

Field Guide

An Introduction to Avenza Maps.













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1 Getting Started

1.1 Introduction

Avenza Maps is a powerful app for Android and iOS devices that provides a variety of tools for use with georeferenced maps both online and offline. Maps can be imported from a personal source, or downloaded from our Map Store, which contains over 1 million maps across the world. This section will provide an overview of the app which can help get users started.



1.2 Maps

The My Maps List provides access to any maps that have been downloaded or imported onto a device.

The map's title, publisher, distance and storage size are displayed. The "On map" label displayed next to installed maps, which signifies that the user is currently located within the extent/coverage of that map.

Additionally, the list also visually indicates whether a map is part of a collection or folder, as well as whether it is inactive (outside of the three active map limit, a subscription is required). Maps can be added and managed from this page - both of which will be discussed in more detail later in the guide.



1.3 Layers



Layers can contain map features: placemarks, lines, tracks, areas as well as feature data such as photos, and attribute data.

All map features stored in the database are listed in the Layers tab. Map features can be managed here, including adding, deleting, and editing map feature information.

The Layers tab also allows users to export all data layers contained within the app, regardless of what map a layer is linked to, as well as the ability to link and unlink layers from maps.

1.4 Store

The Avenza Map Store contains spatially referenced maps created by professional mapping companies, agencies, and cartographers from around the world. Maps are available for free and for purchase in the Map Store.

In order to make purchases from the Map store, users must be logged in with an Avenza Maps Account, so that purchases can be accessed across up to five devices.

1.4.1 Account

An Avenza Maps account is free to create and can be used to purchase and access maps on up to five devices. Note: Map Store accounts are separate from Avenza Maps subscriptions.



1.4.2 Map Store Search Methods

Users can search the Map Store for maps of their interest using their location, activities, keywords, and categories.

1.5 Settings

9:41	.ıl 🗢 🔲
Settings	
HELP	
Help	>
ACCOUNT INFORMATION	
Account details	>
Backup and Restore	>
SETTINGS	
General	>
Display	>
Units of measurement	>
Map view	>
Manage symbol sets	>
GPS settings	>
My maps Layers Store	Settings

This section provides all of the various settings available within Avenza Maps. See **Section 7** for more details.

2 Getting Maps

Maps can be added into Avenza Maps in two ways: imported from a custom location, or the Map Store.

2.1 Importing Custom Maps

9:4	1 1	?
Close	Import map	00 0::
GET A	MAP FROM AVENZA MAP STORE	
ŗ.	Get a map from the store Browse, purchase and download maps from the Avenza Map Store. You can have an unlimited number of Map Store maps on your device.	
?	Request a map Tell us about a great map you would like to see in the Map Store	>
STORA	GE LOCATION	
	From iTunes file sharing Import a map from your computer through iTunes File Sharing	>
*	 From Dropbox Import a map from Dropbox From storage locations Import a map from cloud storage app or from a location on your device 	
\bigcirc		
	From the web	>
My ma	ps Layers Store Se	b ettings

Custom imports include maps imported from external sources, including the Map Store.

2.1.1 Formats

Avenza Maps currently supports the following map formats:

- **GeoPDF (.pdf)** PDF embedded with geographic data. Proprietary format of TerraGO.
- Geospatial PDF (.pdf) PDF embedded with geographic data.
- GeoTIFF (.tiff, .tif) TIFF file embedded with geographic information.
- JPG (.jpg) Image file that must be packaged with either a TFW/PRJ or JFW/ WKT file type in ZIP format.
- Avenza Maps File (.avenzamaps, .pdfmaps) Format used to import multiple custom maps at once.

2.1.2 Methods

Avenza Maps currently supports importing map from the following sources:

- Avenza Map Store Accessing the Map Store for custom maps (Section 2.2).
- **Device Storage** Access device storage, including SD card storage to import maps.
- **Dropbox** Connect to Dropbox to access and import maps.
- **iTunes File Sharing** Connect to iTunes to access and import maps.
- **QR Code** Use the device camera to scan valid QR codes to import maps.
- Web Enter a valid georeferenced map URL to import it into the app (avenzamaps://, ftp://, http://, pdfmaps://).

2.1.3 Importing a Map

To import a map into the app:

- 1. Open Avenza Maps.
- 2. On My Maps, click the Import 🕁 icon.
- **3.** Choose the preferred import method.
- 4. Find the desired file and select it.
- 5. Tap Import.

2.1.4 Bulk Download

In the event that importing multiple maps is interrupted prior to completion, users can resume downloads manually. This works for custom map imports and the Map Store.

To resume bulk download from My Maps:

- **1.** Tap the Options ••• icon at the top right.
- 2. Tap Resume All.

2.2 Map Store

2.2.1 Account

When purchasing maps, an Avenza Map Store account is required. It allows access to all purchased maps on up to five devices.

Register

To register an account:

1. Tap the Account \gtrsim icon found on My Maps and the Map Store.

2. Tap on Register.

3. Enter the required information and click submit. A confirmation email will be sent allowing account activation.

Login

To login to your account:

1. Tap the Account \gtrsim icon found on My Maps and the Map Store.

2. Enter the correct Map Store email and password to access the account.

16:44 🔊		† E
K Back	My account	Sign out
	Signed in as Steven.t@gmail.com	
	Download history	
	Change email address	
	Change password	
You car	permanently <u>remove you</u>	r account.
	۵.	0
My Maps	Layers Store	Settings

Reset a forgotten password

To reset a forgotten password:

- **1.** Tap the Account $\stackrel{2}{\sim}$ icon found on My Maps and the Map Store.
- 2. Tap on Reset Password.

3. Enter the corresponding Map Store email. A password reset email will be sent (for any issues with this process, please visit **<u>support.avenzamaps.com</u>**).

Accessing Download History

To access previously downloaded maps:

1. Tap the Account \gtrsim icon found on My Maps and the Map Store. Ensure an account is logged in.

- 2. Tap Download History.
- 3. Search and/or sort through previously downloaded maps.
- **4.** Tap the download \checkmark icon to redownload a map.

2.2.2 Categories

The Map Store has a variety of categories including:

- Parks & Forests
- Trails
- Tourist
- Nautical
- Professional
- Aeronautical
- Historical
- Hunting & Fishing
- Topographic
- Roads
- Educational
- Imagery
- Geological



2.2.3 Activities

The Map Store has a variety of activities including:

- Hiking
- Backroading
- Offroading
- Hunting
- Camping
- Cycling
- Fishing
- Skiing
- Snowmobiling
- Paddling
- Orienteering
- Horseback Riding
- City Tours
- Flying
- Forestry
- Sailing
- Surveying



2.2.4 Search

To search for maps, tap on Map Store 🚬 and the search bar at the top of the screen.

 Enter a location and tap search.
 Searches can be done by location and keywords.

2. Maps in the area can also be viewed in Explore Mode. In the Map Store, tap Explore on a map. Tap to drag the map and two finger pinch to zoom in and out. Once in the preferred area, tap Search this area to view maps and points of interest.



3. Refine searches using the Filter ∇ icon at the top right of the Map Store and Explore Mode to select one or more search options.

4. To return to search results or the Map Store, tap \langle Back at the top left.

5. When the desired map is found, select it to see more information and purchase/download it.

Map Details

Map information includes description, publisher, map size, publish date, and language. The map can also be previewed before purchasing/downloading, and extents can be viewed in Explore Mode.

2.2.5 Purchasing and Downloading a Map

To download or purchase a map:

1. Find the desired map.

 In search mode, tap Free or the advertised price. Map details can also be viewed by tapping on the map.

3. When downloaded, the button will update to open the map. Tapping this closes the Map Store and opens the installed map.

