Editors** can edit and publish applications and view and export data, but cannot access functions related to organisation details, user management or project management
- **Guests** can view and export data, but cannot make any changes

		Admin	Editor	Guest
Dashboard		YES	YES	YES
Profile	Profile	YES	YES	YES
	Memberships (mine)	YES	YES	YES
	Email	YES	YES	YES
	Password	YES	YES	YES
Organisation	Organisation details	YES		
	Members (invite)	YES		
	Projects (manage)	YES		
Applications	Screens	YES	YES	
	Save targets	YES	YES	
	App settings	YES	YES	
	Publish	YES	YES	
View Data	Search and filter	YES	YES	YES
	View data settings	YES	YES	YES
	View map	YES	YES	YES
	View table	YES	YES	YES
	Export CSV	YES	YES	YES
User guide		YES	YES	YES
Support		YES	YES	YES
Logout		YES	YES	YES

Members tab

The **Members tab** is only available to **Admins**.

The Members tab shows a list of all members of your organisation. Here you can edit the access level of members, delete members, and invite new members.

To **Invite member**, fill in the **email address** of the person and select an **Access Level**. Confirm your invite **Save**.

The person you have invited will receive an emailed invitation to join your organisation. It will list your organisation name, your name, and the access level you have granted them. There is a link in the email to accept the invitation.

Once the person has accepted the invite, their status in the list will change from “Invited” to “Joined”.

If they have not received the email invitation, you can resend it with the Resend button. Make sure the email address is correct, and that they are checking their spam/junk mail folders if necessary.

Applications: Extra Topics

Icons and Images

File types

You can upload any image filetype, for example .svg, .png, .jpg, .gif, .bmp.

Scalable vector graphics (svgs) scale very well without losing quality. This is ideal for mobile devices with different screen sizes and aspect ratios.

If possible, use images with transparent backgrounds. Jpgs and bmps cannot have transparent backgrounds, so for this use pngs or svgs are best.

File size

For mobile devices there is no need to use very high-resolution images with large file sizes. Images are packaged into the app that the mobile device has to download and install, so the larger you make them, the more data there is for the mobile to download.

Image dimensions

For icons, try to use square icons if you would like your lists to look consistent and for the icons and text to line up with each other.

Transparency

Icon and picture files can be created either with transparent backgrounds, or white backgrounds. Only svg and png files can have transparent backgrounds.

The main screen background of your mobile apps is white by default, so normally you don't see the white square for icons that are not transparent. However, if an image is selected in the mobile and the selected row is no longer white, the background does show.

Note also that it is possible to switch CyberTracker Mobile into Dark theme, in which case the whole app is displayed on a dark background.

Save Button behaviour in the Mobile

The **Save button** saves a **single observation record** containing the following data:

- The **timestamp** when the data collector pressed Save.
- The **GPS co-ordinate** where the data collector pressed Save.
- Any **data that has been entered** when the data collector pressed Save.
- Additional **metadata** about the observation records.

Save Target behaviour:

- If you have **no Save Targets**, save automatically takes you back to the **Start Screen**.
- If you have any **Save Targets**, there is no auto option to save and return to start screen. You must add the **Start Screen as a Save Target** as well manually.
- If you **only have one Save Target**, then when you press save it does not pop up the Save Target list, it just saves and correctly takes you to that save target.
- Even if you have more than one Save Target screens, but from your current position in the app there would only have been one in the list, it does not pop up the Save Target list.
- **Save Targets** only show up if they **return to a screen before or including your current screen** in the screen flow. You can only loop backwards or stay where you are, you cannot use a save target to go forwards or skip screens.
- **Save targets only show up for any Branch or is visible if screen that you did pass through or are busy with in your current flow.** In other words, if there are save targets that return to the first screen in the Animal branch, and the first screen in the Plant branch, and you are in the Animal branch or passed through it without going through the Plant branch, you will not see the save target for the Plant Branch screen in the save target list.
- The **Save Target that goes back to the Start Screen has a delay** built into it. When you press any other Save Target it is actioned immediately. For the Save Target that returns to the Start Screen, **you need to keep holding down on the Save Target until the progress bar is finished.** This is to prevent data collectors accidentally returning to the start screen if they meant to loop back within the same survey.

