
FireMapper Standard Manual

Fire Front Solutions Pty Ltd

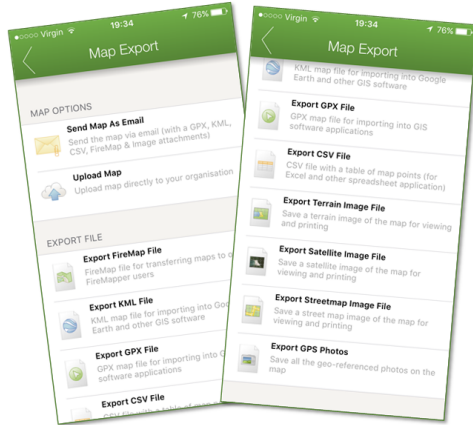
Apr 17, 2024

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FireMapper is a mobile app that allows individual users to quickly map bushfires and other incidents.

The Standard version is a light-weight version of FireMapper, available from the iTunes and Google Play stores as a once off purchase (~ \$35 AUS). It contains a subset of the features that are available in the Enterprise version of the application.



Note: This manual is for FireMapper Standard. There is another manual that covers additional functionality in [FireMapper Enterprise](#)

FireMapper is available on iOS and Android clients.

There are two versions of FireMapper on the iTunes store for iOS devices

FireMapper Standard can be purchased directly from the iTunes store:

<https://itunes.apple.com/us/app/firemapper/id865028094>

FireMapper Enterprise requires an annual Enterprise subscription to use:

<https://apps.apple.com/us/app/firemapper-for-enterprise/id1447064437>

There are two versions of FireMapper on the Google Play store for Android devices

FireMapper Standard can be purchased directly from the Google Play store:

<https://play.google.com/store/apps/details?id=com.firefrontsolutions.firemapper>

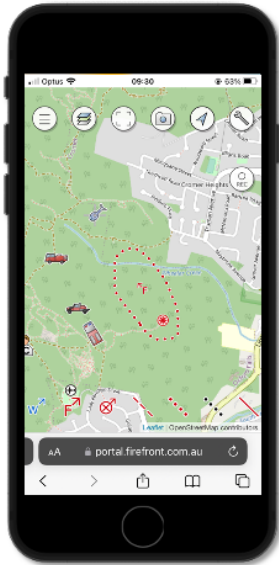
FireMapper Enterprise requires an annual Enterprise subscription to use:

<https://play.google.com/store/apps/details?id=com.firefrontsolutions.firemapper.enterprise>

For other platforms, you can use FireMapper Portal in the web browser for viewing and editing maps. FireMapper Portal is available for Enterprise users only.

The FireMapper Portal also has a light-weight web version of the FireMapper called Mobile Map that is also designed to run on mobile devices inside of Chrome, Safari, Edge and Firefox. This is a useful option if you need to view and edit shared maps on other platforms.

Here is a screenshot of the Mobile Map running in Safari on iOS.



APP PERMISSIONS

FireMapper requires permissions set in the Settings section of your mobile device. The process of configuring these settings varies between iOS and Android.

1.1 Android App Permissions

Android permissions are controlled by the Settings app. This process will vary based on Android version and manufacturer, so you may need to look around the settings app to find the relevant permissions.

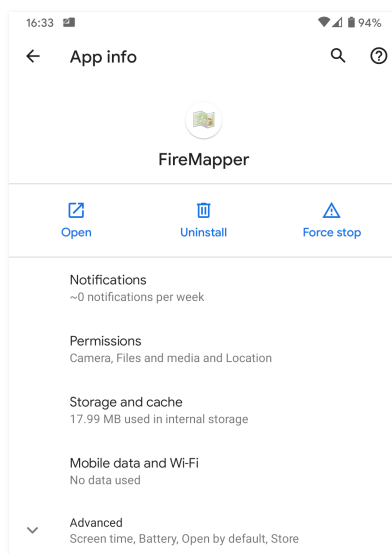
1. Open the **Settings** App. This icon usually looks like a gear icon, however it varies between manufacturer on Android devices.



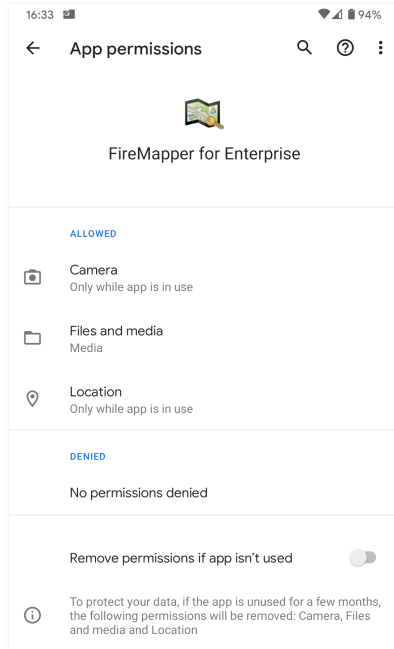
2. Select **Applications** in the Settings app.
3. Tap **FireMapper** application from the list of applications in the Settings app.



4. Tap **Permissions** to change application permissions for FireMapper



5. Check that **Location** is enabled and set to **Allowed all the time**. This will allow FireMapper to display your location on the map, record GPS tracks and mark your location on the map. You will need to use 'Allowed all the time' if you want FireMapper to record a GPS track with the screen turned off.
6. Check that **Camera** is enabled and set to **Only While App in Use**. This will allow FireMapper to capture geo-referenced photos and use the camera for the internal QR scanner in FireMapper.



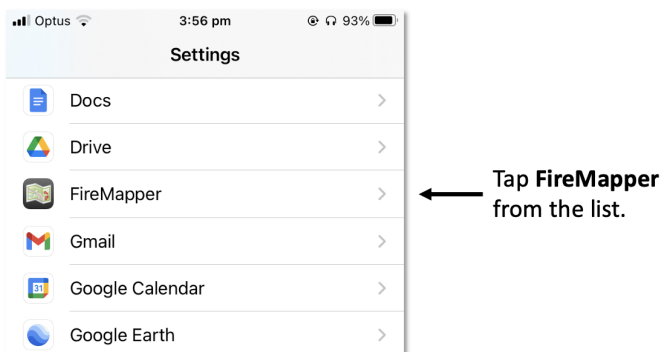
1.2 iOS App Permissions

You will need to grant FireMapper the following permissions.

1. Open the **Settings** App.

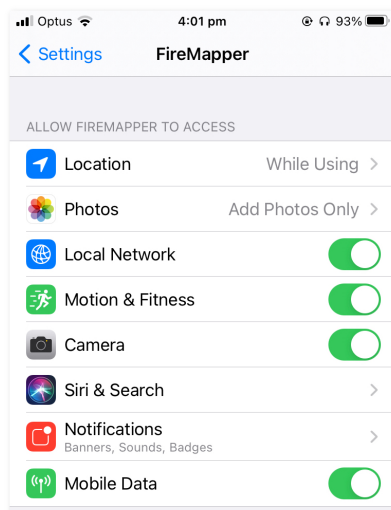
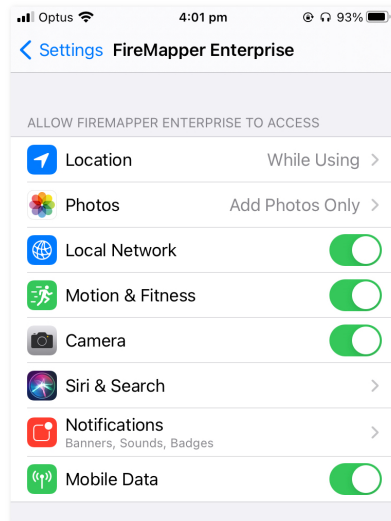


1. Select **FireMapper** from the list of applications.



3. **Check App Permissions**

- a. Check that **Location** is set to **While Using**. This will allow FireMapper to access your location. This is required if you want FireMapper to display your location on the map, record GPS tracks or mark a location using the GPS. Check that **Precise Location is Enabled** on newer versions of iOS, as FireMapper will not use your location if precise location is turned off.
 - b. Check that **Photos** is set to **Add Photos Only** if you want to save photos from FireMapper to your photo gallery. If this is disabled you will not be able to Export GPS Photo to your photo gallery.
 - c. Check **Motion and Fitness** is enabled if you want FireMapper to detect the user activity for recorded map features. This is used to automatically detect observations that have been recorded by ground crew. This setting can be disabled if you do not need this functionality.
 - d. Check **Camera** is enabled if you want to capture photos with FireMapper or if you want to use the built-in QR code scanner.
 - e. Check **Mobile Data** if you want FireMapper to connect to the internet via the Mobile Data connection.
4. Check that **Location Network** is enabled, if you want to connect to use location sharing or want to connect to an ADS-B receiver via the GDL90 protocol. This is only used by FireMapper Enterprise.

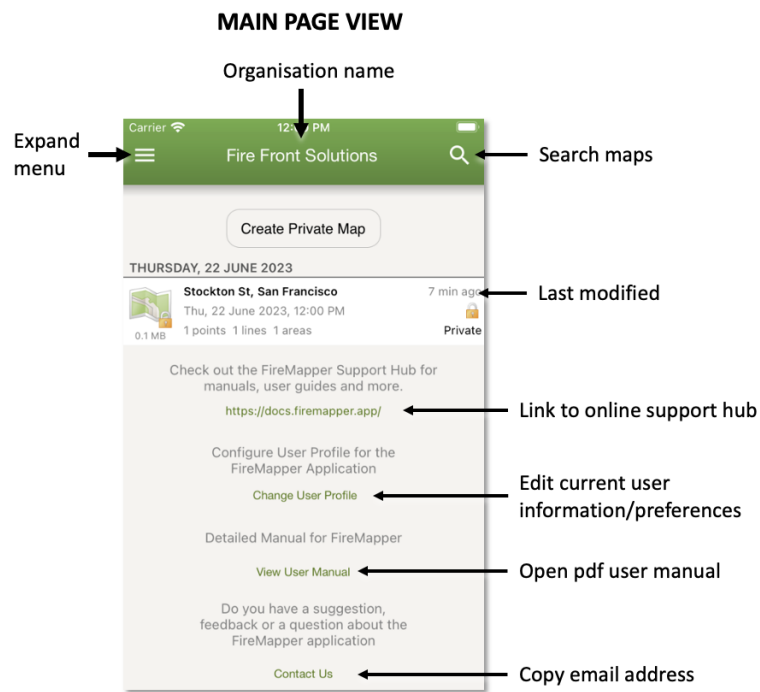


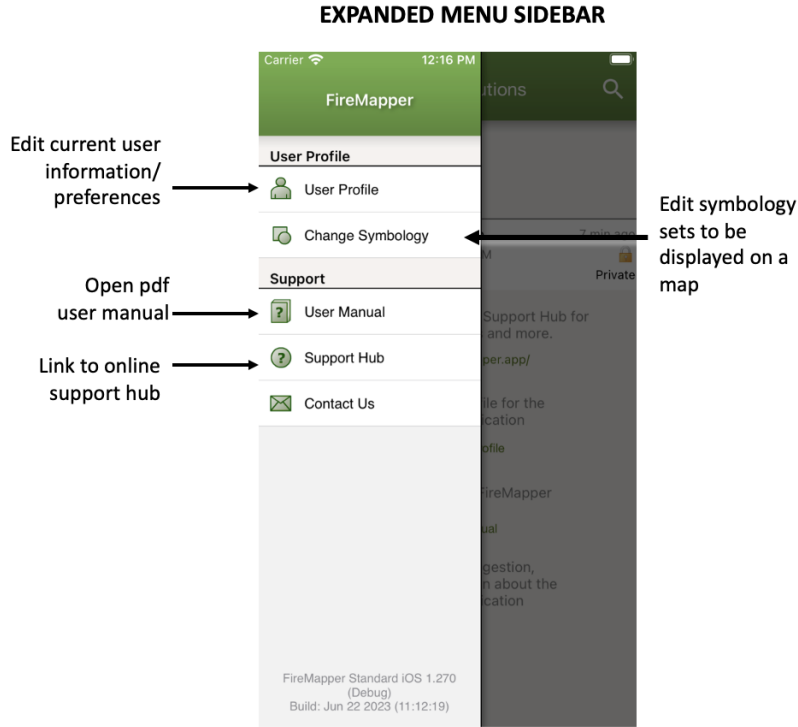
MAIN MENU SCREEN

The *Main Menu Screen* is the top level screen for FireMapper.

The Main Menu screen allows you to create new maps or load existing maps.

Shared Maps is only supported in the Enterprise version.

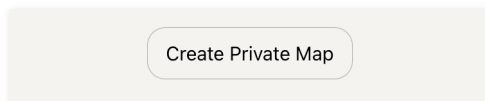




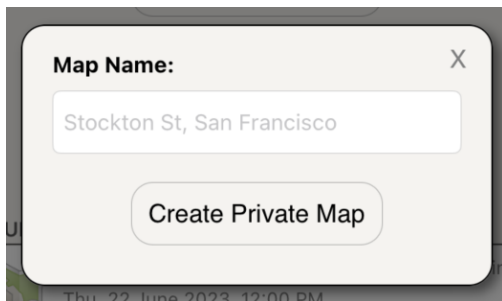
2.1 Create a Private Map

Private maps are stored locally on the device and are not shared with other users or devices.