Note: the purchase process is completed by the designated app store (App Store on iOS, Google Play Store on Android).



2.3 Managing Maps

Maps can be managed, moved, and deleted on the My Maps page. This includes creating folders and collections.

2.3.1 Folders and Collections

Folders can group and organize certain maps. They can contain custom imported and Map Store maps. A collection is a folder where map features and movement can be shared between each other without the need to open two different maps.

To create a folder:



1. In My Maps, tap the Edit $\cancel{2}$ icon at the top right.

2. At the bottom left, select the AddFolder icon.

3. Select Folder or Collection.

4. Rename the folder or collection then tap OK.

5. A folder or collection will be added to My Maps.



1. In My Maps, tap the floating action button +.

2. Select Add Folder or Add Collection.

3. Rename the older or collection then tap OK.

4. A folder or collection will be added to My Maps.

2.3.2 Turning a Folder into a Collection

0	Hunting & Fishing 8 folders = 24 maps	(i)
Ø	Hiking. North America 12 maps	(j)
	Folder	
	 Collection	
	Cancel	

To convert a folder to a collection:



1. In My Maps, tap the Edit 🖉 icon at the top right.

2. Tap the information (i) icon beside the folder.

3. Under Attribute, switch the Collection toggle on.

4. Tap Save at the top right.

5. The folder will now be a collection. The reverse toggle can be done to convert a collection back into a folder. 1. In My Maps, tap the three vertical dots :

2. Tap Edit.

3. Select the folder to be turned into a collection.

4. Tap the Edit icon $\cancel{0}$.

5. Switch the Collection toggle on.This folder will now be a collection.

2.3.3 Moving Maps



Press Done to complete the process.

To move maps around between collections and folders:

É	
1. In My Maps, tap the Edit <i></i> icon at the top right.	1. In My Maps, tap the three vertical dots :
2. Select the map or maps to be	2. Tap Edit.
moved.	3. Select the map(s) to be moved.
3. Tap the Move folder C ; icon at the bottom left.	4. Tap the Move \square icon.
4. Select the desired location.	5. Select the folder where the map(s) will be moved.
5. Selected maps will be moved.	

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2.3.4 Deleting Maps



There are two ways maps can be deleted.

Option 1

1. In My Maps, **(s**wipe left/ **(i)** long press the desired map to show the Delete button and press it.

2. Confirm the selection remove the map.

Option 2



1. In My Maps, tap the Edit $\cancel{2}$ icon at the top right.

2. Select the map that will be deleted.A prompt will appear to confirm the process. Select OK.

3. Click on the Trash **1** icon at the bottom right. Confirm the selection and press Delete to remove the map.



1. In My Maps, tap the three vertical dots :

2. Tap Edit.

3. Select the map(s) to be deleted.

4. Tap the three vertical dots : again and tap Delete.

2.3.5 Installing Map Updates

Map Store publishers will periodically update their content. Maps installed from the Map Store can be manually checked to see if updates are available.

To check for map updates:



1. In My Maps, click the Options ••• icon at the top right.

2. Tap Check for Map Updates.

3. A pop-up box will appear checking for map updates.

California mountains 45 maps Resume All Check for Map Updates Ginord Pinchot NF - Special Porest Cancel

1. In My Maps, tap the three vertical dots

2. Tap Check for Map Updates.

If map updates are available, an Update Available button will appear beside the map in My Maps. Tapping the button opens the map's download page. Map updates can be offered at a fee at the discretion of the publisher, or completely free. There are two options when installing a map update.

Keep the Older Product - This method will install the map update as a separate item. Both versions of the map will appear in My Maps. This may be useful when comparing changes between maps.

Update the Existing Product - This method installs the update over the current version.

All map update versions are added separately to download history.

To reinstall previous versions:

- **1.** Tap on the Account \ge icon at the top right in My Maps or the Map Store.
- 2. Ensure there is an account logged into Avenza Maps.
- **3.** Tap on Download History.
- 4. Find all map update versions.

3 Viewing Maps

9:41 ·III ຈີ < Banff National Park... Q (i) Road overgrown Brandy wine Mill Site 1735 MOUNT BREW 1757 MALT PK Summer 2WD Parking P Summer 4WD Parking P 1619 1518 8 0 51.658838, - 116.177498 \checkmark \odot

3.1 Overview of Map View

Opening a map enters Map View, where the majority of Avenza Maps' features can be accessed.

3.1.1 Gestures

The following is a list of supported gestures and what they perform:



Single tap and drag: pan the map.



Single tap and flick: pan the map quickly.



Single tap: hide all placemark labels, show/hide toolbar and title bar.



Single tap and hold: pick up a placemark, drag to reposition.



Double tap: zoom-in and centers.



Two-finger tap: zoom-out and centers.



Two-finger rotate: rotates the map.



Expand: Zoom-in.



Pinch: Zoom-out.

3.2 Location

Tap the GPS \checkmark icon at the bottom left to find the current location, which is displayed as a blue dot but can be customized in Display Settings (Section 7.2.1). The blue transparent radius indicates GPS fix accuracy - the smaller the circle, the more accurate the fix. Location is determined using a combination of cellular, Wi-Fi, Bluetooth, and GPS fixes.

If users are not physically within the extent of the map, "Not on map" will appear where coordinates are displayed. Simply pan around the map to resume viewing coordinates.

3.2.1 Map View Modes

There are four easy access viewing options in Map View:

Tap the location icon at the bottom left to enable Follow Mode.
 The map will be in default orientation and the crosshair will move with the user. When Follow Mode is engaged, the location symbol will change to .



2. With Follow Mode \checkmark enabled, a compass will appear at the top right. Tap the compass \checkmark to enable Compass Mode \land . The map will rotate based on the direction the user is facing. Tapping the compass \checkmark again will reset the view and exit Compass Mode.

Note: this mode only works when the device is held level or on a flat surface.

3.2.1.1 Map Lock Orientation PRO

Pro users can set and lock a custom map rotation in Map View. This feature uses spatial referencing data within a map file to apply custom rotation.



Note: Map Lock Orientation does not synchronize with Magnetic North (for users that have enabled it in Settings).

To use this map view mode:

- **1.** In Map View, swipe up from the bottom panel.
- **2.** In the Location tab, tap Lock Orientation to open the form.
- 3. Within Lock Orientation the map lock can set in three ways:

3.1 Hold the device flat and rotate it to the desired rotation, then tap Done to apply the rotation lock.

3.2 Tap the "0-359.9" field and supply any custom heading (ex. "90" to have the map rotated such that East is at the top of the device screen). Once the desired rotation is reached, tap Done to apply the rotation lock.

3.3 Tap the toggle switch to quickly apply a map lock that places True North at the top of the device screen. After the toggle is engaged, tap Done to apply the rotation lock.

4. To disable a map lock, simply tap the now updated, Map Locked button used to enter Map Lock Orientation One tap will disengage the map lock and a second tap will re-apply a new map lock. The Map View mode can be disengaged by tapping the compase icon at the top right.

3.2.1.2 Course-Up Orientation

This setting is accessed in the Location tab by swiping up from the bottom panel and is activated by an On/Off button. The mode uses realtime location updates to apply a course-based map rotation. When



users travel in real time, the map will rotate and place their direction at the top.

1. Unlike the compass, this mode can be used when the device is oriented in any position.

2. This mode uses location fixes to determine direction of travel, not the user's device compass sensor.

This mode is available to all users.

