

# Collecting and Visualizing GPS Data with Track Kit for iOS and Android Devices

## Reference Guide for Using the Track Kit App

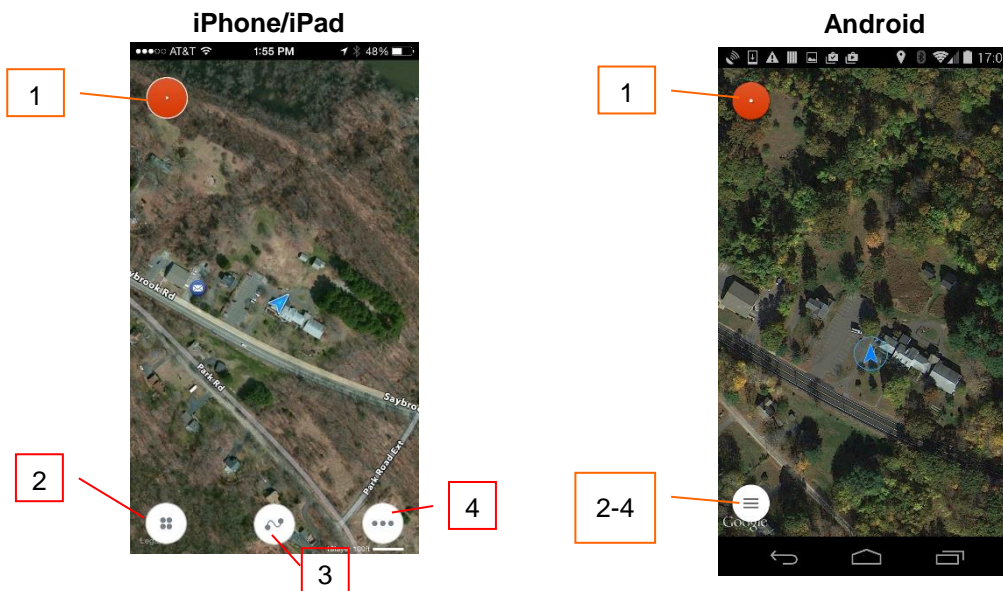
Track Kit is an app for iOS and Android devices that is designed to collect geo-referenced waypoints, tracks and photographs in the field much in the way a handheld GPS would. This guide is based on the iOS version, with specific Android instructions where needed. The iOS app costs \$2.99 (price varies  $\pm$  \$2), while the Android version is currently free. However, the Android version is new and does not have some of the functionality of the iOS version. Differences are noted throughout the guide.

After reading this guide you should be able to:

1. Record a track
2. Collect waypoints (and data) along your track
3. Collect photos along your track
4. Download maps for offline use
5. Share your data

### Explore the App Layout:

Once you have downloaded Track Kit to your phone or tablet, take a minute or two to explore the various tools and menus the app offers.



1. **Record** – tap to begin recording a track
2. **Tools** – tap to access tools
3. **Tracks** – tap to access previously saved tracks and points
4. **Maps/Settings** - tap to change basemap, download offline maps and adjust display settings

Use the **Maps/Settings** button to explore different basemaps and select one you like.



## Recording a Track & Collecting Waypoints:

In Track Kit, waypoints are associated with a track, so to begin collecting points you have to first start recording a track.

### Step 1: Tap Red “Record” Button

To begin recording a track as you walk, simply **tap the big red record button** in the upper left corner of your screen (see image previous page). A red title bar will appear on the top of your screen indicating speed, travel time, distance travelled, and current altitude.

To see additional trip data (average speed, active time, max speed, stop time), **tap the small arrow** at the bottom of the title bar.

**Tap the bar graph symbol** to see a chart of your progress.

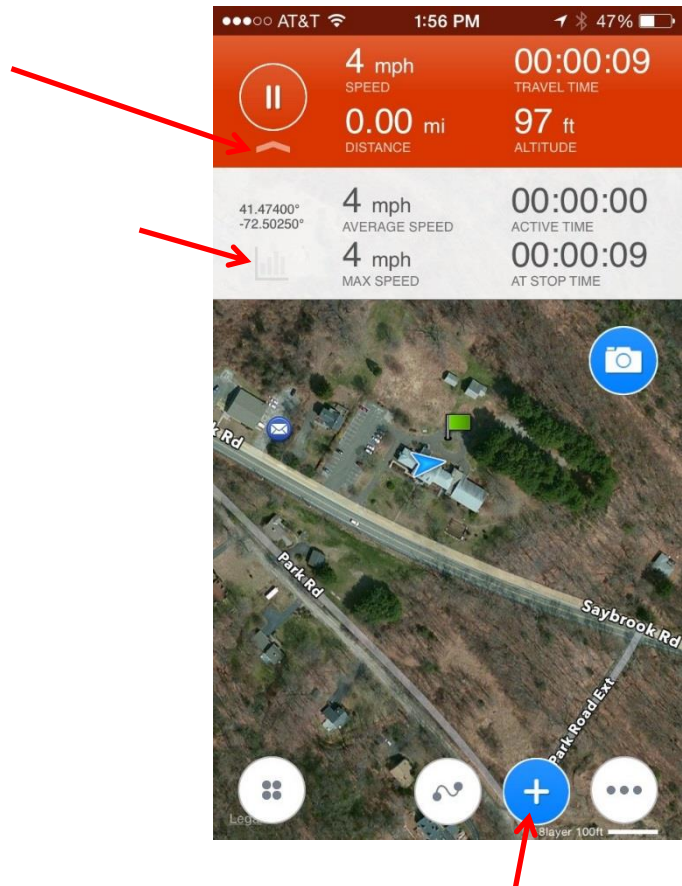
**Tap the small arrow again**, to close the additional trip data bar.