1. Tap the **Create Private Map** button.



2. Enter a new name for the private map. This is optional for private maps. If you don't provide a map name, your current street address and date will be used.



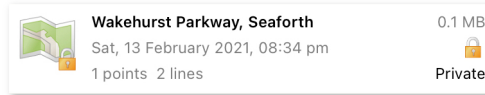
3. The *Map Screen* will appear with a new map.

2.2 Delete Private Map

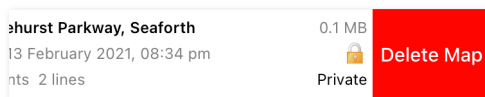
The steps for deleting a private map in FireMapper is different on iOS and Android devices.

In FireMapper iOS you can delete a map from the *Main Menu* screen.

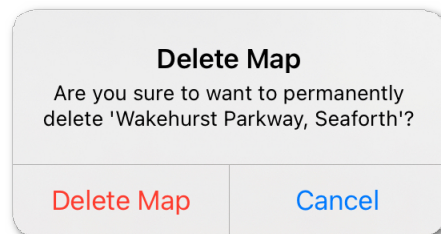
1. **Swipe your finger** from right to left on the map item on FireMapper iOS. On Android you will need to long press on the map item.



2. A red '**Delete Map**' button will appear on the right. Tap **Delete Map** to permanently delete the selected map file.



3. A confirmation dialog will appear if the map contains features. Click **Delete Map** to delete.



There is no confirmation dialog for blank maps. Blank maps will be deleted without an confirmation dialog.

MAP SCREEN

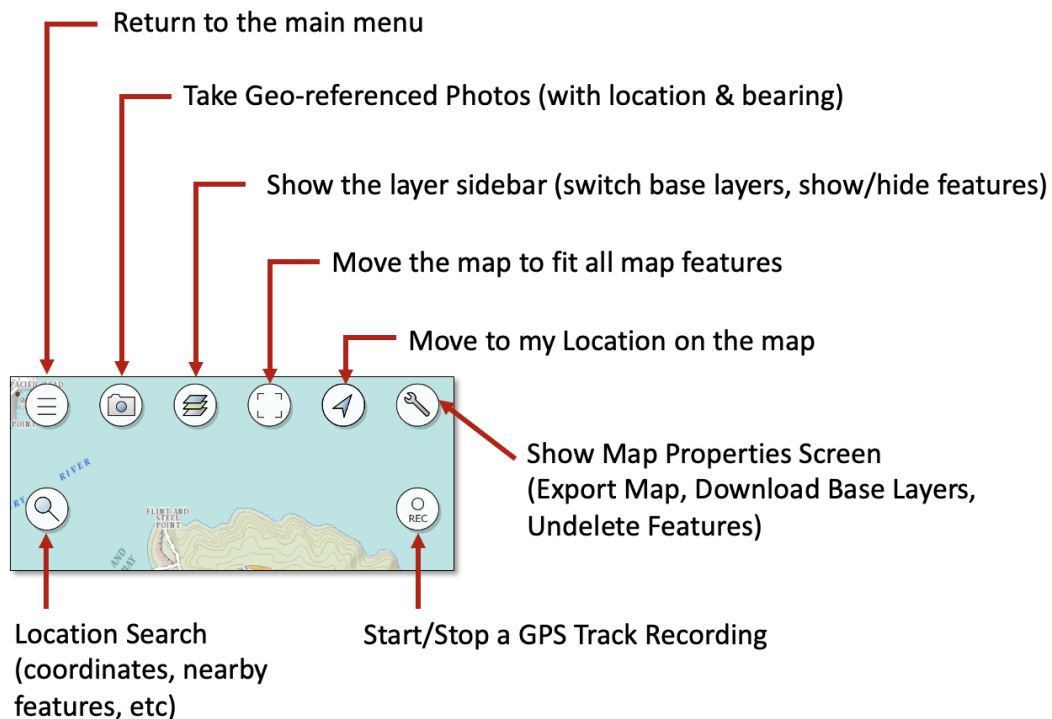
The *Map Screen* displays map features (such as points, lines, photos and areas) and allows you to change between base maps (such as Google, Open Topo Maps, and others).

FireMapper has various toolbars and popup views that automatically appear and disappear depending on whether a map feature is selected.

3.1 Map Mode

3.1.1 Map Toolbar

The *Map Toolbar* appears at the top of the *Map Screen*. The toolbar is visible in **Map Mode**, ie. when no features are selected and disappears when a feature is selected on the map.



Main Menu Button

This button closes the current map and returns to the *Main Menu screen*. If you have a GPS recording in process it will be stopped when you close the map.



Search Button

This button opens the *Search screen* and allows the user to search for coordinates, addresses and features on the map.



Camera Button

This button opens the Camera and allows the user to capture geo-referenced photos with location and direction information. Photos captured with this camera will be added to the current map.



Layers Button

This button will shows/hide the Layers Sidebar in FireMapper which is used to switch between available base layers.



Fit to Map Extents Button

This button will move the map so it fits all the current map features in the current extents.



My Location Button

This button will move the map to the users current location



The My Location button will change icons, depending on the source of the location.

ABS-B Location (Light Blue)

If FireMapper is using an ADS-B receiver that is connected via Wi-Fi (GDL90) to determine your location the button will look like the following icon:



Bluetooth GPS Location (Dark Blue)

If FireMapper is using a Bluetooth connected GPS receiver (such as the Garmin GLO, Bad Elf) to determine your location, the button will look like the following icon:



External App Location (Purple)

If FireMapper is being provided your location by a third party application on the device such as a GPS simulator app, the button will look like the following icon:



Network Location (Orange)

If FireMapper is using nearby Wi-Fi networks and cellular towers, the button will look like the following icon:



No Location (Red)

If FireMapper does not currently know your location or you have not granted it permission to access your location, the button will look like the following:



Map Properties Button

This button is used to access the *Map Properties screen*. The Map Properties screen lists a timeline of all the features on the app, and allows you to download base layers, export maps and undelete features if required.



GPS Recording Button

This button is used to start/stop a GPS track recording. Track recordings will be added to the current map.

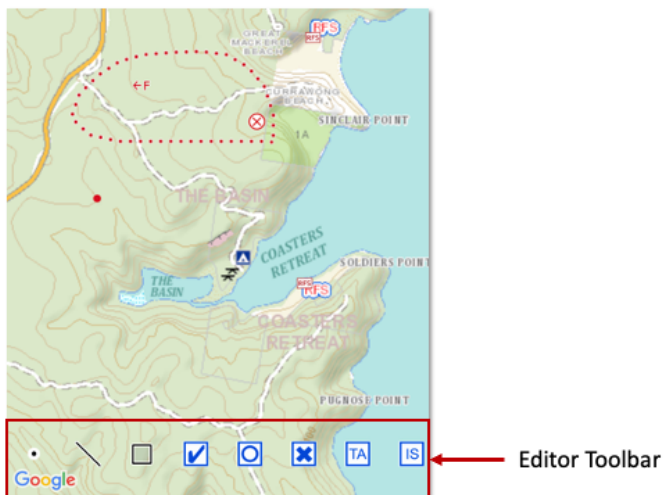


3.1.2 Editor Toolbar

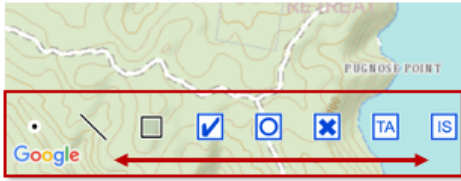
The *Editor Toolbar* is visible in **Map Mode**, ie. when no map features are selected on the map and you are zoomed on the map. The toolbar disables when a feature is selected or if you are zoomed out too far for adding features to the map.

Note: If you can't see the *Editor Toolbar* at the bottom of the *Map Screen* try the following:

- Unselect any selected map feature by tapping in a blank area of the map.
- Make sure you are zoomed in. Editing the map is not supported when zoomed out at a statewide/country level.



You can drag your finger left and right on the toolbar to scroll through the list of feature types that can be added.



Drag your finger to scroll through the list of feature types

There are three different types of editors that can be opened depending on the feature type you select in the *Editor Toolbar*; Point, Line and Area Editors.

Point Editor

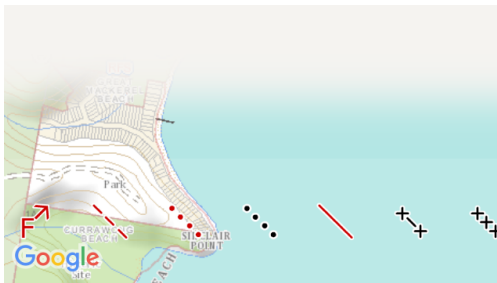
Drawing a new Point:

1. Select a **point type** from the bottom toolbar. You can scroll left to right to access different feature types.
2. **Tap and hold** in the location you want to add your point.

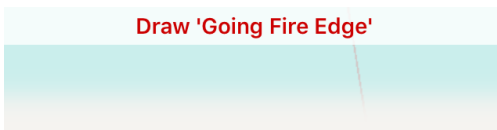
Line Editor

Drawing a new Line:

1. Move the map to the area where you want to draw as you can not move the map while drawing the line.
2. Select a **line type** from the bottom toolbar. You can scroll left to right to access different feature types.



3. The Map view will enter line drawing mode. You will see the following at the top of the window.



4. Draw a line on the map by dragging your finger across the screen.
5. Line distance will appear at the top of the map. If you close the shape, the enclosed area will also appear for the line.



6. Tap the **tick** button on the *bottom left* to save.

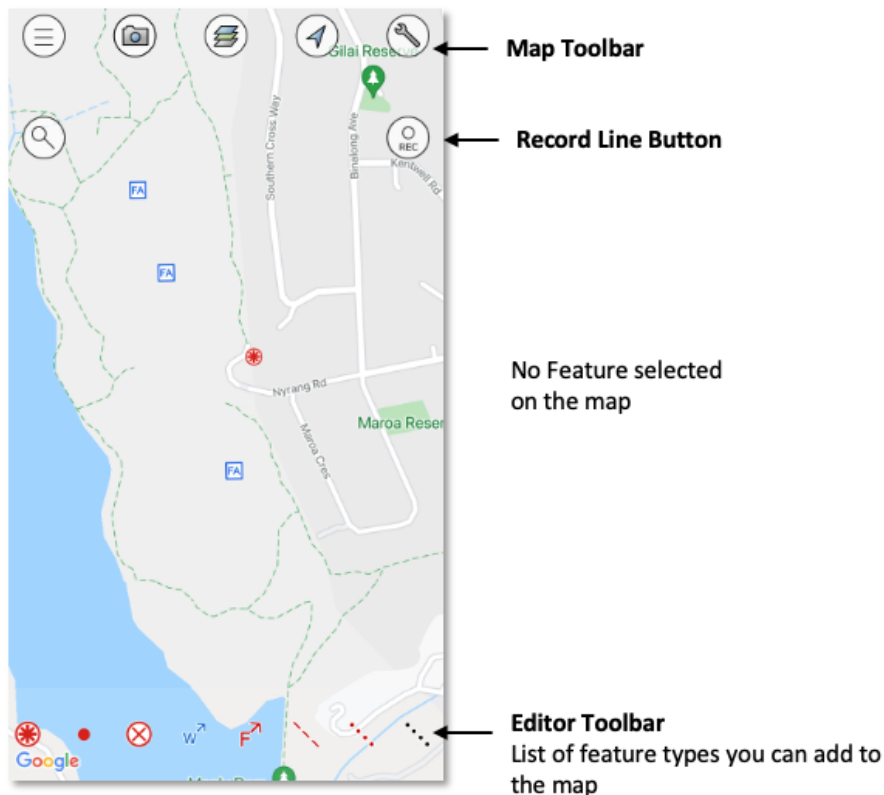


Area Editor

Drawing a new area:

1. Move the map to the area where you want to draw as you can not move the map while drawing the area.
2. Select an **area type** from the bottom toolbar. You can scroll left to right to access different feature types.
3. Drag your finger to trace the perimeter of the area on the map. The area will auto-close the polygon when you either cross your drawn perimeter with your finger or when you lift your finger off the screen. The perimeter and area will be displayed at the top of the screen as you draw the area.
4. Tap the **tick** button in the bottom left corner to save the area.

Map Mode appears when no features are selected. The top of the screen displays a toolbar, and the bottom of the screen displays a scrollable palette of point, line and area types that can be added to the map.



You can enter the map mode by de-selecting the selected feature by clicking on a blank area of the map. This view is used for modifying the map view and adding new features.

Map Toolbar The *Map Toolbar* is visible at the top of the screen. It provides a range of actions for map, such as moving the map to your current location, changing the base layer, accessing the map properties screen, and capturing photos and GPS recordings.