App Version Changes: Effect on Data

Most changes are safe to make and have little or no effect on data you have already collected. However, **some kinds of changes will result in losing data.**

Changes that will result in Data Lost

- **DELETING A PROJECT** deletes its **APP** and **ALL DATA LOST** for the Project.
- **DELETING A SCREEN** will result in **DATA LOSS.**
- **DELETING A NUMBER LIST SCREEN** will result in **DATA LOSS.**
- **DELETING A NUMBER LIST SCREEN LIST ITEM** will result in **DATA LOSS**

Version number

Each time you make a change in your app, even if it is just to fix a spelling mistake on one of your screens, you will **need to republish** the app before the change will take effect on the mobiles.

Each time you publish your app, it will be given a **version number**. You will see this version number displayed on the Publish page. The version number is the date (yyyymmdd), and then a counter (nn) to show how many times you have republished on that day.

For example, the first time you publish on the 18th of March 2023, the version number will be 2023031801. If you republish again on the same day, your version number will be 2023031802, and so on.

Mobile updates

This is how the mobile handles app updates that contain changes that affect data:

- A mobile device has version 2023031801 of your app installed, and data collected on the mobile but not yet submitted.
- You update your version to 2023031802, including a change that affects data, such as adding a new screen.
- The mobile detects that a new version is available, and prompts the data collector to update, which she does.
- The mobile now has version 20231802 installed, including the new screen.
- The data collector continues to record observations, now including data for the new screen.
- The old observations obviously do not contain any data for the new screen.
- When the data collector submits, the old and the new data is submitted to the server.
- Each record contains the version number of the app with which it was collected.

Summary of Changes

CHANGE TYPE	DATA LOSS	COLUMNS	DATA IN TABLE	OBSERVATION FILTERS
Edit screen label	Safe	Heading change	No change	Change
Edit list item label	Safe	No change	New records change	Change but still links to old item
Change screen order	Safe	Order change	No change	Change
Change list item order	Safe	Order change if number list item; others no change	Change to order of multi select items	Change
Add screen	Safe	Added	New records have data	Added
Delete screen	DATA LOSS	DELETED	DELETED	DELETED

CHANGE TYPE	DATA LOSS	COLUMNS	DATA IN TABLE	OBSERVATION FILTERS
Add list item	Safe	Added if number list item; others no change	New records have data	Added
Delete list item	DATA LOSS if number list; others safe	DELETED if number list item; others no change	DELETED if number list item; others no change (old data still there)	DELETED. Cannot filter by this item anymore.

CyberTracker Mobile

CyberTracker Mobile is a separate application to CyberTracker Online. Where CyberTracker Online is a website, CyberTracker Mobile is a mobile application that runs on either Android or Apple iOS devices.

- CyberTracker Online is used for designing, building and publishing mobile Apps, which can then be deployed onto CyberTracker Mobile.
- CyberTracker Mobile is used to collect data in the field and submit the data back to CyberTracker Online.
- You can then view data from all your data collectors in CyberTracker Online.

Install CyberTracker Mobile

Once the app has installed, you will be asked to allow CyberTracker Mobile certain permissions on your mobile, for example to take photos, audio, and to access your phone's location service to get GPS co-ordinates. Allow all permissions if you want to use this functionality.

You also need to enter your name under Settings in CyberTracker Mobile. Data collected on this device (for any project) will be submitted with this name as the data collector.

Connect Screen

When you launch CyberTracker Mobile, if you don't yet have any projects installed, the Projects screen opens.

CyberTracker Mobile can be used to collect data for many different back-ends, and the Connect screen allows you to connect to your backend. (The backend is where the data will be submitted to after collection, and where it can be viewed.)

However, for CyberTracker Online projects, all the information about how to connect is contained in the QR Code or the Mobile app link that you will generate when you publish your projects in CyberTracker Online, so simply clicking on the link on your mobile phone will connect you correctly.

Projects screen

The Projects screen lists any Project Apps you have installed. You can have multiple Project Apps. Access the Projects screen from the Projects icon in CyberTracker Mobile's main interface.

Alternatively, if you are within a CyberTracker Online app on the mobile, use the Projects button in the navigation bar to return to the Projects screen. This Projects button is only available on your app's start screen.

Update a Project App

When a **new version** of an app is available, CyberTracker Mobile will detect this, and display the update icon next to the project name in the Projects list.

- Click on the **update icon** to update the app.
- You will need to have an **internet connection** on your phone when you do this.
- CyberTracker will download and install the new version and notify you once complete.
- There is no need to get a new CyberTracker Mobile app link to update an app.

Delete a Project App from Mobile Device

You can **delete an App from your Mobile Device** – this will not delete the App or any data from the CyberTracker Online server:

- In the Projects list, swipe left on the project you would like to delete.
- Confirm the delete.
- On the second "Yes, delete it" confirmation, hold down on the text until the progress bar has reached the end.