3.2.2 External GPS Receivers

Avenza Maps offers compatibility support for Catalyst, Nomad, R1, R2, TDC, and Trimble receivers. Users can pair their device to receivers for higher accuracy location fixes in-app when navigating, geofencing, GPS tracking, and using GPS tools. In order to connect receivers to Avenza Maps, users must install the Trimble Mobile Manager (TMM) app and pair their device to the receiver via bluetooth. Android users must set TMM to be their mock location provider within their device's Developer settings.

Once paired, a satellite indicator will appear within the Location tab of Map Viewer, establishing a connection. Users can interact with the icon to view which devices have been paired, access their mock location settings, and any external device GPS settings (Section 7.2.6).

3.3 Placemarks

A placemark is a position marker on the map and is indicated by a default icon which stores a geographic location. Users can access clearly defined symbol libraries, and change placemark symbology at any time. Pro users can manage custom symbol sets in settings (Section 7.2.4). More details on editing placemarks are in Section 4.1.

3.3.1 Adding a placemark

To add a placemark:

1. Open the desired map.

2. Pan to a position on the map centered by the crosshair.

3. Tap the Placemark \bigcirc icon at the bottom left.



4. The 'Add Placemark' dialog opens allowing users to set the symbol, rename the placemark, add images and add any attributes before the symbol is created.

5. Select the checkmark icon in the upper right corner once symbol settings have been verified.

6. A placemark is added with the specified settings on the map.

3.3.2 Choosing Placemark Symbols

To access the Choose Symbol dialog:

1. With a map open, tap the Placemark \bigcirc icon.

2. Under Information click on Style.

3. Scroll through the various categories and find the appropriate symbol.

3. To change the display view, tap the grid \bigoplus icon at the top right.

AVENZA S	YMBOLS				
•	Q	•	Q	•	•
Q	Q	Q			
RECREATI	ONAL SYMI	BOLS			
	Ŕ	\$	26		50
*			岔	*	
	٣I	R	* /		

4. Tapping settings (3), open the Manage Symbol Sets dialog (see Section
7.2.4 for more details).

3.3.3 Placemark Details

To view placemark details:

1. Open a map with a placemark.

2. Tap the placemark once to display its label, tap it again to EditPlacemark.

3. In the Edit Placemark Screen under Information, the name, icon, description, photos, coordinates, and attribute schema can be changed.

Close	Edit Placemark		\odot
PLACEMARK NAME			
My Placemark			\bigotimes
INFORMATION			
Style		0	>
Photos			
+			

3.3.4 Moving a Placemark

To move a placemark on the map:

1. Tap and hold a placemark on the map.

2. Drag the placemark to another position and release.

Alternatively:

1. Tap the placemark on the map to display the label, tap it again to enter Edit Placemark.

- **2.** Under Information, tap Location to edit coordinates.
- 3. Edit or enter new coordinates and submit.

3.3.5 Deleting a Placemark

To delete a placemark:

1. Tap the placemark twice to enter Edit Placemark.

2. Tap the trash **1** icon at the bottom, confirm the selection by tapping Delete.

Location	49.443515, 24.279629 >
Altitude	0.000000 m
Time	08.02.2022 at 10:12 AM
ATTRIBUTES	
Barent Layer/Schen	na Edit Move

3.4 Coordinates



3.4.1 Format

Users can view the coordinates of their map features at the bottom bar in Map View.

To change the coordinate display format:

- **1.** Tap the coordinates to reveal the coordinate display list.
- 2. Scroll through to choose the desired format:
 - a. Map Default
 - **b.** WGS 84
 - c. Easting and Northing*
 - d. MGRS/USNG
 - e. WHAT3WORDS
 - *f*. UTM
 - b. BNG WGS 84 PRO

*Map must be projected into a valid UTM format for Easting, Northing coordinates to be accurate.

3.4.2 Copy to Clipboard

To copy the current coordinates to the device clipboard:

- 1. Long-press on the coordinates display.
- 2. A message will display prompting the copy.
- **3.** Paste coordinates by long pressing an input area and tapping Paste.

3.5 Tools

Avenza Maps has various tools to improve map interaction and data collection.

To access the tools:

1. Open the desired map.

2. Tap Tools *in the bottom right* and a list of available tools will be displayed.


3.5.1 Draw and Measure

This tool allows users to draw, measure, and save lines, areas, and circles.

Accessing the Draw and Measure Tool:

- 1. Open the desired map.
- 2. Tap Tools 🛷 .

vertex.

3. Tap Draw and Measure.

Drawing and Measuring a Line

1. With the Draw and Measure tool open, pan around the map until the crosshair is centered where the first point will be created.

2. Once the crosshair is in place, tap
 Add Point + Add point anywhere on
 the map view to create the first
 vertex.



3. Continue in this fashion until the line is complete. To undo a point, tap the Undo \bigcirc Undo to real to re

to remove the last

4. While drawing, line measurements for the current segment and a total of all lines will appear at the top of the screen.

5. Once satisfied with the line, tap the checkmark \checkmark to save the line. It will now appear in the Map Features list.

Drawing and Measuring an Area

1. With the Draw and Measure tool open, pan around the map until the crosshair is centered where the first point will be created.

2. Once the crosshair is in place, tap
 Add Point + Add point to create the first vertex.



3. Once a minimum of 3 vertices (2 lines) have been made tap the Line \checkmark icon to toggle it to Area $\boxed{2}$. To undo a point, tap Undo \bigcirc Undo to remove the last vertex.

Drawing and Measuring a Circle

1. With the Draw and Measure tool open, pan around the map until the crosshair is centered where the first point will be created.

2. Once the crosshair is in place, tap
 Add Point + Add point to create the first vertex.

3. Once 2 vertices (1 line) are made,



tap Circle \bigcirc to enable it. To undo a point, tap Undo \bigcirc undo to remove the last vertex.

4. In Circle O mode, users can continue drawing in and out to increase or decrease the size of the circle. With the Circle mode enabled, users will also see the current measurements at the top of the screen for the current area and perimeter of the feature.

5. Once satisfied with the circle, tap the checkmark \checkmark to save. It will now be listed as a map feature in Layers \gtrsim .

Drawing Using Point-By-Point, or Course and Distance

Point-By-Point: Allows the user to add points based on coordinates.

Course and Distance: Allows the user to enter Segment and Bearing information to determine the placement of a point.

Segment	Bearing	
58 km	5°	
Point		

1. With the Draw and Measure tool open, pan around the map until the crosshair is centered where the first point will be created then tap Add point (+ Add point).

2. Adding the first point will make the Segment and Bearing fields active in the Draw and Measure overlay. Tap the settings [image] icon in the overlay to modify these values if necessary.

3. Once satisfied with the line(s) drawn, tap the checkmark \checkmark to save the map feature.

Accessible Settings:

1. With the Draw and Measure tool open, tap the Settings 🙆 icon in the top right corner of the display box.

2. Users can change line style, thickness, and unit distance for features.

3.5.2 Record GPS Tracks

This tool allows users to record their tracks using GPS.

Note: in order to use this feature, GPS must be enabled. See Section 7.2.5 for adjusting GPS tracking settings.

Recording a Track:

1. Have an appropriate map open that covers the desired area where the user is located.

2. Tap Tools 🕢 and select Record GPS Tracks or swipe up from the bottom panel and tap the Tracking tab.

3. Once a signal has been established, tap Start Tacking to begin recording. Tracks will be continuously recorded even if the app is minimized.

4. While recording, the Start button will change to Pause - allowing a temporary halt to the tracking service with one tap.

5. When the recording is finished, tap Stop and the track will be saved as a map feature.



Viewing a Track

Saved tracks can be viewed on the map directly or in the Layers tab 📚 as map feature.