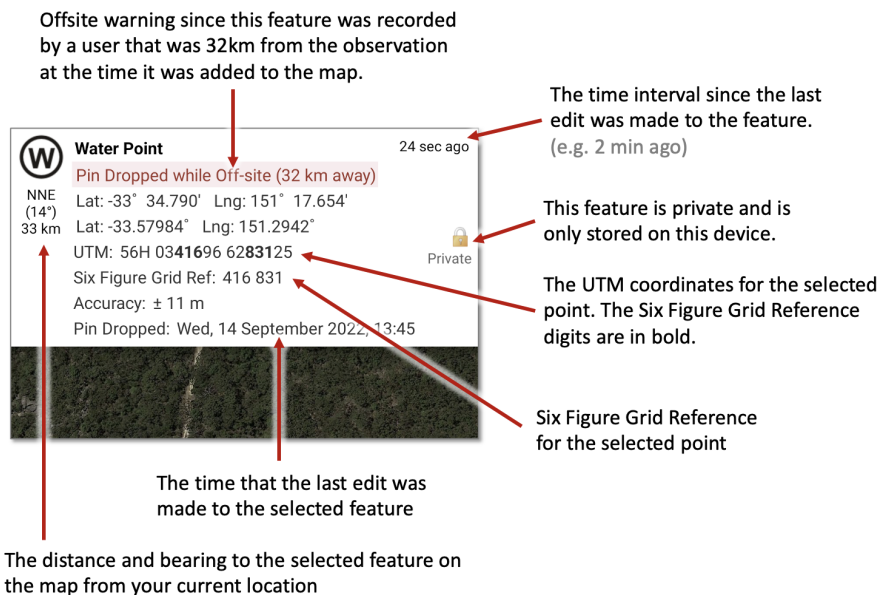
Editor Toolbar The *Editor Toolbar* may be visible at the bottom of the screen (depending on map zoom level) and is used for adding new features to the map. You can scroll the editor toolbar left/right by dragging your finger on the toolbar to view the range of different feature types that can be added to the map.

3.2 Feature Mode

3.2.1 Popup Bar

The *Popup Bar* appears at the top of the *Map Screen* in **Feature Mode**, ie. when a map feature is selected. This bar displays a summary of the selected feature including the information that is most relevant to firefighters and other emergency responders.

The popup automatically disappears when the feature is unselected, by clicking a blank area of the map on the screen.

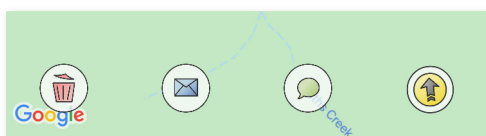


Tap on the popup bar to open the details view for the selected feature. This will allow you to view additional information about the selected feature and also edit fields such as the feature name and feature type.

3.2.2 Feature Toolbar

The *Feature Toolbar* only appears at the bottom of the *Map Screen* in **Feature Mode**, ie. whenever a point, line, photo or area is selected on the map. The toolbar automatically disappears when a feature is unselected.

The buttons that are available in the bar are dependent on the selected feature type and if the feature is editable.



Delete Feature Button

Deletes the selected feature from the map.

Directions:

1. Select a **feature** on the map.
2. Tap the **delete** button on the *Feature toolbar*.



Send As Email Button

Sends the selected feature as a email message.

The email message includes a screenshot of the map and any GPS photos that are attached to the selected feature. This option is available for all map features.

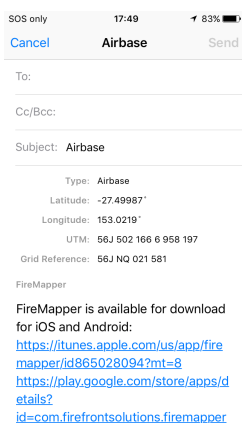
Note: On iOS devices, this uses the native Apple email client. You will need to have your email account configured with the Apple mail client for this to work on iOS devices.

Directions:

1. Select a **feature** on the map
2. Tap **email** button on the *Feature toolbar*



3. Email editor will appear with details of the feature and a photo attachment (*if available*)



4. Tap the **send** button.

Note: You can set the default email addresses for email messages in the *Main Menu->User Profile*.

Send As Text Button

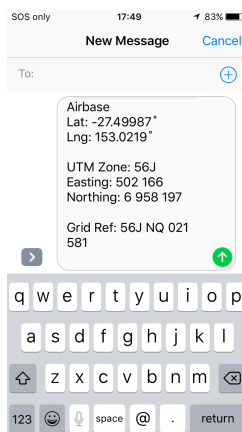
Sends the selected feature as a text message. The text message includes a screenshot of the map and any GPS photos that are attached to the selected feature. This button is available for all map features

Directions:

1. Select a **feature** on the map.
2. Tap **text** button at the bottom of the *Map Screen*.



3. Message editor will appear with details of the feature and a photo attachment (*if available*).



4. Tap the **send** button.

Note: You can set the default mobile numbers for text messages in the *Main Menu->User Profile*.

Downgrade Feature Button

Changes the selected point or line from a completed/confirmed state to a proposed/unconfirmed state. This button is only available for some features.

Directions:

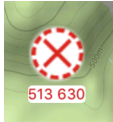
1. Select a **completed** or **confirmed** feature on the map.



2. Tap the **checkbox** button on the *Feature toolbar*.



3. The icon will change to a *propose/unconfirmed* status.

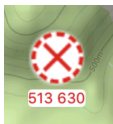


Upgrade Feature Button

Changes the selected point or line between proposed/completed and unconfirmed/confirmed states. This button is only available for some features.

Directions:

1. Select a **proposed** or **unconfirmed** feature on the map.



2. Tap the **checkbox** button on the *Feature toolbar*.



3. The icon will change to a *completed/confirmed* status.

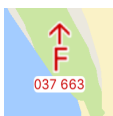


Rotate Point Button

Rotate the selected point by 45 degrees. This option is only available for some **point** types that support rotation (such as fire direction and wind direction).

Directions:

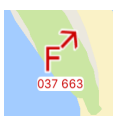
1. Select a **directional point type** on the map.



2. Tap the **rotate** button on the *Feature toolbar*.



3. Point type icon will rotate clockwise 45 degrees.



4. Tap the **rotate** button at the bottom of the *Map Screen*.



5. Point type icon will rotate clockwise 45 degrees.



Flip Line Button

Flip the selected line style. This option is only available for asymmetrical lines such as control line and backburn styles.

1. Select a **asymmetrical line type** that indicates direction on the map.



2. Tap the **flip** button on the *Feature toolbar*.



3. The line style will be flipped.



Navigate With FireMapper Button

Use the built-in navigation tool in FireMapper to navigate in a straight line towards the selected point using the built-in compass and GPS.

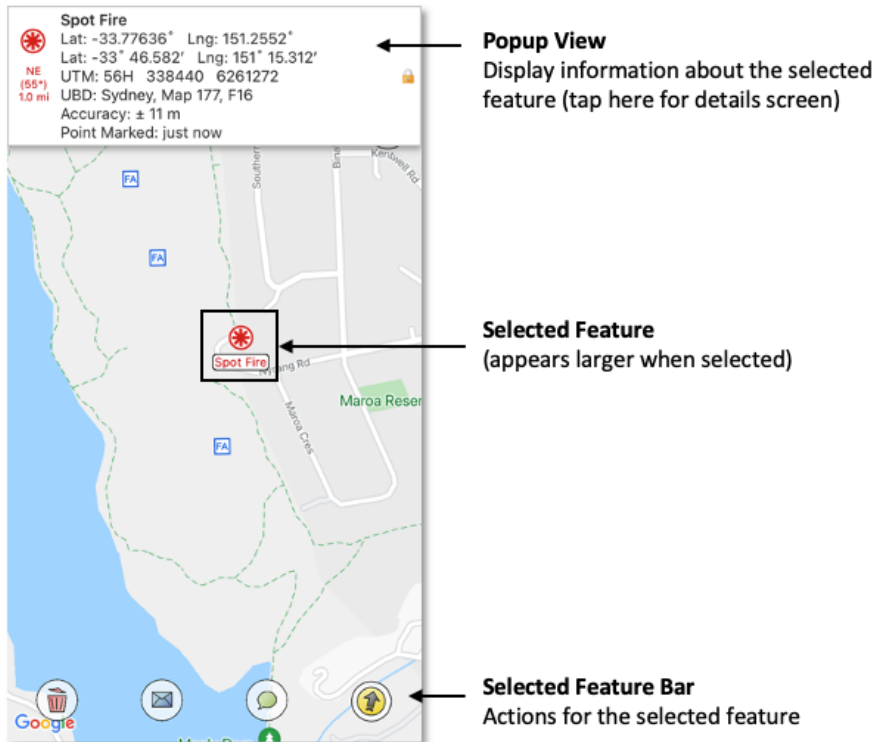
The 'Navigate With FireMapper' arrow button will point in the direction of the selected feature using the internal compass. This is handy if you need to know the approximate direction of the feature on the map without having to start a navigation.

1. Select a point or photo feature on the map.
2. Tap the **Navigate With FireMapper** button at the bottom of the *Map Screen*.



Note: This functionality is not available yet on the Android. Some fields such as bearing and estimated time remaining are yet to be released.

Feature Mode appears when a map feature (e.g. point, line, ...) is selected. A single short tap on a map feature to select a map feature an activate *feature mode*



Popup Bar The *Popup Bar* is visible at the top of the screen. This displays a summary of the selected feature as well as the distance and bearing to the selected point in the top left corner. Tapping the Popup View will display additional details on the feature, and fields to edit the name, address and notes for the feature.

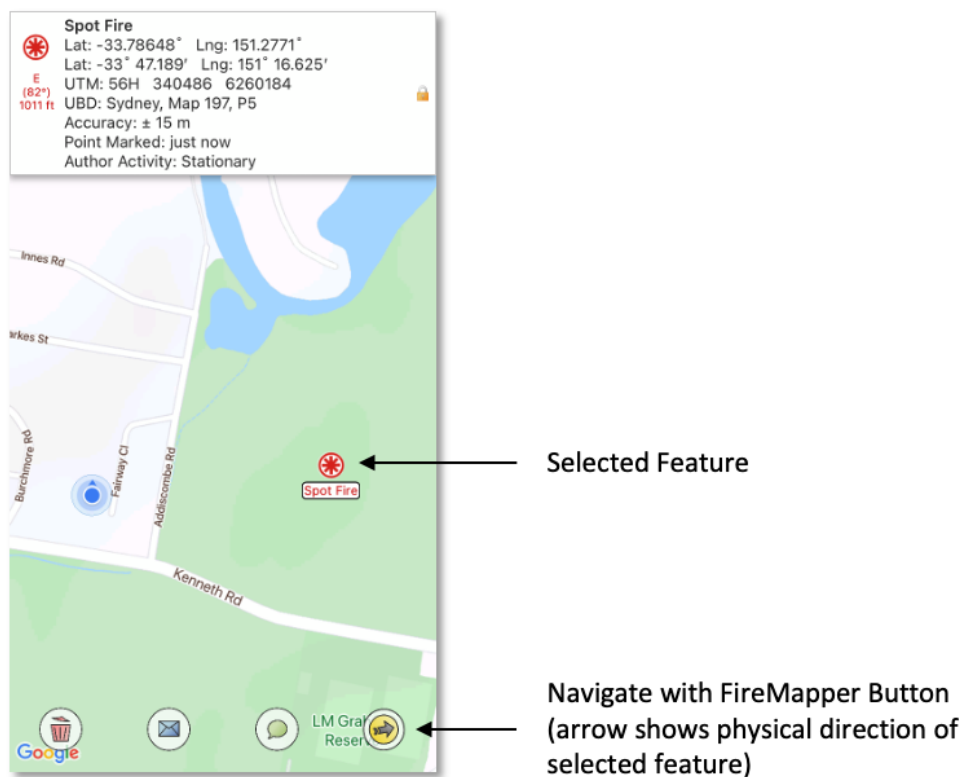
Feature Toolbar The *Feature Toolbar* at the bottom of the screen. The options on the Feature Toolbar will change depending on the type of feature selected. Options include sending the selected feature as email or text message, exporting the individual feature as a file, navigating to the selected feature and deleting the selected featured.

NAVIGATION SCREEN

You can use FireMapper to navigate to a location using the internal compass.

Note: This functionality is not implemented yet on the Android. This is on the product roadmap for Android. Some fields has not available on iOS yet such as bearing and estimated time remaining. These will be added in a future release.

