Geocortex Fleet Tracker
User Guide

www.geocortex.com

Latitude Geographics Group Ltd.
200-1117 Wharf Street Victoria, BC V8W 1T7 Tel: (250) 381-8130 Fax: (250) 381-8132
www.latitiudegeo.com info@latitudegeo.com

20101110-1 DRAFT FOR REVIEW

Copyright © 2010 Latitude Geographics Group Ltd.
All Rights Reserved
Printed in Canada

The information contained in this document is the exclusive property of Latitude Geographics Group Ltd. This work is protected under Canadian and US copyright law and copyright law of the given countries of origin and applicable international laws, treaties, and/or conventions. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying or recording, or by any information storage or retrieval system, except as expressly permitted in writing my Latitude Geographics Group Ltd. All requests should be sent to Attention: Contracts Manager, Latitude Geographics Group Ltd., 200-1117 Wharf Street, Victoria, BC, Canada V8W 1T7.

This information is subject to change without notice.

US GOVERNMENT RESTRICTED RIGHTS

The software and documentation are provided with restricted rights. Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph Latitude Geographics Group Ltd. All Rights Reserved (c)(1)(ii) of The Rights in Technical Data and Computer Software clause at DFARS 252.227-7013, or subparagraphs (c)(1) and (2) of the Commercial Computer Software – Restricted Rights at 48 CFR 52.227-19, as applicable. The Contractor/Manufacturer is Latitude Geographics Group Ltd., 200-1117 Wharf Street, Victoria, BC, V8W 1T7.

Latitude Geographics, Geocortex Internet Mapping, and the Product Name are trademarks of Latitude Geographics Group Ltd. Geocortex and Latitude Geographics are registered trademarks of Latitude Geographics Group Ltd. in the United States and Canada. Esri, ArcGIS and the Esri globe logo are trademarks of Environmental Systems Research Institute Inc. Microsoft and the Windows logo are registered trademarks and the Microsoft Internet Explorer logo is a trademark of Microsoft Corporation. Other companies and products mentioned herein are trademarks or registered trademarks of their respective trademark owners.

Table of Contents

1 Overview 4
1.1. How does it work? 4
1.2 User Guide 4
2 Navigation Tools 5
2.1 What are they? 5
2.2 How to Zoom In 5
2.3 How to Zoom Out 5
2.4 How to Use the Pan Tool 5
2.5 How to Use the Full Extent 5
2.6 How to Use the ”Jump to the Nearest Asset” Tool 5
3 Managing Data 6
3.1 Asset Data 6
3.2 Address Search 8
3.3 Create Reports 8
4 Defined Locations 9
4.1 What are they? 9
4.2 What can you use them for? 9
4.3 How can you use them? 9
4.4 Editing Locations 9
5 Asset Monitors 10
5.1 What are they? 10
5.2 What can you use them for? 10
5.3 How can I create an Asset Monitor? 10
5.4 What are Asset Monitor Conditions? 12
5.5 How can I create Asset Monitor Actions? 15

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

1 Overview

This section offers an introduction to Geocortex Fleet Tracker, with a general overview of the software's functions and applications.

1.1. How does it work?

There are two basic components that allow Geocortex Fleet Tracker to obtain the information needed to help manage your fleet. The server is responsible for collecting data on your assets, while the client retrieves updated maps from *ArcGIS*.

1.2 User Guide

While all of the features of Geocortex Fleet Tracker are easy to use, they may not be entirely intuitive to first-time users. So to avoid any frustration, we've outlined some straight-forward explanations to help get you started.

We'll begin by giving you an overview on how to navigate around the application. Then, we'll review the different features and functions and give you some suggestions as to how you might apply them. We'll also lead you through the process of creating some of your own *Asset Monitors* and *Actions* for managing your *assets*.

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

2 Navigation Tools

This section will introduce the different Navigation Tools and will show you different ways to find your way around the Geocortex Fleet Tracker map.

2.1 What are they?

Navigation tools are the features that help you find your way around the map. The Navigation tools are located in the upper left-hand side of the screen, underneath the banner. In the tool bar, you will find a *Zoom In*, *Zoom Out*, *Pan*, *Full Extent* and *Jump to the Nearest Asset* icons. In this section, we will go through how to use each of these tools properly.

2.2 How to Zoom In

The *Zoom In* tool is the icon that looks like a magnifying glass with a "+" symbol in the middle of it. Simply click on the icon to use the *Zoom In* feature. Geocortex Fleet Tracker will automatically magnify the center of the map.

Alternatively, you can zoom in by rolling your mouse wheel upwards. In this case, point the mouse over the area you would like to take a closer look at and roll your mouse wheel up. You will notice that the map will zoom into the area that the mouse was pointing at, instead of the central point of the map.

You can also zoom in by holding the SHIFT key on your keyboard and dragging a rectangle on the map with the mouse.

2.3 How to Zoom Out

The *Zoom Out* tool is the icon that looks like a magnifying glass with a "-" symbol in the middle of it. Clicking on this icon will zoom out of the map. You can also roll your mouse wheel towards you for the same effect.

2.4 How to Use the Pan Tool

The *Pan* tool is the icon to the right of the *Zoom Out* tool that looks like a little hand. The *Pan* tool allows the user to "grab" onto a specific point in the map and slide the map to the side in any direction that you choose. To use the *Pan* tool, click on the *Pan* icon and click on an area of the map. Hold the left mouse button down and move your mouse up, down, to the left or right. You will see the map shift in the corresponding directions.

Another method of sliding the map is to click on a point in the map with the arrow and with the mouse still held down, move the mouse in any direction.