To view more information about the track in Map View:

1. Double tap the track to show its label and enter Edit Track.

2. The track name, style, photos, description, operations, and attributes can be edited.

3. Tap Show Graph to view speed, distance, elevation, and time.

3.5.3 Navigate to a Destination

This tool allows users to navigate to placemarks, lines, tracks, and more. Navigation provides information such as bearing, course, speed, distance, time to next and estimated time.

Note: area features cannot be selected for navigation activities.

To access the Navigation tools:

1. Open a desired map.



2. Tap Tools *intermination* at the bottom and select Navigate to a Destination, or swipe up from the bottom panel and select the Navigation tab.

There are four navigation options:

Project Destination: Specify a compass heading and desired distance. This creates a placemark that users can navigate towards from their current location. Once specified, tap the Navigate button and the placemark will be created. The navigation panel will update navigation data. A line from the current location to the placemark will be shown on the map.

Navigate to Feature: Navigate to an existing line, track, or placemark feature on the current map. Tapping this option will open a list of all available layers and features. Like Project to Destination, a line will be drawn between the current location and the feature being navigated to. Navigation data will also be updated in real-time.

Enter Coordinates: Specify a desired coordinate to navigate to. Ideal for navigating to known points.

Create a Route: Create a new line feature using the same tool overlay as Draw and Measure. Users can also toggle between Point-by-Point and Course-and-Distance draw modes. This feature will be added to the active layer on the map. Upon completion of the new route, a dialogue will prompt users to initiate navigation.

Note: in addition to the tools above, navigation to any line, track, or placemark can be initialized within the Edit Feature screen via the navigation ③ icon at the top right. See Section 7.2.7 for customizable navigation settings.

3.5.4 Find by Coordinates

This tool allows users to find a location using known coordinates in all supported formats (Section 3.4.1):

1. Tap Tools ∂p and select Find by Coordinates.

 Banff National Park...
 Q
 (i)

 Q
 48.718278, - 108.782716
 X
 Cancel

2. Enter the desired coordinates.

Note: the degree symbol does not need to be entered (e.g. 43 50'52",-79 42'35").

3. If the location is found on Map View, the crosshair will automatically zoom and center on that location.

3.5.5 Plot GPS Average

This tool allows users to plot placemarks at their current location with improved accuracy and reports more accurate location statistics (depending on location, satellites in view, signal, etc.) by sampling location fixes at the current position over time and creating an averaged set of coordinates.



Running this tool will generate a new layer called Averaged Placemarks for each map where Plot GPS Average is used. Placemarks created with the tool will be added to the layer, and results will be tracked both in the feat Running the tool will generate a new layer called Averaged Placemarks for each map or collection the tool is used on. Placemarks created by running the tool will then be added to this layer and feature tool results in both the feature description field and also as a separate set of feature attributes.

The attributes written each time the tool is run include:

DURATION_S - The span of time (in seconds) the tool was run for.

FIX_COUNT - The number of fixes recorded for the duration of the tool execution (if this value is less than 30, the sample size is too small to report accurate metrics).

STD_ERROR - The standard deviation error distance.

STD_UNITS - The standard deviation distance unit.

The tool can be used in one of three ways, as specified by tapping Settings in the overlay:

Manual Mode: Running the tool in manual mode allows the user to start and stop data collection at any point. A user would stand in one position, run the tool, and once satisfied with

Close	Settings		
AVERAGING			
Manual			 Image: A start of the start of
Timer		1m Os	\bigcirc
Number of fixes		30	\bigcirc

the number of fixes collected, tap to halt and complete the tool service.

Timer Mode: Running the tool in timer mode allows the user to specify the number of minutes and seconds the tool will run for before stopping and creating an averaged placemark.

Number of Fixes Mode: Running the tool in 'Number of Fixes' mode will allow the user to supply a number of fixes to collect before stopping and creating an averaged placemark. For data collection purposes, the number of fixes collected should be no less than 30.

Use of the **Plot GPS Average** tool requires an active **Avenza Maps Pro subscription**.

To run the Plot GPS Average tool:

1. In the desired map, tap Tools *information*, Plot GPS Average. An overlay will appear showing GPS information, Plot GPS Average, Add Placemark, and settings.

2. Tapping Plot GPS Average will update the GPS information in real-time.As the tool is run, the overlay will update with time and number of fixes collected information which includes coordinates, averaged location, GPS fixes in average, and duration.

3. With the Plot GPS Average overlay open and not running, tap Settings to change the averaging method - manual, timer, or number of fixes.

4. Time and number of fixes averaging modes require users to input a value and press OK.

5. Once averaging modes are set, tap Close, return to the overlay and tap Plot GPS Average.

6. Tap Stop Process to halt the tool and Add Placemark to generate a placemark.

3.5.6 Monitor Geofences

Users can create geofences around map features such as placemarks, lines, areas, layers, and more. They can also be set to send alerts via device notifications if a geofence is entered, exited, or when leaving a geofenced map feature area. Custom



distance radiuses and names can be set up for each geofence. Once the distance is set, regardless of the specified unit, it will convert to imperial or metric (i.e. feet or meters). This is similar to when recording GPS tracks or viewing navigation data.Geofences can be created by entering a map, tapping Tools *of* and then Monitor Geofences. Layer-based geofences can also be generated as they are imported into the app.

Note: creating map features or layer-based geofences requires that the layer is linked to the map.

To add a new Geofence:

- **1.** Tap the + to add a geofence.
- 2. Tap the type of geofence that will be created.
- 3. Tap the respective feature, layer, or map to apply the geofence to.

4. Set the geofence title, distance, units, notification type, and run properties in the Edit Geofence page.

To create a layer based Geofence on data import:

- **1.** Tap the Layers \bigotimes icon at the bottom in Map View.
- 2. Tap the Import 🕁 button.
- 3. On the Import Data page, enable Import as Geofences at the bottom.

4. Tap Geofence Import Settings and set parameters that will be applied to all features within that layer.

To toggle all geofences off or on:

1. On the Monitor Geofences page, tap the alert \triangle icon.

Geofence Accessibility

Depending on subscription type, there are restrictions to number and type of geofences that can be created.

Subscription Tier	No Subscription	Plus	Pro
Geofence Layers	1	4	Unlimited
Geofence Map Features	5	50	Unlimited
Geofence Maps	Not Included	Not Included	Included
Global Geofences*	Not Included	Not Included	Included

*Global Geofences is a geofence parameter that determines when a device level notification is sent to the device. Free users can only receive geofence notifications while viewing a map with geofences enabled. The Global Geofences option allows users to receive Geofence alerts while in any part of the app and also while using other apps.

3.5.7 Open Google or Apple Maps

This tool allows users to view their current Map View in Google Maps if installed.

Note: Apple Maps is default in iOS. If Google Maps is installed, it will use that automatically.

- 1. Open a desired map.
- 2. Tap tools 🥢 and tap Open View in Google Maps.
- 3. Current map will be opened in Google Maps.

3.5.8 Plot Photos

This tool allows users to attach geotagged photos as placemarks based on embedded information.

To plot a photo:

1. Open the desired map.

2. Tap the tools *icon* and tap Select Plot Photos. Ensure photo access permissions are enabled.

3. Select geotagged photos and tap Import.



4. A placemark will be added at the location based on the geotagged photo.

4 Data Collection and Management

4.1 Editing Map Features

Map feature information, which includes the name, styling details, description, and attributes can be accessed through the Map View and Layers tab.

To access map features in Map View:

1. Open the desired map

2. Tap once on the map feature to view its name, tap twice to edit feature details.

To access map feature information from Layers:

Close	Edit Line	\bigcirc
LINE NAME		
Line 1		
INFORMATION		
Style	9	5 >
Photos		
+		
Description	Not S	Set >
Time	11.02.2022	at 13:41



1. Tap Layers 📚 .

- 2. Select the layer that contains relevant map features.
- **3.** Tap the map feature to be edited.
- 4. The details page for that feature will be opened.