Start walking and notice your track begin to appear on the map.

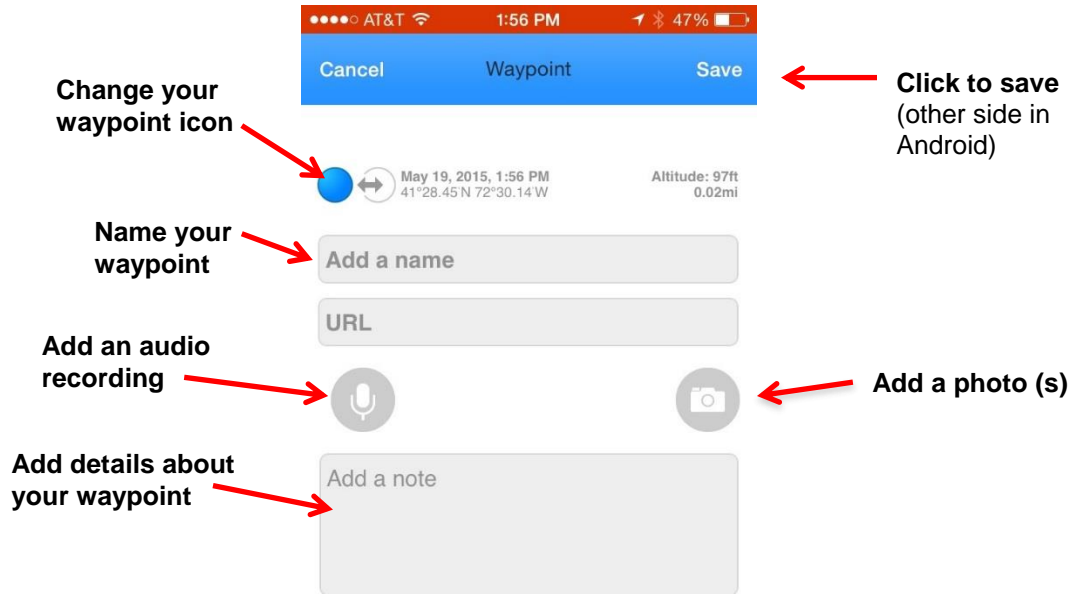
### Step 2: Add Waypoints to Your Track

Waypoints are particular spots along your track that you want to save information about.

To add a waypoint, **tap the blue plus sign** at the bottom of the screen.



The waypoint info screen will appear. Use the image below to guide you through entering information about your waypoint.



**Tip:** Occasionally after adding notes to a waypoint, the edit waypoint window closes before you can add photos or audio notes. If this happens, tap on the waypoint icon to reopen the edit waypoint window.

### Step 3: Edit a Waypoint

Editing a waypoint after you have saved it is easy. Simply **tap on the waypoint icon** on your map, and the waypoint window will reopen. From there you can edit or add to the text, add additional photos, etc.

#### Step 4: Quickly Add Photos to Your Track

In addition to adding a photo to a waypoint, you can also add a quick photo to your track without saving a waypoint.

**Tap on the blue camera icon** and a small viewfinder window will open. (Button looks slightly different on Android.)

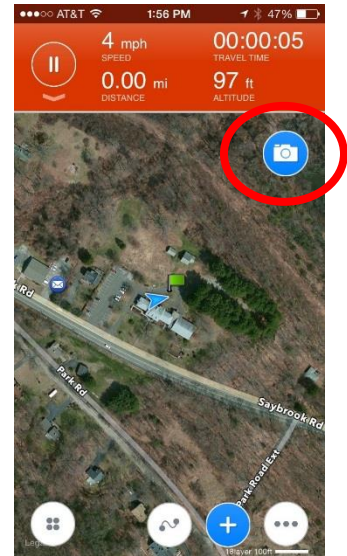
Frame your picture in the viewfinder window and then **tap** on it to take the picture.

A “Photo Added” message will appear.

You can continue taking pictures by **tapping on the viewfinder window**.

When you have finished, **tap the blue camera icon again** to close the viewfinder window.

To view the photos you have taken, **tap the photos icon** (feature not available for Android). Scroll through your photos by swiping your finger across the screen. Delete unwanted photos by **tapping the small trash can icon** in the bottom left-hand corner. **Tap “OK”** when done looking at the photos.

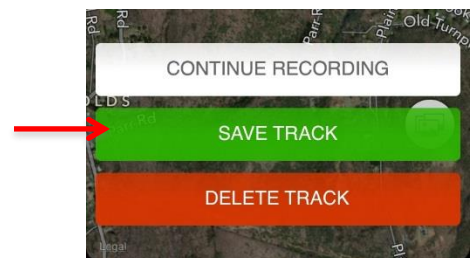


#### Step 5: Save Your Track & Waypoints

When you have finished collecting points and want to end your track, **tap the red pause button** in the upper left corner of the red title bar.