View Data: Extra Topics

In **View Data**, select the **Project**, which will show all data for the last 30 days.

The **Map View** will show you:

- **Observations** - each saved observation record as a large dot on the map
- **Timer tracks** - all timer tracks as small dots on the map

Hover over the dots on the map to get more information about them, such as their type or timestamp.

The **Table View** by default the data is sorted with the most recent observation on top. The **timestamp** is listed first, and then all your **screens follow in order as columns**, with the data that was entered for them. There are additional **metadata** columns captured automatically by CyberTracker at the end.

Filters

There are various filters that can be applied to your data. Any filters set will filter the data in both map view and table view.

Date Filters

By default, your data is filtered to show the last month's worth of data only. Use the date controls to set a start or end date (or both) for the data you want to view and click Search.

Observation Filters

You can use one or more of your select screens to filter your data. At the bottom of the screen settings, under the View Data settings section, check the checkbox for Observation filter.

The screen and its list items will appear as filter check boxes to the left of the map. The dots on the map will be colour coded to show different observations.

You can add multiple screens as observation filters. Only list screens (single and multi-select) can be used as observation filters.

Observation filters will filter both your map and table data.

Timer track Filters

You can also use one of your select screens to filter your timer track data by. For example, you may want to display timer tracks for a type of survey.

At the bottom of the edit screen for your chosen screen, check the Timer track filter checkbox and click Save.

You can only nominate one list screen as a Timer track filter, for example, the Type of Survey.

The table view shows observation data only, not timer track data, so the timer track filters have no effect on the data in the table view.

What data is captured?

CyberTracker Online is all about creating your own data capture application, so you can specify what data you want to collect.

Each app screen that you create represents a question, and data collectors will enter their answers on that screen.

So each of your screens becomes a column in your data table, or your CSV file, or other exports.

But CyberTracker Online also collects additional data for you for each observation that your data collectors record.

The following fields are automatically added as columns in your data table and exports:

- Timestamp (UTC)
- Username
- Device Id
- Latitude
- Longitude
- Save Target
- Submitted (UTC)
- Version
- Observation Id
- Session Id
- Track Filename

Here are some further details about each field:

Timestamp (UTC)

The timestamp, in UTC, when your data collector pressed save for the record.

Username

The username that is set on the CyberTracker Mobile app for data collection for all projects on that mobile device.

This field is not always populated, it depends on whether the data collector has set it in the CyberTracker Mobile settings as a once off operation.

If you want to know who submitted each observation, it is recommended to encourage your data collectors to set their username in CyberTracker Mobile, or alternatively to provide your own screen in your application where you ask them to enter their name.

Device Id

A unique id for a particular installation of CyberTracker Mobile on a particular mobile device.

This is not necessarily equitable to a single data collector, or even a single device, but it is close.

- If you have more than one device, you will have a different device id for each device.
- If two users both share the same device for data collection, the device will only have one device id.
- If CyberTracker Mobile is uninstalled and then reinstalled on the same device, the new installation will have a new device id.

- If CyberTracker Mobile is upgraded to a new version on the same device, the device id will remain the same.

Latitude and Longitude

The GPS co-ordinates at the location at which the data collector pressed save.

Expressed in decimal degree notation.

Save Target

If the data collector selected a save target when they pressed save, the name of the save target they selected will be captured here.

If you do not have save targets for your application, or only one save target was relevant at the time of saving so the data collector did not need to select one, then this field will be empty.

You can use this information to see whether, after pressing save, the data collector returned to a particular screen within your app to continue data collection, or whether they returned to the start screen, effectively ending their data collection session.

Submitted (UTC)

The timestamp, in UTC, when the data was submitted from the mobile device to CyberTracker Online, either because the data collector pressed Submit data, or because CyberTracker auto-submitted the data.

Version

The version of your app with which this record was collected.

Observation Id

A unique id for this observation record.

Session Id

A session is the time from which a data collector left the start page (started collecting data) and returned to the start page again at the end of data collection.

For simple apps, with no save targets, the data collector returns to the start screen after every save. So, each session will only have one observation record.

If you define save targets, then a data collector can start collecting data (leave the start screen), and then loop back several times within the application, saving many observation records before finally returning to the start screen at the end of the session.

For example, if you have a team that goes out on patrol for a whole day, they might begin the day by entering the team name, area in which they are working, and then have a “main” screen with observation types (saw an animal, saw a plant, saw a fire etc) that they return to throughout the day as they record observations. Only at the end of the day do they return to the start screen and end the session.

The session Id will group these observation records together for you.