- 1. Tap Layers 😂 .
- 2. Select the layer that contains relevant map features.
- 3. In that layer, select the three vertical dots .
- 4. Select the map feature that needs to be edited.
- 5. Tap Edit.

Map feature information can also be accessed the same way via the Layers 📚 page.

4.1.1 Icon

To change the icon of a placemark in Map View:

1. Tap once on the map feature to view its name, tap twice to edit feature details.

2. Under Information, tap Style to change the icon symbol.

4.1.2 Name

To change the placemark name in Map View:

1. Tap once on the map feature to view its name, tap twice to edit feature details.

2. Under Placemark Name, tap the name to change it.

4.1.3 Description

To enter a description for a map feature:

1. Tap the map feature twice to open its details.

2. Under Information, tap Description and enter the relevant information.

3. When complete, tap Back and return to the edit details menu to view the set description.

4.1.4 Photos

To attach one or multiple photos to a feature:

1. Tap the map feature twice to enter its details page.

2. Ensure the Avenza Maps app has permissions to access photos, media, and files.

3. Under Photos, tap the + sign.

4. Tap Add photo. Use either the camera or photo library to add photos to this particular map feature.

5. Repeat this process for each photo added. Tap Back when done to view all photos attached to the map feature.

4.1.5 Location

In map feature details, the location is provided through the feature's coordinates on the current map. Tapping the coordinates opens the edit field where they can be changed.

4.1.6 Time

This provides the timestamp in the user's local time for when the map feature was created.

4.1.7 Attribute Schema

This section allows users to create, or fill out attribute information for a specific feature. Please note that at the feature level, created attributes will not be accessible for all features. For more information on Attribute Schemas, see **Section 4.4**.

NAME	
New attribute	
ТҮРЕ	
String	>
PICK LIST	
+ Add a new pick list value	

4.2 Custom Icons and Line Colors

There are two ways to add icons to Avenza Maps.

The first option is to import an .avenzasymbols or KML/KMZ file to the Manage Symbol Sets dialog (requires Pro subscription). For more details on how to use the Manage Symbol Sets option, please see **Section 7.2.4**. The second option is to create a KML/KMZ file with the icons and import it directly onto a map.

One way to create a KML is through Google Earth.

To create a KML in Google Earth for custom symbology:

1. With Google Earth open, create a point on the map.

2. Right click on the point and select Properties.

3. Select the pin icon and change it to the desired icon. Please note, if custom icons are being used, the recommended format is .png in order to allow transparent backgrounds.

4. With the new icon in place, right click on the layer.

5. Select "Save Place as" and save it as a .KMZ file.

6. Import the newly created .KMZ into Avenza Maps (Section 5).

7. Once imported, new symbols will be listed in the icon library.

4.3 Map Feature Layers

4.3.1 Default Layer

All features created are placed in a single layer known as the default layer. Features contained within the default layer include: areas, lines, points, and tracks. Layer information can be accessed from the Map Layers icon within a Map View (**Section 4.3.4**).

4.3.2 Adding Layers

Layers can be added from within the specific Map View, as well as the Layers tab.



To create a new layer from the Map View:

Ś.	
1. Open the desired map.	1. Open the desired map.
2. Tap on Layers 😂 .	2. Tap on Layers 😂 .
3. In Map Layers, tap Edit.	3. In Map Layers, tap on the vertical-
4. Tap Add Layer 餐 . Name it	
accordingly and tap OK.	4. Tap Add Layer 🕂 .
5. Once created the layer is linked	5. Once created the layer is linked
to the map.	to the map.

Note: a created layer is not necessarily an active layer. To change this, see Section 4.3.4.

To create a new layer from the Layers tab:



 In the Avenza Maps app, tap the Layers tab 📚 .

2. In Map Layers, tap Edit.

Tap Add Layer ♀
 Name it accordingly and tap OK.

4. Once created the layer is linked to the map.

 In the Avenza Maps app, tap the Layers tab 📚 .

2. In the Layers tab, tap Add + .
Name it accordingly and tap it OK.

3. Once created the layer is linked to the map.

4.3.3 Moving Map Features

To move a map feature or entire layer to another layer:

Close		Transferring
8	Layer 1	
8	Layer 2	
8	Layer 3	

1. In the Layers tab, locate the layer with map features that will be moved to another layer.

2. In the Layer with map features to be moved, tap Edit.

- **3.** Select the map feature(s) to be moved.
- 4. Tap Move Layers 😂 .
- 5. In the Transferring screen, select the new layer.

6. A prompt will appear asking if the destination layer styles should be applied to the new features.

a. If Yes is selected, the features will be moved and take on the new styling of the destination layer.

b. If No is selected, the features will be moved but keep their origins styling.

- 1. Tap on the vertical three-dots .
- 2. Tap Edit.
- **3.** Select the map feature(s) to be moved.
- 4. Tap Move.
- 5. Select the folder where the map feature(s) will be moved.

4.3.4 Editing Layers

To view or change the Layer settings from Map View:

Ú

- 1. Tap Map Layers 😂 .
- 2. In Map Layers, tap Edit.
- **3.** Tap the information (i) icon beside the layer.
- 4. Layer details will be displayed.

Ŵ

- 1. Tap Map Layers 😂 .
- 2. Tap the three vertical dots .
- 3. Tap Edit.
- 4. Select the desired layer.
- 5. Tap the Edit icon.
- 6. Layer details will be displayed.

Layer settings can also be directly changed from the Layers tab.

Setting the Active Layer

The active layer collects data. Setting an active layer is useful for setting up schemas and specific styling definitions for data collection.

LAYER	
Lock layer	
Layer is Active	Active
PLACEMARKS	
Default icon	♀ >

To set the active layer for data collection:



- 1. Open the desired map.
- 2. Tap Map Layers 😂.
- 3. In Map Layers, tap Edit.
- **4.** Select the information (i) icon beside the layer.

5. Under Layer, tap the Active button to set it green indicating the layer is now Active.

,

- **1.** Open the desired map.
- 2. Tap the three vertical dots •.
- 3. Tap Edit.
- 4. Select the desired layer.
- 5. Tap the Edit icon.

6. In Layer Details, turn the green toggle on indicating that the layer is now Active.

Locking Layers

Locking layers will prevent their deletion.

To lock the layer from Map View:



- **1.** Open the desired map.
- 2. Tap Map Layers 😂 .
- 3. In Map Layers, tap Edit.
- **4.** Select the information (i) icon beside the layer.
- 5. Under Layer, toggle the Lock Layer feature on.





- 1. Open the desired map.
- 2. Tap the three vertical dots .
- 3. Tap Edit.
- 4. Select the desired layer.
- 5. Tap the Edit icon.
- 6. Layer details will be displayed.
- 7. Toggle the Lock Layer feature on.

Layers can also be directly locked from the Layers tab.

Visibility

This option is useful for viewing data when there are many layers and not all need to be visible. It also helps when exporting specific layers as to which ones should be visible on export.

To toggle the visibility of a layer from Map View:

- 1. Open the desired map.
- 2. Tap Map Layers 😂 .

3. In Map Layers, tap the visibility **(**) icon beside the layer to be made visible or invisible. Green indicates visibility, grey indicates no visibility.

The visibility can also be toggled this way directly from the Layers tab.

4.3.5 Deleting Layers

To delete a layer from Map View:

Ú

- 1. Open the desired map.
- 2. Tap Map Layers 😂 .
- 3. Tap Edit.
- 4. Select the layer to be deleted.
- 5. Tap the trash 🔟 icon.