You will be given the option to continue recording, save track, or delete track. To save your track **select “Save Track.”**



A track info window will open.

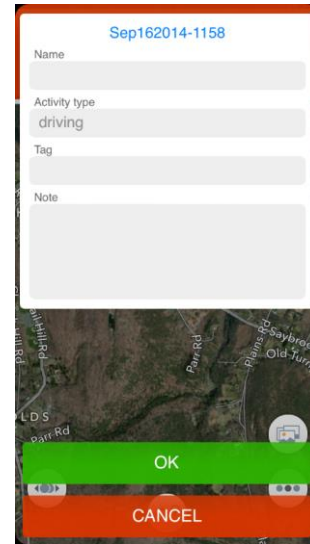
Give your track a **name**.

Select the **activity type**.

Add any **keyword tags** that will help you identify the track later.

Add any **notes** you may have about the track.

**Tap OK** when you have finished.

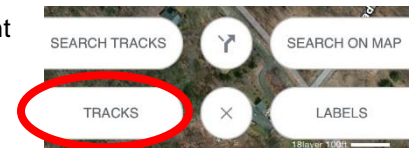


### Step 7: Share Your Track & Waypoints

To review or share your track and point data with others, **tap on the tracks icon** in bottom center of your screen. (For Android, click on the menu button.)

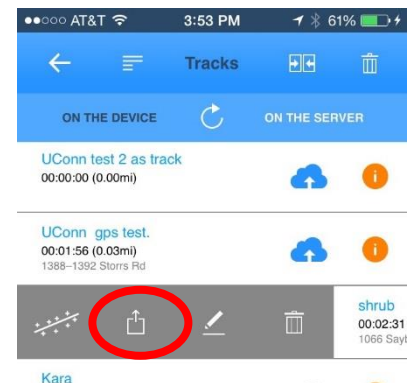


Among the new options that open, select **Tracks**. (This will look different on Android, but still select Tracks.)



Find the track you want to share in the list of tracks. **Swipe your finger to the right** over the track name. A new menu will open on the left. (In the Android version – tap on the three tiny dots next to the title of the track.)

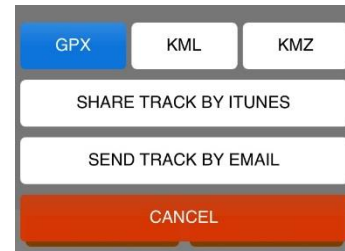
Among the options that open tap on the square with an arrow pointing up.



In the menu that opens, select the **type of file** you would like to share – GPX (standard geospatial format), KML (Google Earth format), or KMZ (zipped Google Earth format).

There are then two options for sharing your track:

1. **Share Track by iTunes:** Will download your track to your computer the next time you sync your device with iTunes.
2. **Share Track by Email:** Will send your track as an email attachment to whomever you choose.

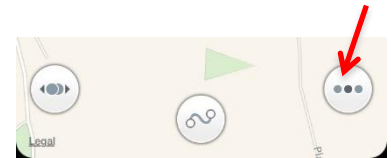


### Collecting Waypoints (without a track):

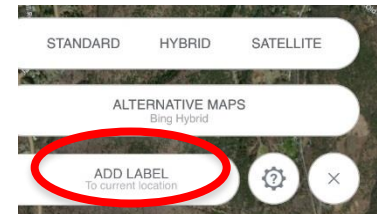
You can also collect data points (i.e. waypoints) in Track Kit without recording your track. These waypoints are called “labels.” You can group a collection of labels together and save the group as a “Track” that can be shared like any other track.

#### Step 1: Record a Label/Waypoint at Current Location (iOS Only)

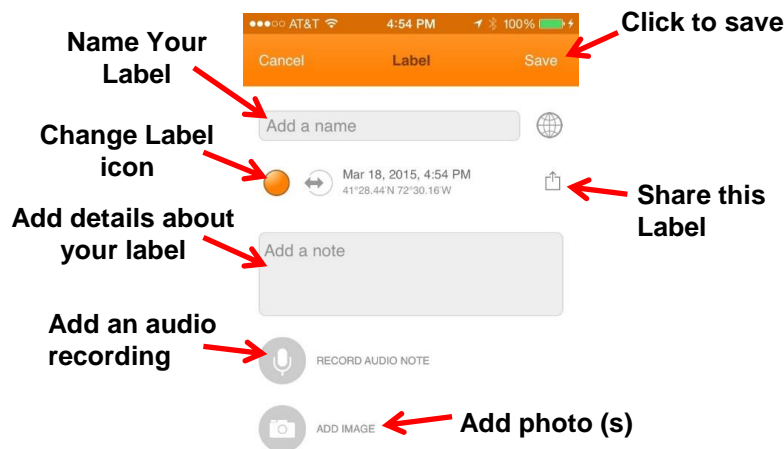
There are two ways to collect a label. The first is to tap on the **Maps/Settings button** in the lower right corner of the screen. (Note: This option is not available for Android Users, please skip to step 2 and use the long tap method.)