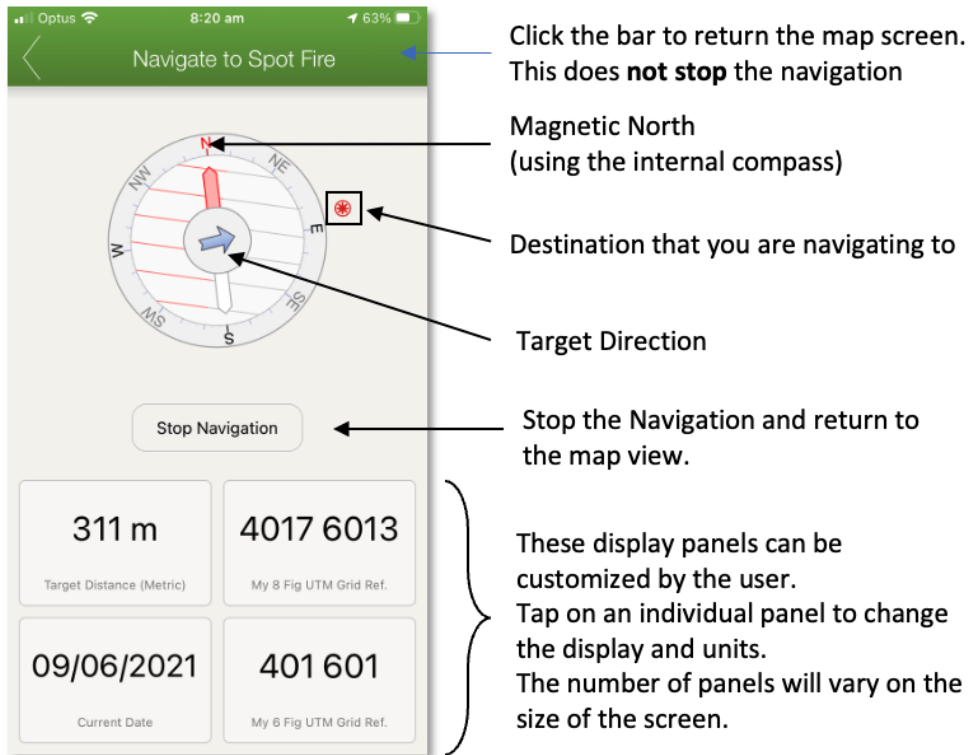
1. Select a Point or Photo on the *Map Screen*.



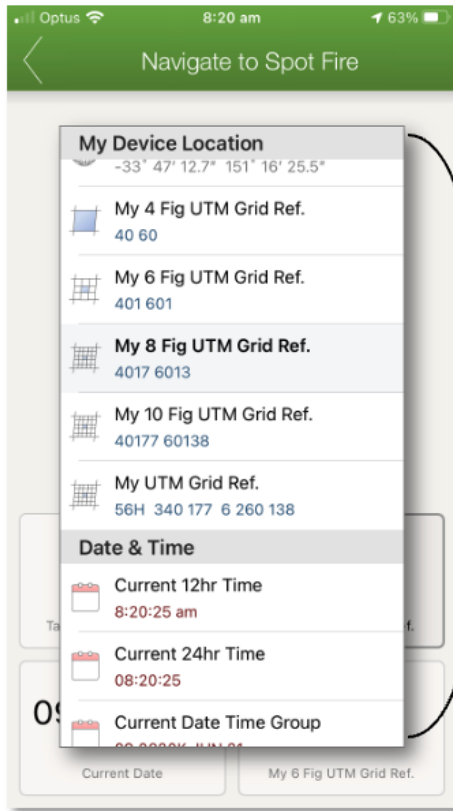
2. Tap the **Navigate using FireMapper** button in the bottom toolbar. The yellow/black arrow button will point the approximate physical direction of the target. This is handy if you want to know the direction of the selected feature on the map without starting the navigation tool.



3. Move the device in a figure 8 pattern in the air a few times to help calibrate the digital compass and reduce the magnetic error.



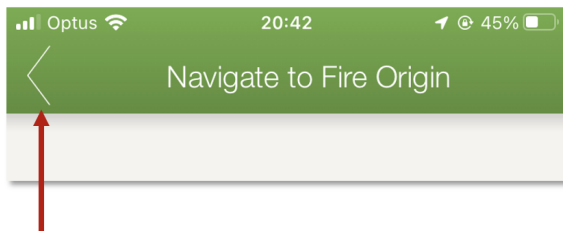
5. On the navigation screen, you can tap any display panels you would like to change.



Select the field and units that you want to display on the panel.

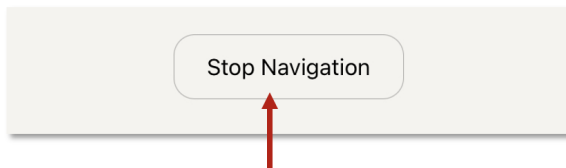
Scroll up and down to see the complete list of field types.

5. You can return the *Map Screen* without stopping the navigation using the top bar.



6. A blue dotted line will show the course on the map view. The arrow on the left side will show the physical direction and distance to the destination. Tap the arrow to return to the navigation screen.

7. Tap the **Stop Navigation** button to stop the navigation and return to the map.



SEARCH SCREEN

The Search screen in FireMapper is an intelligent search that allows you to search for coordinates, nearby features, addresses and more.

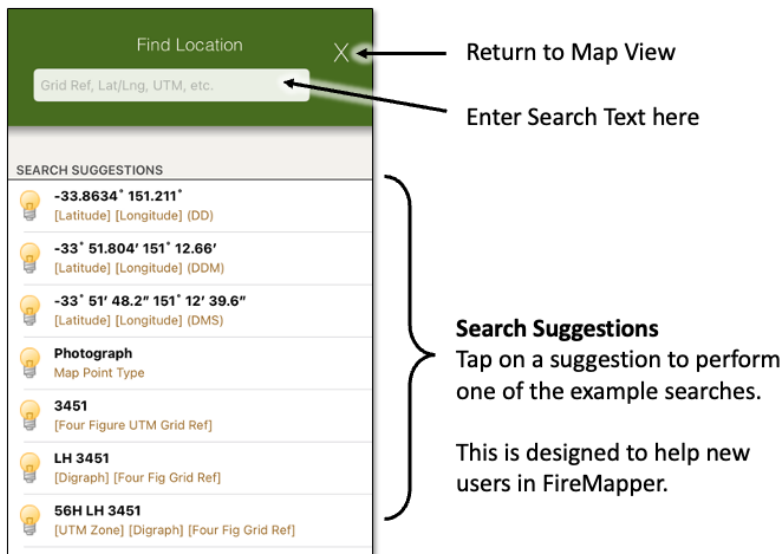
How to perform a location search:

1. Tap the **Search** button on the left side of the *Map screen*. The search button is only visible when no features are selected on the map

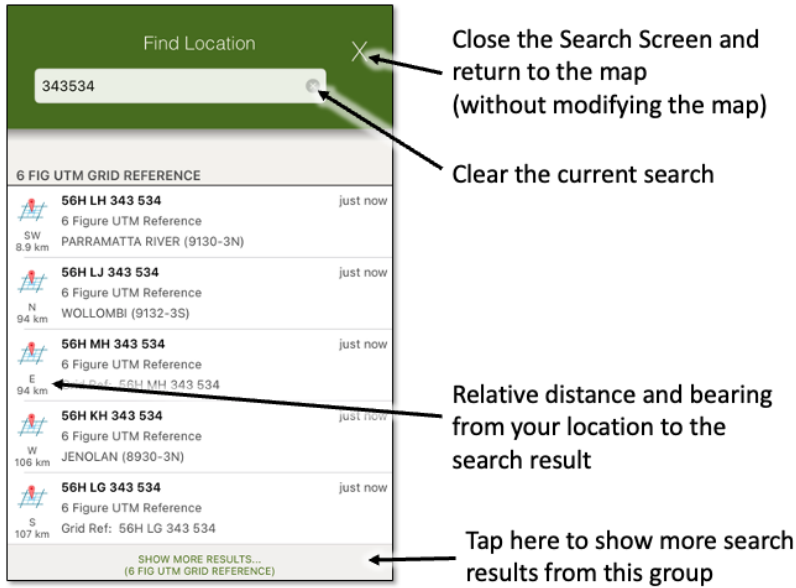


Search Button

2. **Enter the search text** in the text box at the top and tap Enter. This is a list of search suggestions when no search text is entered.



3. **Tap the search result** you want to add/view on the map. If the feature does not exist yet, a new point will be added to the map.

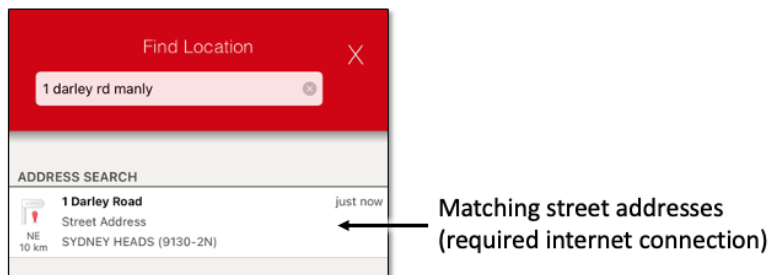


5.1 Address Search

The address based search requires an internet connect to work.

Examples:

- Street Address (e.g. 1 Darley Rd, Manly)
- Suburb (e.g. Manly)
- Intersection (e.g. Darley Rd Marshall St)
- State & Postcode (e.g. 2095 NSW)



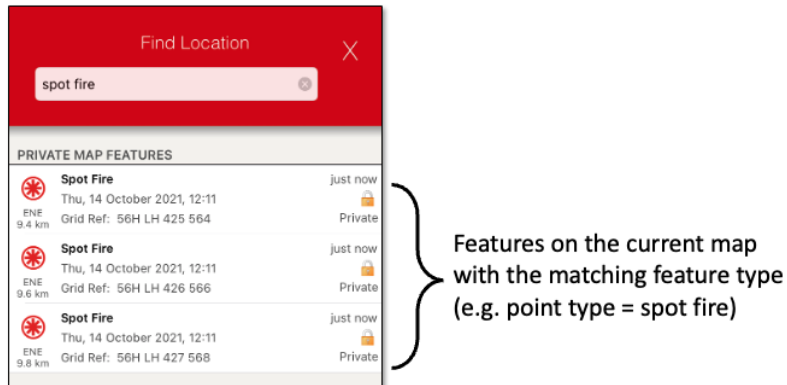
5.2 Map Feature Search

You can search for features on the current private or shared map by feature type, feature name or feature notes. This is useful for quickly finding an existing feature on the current map.

Examples:

- Spot Fire
- Photo

- Asset
- Fire Edge



5.3 4 Figure Grid Reference

As four figure grid references repeat every 100km, so make sure you pick the correct location from the result list.

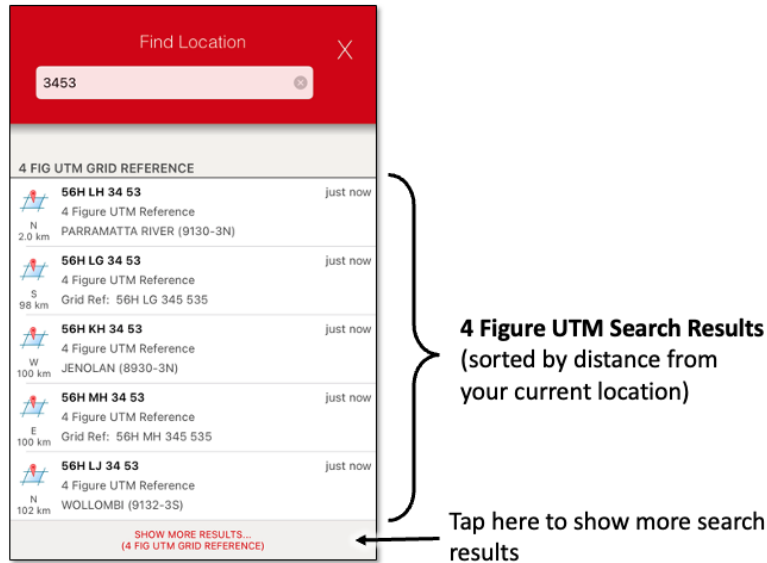
You also provide the UTM Zone (e.g. 56H) and/or digraph to refer to a specific grid reference. 4 Figure grid references repeat every 100km north/south/east/west.

Spaces and dashes in the four grid reference are optional.

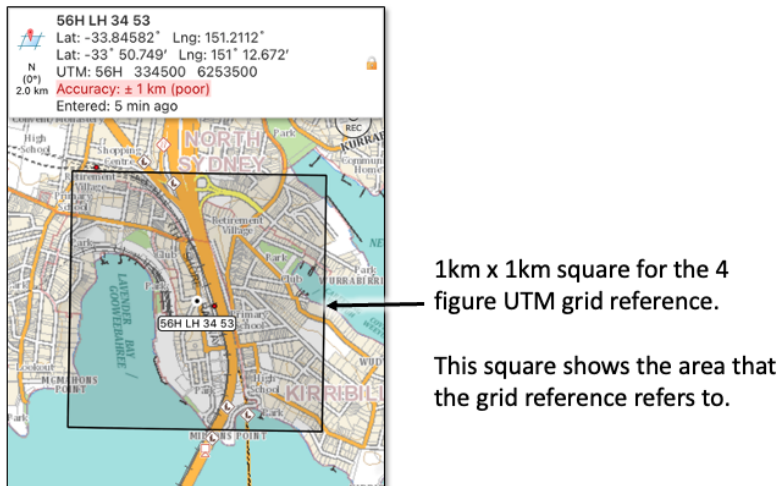
Due to the limited resolution of 4 figure grid references, most users will instead use either 6 or 8 figure grid references.