6. A confirmation message will appear. Tap OK to confirm.

)

1. Open the desired map and tap Layers \bigotimes .

- 2. Tap the three vertical dots .
- 3. Tap Edit.
- **4.** Select the layer to be deleted.
- 5. Tap Edit.
- 6. Tap Delete.

Layers can also be deleted directly from the Layers tab.

4.3.6 Searching for Map Features

To search for existing map features:

- **1.** Open the desired map.
- **2.** Tap the Search Q icon.
- 3. In search, enter the name of the map feature.

4. A list of map features containing matching letters and words will be displayed, including the option to search for the feature on OpenStreetMaps (i.e. "coffee shop").

4.3.7 Linking and Unlinking Map Layers

Linking Map Layers

Linking a map layer means map data can be viewed on multiple maps simultaneously through one layer. Any additions to that layer exist on all maps linked to it. This is ideal for users that are collecting data across multiple maps.



There are three locations where a layer can be linked to a map: from Map View, the Layers tab, and when importing a layer.

Note: layers must be linked individually.

To link layers from Map View:

- **1.** Open the desired map.
- 2. Tap Map Layers 😂 .
- 3. Tap Link 🔗 .
- 4. In Link Layers, select the layers that will be linked to the current map.
- 5. One selected, tap Apply.
- 6. The new layers are added and linked to the map.
- 7. Repeat the steps for each layer to be linked.

To link layers from the Layers tab:

- 1. Open the Avenza Maps app and tap the Layers 📚 tab.
- 2. Tap Link 🔗 .
- **3.** In Link Layers, select the layers that will be linked to the current map.
- 4. One selected, tap Apply.
- 5. The new layers are added and linked to the map.
- 6. Repeat the steps for each layer to be linked.

To link layers on import from the Layers tab:

- 1. Tap the Layers 😞 tab.
- 2. Tap import 🕁 .
- 3. In Import Layers, under Settings, tap Link to Maps.
- 4. In Link to maps, select the map, collection, or folder to be imported to.
- 5. Import the layer using the preferred format.
- 6. Confirm the import.
- 7. The layer will now be imported to the chosen map.
- 8. Repeat the steps for each layer to be linked.

Unlinking Map Layers

Unlinked layers are no longer linked to a map and cannot be viewed on one; however, the data is still present and accessible through the Layers tab. This option is ideal for users who are working with a lot of data or multiple maps and don't need the data visible on the map any longer.

There are two ways to unlink a map: through Map View, and the Layers tab.

To unlink a layer from the Map View or Layers tab:

- **1.** Open the desired map and tap Layers \bigotimes .
- 2. Tap Link 🔗 .
- **3.** Unselect the layers that are currently linked to the map.
- 4. Tap Apply.

To unlink a layer from the Layers tab:

- 1. Open the Avenza Maps app and tap Layers 📚 .
- 2. Tap Edit 🖉 .
- 3. Select the layer to be unlinked.
- **4.** Tap the information (i) icon.
- 5. In Edit Layer, under Linked Maps, tap Unlink from all.
- 6. A confirmation message will appear. Tap OK.

4.4 Attribute Schemas

An attribute schema allows users to create a series of attributes for a layer to make data collection more efficient. The schema defines the name, type, and associated properties such as an optional pick list.

4.4.1 Creating an Attribute Schema

To create an attribute schema for a layer in Map View:

1. Open the desired map.

- 2. Tap Map Layers 😂 .
- 3. Tap Edit.
- **4.** Tap the information (i) icon beside the layer to be edited.
- 5. Under Attribute Schema tap Add a New Attribute.
- 6. Rename the attribute as desired.
- 7. Set the Attribute type
 - a. String alphanumeric characters.
 - b. Boolean yes/no values.
 - c. Real numbers that can contain decimals.
 - d. Integer whole numbers.
- 8. Tap Back once attribute characteristics are set.
- 9. Repeat the steps for each created attribute.



- 1. In Map Layers, tap the three vertical dots :
- 2. Tap Edit.
- 3. Select the layer.
- 5. In layer details, under Attribute Schema tap Add a New Attribute.
- 6. Rename the attribute as desired.
- 7. Set the Attribute type
 - a. String alphanumeric characters.
 - b. Boolean yes/no values.
 - c. Real numbers that can contain decimals.
 - d. Integer whole numbers.
- 8. Tap Back once attribute characteristics are set.
- 9. Repeat the steps for each created attribute.

4.4.2 Importing an Attribute Schema

To import a custom schema in Map View:

- **1.** Open the desired map.
- 2. Tap Map Layers 😂 .
- 3. In Map Layers, tap Import 🕁 .

4. In Import Layers, under Settings, toggle Import Schema Only as on.

5. Select the preferred import method and custom schema will be imported.

Attribute schemas can also be imported through the Layers tab, as outlined in **Section 4.3.7** and **5.4.2**. Once imported,

Close	Import schema	
Import th attribute of the da	ne layer structure, default schemas from a KLM file ata	icons and but none
Recently	used	>
From iTu	nes file sharing	>
From Dro	opbox	>
From sto	orage locations	>
FROM THE	WEB	
Type or p	paste URL here	

the schema will be on its own layer and may require additional changes in order to be the active layer for data collection (changes required may include linking the layer to the appropriate map, setting it as the active layer, making any last minute changes to the attributes/picklist values - **Section 4.3.4**).

4.4.3 Exporting an Attribute Schema

To export a custom schema:

- 1. Open the desired map.
- 2. Tap Map Layers 😂 .
- 3. Tap Edit.

4. Tap the information (i) icon beside the layer with attribute schema to be exported.

5. In Export Layers, fill out the desired information (filename, format).

6. Under Data, tap Schema Only.

Note: KML file format must be used if the exported schema will be reimported at a later time.

Close	Export setting	S	Export
FILE NAME			
All layers.km	I		
FORMAT			
KML			>
TRACK EXPORT			
As track			>
DATA			
All features			\bigcirc
Schema only		10 layers	
Custom			\bigcirc
IMAGE SIZE			
Small		1024x768	3 >

4.4.4 Using Attribute Schemas

With an active layer schema, users can begin collecting data using the predesigned attributes, icons, and other styling settings.

Data can be collected with a schema using the following steps:

1. Set the schema as the active layer on a map (please see **Section 4.3.4** for help on how to do this).

2. Add a placemark, line, track, or area to the map.

3. Tap Map Layers 😂 in Map View.

4. Tap Edit and the information (i) icon beside the layer with attributes requiring data.

5. Under Attribute Schema, tap the attribute that requires data entry.

6. If the attribute has a picklist, choose the appropriate value or enter a new value.

7. Tap Back once completed.

8. Repeat the steps for each attribute that requires data entry.

9. Repeat the steps for any other features.

5 Import

Avenza Maps allows the import of custom map features for use on maps when both online and offline. Map Features include placemarks, tracks, lines, and areas.

5.1 Methods

Recently Used - Import previously used layers. Ideal for importing from email, using the same feature for multiple maps, offline importing.

From Storage Locations - Import features stored on the device, SD card, or cloud storage.

From Dropbox - Connect to Dropbox to import features. Requires Dropbox account access.

From iTunes File Sharing - Connect to iTunes to import features as files.

From the Web - Import from a website. Requires a full web address (HTTP, HTTPS, FTP).

Close	Import schema	00
Import the attribute s of the dat	e layer structure, default io schemas from a KLM file b a	cons and out none
Recently u	used	>
From iTun	es file sharing	>
From Drop	obox	>
From stor	age locations	>
FROM THE W	/EB	
Type or pa	aste URL here	,

5.2 Formats

Currently, imported features must be in either KML/KMZ format, GPX, or Shapefile. The importing of Attribute Schemas can only be done through the KML/KMZ format.