In the menu that opens, select **Add Label to current location.**



A Label info window will open. Fill out the information as indicated below. Add additional Labels as needed.



## Step 2: Long tap to add Label

The second way to add a label is through a long tap on the map.

Locate the spot on the map where you want to add a Label. **Hold your finger down** on the spot for 1-2 seconds. The Label information box will open.

**Add information to the point** as in step 1 above.

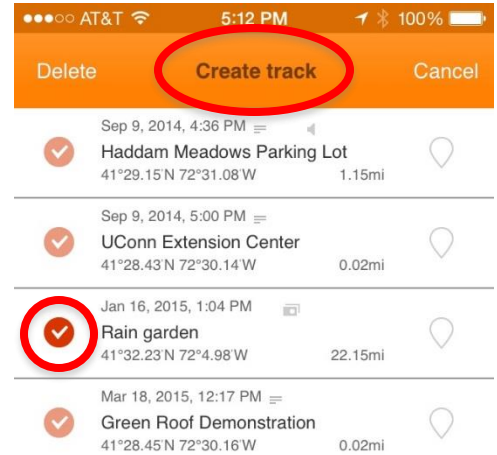
**Click Save** when done.

## Step 3: Group several Labels into a Track (iOS Only)

It is often useful to join several Labels together into a single "Track." Note the use of the word Track is confusing here as it is not exactly a Track. In any case, this allows you to easily share a collection of Labels with friends or add them to an online map.

(Note: this Step is not yet available for Android users. You can either create separate labels and share those, or just collect them in a track as identified above.)

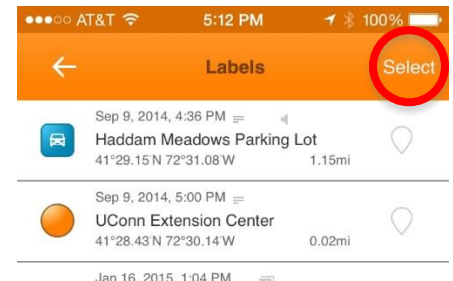
Tap on the **Tracks Menu**.



Select **Labels** on the menu that opens.



On the Labels screen that opens, **Tap Select** in the upper left corner of the screen. Little faded out red check marks will appear next to each Label.



**Tap the red checkmark** next to the Labels you would like to join together. The check marks will turn bright red when selected.

When you have finished selecting Labels, **tap on Create Track** at the top of the screen.



The Track information screen will open. **Fill out the information** about your group of Labels.

**Select Save** when done.

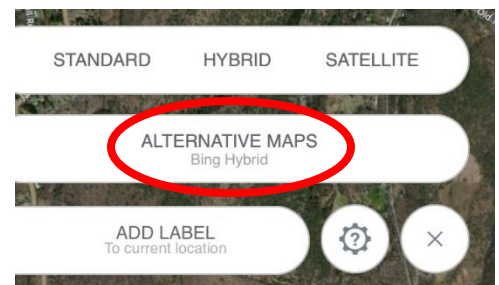
The collection of Labels will then be saved to your track list where you can share them with others like any other track.

## Downloading Maps for Offline Use (iOS Only)

If you are going to be collecting data in an area that does not have a good cellular signal and/or to conserve data downloads, it is a good idea to download maps for the area ahead of time and store them on your device. Track kit makes this easy to do. (Note: This feature is not yet available for Android.)

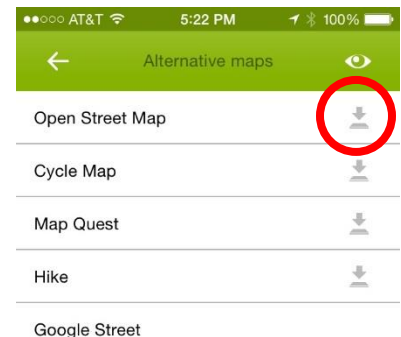
**Tap the Maps/Settings** button.

In the menu that opens, **select Alternative Maps**.



Note that there are several different basemaps available. All of the options with a downward pointing arrow can be downloaded for offline use.

To see what each map looks like, tap on its name. Return to the Map selection screen by repeating the steps above.





Once you have found a basemap you would like to download for offline use, **tap the downward pointing arrow** next to the map name.

The app will return to the Map screen.

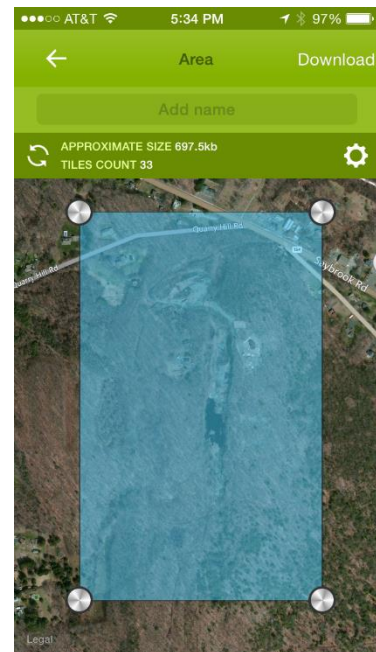
**Pan** (hold finger on screen and drag) & **Zoom** (pinch fingers together to zoom out and apart to zoom in) around on the map until you find the location you want.