Examples:

- 3453
- 34 53
- 34-53
- LH 3453
- LH 34 53
- 56H LH 3453
- 56H LH 34 53



A four figure grid reference has a low accuracy of 1km by 1km. FireMapper will show the square that the four figure grid reference refers to when the point is selected on the map.



5.4 6 Figure Grid Reference

As six figure grid references repeat every 100km, so make sure you pick the correct location from the result list.

You also provide the UTM Zone (e.g. 56H) and/or digraph to refer to a specific grid reference. 6 Figure grid references repeat every 100km north/south/east/west.

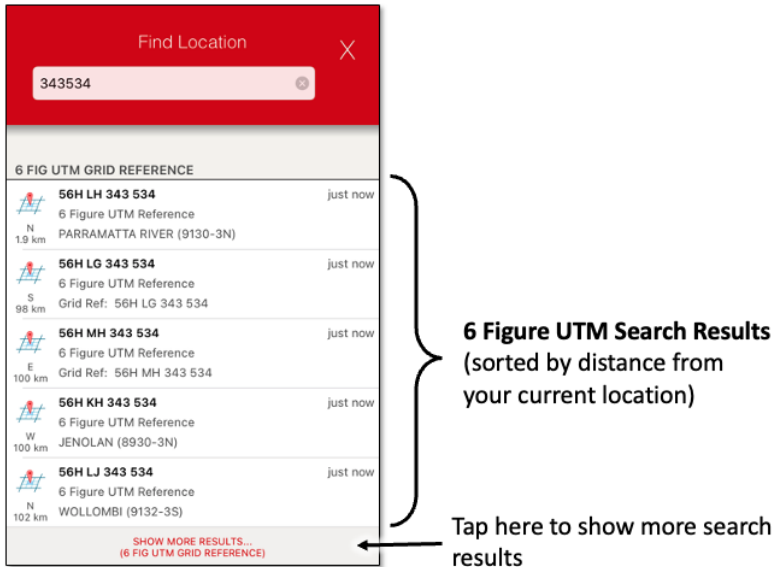
Spaces and dashes in the six figure grid reference are optional.

6 Figure grid references are commonly used by ground based users.

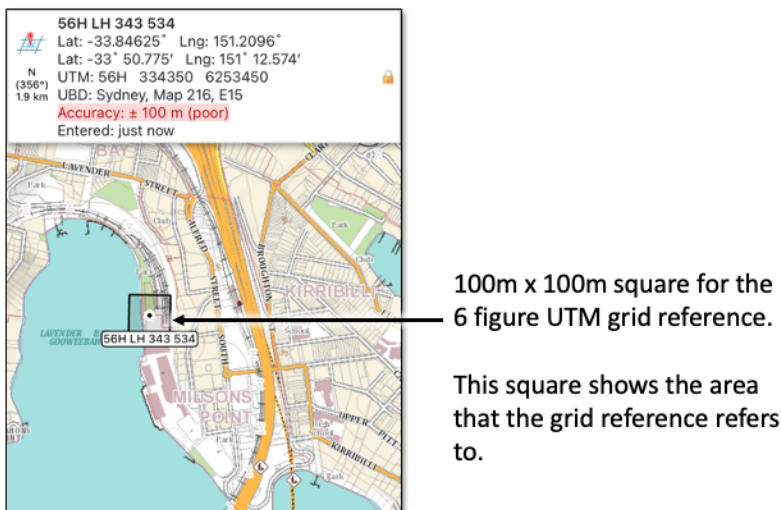
Examples:

- 242534
- 242 534

- 242-534
- LH 242534
- LH 242 534
- LH 242-534
- 56H LH 242534
- 56H LH 242 534
- 56H LH 242-534



A six figure grid reference has a resolution of 100m by 100m. FireMapper will show the square that the six figure grid reference refers to when the point is selected on the map.



5.5 8 Figure Grid Reference

A eight figure grid reference has a higher resolution of 10m by 10m.

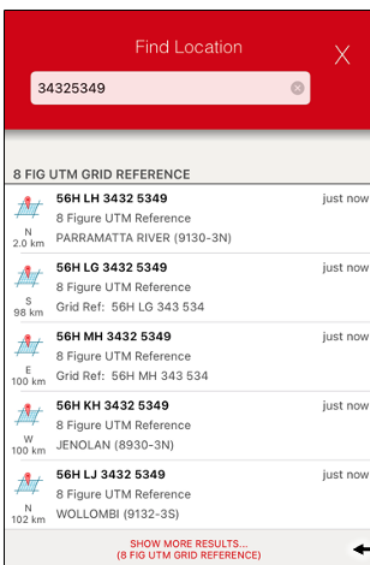
When searching using a 8 figure grid reference, you can also provide the UTM Zone (e.g. 56H) and/or digraph to referer to a specific grid reference. If you don't provide a UTM Zone or digraph, FireMapper will return a collection of matching grid references near your location, as each grid reference repeats every 100km.

Spaces and dashes in the eight figure grid reference are optional.

8 Figure grid references are used by ground based users when a higher level of accuracy is required.

Examples:

- 34325349
- 3432 5349
- 3432-5349
- LH 34325349
- LH 3432 5349
- LH 3432-5349
- 56H LH 34325349
- 56H LH 3432 5349
- 56H LH 3432-5349



8 Figure UTM Search Results
(sorted by distance from
your current location)

Tap here to show more search
results

5.6 10 Figure Grid Reference

10 Figure grid references repeat every 100km north/south/east/west and has a resolution of 1m x 1m.

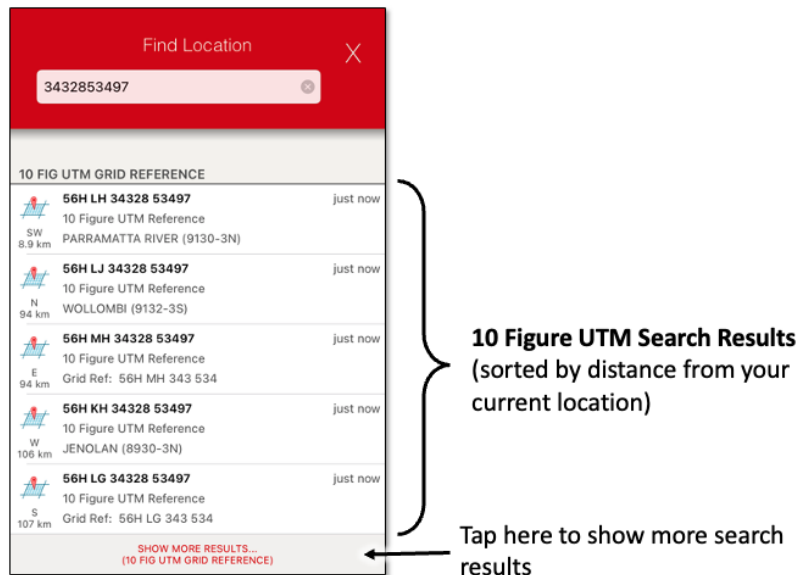
The first five digits in the grid reference refers to the easting in metres and the last five digits refers to the northing in metres. To convert an easting/northing into a 10 figure grid reference, use the last 5 figures of the easting and the last 5 figures of the northing.

When searching using a 10 figure grid reference, you can also provide the UTM Zone (e.g. 56H) and/or digraph to referer to a specific grid reference. If you don't provide a UTM Zone or digraph, FireMapper will return a collection of matching grid references near your location, as each grid reference repeats every 100km.

The spaces and dashes in the ten figure grid reference are optional.

Examples:

- 3432853497
- 34328 53497
- 34328-53497
- LH 3432853497
- LH 34328 53497
- LH 34328-53497
- 56H LH 3432853497
- 56H LH 34328 53497
- 56H LH 34328-53497



5.7 14 Figure Grid Reference

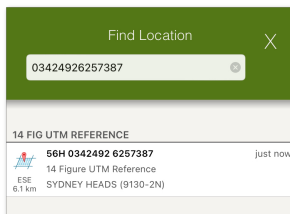
14 Figure references have an accuracy of 1m x 1m. This is a unique location in a UTM zone band (56N, 56S, 55N, 56S etc.). FireMapper will use the current device location to determine the current UTM zone to use.

In a 14 Figure reference, the first 7 figures is the easting and the last 7 figures is the northing. In order to have 7 figures for the easting, a zero is added at the start of the easting to get 14 figures.

The leading 0 is optional when searching for using a 14 Figure Grid Reference.

Examples:

- 03424926257387
- 03424926-257387
- 0342492 6257387
- 3424926257387
- 3424926-257387
- 342492 6257387



5.8 Easting/Northing

An easting/northing is used to uniquely identify a location inside a specific UTM zone. FireMapper will use your current location to determine the UTM zone, if only an easting and northing are provided. Sometimes an easting is written with a leading 0.

Examples:

- *[Easting] [Northing]*
- 398 313, 6 260 424
- 398 313,6 260 424
- 398313, 6260424
- 0398313, 6260424
- 0398313E, 6260424N
- 0398313 E, 6260424 N
- 0398313 mE, 6260424 mN
- 0398313mE, 6260424mN
- 398313, 6260424
- 0398313 6260424
- 0398313E 6260424N

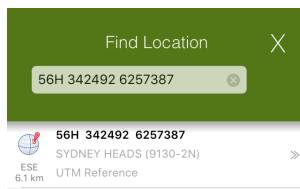
- 0398313 E 6260424 N
- 0398313 mE 6260424 mN
- 0398313mE 6260424mN
- 0398313,6260424
- 398313,6260424
- 398313E 6260424N

5.9 UTM Reference

A UTM reference has a high accuracy of 1m x 1m. This is a unique location which refers to a single location on the Earth's surface

Examples:

- 56H 342492 6257387

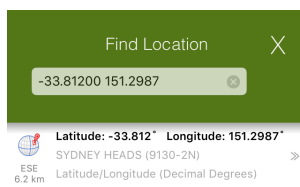


5.10 Decimal Degrees (DD)

Latitude/Longitude expressed in decimal degrees. This is a unique location which refers to a single location on the Earth's surface. Latitude/Longitude is commonly used by aircraft as they have to operate over long distances and can easily be entered by the pilot.

Examples:

- *[Latitude] [Longitude]*
- -33.81200 151.2987
- 33.81200S 151.2987W
- S33.81200 W151.2987
- -33.81200° 151.2987°
- 33.81200° S 151.2987° W
- -33.81200deg 151.2987deg
- -33.81200d 151.2987d



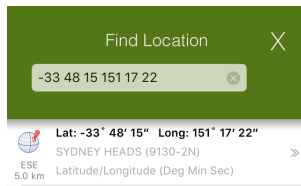
5.11 Degrees Decimal Minutes (DDM)

Latitude/Longitude expressed in degree decimal minutes. This is a unique location which refers to a single location on the Earth's surface

Degrees Minutes are commonly used by aviation users in Firefighting. Latitude/Longitude is commonly used by aircraft as they have to operate over long distances and can easily be entered by the pilot.

Examples:

- *[Latitude] [Longitude]*
- -33 48 151 17
- -33d 48m 151d 17m
- -33dec 48min 151deg 17min
- -33° 48' 151° 17'
- 33 48S 151 17W
- S33 48 W151 17
- -33 48.72 151 17.89
- 33 48.72S 151 17.89W
- S33 48.72 W151 17.89

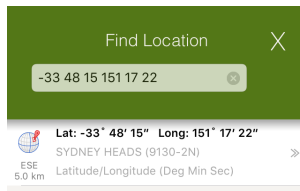


5.12 Degrees Minutes Seconds (DMS)

Latitude/Longitude expressed in degree minute seconds. This is a unique location which refers to a single location on the Earth's surface

Examples:

- *[Latitude] [Longitude]*
- -33 48 15 151 17 22
- -33d 48m 15s 151d 17m 22s
- -33deg 48min 15sec 151deg 17min 22sec
- 33 48 15S 151 17 22W
- S33 48 15 W151 17 22
- -33 48 15.11 151 17 22.34
- 33 48 15.11S 151 17 22.34W
- S33 48 15.11 W151 17 22.34



5.13 NTZM Coordinates

If your device is located in New Zealand, you can also search by NZTM coordinates. NZTM coordinates are commonly used by emergency services (including FENZ). NZTM is also used when working with NZ topographic maps.

You can search for 4, 6, 8, 10 and 14 grid references in NZTM. The FireMapper app will show results for NZTM coordinates before UTM coordinates, as this NZTM coordinates is the most common format for NZ.