Note: importing GPX files requires a Plus or Pro subscription. Importing Shapefile requires a Pro subscription and the appropriate supplementary files along with the Shapefile (.shp) together in a ZIP folder to successfully import (.shp, .shx, .prj and .dbf).

5.3 Features vs Schemas

Users have the option to import features with a schema, or schema only. Importing schema only means that no features are imported, only the styling and attribute information. Importing schema must be in the KML/KMZ formats.

5.4 Features vs Schemas

5.4.1 Creating an Attribute Schema

- **1.** Open the desired map.
- 2. Tap Map Layers 😂 at the bottom.
- **3.** Tap the Import 🕁 icon at the bottom.
- 4. Select the import method.
- 5. Select the features to be imported and tap Import.
- 6. The map features will now be visible in the Layers tab and Map View.

5.4.2 Importing via Layers tab

- 1. Tap the Layers 📚 tab.
- 2. Tap the Import 🕁 button.
- 3. Choose the import source.
- 4. Select the desired map features that will be imported.

5. If a map was not previously selected to be linked, a prompt will appear to link the layer now, or proceed with just importing to the Layers tab where linking can be done later.

- 6. Confirm the import.
- 7. The layer is now imported and linked to the chosen map(s) (if selected).

6 Export

Avenza Maps allows the exporting of custom map features for use on another device or other means. Custom map features include placemarks, tracks, lines, and areas. Users have the option to export all features at once from the Layers tab.

6.1 Methods

AirDrop 🗳 - Select another iPhone device to AirDrop map features to.

Email

Dropbox

Storage locations - Google Drive, Box, Device Storage, etc.

6.2 Custom Export Selection

Export all features - All features from the map features list.

Schema only - Only the attribute schema and styling data from each layer is exported.

Custom - Select from individual features and layers imported to the app.

6.3 Formats

Avenza Maps currently supports the following formats:

- Keyhole Markup Language (KML/KMZ)
- Comma-Separated Values (CSV)
- GPS Exchange Format (GPX)
- GeoPackage (GPKG)
- Shapefile (SHP)

Note: to re-import exported data into Avenza Maps, it must be exported as KML/KMZ, GPX, or SHP formats. When exporting in SHP formats, users can choose the desired coordinate system - map coordinates or WGS84. SHP format exports as a ZIP file containing all relative data files

Exporting Shapefiles requires a Pro subscription.

6.4 Image Settings

Users have four options when exporting images:

- No Image
- Small
- Medium
- Large

The resolution of these sizes varies based on device.

Note: KML/KMZ and SHP are the only formats that support image exports.
6.5 Exporting Features

To export map features from within a map:

- **1.** Open the desired map.
- 2. Tap Map Layers 😂.
- 3. In Layers, tap Export ሰ .
- 4. In Export Layers, choose the desired export settings.
- 5. Tap Export when complete.

Alternatively, the same steps can be used to export map features directly from the Layers 📚 tab.

7 Settings

7.1 Plus and Pro Subscriptions

Avenza Maps Plus and Pro subscriptions require subscription information to be entered separately before custom features can be used. A network connection is required to log in to a Plus and Pro account, but not required to use custom features.

To enable a Plus or Pro subscription:

1. Tap Settings 🙆 .

2. Under Account Information tap Enter Account Details.

3. Enter the username (Subscription ID Code), password (applicable if provided by an organization, otherwise bank), full name, work email, and organization details.

4. Tap Log In.

Aven 7FHU-KDF	PRO za Maps Pro PA-79DS-WK5D-GWJN
Name	Alexander
Organization	Avenza Maps
Email	simplebox@gmail.com
Expires	1 Jan 2023, 02:59:59
Up	odate account
	Log out

Users can also use QR codes to expedite the Pro and Plus sign in process. Account administrators can distribute the codes which contain a 20-digit username subscription code that is automatically inputted. All other required fields must be inputted manually.

To enable a subscription using a QR code:

- 1. Tap Settings 📀 at the bottom right.
- 2. Under Account Information tap Enter Account Details.
- **3.** Tap the QR code R icon at the top right.
- **4.** Enable Camera permissions to scan the QR code.
- 5. Scan the code and manually input the remaining information.
- 6. Tap Log In.

Note: After successfully registering, tap Details to view the details and status of the subscription.

7.2 Settings

Users can access and define optional customizations and features, including account information and support article:

Help

Account Information

- Account Details
- Upgrade Account

Settings

- General
- Display
- Units of Measurement
- Map View
- Manage Symbol Sets (Pro Feature)
- GPS Settings
- Geofencing (Android)
- Navigation

9:41	•
Settings	
Help	>
ACCOUNT INFORMATION	
Enter Account Details	>
Upgrade Account	>
Restore Subscriptions Restore Subscriptions allows you to restore any active Avenza Maps Pro or Avenza Maps Plus subscriptions purchased through your Apple account on this or another device.	>
SETTINGS	
General	>
Display	>
Units of Measurement	>
Map View	>
Manage Symbol Sets PRO	>
GPS Settings	>
My Maps Layers Store Se	O ttings

7.2.1 General

Allow Usage Reporting - Sends anonymous information about feature usage to improve app development.

Specify Map Folder (Android) - Maps loaded from a source other than the Map Store will be saved to a specified location (e.g. SD card). Please note that changing this directory repeatedly may cause loss of access to previously imported custom map content.

Import in HD **•** - Select whether to render PDF documents in HD format when importing.

Select Album 🗰 - Select album in camera roll to save photos taken in the app.

Clear Search History - Clear all values from history sections in search.

K Back	General	
Allow usage r	eporting	
To improve future information about Avenza.	versions of Aven which features a	za Maps, anonymous re used will be sent to
Import in HD		Automatic >
Select whether to importing based o	render PDF docu on their dimension	uments in HD when ns.
Select Album		Avenza Maps 💙
Select album in ca	amera roll to save	photos taken in app.
Clear search	history	
Clear all values fro	om the history se	ctions in search.
Legacy positi	ve GMT form	nat
Use legacy time z on export. Note, t version.	one format for po his option will be	ositive GMT time zones removed in a future
Debug setting	gs	>

Legacy Positive GMT Export Format - Use legacy time zone format for positive GMT time zones on data export.

Debug Settings - Additional options for troubleshooting, including Map Store settings.

7.2.2 Display

Use Theme - Select system theme or manually set device between Light and Dark mode.

Crosshair Color - Change crosshair color in Map View.

Selection Color - Change the highlight color of selected lines and areas.

Navigation Line Color - Change the color of the line from the current position to the navigation destination.

Current Location Color - Change the location dot color of the current position.

Lines and Areas Style - Specify default styles for lines and areas, applied when importing or drawing new features with no styling.

Vibrate on Tap - Provides haptic feedback when tapping the screen.

Kernel Back Display		
Use theme	System 关	>
Indicate if you want to use the same theme your device, Light or Dark.	as the rest of	
Crosshair color		>
Change the crosshair color in the map view	Ι.	
Selection color		>
Change the highlight color of selected lines	and areas.	
Navigation line color		>
		-
Change the color of the line from your curre your navigation destination.	ent position to	
Change the color of the line from your curre your navigation destination.	ent position to	>
Change the color of the line from your current your navigation destination. Current location color Change the location dot color that shows y position on a map.	ent position to	>
Change the color of the line from your current your navigation destination. Current location color Change the location dot color that shows y position on a map. Lines and Areas style	ent position to	> >
Change the color of the line from your current your navigation destination. Current location color Change the location dot color that shows y position on a map. Lines and Areas style Specify default styles for lines and areas.	ent position to	> >

7.2.3 Units of Measurement

Default Units - switch between presets or manually change unit measurements.