**Tap on the map in one corner** of the area you want to download.

**Tap on the map in the opposite corner** covering the area you want to download.

An area will be highlighted. Make sure it covers the area you will be visiting. Note that the size of the download and the number of map tiles to be downloaded will be displayed.

Give the map area a name in the **Add name** box.

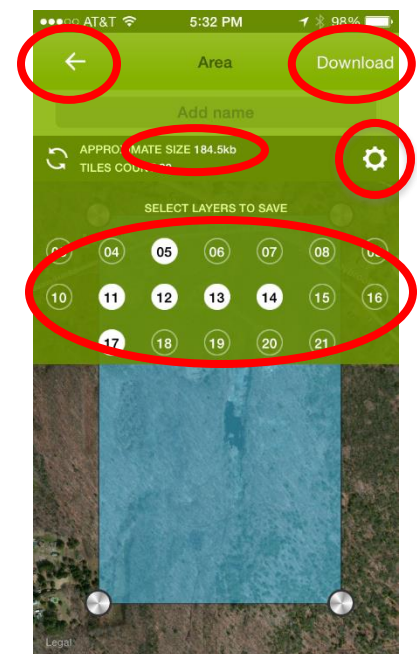


Select the zoom layers you would like to save by **tapping on the setting wheel** beneath the Add name box. Note that the more layers you select the larger the file download will be. Tap the setting wheel again to close the zoom layers menu.

**Select Download** when you are ready to download the maps.

If you realize you made a mistake after downloading, **select Change**. You can then drag the corners of the blue box as needed to edit. When finished, **select Download** again.

To return to the map, tap the **left facing arrow** in the upper left.



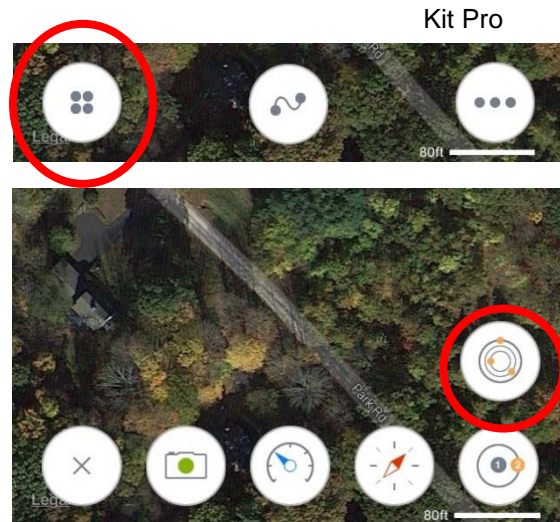
## Group Tracking

If you are in the field with a group collecting points/tracks, the Group Tracking feature allows you to keep track of where each other are.

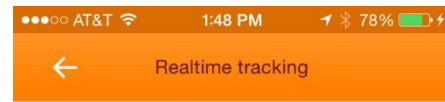
### Create a Group

**Tap on the Tools** Menu (lower left corner) in Track for iOS or the Main Menu button in Track Kit for Android (also lower left corner).

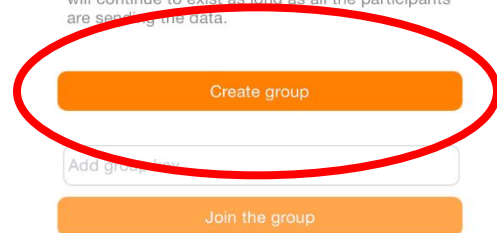
In the options menu that opens, **tap the group tracking button** in iOS (looks like three circles with three orbiting orange dots). For Android, select "Realtime Tracking" in the menu.



The Realtime Tracking window will then open. If you want to create a new group **tap "Create Group."**

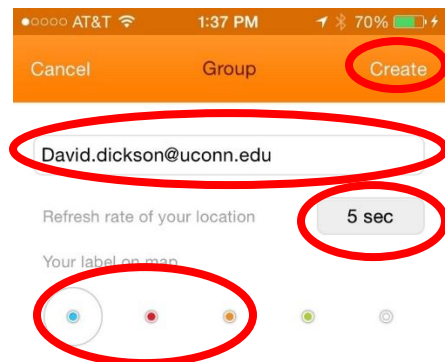


You can create or connect to group of users to see the movement of each other.  
Created group exists only for 48 hours. A group will continue to exist as long as all the participants are sending the data.



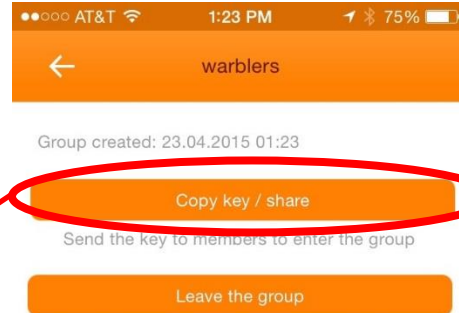
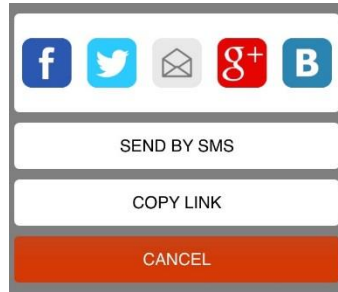
**Give your group a name** in the window that opens and **select a color** to represent your location. You can also **change the refresh rate** of your location. (Note: shorter durations will decrease battery life.)