Examples:

- 95 08 (*4 figure grid ref*)
- 957 083 (*6 figure grid ref*)
- 9572 0838 (*8 figure grid ref*)
- 95721 08381 (*10 figure grid ref*)
- 1795721 5708381 (*NZTM coordinates*)

5.14 Quadrillage Romer Reference

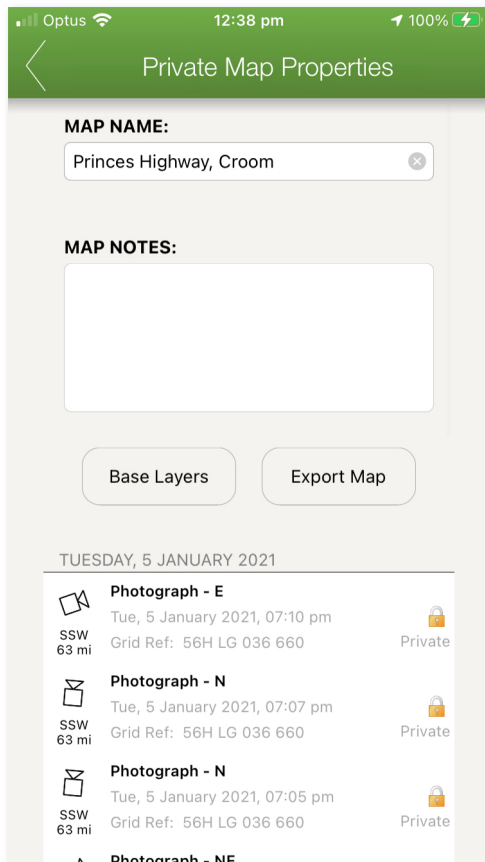
If your device is located in Quebec, you can also search by the quadrillage romer grid that is used in Quebec. This grid format is used by emergency services in Quebec.

Examples:

- 3612-1
- 3612-1-2476

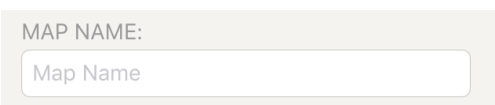
MAP PROPERTIES SCREEN

The *Map Properties* screen allows you to edit the metadata for your map.



6.1 Map Name

Name of the current map.

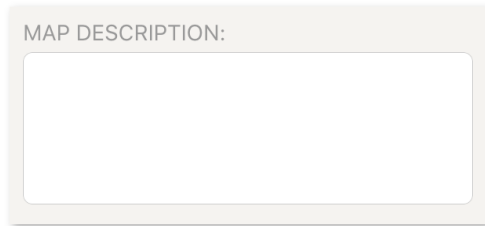


6.2 Map Description

Additional description for a map.

You can only edit the *map description* for private maps. Map description is not available for shared maps.

This notes are included in the exported kml, kmz and gpx files.



6.3 Restoring Deleted Features

Restoring a Deleted Feature (FireMapper iOS):

1. Select the spanner button at the top right corner of the *Map screen*.



2. On iOS devices, swipe right to left on the deleted feature to reveal the Undo button.



3. Tap the 'Undo' button to restore the deleted feature.

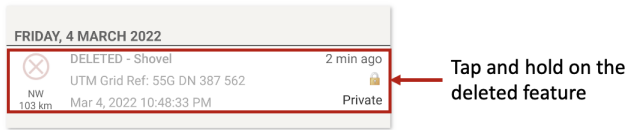


Restore a Deleted Feature (FireMapper Android):

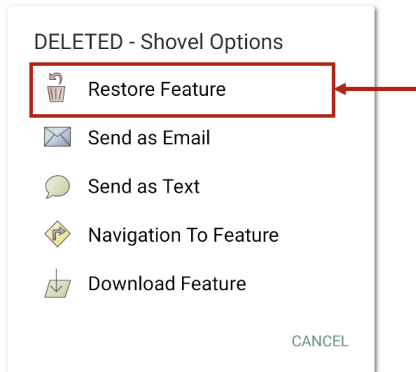
1. Select the spanner button at the top right corner of the *Map screen*.



2. On Android devices, long press on the deleted feature and tap **'Restore Feature'** from the popup menu.



3. Long press on the deleted feature and tap **'Restore Feature'** from the popup menu.



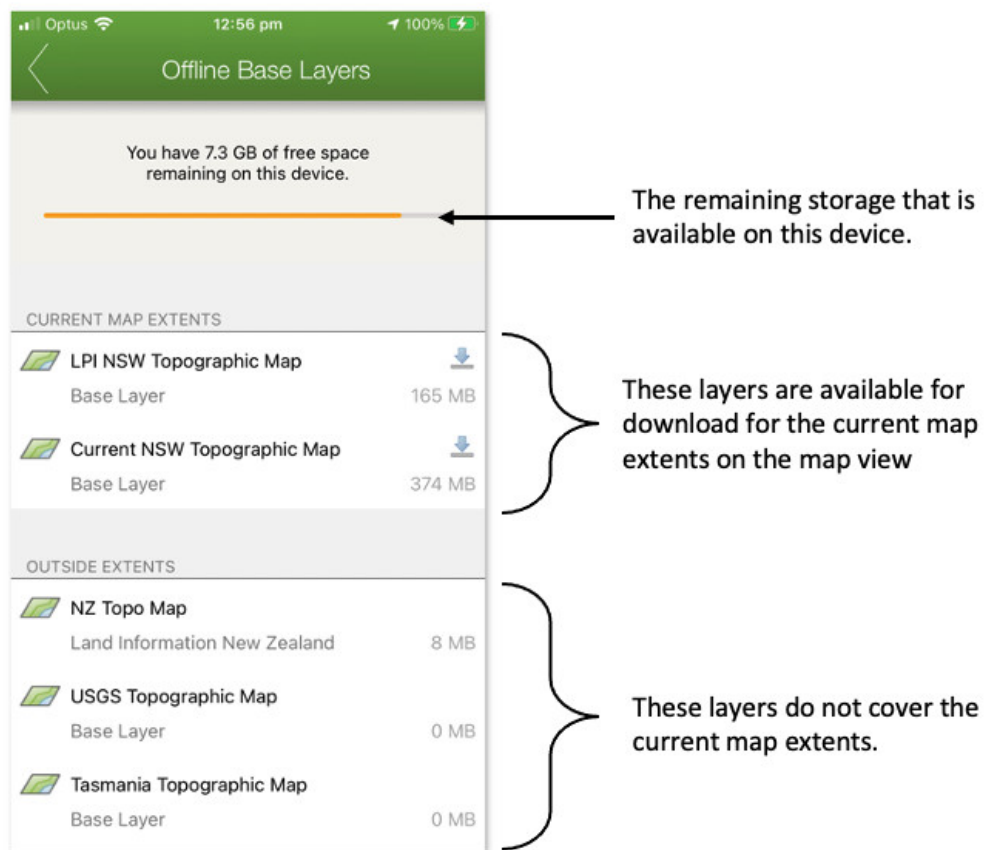
BASE LAYERS SCREEN

The *Base Layers Screen* lists all the available non Google base layers and the amount of storage space they're occupying on the device.

Tapping a layer will instruct FireMapper to download tiles for that layer based on the area the map currently covers.

FireMapper also downloads and stores the base layer as you view the map in the map screen. This is done for performance reasons and to improve offline availability.

Each base layer is stored as a folder as a Compact Cache V2 in the FireMapper documents directory. There is a `layer.json` file in each base layer directory that contains the configuration for the offline layer.

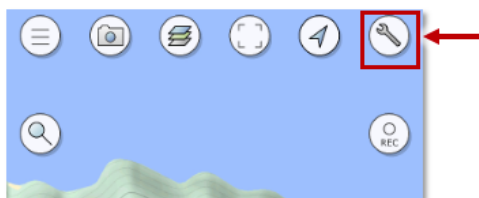


7.1 Downloading Base Layers

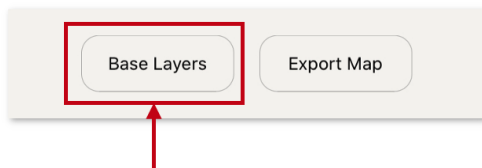
1. On the *Map Screen* move the map to the region/area that you want to download



2. Tap the **Spanner** button in the top right corner of the *Map screen*



3. Tap the **Base Layers** button on the *Map Properties screen*

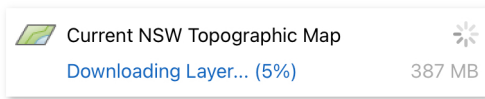


4. Tap on the Base Layer(s) that you would like to download to the device. Only layers that are available for the current map extents can be downloaded.

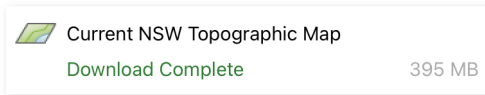


5. The download may take a few minutes to complete. You can download multiple layers at the same time. FireMap-

per will download the tiles to the local device for the current map extents. There is a limit on the number of tiles that can be downloaded for each layer to limit the size of the download, especially for large areas. FireMapper will only download a maximum of 800 tiles per any one zoom level.



6. Wait for a download complete message before closing the base layer screen. If you close the base layer screen while the download is in progress, the download will be aborted.



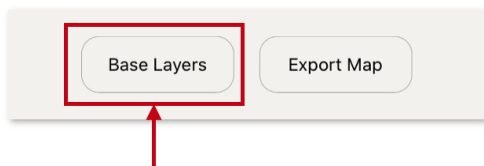
7.2 Deleting Base Layers

You may want to delete a base layer if you are running out of local storage on the device. You can also delete base layers generated from imported PDFs.

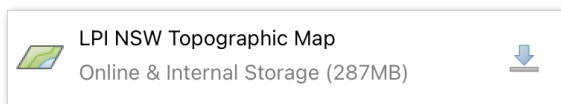
1. Tap the **Spanner** button in the top right corner of the *Map screen*



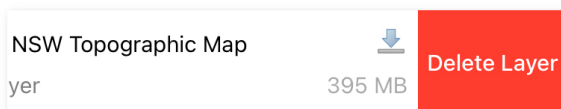
2. Tap the **Base Layers** button on the *Map Properties screen*



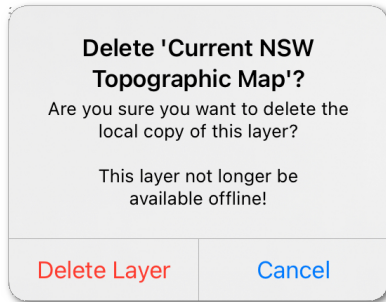
3. **Swipe right to left** on the base layer you want to delete on iOS. On Android press and hold on the base layer that you want to delete.



4. Tap the red **Delete Layer** button on the right side base layer item.



5. Tap **Delete Layer** button on the dialog to delete the local copy of the base layer. This will free up any space used by the layer. You can not undo this operation!



7.3 Copying Base Layers

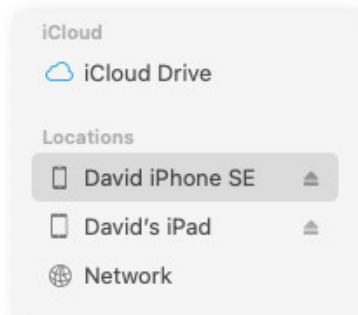
Copying Base Layers with FireMapper iOS and MacOS

The base layers can be accessed from FireMapper iOS using a MacOS computer. This is useful if you want to copy base layers between devices.

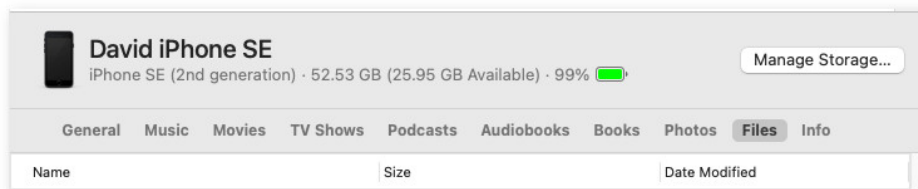
1. Connect your iPhone/iPad to your MacOS computer.
2. Open the **Finder** app on your MacOS computer.



3. **Select your iOS device** from the left side bar in Finder window.



4. **Select the Files tab** at the top right corner of the Finders window.



5. **Select FireMapper application** to view the list of base layers. Some of these base layers may be autogenerated by FireMapper as you view the map. Each base layer is stored as a compact cache v2. Ignore the inbox folder, this is a special folder for imported maps.

Name	Size	Date Modified
FireMapper		
current_nsw_topographic_map	395.8 MB	7 Oct 2020 at 11:32 pm
Inbox	364.7 MB	3 Jun 2021 at 7:24 pm
lpi_nsw_topographic_map	164 MB	7 Oct 2020 at 11:15 pm
nz_topo_map	7.1 MB	17 Dec 2020 at 12:31 pm
open_topographic_map	44.1 MB	7 Oct 2020 at 9:39 pm
qtopo_map	15.4 MB	24 Oct 2020 at 9:56 pm

Download Base Layer Folder from iPhone/iPad to Mac OS

To download a folder, drag it from the Finder window to your desktop (or another folder). This may take a few minutes to complete, MacOS will not display any status while the download is occurring which can be confusing. The folder will appear on your desktop after the download is complete.