Track Filename

If you are collecting Timer Tracks in your app, this field contains the name of the collected track file. It also indicates (by being populated or not) which observation record the track file was submitted with.

Track files are submitted with the last observation record of a session, the one in which the data collector returned to the start screen on save, rather than to another save target.

There is one track file per session.

Timer Tracks

A timer track is the track or path that a data collector followed while collecting data in your app. A GPS position is taken automatically at certain time intervals for the duration of the data collection session.

The Timer Track can be viewed on the map once data has been submitted.

When does the Timer Track start and stop?

The timer track starts as soon as the data collector presses Next on the Start screen and ends when they return to the Start screen again.

The timer track indicator in the header bar (top right corner of the screen), will show whether the timer track is recording points or not.

On the Start screen itself it is off, (the indicator has a line crossing over it), but as soon as Next is pressed and the data collector gets to the first data collection screen, the indicator shows that the timer track is recording when the black dot appears inside the circle.

If your application has multiple save targets, so that data collectors can start a data collection session (say a full day patrol) and then loop back multiple times throughout the day to mid-way in your application, the timer track will run for the full session, until such time as the data collector returns to the Start screen using the relevant save target.

Timer Track intervals

By default, the timer track is set to take a GPS reading every 10 seconds, so the track points should be 10 seconds apart.

In addition, a timer track point is recorded every time a data collector presses save in the application, to ensure that the timer track passes through each observation record point.

Timer Track data submission

The timer track data (all the points in the track) are submitted as a track file together with the last observation record in a data collection session, in other words the save on which the data collector returns to the start screen.

So if you have a full day patrol, and your data collector saves many observations during the day, the track file will only be submitted on the final save of the day when they return to the start screen, and will contain the track points for the whole day.

If your app is auto-submitting data every two hours, you may have received observation records for part of the day, but you will not get the related track file until the final record for the session is submitted.

Timer Track display on the map

Timer track points are displayed on the map as small dots (as opposed to the larger dots that represent observation records). Hover over the timer track point to get a tooltip with its timestamp.

You may choose one of your select screens to filter your timer tracks by. Timer tracks will also be filtered by the date filters in the View data section.

Who can see my data?

Only members of your organisation in CyberTracker Online can see your data.

You invite members to join your organisation as either Admins, Editors or Guests, and if they accept the invite, these people will be able to see your data, but no-one else.

If you would like to share your data with other people, you can export it and send it to them, but they will not be able to view it in CyberTracker Online.

Note that your data collectors do not need to be members of your organisation. Anybody to whom you send an app link can install your app on their mobile phone and collect data for you, without needing to have a user account in CyberTracker Online. They will not be able to view the collected data.

Can CyberTracker be used in languages other than English?

The CyberTracker Online interface is only available in English. However, if you are using **Google Chrome browser**, you can use **Google Translate** to translate the links buttons and messages.

You can build mobile applications in other languages. Also, CyberTracker was originally designed for data collectors who could not read or write and can be largely icon based. While designing your application, when you are prompted to enter labels for your screens or list items, enter them in your language of choice. This is how they will display on the Mobile.

Note that the main CyberTracker Mobile interface is also only available in English, so some of the buttons and messages will remain English. Your application however and its screens will be translated, as you define them.

The values of your collected data will also be in the language you chose if you defined lists to select from, or the language in which your data collectors entered it in the case of text inputs.

Areas where there is low or no internet connection

CyberTracker Online is a website and can only be used while you have an internet connection. The work you do building your applications and viewing your data will all be online.

CyberTracker Mobile is a mobile App and can run on your phone while offline. You can collect data in the field with no internet connection.

However, you will need to have an internet connection on the phone to do the following:

- Install CyberTracker Mobile for the first time or upgrade it.
- Install a CyberTracker Online app on the phone for the first time or update it.
- Submit data.

You may be able to do these functions in a base camp that offers an internet connection, then go into the field and collect data offline, returning to your base camp to submit data periodically.

The data on the mobile phone is light, or quick to upload, providing you do not have too many audio or photo files, which are larger. In areas with poor connections, it is recommended not to collect too many photo or audio files.

Why can't I access all features?

If you are not able to find all features in CyberTracker Online:

- Your organisation is set to use the **Intro feature set**, instead of **All features**
- Your user account is assigned a role or **access level** in this organisation that does not have access to the feature.

Migrate CyberTracker Classic projects into CyberTracker Online?

It is currently not possible to migrate an existing CyberTracker Classic project into CyberTracker Online. CyberTracker Online supports new projects built from scratch online, and new data collected for those projects.