When you are finished, **tap "Create."** Notice your new group is now listed on the Realtime Tracking Window.



To invite others to join your tracking group, **tap on the group name** in the Realtime Tracking Window.

In the window that opens, **select “copy key/share.”** This will then allow you to send the key via text (sms) or email to someone else, or share the link on social media sites.



**Join a Group**

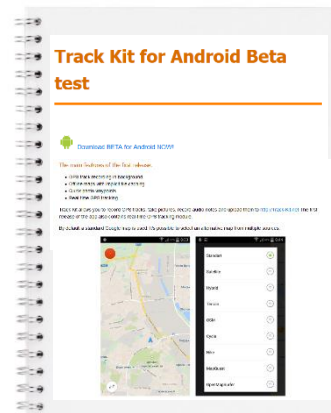
To join a group in iOS, **paste a group key** (sent to you by someone using the above method) into the “Add group key” box. Then tap “Join the group.”

On Android, tap on “Join Group” and paste the group key into the “Insert the group key” box.

Note: you can hide yourself at any time by tapping on the eyeball icon next to the group name.

**Congratulations, you now know almost everything you need to start collecting tracks & waypoints in the field using the Track Kit App.**

**You may also find the developer’s Reference Guides helpful.**



[http://track-kit.net/manual/track\\_kit\\_ios.html](http://track-kit.net/manual/track_kit_ios.html)

[http://track-kit.net/manual/track\\_kit\\_android\\_beta\\_en.html](http://track-kit.net/manual/track_kit_android_beta_en.html)





# Visualizing and Managing Data on the Track Kit Website

## Reference Guide for Using the Track Kit Website

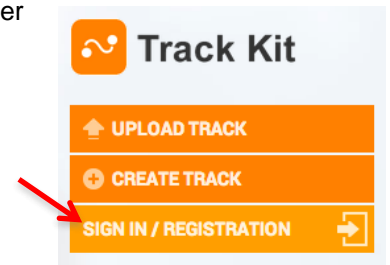
Now that you know how to collect waypoints and tracks using your smartphone or tablet, let's explore ways to visualize the data on the web. In this exercise, you will upload your GPS track from your phone to the Track Kit server. Then you'll export the data from the Track Kit website to a Google Maps file (.KML).

Track Kit provides a free online mapmaking site, <http://track-kit.net>. It provides a space for storing your GPS tracks as well as tools for editing and visualizing the data you collected using the Track Kit mobile app.

### Log into Your Track Kit Account on the Web

In order to save your GPS tracks, waypoints and photographs online, you must register for a free Track Kit account.


- Go to <http://track-kit.net> in an internet browser and click on **SIGN IN/REGISTRATION**.
- If you have already created an account, **Log In**. Otherwise, click on the **Registration** link and fill out the required information. **WRITE DOWN YOUR LOG IN INFORMATION**. You'll need it again.




Username/email: \_\_\_\_\_ Password: \_\_\_\_\_

### Log into Your Track Kit App on Your Device

Before you can upload your GPS data to the Track-Kit website, you must first log into your new account within the Track Kit app on your device. You may also be required to confirm your email before you can access the Track Kit server (check your email).

- Open the Track Kit app on your device. Click on the **three dot ellipsoid** icon  in the lower right side of the screen. Android users, select the **Menu** button. When additional options appear, click on the **Settings icon**. In the **Options** menu, scroll ALLLLL the way to the end. Look for the orange **Log in** button. Click on it. Enter your email and password to log in. Note, if you just registered, you may need to verify your email (check your email).
- Click on the **← arrows** at the top of the **Options** menu until you return to the main map screen.

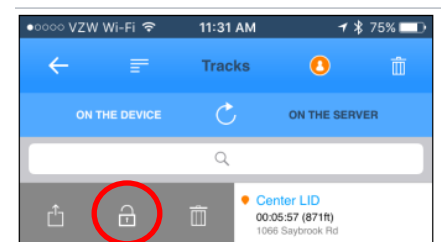
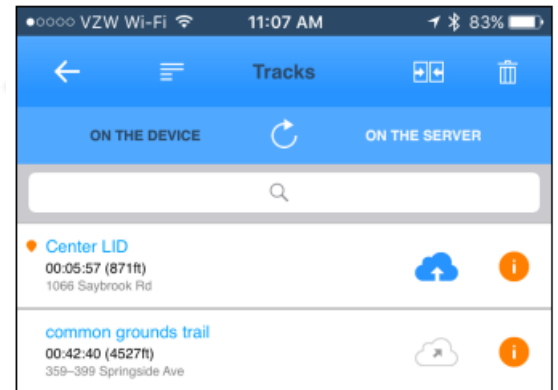
## Upload Your Tracks to the Track-Kit Website

On your smartphone or tablet, from the main map screen, **tap the Tracks icon**  and **select TRACKS**. \*\*\***ANDROID USERS**, tap the **Menu icon** and **select TRACKS**.