Upload Base Layer Folder from Mac OS to iPhone/iPad

Drag a previously downloaded folder from the desktop to the FireMapper application in the finder window. This may take a few minutes to complete, MacOS will not display any status while the download is occurring which can be confusing. The folder will appear in the FireMapper base layer group after the upload is complete.

This process can be used to copy base layers between iOS devices.

Delete Base Layer Folder

Right click on the base layer folder under the FireMapper application and select delete. This will permanently delete the folder from the device.

current_nsw_topographic_map	B	9 Jan 2021 at 11:43 am
Inbox	B	4 Jun 2021 at 10:26 pm
lpi_nsw_topographic_map	234.3 MB	8 Jan 2021 at 2:11 pm

Copying Base Layers with FireMapper iOS and Windows PC

The base layers can also be accessed from FireMapper iOS using a Windows PC using Apple iTunes application.

1. **Connect your iPhone/iPad** to your Windows computer.
2. **Open the iTunes** app on your Windows computer.
3. **Select the iPhone/iPad button** near the top left of the iTunes window.
4. **Click File Sharing**, select an FireMapper in the list

Copying Base Layers with FireMapper Android and MacOS

You will need a copy of Android File Transfer application to transfer files between MacOS and an Android device. Your computer must be using Mac OS X 10.5 and up.

1. Download and Install Android File Transfer on your computer
<https://www.android.com/filetransfer/>
2. Open **Android File Transfer**. The next time that you connect your Android device, it opens automatically.
3. Unlock your Android device.
4. Connect your Android device to your computer with a USB cable

5. On your Android device, tap the **Charging this device via USB** notification.
6. Under “Use USB for,” select File Transfer.
7. An Android File Transfer window will open on your computer.
8. If your Android device has an SD card reader, there may be two locations that you can store base layers; one using internal storage on the device and the other using external storage on the SD card.
9. Copy the base layer folders into the **Android/data/com.firefrontsolutions.firemapper.enterprise/files/base_layers/** or **Android/data/com.firefrontsolutions.firemapper/files/base_layers/** depending on which version of FireMapper you are using. Due to Android restrictions, FireMapper is not able to read outside these directories.

Copying Base Layers with FireMapper Android and Windows PC

1. Connect your Android device to your computer with a USB cable.
2. On the Android device, open the USB Preferences notification and update “Use USB for” to “File transfer”.
3. Windows will display the Android device under “This PC” in File Explorer.
4. If your Android device has an SD card reader, there will be two locations that you can store base layers; one using Internal storage on the device and the other using External storage on the SD card.
5. Open “Internal storage” (or “SD Card”, or whatever your device calls its external storage) on the device and then browse to **Android/data/com.firefrontsolutions.firemapper.enterprise/files/base_layers/**.
6. You will see a folder for each base layer on the device; open the base layer you want to copy files into, and then use the File Explorer to copy into the “_alllayers” folder. The contents of the “_alllayers” folder are a series of folders named “L09”, “L10”.

7.4 Create Your Own Tile Cache

FireMapper will automatically create tile caches on the map as you use the application. There is a folder for each base layer that is automatically generated as you view the map.

Before creating your own tile cache, a good starting point is to copy an existing tile cache off the device.

Tile Cache Format

FireMapper only supports a Compact Cache v2 format with the following configuration:

- Ersi Compact Cache V2 (More details: <https://github.com/Esri/raster-tiles-compactcache>)
- Raster tiles only (Vector tiles are not supported)
- PNG, JPG or WEBP compression only
- 256 x 256 tile size only
- Web Mercator projection (ESPG 3857) only
- Standard Web Mercator levels of details and tile for the cache (Example: https://github.com/Esri/raster-tiles-compactcache/blob/master/sample_cache/conf.xml)

Layer Configuration File

You will need to add a **layer.json** in the layer folder. This file is required for the FireMapper application to discover the tile cache folder.

This file is specific to FireMapper and is not created by third party tools. It is a JSON file with configuration information for the base layer. This needs to be a valid JSON file. You can use an online JSON validator to ensure that the file is a valid JSON file to check the file. The last item in the JSON dictionary must not end with a comma.:

```
{
  "title": "LPI NSW Topographic Map",
  "min_zoom": 5,
  "max_zoom": 19,
  "priority": 10,
  "min_latitude": -36.39,
  "max_latitude": -28.100,
  "min_longitude": 141,
  "max_longitude": 153.599
}
```

- **title** - the name for the base layer that is displayed in the app
- **min_zoom** - the minimum zoom level that the layer is visible in FireMapper. This should be the smallest L<zoom> folder in the cache.
- **max_zoom** - the maximum zoom level that the layer is visible in FireMapper. This should be the largest L<zoom> folder in the cache.
- **priority** - the order that the layer appears in FireMapper. Use 5 if you want it to be the default layer in FireMapper. Use 150 if you want it to be one of the last layers to appear in the list. Do not use anything less than 3.
- **min_latitude** - this is the minimum latitude extents covered by the tile cache.
- **max_latitude** - this is the maximum latitude extents covered by the tile cache.
- **min_longitude** - this is the minimum longitude extents covered by the tile cache.
- **max_longitude** - this is the maximum longitude extents covered by the tile cache.

Tile Folder Name

Use lower case letters and underscores only for the base layer folder name (e.g. lpi_nsw_topographic_map). This should be the same as the title (but with lower case letters and underscores for spaces).

Do not use the same folder name as an existing FireMapper base layer. Each layer must have a different name.

7.5 Converting a TPKX File

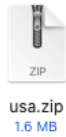
You can import a TPKX tile into FireMapper iOS and it will automatically be converted into a compact cache on the device.

It is also possible to manually create the compact cache layer format required by FireMapper using the following steps.

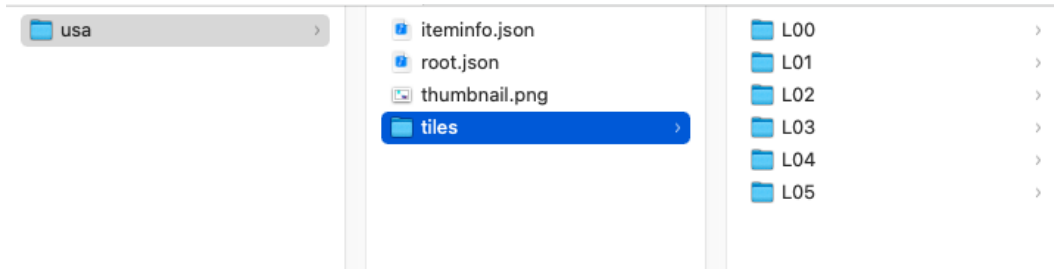
1. Create a TPKX with the following settings:
 - Raster Tiles (Vector tiles are not supported)
 - PNG or JPG compression for the tiles
 - 256 x 256 Tile size
 - Web Mercator projection only (ESPG 3857)

<https://github.com/Esri/tile-package-spec/blob/master/Sample%20TPKX%20Files/Usa.tpkx>

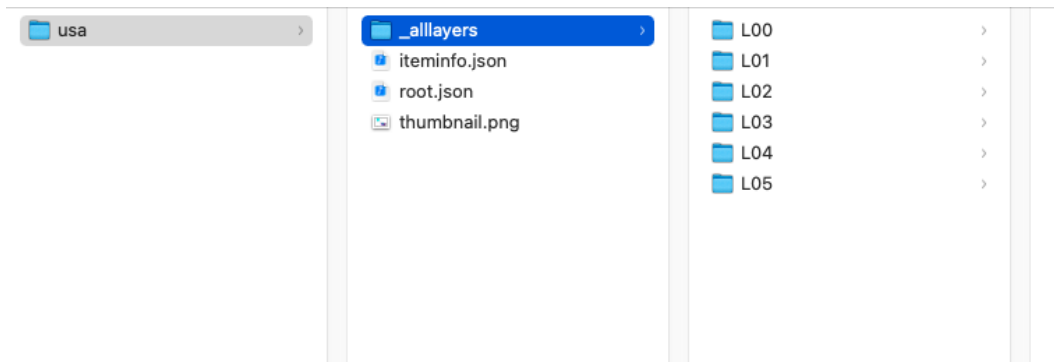
2. Rename the generated TPKX file from a .tpkx file extension into a .zip file extension. Use a lower case name for the file (e.g. usa.zip)



3. Extract the contents of the zip folder



3. Rename the **tiles** folder to **_alllayers**.

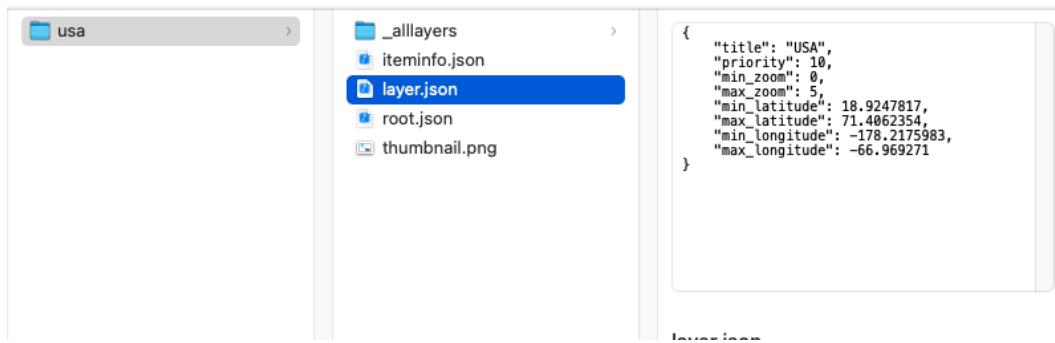


4. Add a **layer.json** file in the same directory as the **_alllayers** folder. This file is required by FireMapper and the base layer will not be loaded into FireMapper without it.

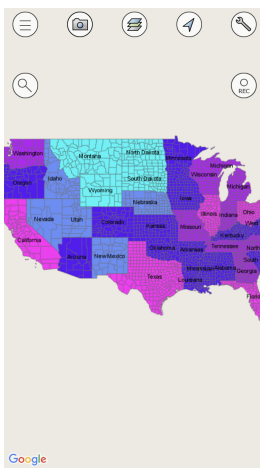
Use a text editor to create the layer.json. Make sure the extension is '.json'.

Following is sample layer.json that matches the sample USA.tpkx file:

```
{
  "title": "USA",
  "priority": 10,
  "min_zoom": 0,
  "max_zoom": 5,
  "min_latitude": 18.9247817,
  "max_latitude": 71.4062354,
  "min_longitude": -178.2175983,
  "max_longitude": -66.969271
}
```



5. Copy the base layer folder (e.g. USA) onto the device.
6. Restart FireMapper. FireMapper only detects new layers when the application is restarted. The new layer should be visible in the Base Layer screen.



FireMapper does not currently use the iteminfo.json, root.json, thumbnail.png or config.xml files. It does not matter if these files exist or not in the layer folder.

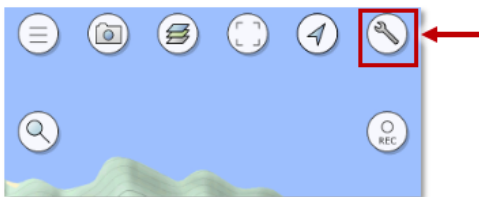
EXPORT SCREEN

The *Export Screen* lists all the available map export options.

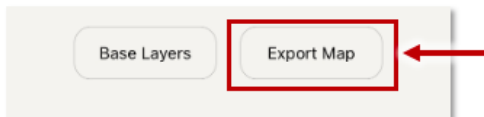
The export options will vary depending on the map content. Photo export formats such as KMZ are only available if there are photos on the current map.

How to Export a Map:

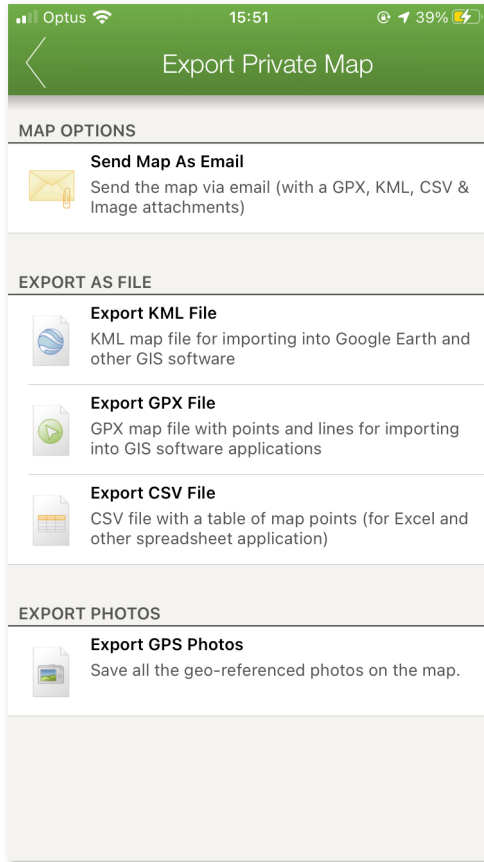
1. Tap the **Map Properties** button in the top right corner of the *Map screen*.



