

Category: General

Module 4: Custom Map Features

Who should read this guide?

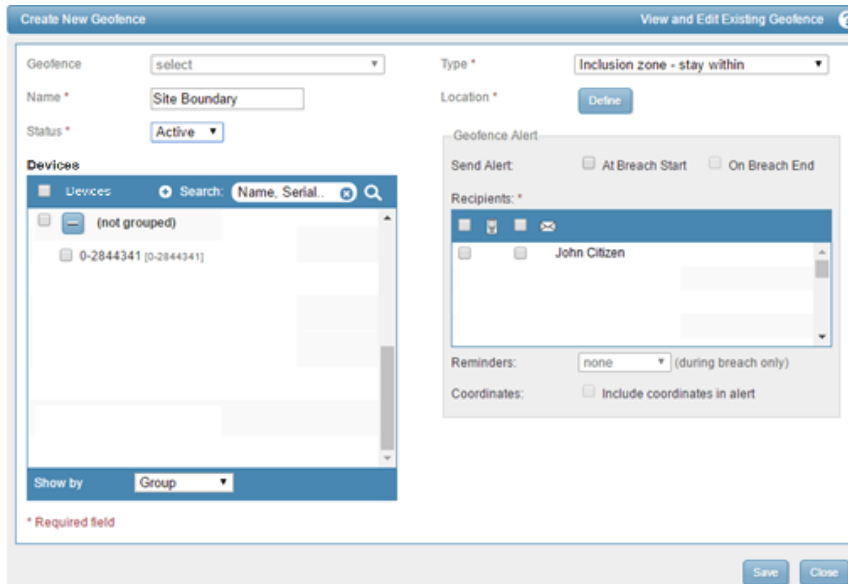
Tracertrak account administrators should read this guide to help them understand how they can better customise their Tracertrak mapping experience and manage geographical compliance of their remote workers and assets.

This guide covers:

- Configuring Geofences
- Setting up custom Company Locations
- Uploading custom map overlays using KML Layers (advanced)

Geofences

A geofence is a specific geographical area that can be configured for a Tracertrak account and then alerts can be sent if a device breaches a geofence rule. Devices can be associated with geofences to monitor when they leave or enter defined areas. Geofence breach alarms are triggered when the device leaves an inclusion zone or enters an exclusion zone. To create a new geofence, select Configure > Geofences and select the [Create New Geofence](#) button at the bottom right of the page.



Name: Enter the name you wish to use to identify the geofence.

Status: Select 'Active' or 'Inactive'. An active geofence is being monitored to ensure there has been no breach of the geofence. You can suspend the geofence by setting its status to 'inactive'.

Devices: From the devices table, select one or more devices to apply the geofence rules to.

Type: Select 'Inclusion Zone' or 'Exclusion Zone' from the drop-down list. An inclusion zone means that the selected devices should stay inside the defined geofence area and an alarm is triggered if the device leaves the area. An exclusion zone means that the selected devices should not enter the defined geofence area and an alarm is triggered if the device enters the geofence.

Send Alert: Tick the 'At Breach Start' checkbox to receive an alert when one of the selected devices breaches the geofence. Tick the 'On Breach End' checkbox to receive an alert when the geofence is no longer breached by one of the selected devices. Alerts are always shown on the Console interface. Tick the 'Email' or 'SMS' checkboxes if you wish users to receive the alert by email or SMS.

Location: When creating a new geofence, click [Define](#) to open a pop-up where you can draw the geofence on a map.

Define Geofence Location

Start Region *

New address freeform

Address

Country

Last asset location

Previous address

Company location

Coordinates

WGS84 latitude (e.g. -26.476)

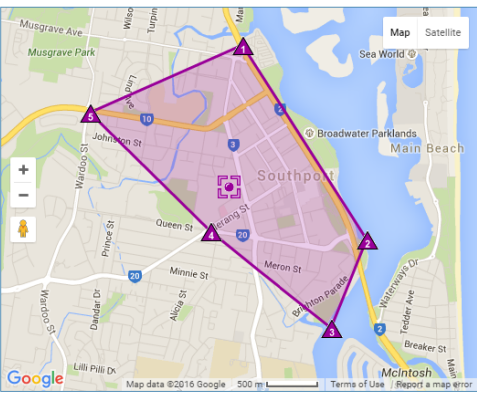
WGS84 longitude (e.g. 152.952)

Shape *

Rectangle

Polygon

* Required field








To define the geofence
Select a size for the polygon and then drag the symbols around the map, creating the required shape. Note that the symbols must trace the geofence boundary in numerical order.

You can select a Rectangle or a Polygon and drag the points to cover the desired area on the map.

Geofence Condition

The 'condition' column contains a summary condition for each geofence in bold. For each geofence, the condition for each associated device is shown as of the last location received from the device since the geofence was created or last edited. When a geofence's location, status or type is changed, its condition is reset. The following conditions are possible.

	PENDING: A broadcast has not been received from any of the devices associated with the geofence since the geofence was created or its location, status or type was changed.
	OK: All devices associated with the geofence have either a last location that was OK - did not breach the geofence - or a condition of PENDING
	IN DOUBT: None of the associated devices has a status of IN BREACH. The last location for one or more associated devices is a LOCATION ERROR or there is a MISSING BROADCAST alarm for one or more of the associated devices.
	BREACHED: The last location of one or more devices associated with the geofence was IN BREACH of the geofence.
	INACTIVE: The geofence has been set to 'inactive'. The geofence is not being monitored for breaches.

Company Locations

You can create company locations to save important or commonly-used addresses. These addresses can be used as a point around which to find devices. Company locations are marked with an icon on the map which cover an area containing the company location. When a device reports from a company location, the address presented in alerts will be the company location name, making it easier for users to identify their location.

To create a company location, select Configure > Custom GIS and select the  button.

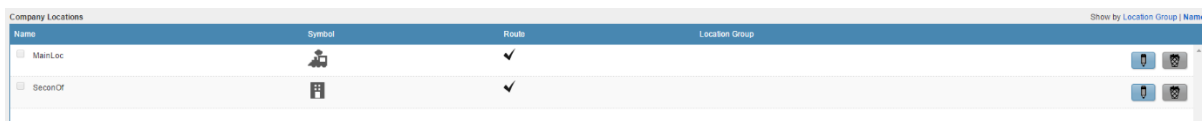
Name: Used to identify the company location.



Location Group: Optional. Select a location group to add this location to.

Position: Define the position by entering an address or GPS coordinates. You can do this by entering an address, WGS84 coordinate, or a previous location reported by one of your devices.

Radius: A company location can be a single dot on the map, or it can be a circle defined by a radius of up to 25km, centred about the coordinate point.

Symbol: Select a symbol from the list. This symbol is used to mark the company location on maps.



Name	Symbol	Route	Location Group
MainLoc		✓	
SecorOf		✓	

Custom Map (KML) Layers

Tracertrak enables you to upload your own custom map layers to present over the top of Google Maps using a KML/KMZ file. This can be used for situations such as presenting a higher detail image over the standard Google Maps, such as a detailed photo of a mine site. Other applications could be displaying your own polylines or place markers for marking points of interest. Google Maps has certain limitations for rendering KML/KMZ files documented at [Google Maps KML support](#).

To upload a custom Map Layer, go to Administer > Custom GIS and select the Upload Custom Map Layer at the bottom of the page. Here you will be prompted to enter an address for the map OR upload a KML/Z file.

Note: Tracertrak only supports one map layer file and it must comply with the Google Maps specification for map layer presentation. If it does not comply the layer will not be shown.