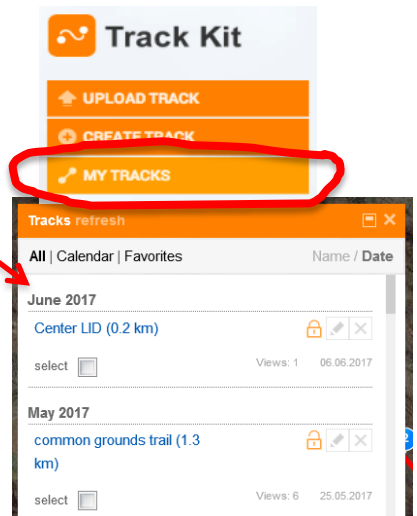
The app distinguishes between two categories of tracks. Those that are “**On The Device**” and those that are “**On The Server**.” The current view will be highlighted in black text.

- **Tap on “On The Device”** to ensure you are looking at the tracks on your phone/tablet.
- Locate the track you just collected and wish to upload to the server and **tap the blue cloud icon**. This will upload that track to your account on the Track-Kit.com website.
- Once your track has been loaded, the blue cloud will turn gray.
- To ensure your track has been uploaded, **tap “On The Server.”** Your track should be listed.
- Tap on the **orange “i” information icon** next to the name of your track. You will see a summary of the track appear on the screen. Options for **editing** the track information, **sharing** the track and **deleting** the track are listed on the bottom of the window. Tap on the **Share icon** in the middle. Notice there are four different data formats to export the track including GPX, KML, KMZ and CSV. These can also be exported and shared via iTunes or Email. Click **Cancel**.
- Click on the **white ←** at the top of the menu to return to your list of tracks stored on the server.
- By default your track is “**public**,” which means that anyone who visits the Track-Kit website can view it. It must remain public for you to share a link to the map.
- To make your track private, **swipe your finger to the right** over the name of your track. You will see a menu appear with three options (share, lock, delete). **Tap on the padlock icon** to lock the track. This will make the track private. Note that you now no longer have the option to share your track.
- Since you may want to edit your track before you share it, leave it as a **private track** for now. Use your finger to swipe left and close the menu.



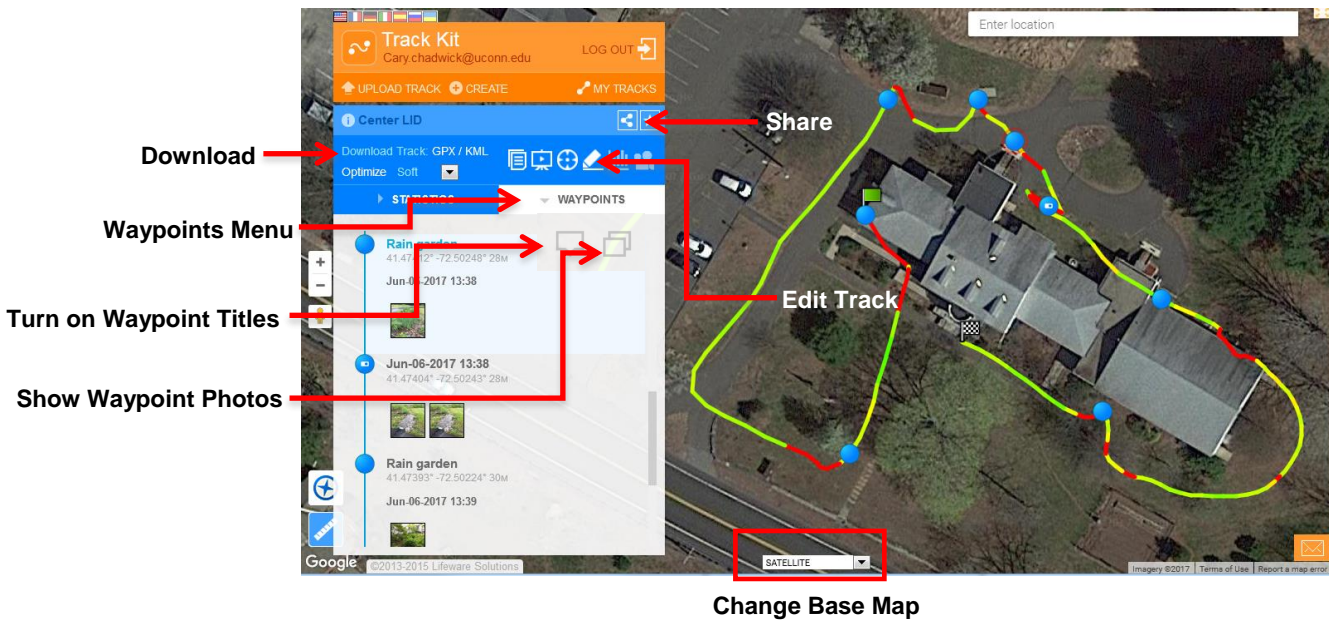
### View Your Track on the Track Kit Website



- Return to your computer and your web browser. The Track Kit website, <http://track-kit.net> should still be open (if not, open it and log in).
- Because you are logged in, you will notice a “My Tracks” option added to the upper left navigation menu. Click on **My Tracks**. A map will open with a list of the tracks you have uploaded/saved to your account.
- **Click on the title** of the track you just walked to view to open it (Note, the name of your track may be different than what is shown to the right).
- A map of your track and waypoints will open.