2. Tap the **Export Button** on the *Map Properties screen*.



3. Select the format that you want to export as from the list of export formats



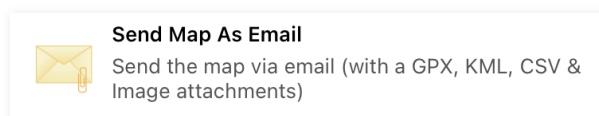
8.1 Send Map As Email

Send map as an email message with the map in multiple file formats attached.

Note: For FireMapper iOS, you can only send emails using the native iOS Mail application with the *Send As Email* feature. You will need to have configured a valid email account with the native mail app if you want to use this feature.

Other clients such as Gmail or Outlook are not supported with the *Send As Email* tool on iOS. If you want to use another email client such as Gmail, select an export format such as GPX, KML, PDF, etc and then select the email client from the list of application. This workaround will allow you to send an email with just a single attachment and no autogenerated email body.

This export option is recommended when sending map via email, as it includes multiple attachments and also generates a email body with a summary of the map.



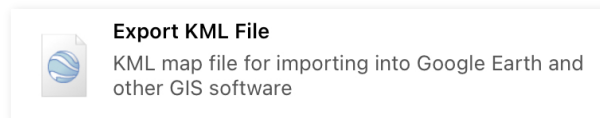
8.2 Export KML File

Exports the map as a KML file.

This format is used by most GIS applications including Google Earth, QGIS Desktop, ArcGIS Pro, ArcGIS Map and more. Only points and lines are supported by KML. Photo attachments are not stored in the KML format. If you need to include photos, use the KMZ format instead.

FireMapper tries to format KML maps with similar line styles, however some line styles can not be reproduced in KML format with third party applications. KML only supports solid lines (not dotted or dashed). This will cause your lines to appear different compared to FireMapper.

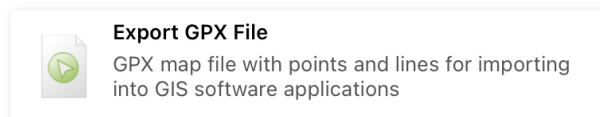
FireMapper Enterprise supports importing KML back into FireMapper including the geometry and metadata for points and lines.



8.3 Export GPX File

Exports the map as a GPX file.

This format is used by most GIS applications including QGIS Desktop, ArcGIS Pro, ArcGIS Map and more. Photo attachments are not stored in this format. If you need to include photos, use the KMZ format instead.

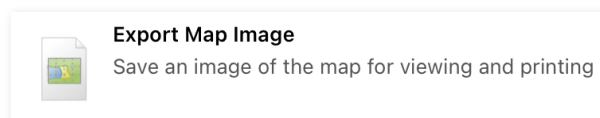


8.4 Export Image File

Exports the map as an image file that can be used for viewing or printing.

This format is useful as no additional software is required to open this file.

The map image can be viewed on any mobile device or desktop.



8.5 Export CSV File

Exports all the points on the map as a CSV file. This export format only contains points. Lines, areas and photos are not included in this format.

This format can be opened in most spreadsheet applications including Microsoft Excel, Open Office and Google Spreadsheets.



Export CSV File

CSV file with a table of map points (for Excel and other spreadsheet application)

8.6 Export GPS Photos

Exports all the GPS Photos from the map.

The list of available options will depend on which applications are installed.

This *Export GPS Photos* option is only available if the map contains photos.



Export GPS Photos

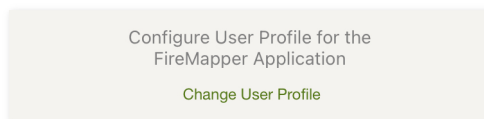
Save all the geo-referenced photos on the map.

USER PROFILE SCREEN

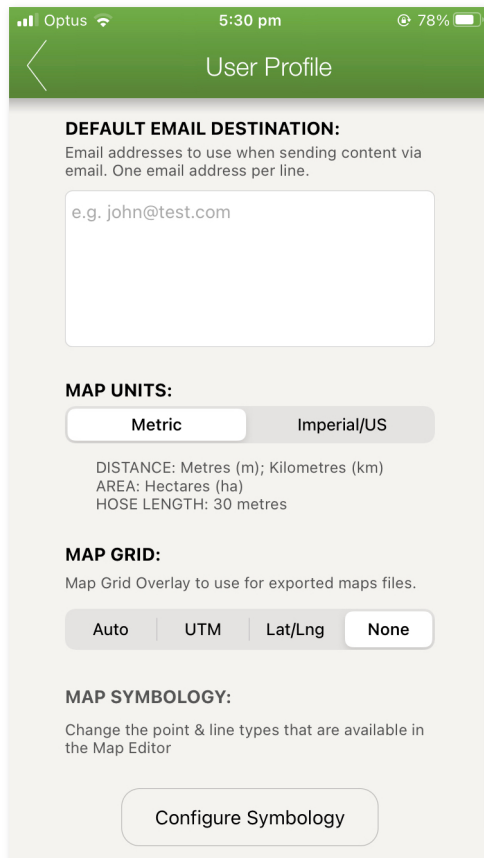
The User Profile screen contains the settings for FireMapper. These settings are specific to your device.

How to edit your user profile:

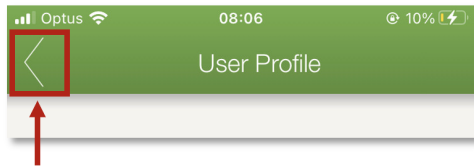
1. Tap the **Change User Profile** link at the bottom of the *Main Menu Screen*.



2. **Edit your profile** to make the required changes



3. Click the **Back Button** at the top of the screen to save changes and return to the *Main Menu Screen*.



9.1 Organisation Access Code

Organisation Access Code is provided to users on an annual Enterprise subscription. This code can be used to enable the enterprise functionality and connect the application to your FireMapper Enterprise account.

This is useful if you need to transfer maps from FireMapper Standard to your enterprise account.

To connect to your organisation, enter the access code and tap enter to connect. This operation will require an internet connection to login.

A screenshot of a mobile application screen. At the top, there is a grey header bar with the text 'ORGANISATION ACCESS CODE:' in bold. Below this, there is a smaller line of text: 'Enter the access code provided by your organisation to enable sharing in FireMapper.' Below the text is a white text input field with the placeholder text 'Access Code' in a light grey font.

Once you have provided a valid access code, FireMapper application will be configured the same as FireMapper Enterprise (different manual).

<https://firemapper-enterprise.readthedocs.io>

A FireMapper Enterprise Licence is required to enable additional functionality in FireMapper.

- Real-time Map Sharing
- Real-time Incident Feeds
- Additional Map Symbology
- Additional Base Layers
- Location/Resource Sharing
- Map Importing (GeoPDF, GPX, KML, KMZ)
- Additional Export Formats (GeoPDF, KMZ, GeoJson, Zip)
- Aviation Units (NM)

9.2 Default Email Destination

Default Email addresses to use when sending an email from FireMapper.

This feature is useful if you are always sending email messages to the same user from FireMapper.

DEFAULT EMAIL DESTINATION:
Email addresses to use when sending content via email. One email address per line.

e.g. john@test.com

9.3 Attach JPG Image

This option allows you to disable the generation of JPEG map images when using the *Export As Map* option. Generating JPEG images requires map tiles to be downloaded from the internet and slow down export times. This option is intended for Advanced Users only.

Default is *enabled*.

EMAIL EXPORT OPTIONS

Attach JPG Image

9.4 Map Units

Measurement Units to use in the FireMapper application.

Aviation units are only available in the FireMapper Enterprise.

MAP UNITS:

Metric Imperial/US

DISTANCE: Feet (ft); Miles(mi)
AREA: Acres
HOSE LENGTH: 50 feet

9.5 Map Symbology

You can customise the symbology available in the map screen.

This allows you to only have the symbology you commonly use available on the map, making it easier to find the point and line types you need quickly.

MAP SYMBOLOGY

Change the point & line types that are available in the Map Editor

[Configure Symbology](#)

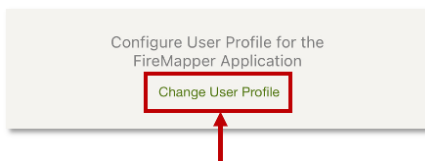
MAP SYMBOLOGY

FireMapper contains bush firefighting symbols that are commonly used in Australia, USA & Canada with support for:

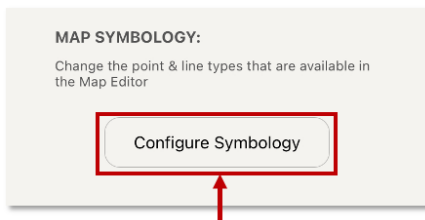
- EMSINA All Hazards Symbology
- USA National Wildfire Coordinating Group Symbology

How to change symbology sets:

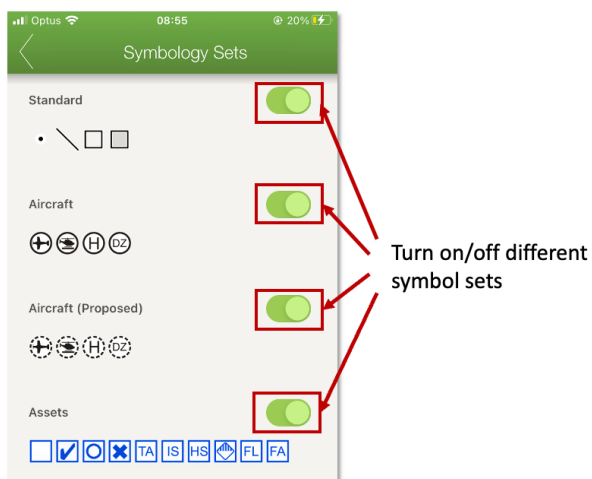
1. Tap the **Edit Profile** link on the bottom of the *Main Menu Screen*



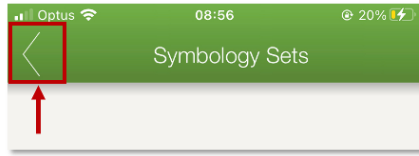
2. Tap the **Map Symbology** button on the *User Profile Screen*



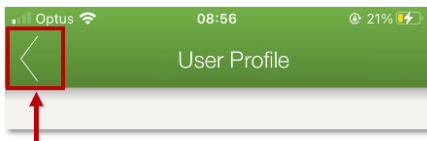
3. **Enable the Symbol sets** that you would like to have available on the *Editor Toolbar* on the *Map Screen*



4. Tap the **Back Arrow** button to return to the *User Profile Screen*



5. Tap the **Back Arrow** button to return to the *Main Menu Screen*



10.1 Symbology Sets

The following Map Symbology sets are built-in to the FireMapper Standard application.

Standard



Aircraft



Aircraft (Proposed)



Assets



Boundaries



Fire Incident



Firefighting Operations



Hazard Reduction



Fire Investigation



Fire Trails



Flight Plan



Incidents



Unconfined Incidents



Operations



Operations (Proposed)



Impact Assessment



Flood & Storm Operations



Vehicle Locations



Vehicle Locations Proposed



Tree Hazards



Hazards



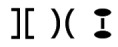
Dangerous Goods



USA - Air Ops



USA - Assignment Break



USA - Communications



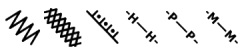
USA - Fire



USA - Logistics



USA - Ops Completed



USA - Ops Reference



USA - Reference



USA - Repair



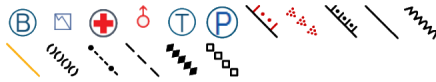
USA - Safety



USA - Water



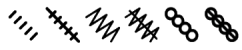
USA - Extras



NZIC Operational Points



NZIC Operational Lines



NZIC Incidents



NZIC Other



Numbers



Contact us if you would like us to add additional symbology to FireMapper.

FREQUENTLY ASKED QUESTIONS

11.1 Installing FireMapper Standard on a new device

Transferring between iOS to Android or Android to iOS is not supported, and you will need to purchase another copy when changing operating systems/app stores or email addresses.

This process only works for iOS to your new iOS device and Android to your new Android device.

iOS Device -> iOS Device

The same Apple ID email address that you used to install the first time and transferring between your iOS device to another iOS device. You must use the Apple ID in the app store across as your old device.

1. Open the App Store app
2. Tap the sign-in button or your photo at the top of the screen.
3. Tap Purchased.
4. Tap “Not on this [device]”.
5. Find FireMapper, then tap the download button (cloud icon with arrow)

Android Device -> Android Device

The same Google Play email address that you used to install the first time and transferring between your Android device to another Android device. You must use the same Google Play email address as your old device.

1. Open the “Play Store” app.
2. Select the “Menu” Android menu button icon located at the upper-left corner, then choose “My apps & games”.
3. Swipe to the left to get to the “Library” area. All the apps you ever downloaded will be listed here including paid apps.
4. Tap the “Install” button next to the FireMapper app.

CONTACT US

12.1 FireMapper Support Hub

For documentation and other user guides for FireMapper, check out our Support Hub

<https://docs.firemapper.app>