Coordinates - Change coordinate display formats and toggle Map Coordinate System defaults.

7.2.4 Map View

Keep Screen On - Prevents the system from turning the screen off.

Use Google Maps 💣 - View locations in Google Maps if installed.

Disable Placemark Aggregation -Prevents combining placemark symbols that are nearby in Map View.

Scale Bar 🗰 - Change the visibility of the scale bar in Map View.

Back	Units of me	easurement	t
PRESET			
Metric	Imperial	Nautical	Custom
DEFAULT UNI	TS		

Back	Map view	
Keep scree	n On	\mathbf{O}
Stop the syster a map.	m from turning off the scree	en while viewing
Use Google	e Maps	
Lise Google Ma	aps for viewing locations if i	nstalled.
ose obogie ina		

Compass North - Toggle between using magnetic or true north for compass headings.

Unlimited Number of Features - Removes restriction on the number of features that are displayed in Map View (can potentially affect app performance).

Limit Zoom Levels - Limit zoom quality in Map View.

7.2.5 Manage Symbol Sets PRO

Manage Symbol Sets allows users to import and manage custom symbols in two formats: KML/KMZ and .avenzasymbols.

While KML/KMZ files can be created by users through Google Earth and other GIS software, .avenzasymbols is a unique file format created specifically for Avenza Maps using the PNG file format.

🗸 Back	Symbol sets	+	\square
AVAILABLE			
Avenza Syr 6 symbols	nbols		>
Recreationa	al Symbols		>
New symbo Downloaded	bl set 1.77 of 10.90 MB		

On a fresh install, users with access to Manage Symbol Sets will see three categories: Imported, Avenza Symbols, and Recreational Symbols. Users can also import fire-specific symbols, available on the Avenza Maps website.

To add a symbol set:

- **1.** Tap on the '+' icon at the top of the screen.
- 2. Choose the source location of the symbol file.
- 3. Navigate to the file and select it for import.

Users have the ability to import symbols from:

- Recently Used
- URL
- iTunes File Sharing
- QR Code
- Device Storage
- Avenza Support

• Dropbox

Once imported, users can then toggle individual symbols on or off in order to further customize their symbol selection experience.

To toggle symbols on/off:

- 1. Tap on the symbol library
- 2. Toggle the desired symbol on/off

To edit symbol library order:

- 1. Tap Edit.
- **2.** Drag on the Reorder icon \equiv to rearrange symbol libraries.
- **3.** Tap Done when complete.

7.2.6 GPS

GPS settings allow users to specify various parameters for locationbased activities that affect GPS Track feature data creation.

Location Source

This setting allows users to specify how Avenza Maps determine their location. The default setting is Use Any Source but this feature can also utilize internal and external sources, such as a Trible GPS Device.



Use Any Source: This option uses both external GPS sources and device-based location services. If a user pairs their device to an external receiver - such as Trimble GNSS - the external source will take priority until it is disconnected.

Use Only External Sources: This option will only use an external source such as a paired receiver. If there is no paired device, users will be notified that location-based activities have stopped. This mode requires an external receiver to send updates through the mock location provider service.

Use Only Internal Sources: This option will exclusively use the device's internal GPS sensor.

Only Use Satellite Fixes 👘

When enabled, the app will only use incoming GPS location fixes from a satellite source, filtering out network or WiFi fixes. Please note that with this enabled, there may be gaps in data collected if a satellite signal can not be obtained. By default this setting is disabled.

Horizontal Accuracy

This setting ignores GPS location fixes within a horizontal accuracy greater than a set distance. The default setting is 32.00 meters and can be changed by tapping on the value:

- **Keep all fixes**: Allows location fixes of any accuracy. Suitable when recorded track quality is not a concern.
- **8.0m**: Allows for high accuracy location fixes only. Suitable for use outdoors when there are few obstructions (e.g. on a hiking trail). This can result in gaps in data if there are lots of obstructions.

- **16.0m**: Allows for normal accuracy location fixes. Suitable for use outdoors with partial obstructions (e.g. in a city).
- **32.0m**: Allows for low accuracy location fixes. Suitable for use outdoors with lots of obstructions (e.g. dense urban environment).
- Set a custom accuracy (In meters): Allows the user to supply their own Horizontal Accuracy threshold value.

Distance Threshold

This setting specifies the distance that must be traveled from the previous point before a GPS location fix is recorded. The default setting is 2.0 meters and can be changed by tapping on the value:

- **Keep all fixes**: Records all location fixes regardless of distance traveled. This will result in a high volume of data, including redundant fixes. Suitable for the highest accuracy required, but should only be used for short tracks in order to remain manageable.
- 2.0m: Suitable for recording accurate tracks in most situations.
- **5.0m**: This will record fewer location fixes. Suitable for very long duration tracks with a reduced accuracy.
- Set a custom distance (in meters): Allows the user to supply their own Distance Threshold value.

Time Threshold

This setting will record, at most, one GPS location fix per set time interval. The default is 2.0 seconds and can be changed by tapping on the value:

- **Keep all fixes**: Records all location fixes regardless of the time interval. This will result in a high volume of data, including redundant fixes. Suitable for the highest accuracy required, but should only be used for short tracks in order to remain manageable.
- 2.0 seconds: Suitable for recording accurate tracks in most situations.
- **3.0 seconds**: This will record fewer location fixes. Suitable for very long duration tracks with a reduced accuracy.
- Set a custom (in seconds): Allows the user to supply their own Time Threshold value.

Combined Tracking Mode

This setting creates a track point when Time and Distance threshold values are met and helps with creating more consistently updated track features. Turning this setting off will update the track if one of the threshold values are met.

Ignore Suspicious Fixes

This setting ignores GPS location fixes that may be incorrect (ex. outlier or expired location fixes).

Reset to Defaults

This will reset all of the above settings back to their default settings.

Pairing Bluetooth Devices

Avenza Maps supports external devices that provide additional accuracy for location-based activities. There is verified compatibility with Bad Elf, Garmin, and Trimble devices. However, an external receiver that pairs with a mobile device should be generally compatible with the app.

To pair a Bluetooth-enabled device with Avenza Maps, please follow instructions specific to the device operating system to ensure it can be used properly.

7.2.7 Navigation Settings

Navigation Settings allow users to specify which navigation method and features to use during route navigation.

Navigate to Each Point in Turn

This setting will force route navigation to take users to each point, preventing shortcuts to intermediate routes. If disabled, the navigation will take the most optimal route at all times which can include shortcuts.

n turn
e navigation to take you to f you disable this setting timal route at all times.
65.62 ft >

Arrival Radius

This setting determines how close a user must be to the next route vertice before the service considers the user to have arrived at the point. Once users have arrived at the next point, the service will update the navigation to the next vertex along the route. To change this setting, tap on it, and select from the following options:

- 10.0m Suitable for walking or cycling along narrow paths.
- 20.0m Suitable for driving, walking, or cyclingalong wider paths or roads.
- **50.0m** Suitable for faster vehicles on wider roads or paths.
- 100.0m Suitable for very fast vehicles.

7.2.8 Geofencing Settings 🚎

Android users can specify the Geofence notification duration in the settings menu. This timer will allow the user to determine how long the device will continue to show a geofencing notification (for a triggered geofence).



In order to receive notifications, Avenza Maps will also need to have permission to allow notifications. This permission can be accessed from the device Settings page. Avenza Maps will follow the sound permissions users currently have set on the device, for example, if the device is set to 'Do not disturb' then Avenza Maps will not make sound notifications. If the device is set to full volume, then users will hear geofence notifications.