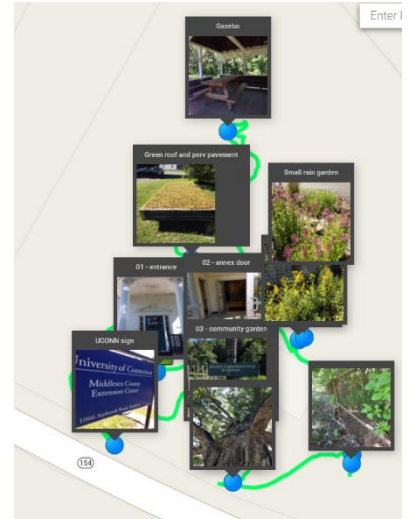


**Tip:** To unclutter your map window, click on the X in the upper right corner of the Tracks box. This will close the box. But don't worry, you can reopen it at any time by **clicking on MY TRACKS**.

- Take just a moment to **explore** the Track Kit map page. (NOTE: your map will look different!)



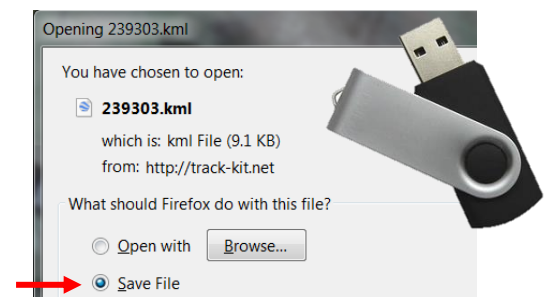
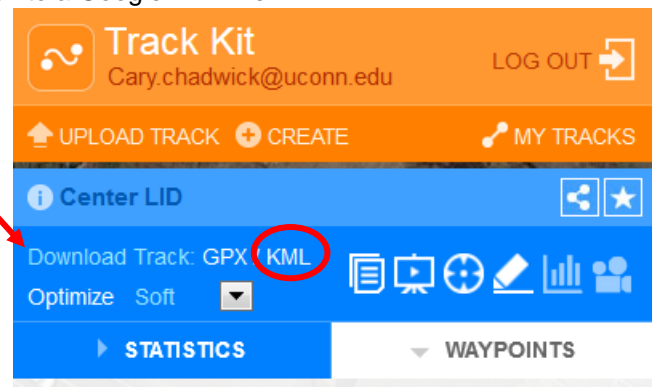
- The panel on the left may obstruct a portion of your track. To move your map out of the way **click and hold anywhere on the map** and then drag (i.e., pan) it to your desired position.
- Explore your track and waypoints by clicking on them. Pretty snazzy right? No coding required and your photos and everything you entered in the field is on your map. Can I get a Woo-Hoo!?
- Notice that as you click on different points, they are highlighted in the **Waypoints** menu on the left.
- **Click on the pop-up icon**  next to green start flag in the Waypoints menu. This will turn on the waypoint labels.
- **Click on the icon that looks like two overlapping pages**  in the Waypoints menu to display the photos associated with each waypoint. Turn these options off when you are finished exploring.



## Exporting Data from Track Kit

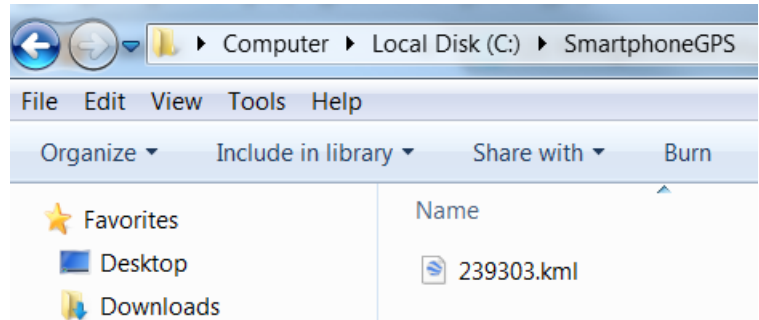
The Track Kit website does a decent job of organizing and displaying your data. It is also essential for transferring your tracks from the Cloud to your device. However, there may be times when you wish to export the data to a file you can save on your computer, or upload to another mapping tool like Google Maps. In this step of the exercise, you will export your track to a Google KML file.

- You should be viewing your track in the Track Kit web map. On the Track Info panel on the left side of the screen, locate **Download Track**. Click on the **KML** link.
- You will be prompted to specify a location where the track will be saved. Click on **Browse...** to select a drive and folder location (this may be different on a Mac). If you have a USB flash drive, save it there. Otherwise, save the KML to the hard drive of the computer you are using (but don't forget the name of the file and WHERE you saved it!).





*Note: your browser may format this window slightly differently and may also be automatically set up to save the file to your "Downloads" folder. The Downloads folder (on a PC) is usually located here:  
C://Users/{your username}/Downloads*



**Pro Tip:** We won't use it in today's workshop, but you may also want to download your track as a GPX file. GPX is the standard format for storing GPS data and can be used in a variety of different mapping tools. It never hurts to have a backup! Just note, this file will not include photos.

[Download Track: GPX](#)