2.5 How to Use the Full Extent

Click on the icon that looks like the world with the magnifying glass. This tool will zoom "to the full extent" of the map.

2.6 How to Use the "Jump to the Nearest Asset" Tool

The *Jump to the Nearest Asset* tool looks like a circle with an arrow pointing across it. This feature will allow you to see both a specific point on the map and the nearest visible asset to it.

Click on the icon and select any point in the map to activate this tool. You will see a small blue circle where you selected, and a larger blue circle around the nearest visible asset. You can click as many other points as you would like in the map to see where the nearest assets are. You can also still use the *Zoom In*, *Zoom Out*, and *Full Extent* tools. To deactivate this feature, select the *Pan* tool and click on the map.

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

3 Managing Data

3.1 Asset Data

This section explains the purpose, function and application of assets and reports used by Geocortex Fleet Tracker. We will provide you with examples and images to help guide you.

3.1.1 What are they?

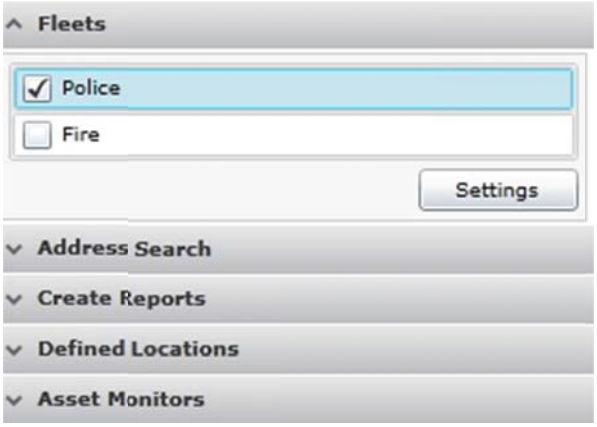
Assets are any mobile items monitored by your GPS system. You can use Geocortex Fleet Tracker to monitor *assets* such as: vehicles, airplanes, ships, cell phones, laptops, or even animals – basically anything with a GPS device.

Assets show up on your map as moving points, which Geocortex Fleet Tracker continuously monitors and displays. They are listed by *asset ID*.

3.1.2 What can you use them for?

This resource allows you to locate *assets*, as well as view their history and apply them to C*onditions*. We will explain what *Conditions* are and how to use them in Section 5.

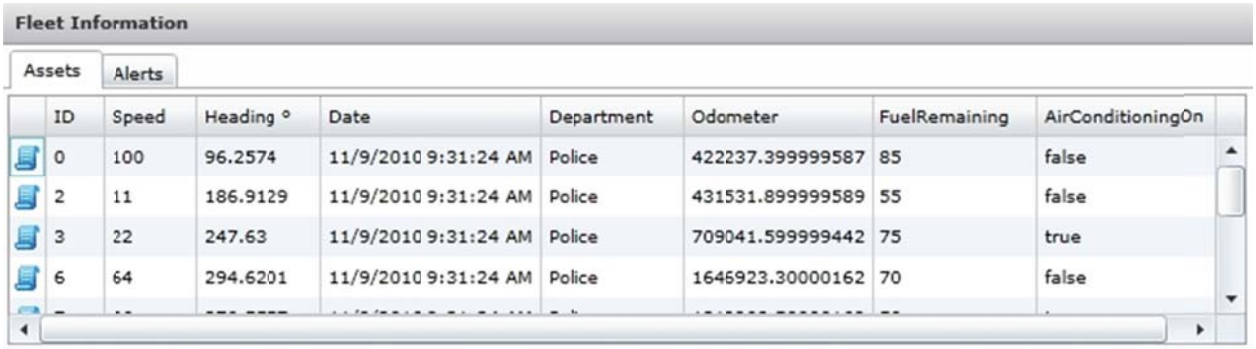
3.1.3 How can you use them?



Your *asset* data can be selected from the top right task bar in the *Fleets* menu. If you have more than one type of *asset* in the same map, you can select either or both kinds of *assets* to view. To view the *asset data* in the map, select the check box to the left of the *asset*. If you want to view the asset data in the *Assets* table, click on the asset name.

You will notice below the map that the fleet data will be displayed in a large table. You will see two tabs called *Assets* and *Alerts*. In either tab, you will see all of the assets of the selected fleet listed.

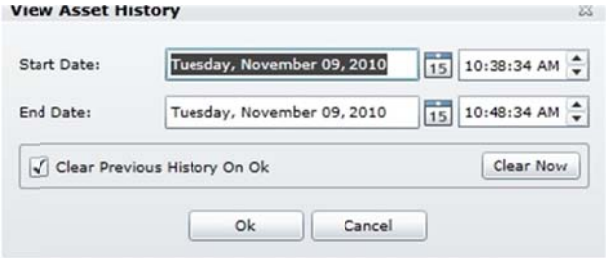
The top of the *Assets* table will have a number of different headings, depending on what kind of data your Server collects. You can sort the information by clicking on the category. You will see an arrow appear to the right of the heading's name. Clicking on the arrow will reverse the sort direction. You can only sort one type of data in the table at a time.



ID	Speed	Heading °	Date	Department	Odometer	FuelRemaining	AirConditioningOn
0	100	96.2574	11/9/2010 9:31:24 AM	Police	422237.399999587	85	false
2	11	186.9129	11/9/2010 9:31:24 AM	Police	431531.899999589	55	false
3	22	247.63	11/9/2010 9:31:24 AM	Police	709041.599999442	75	true
6	64	294.6201	11/9/2010 9:31:24 AM	Police	1646923.30000162	70	false

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

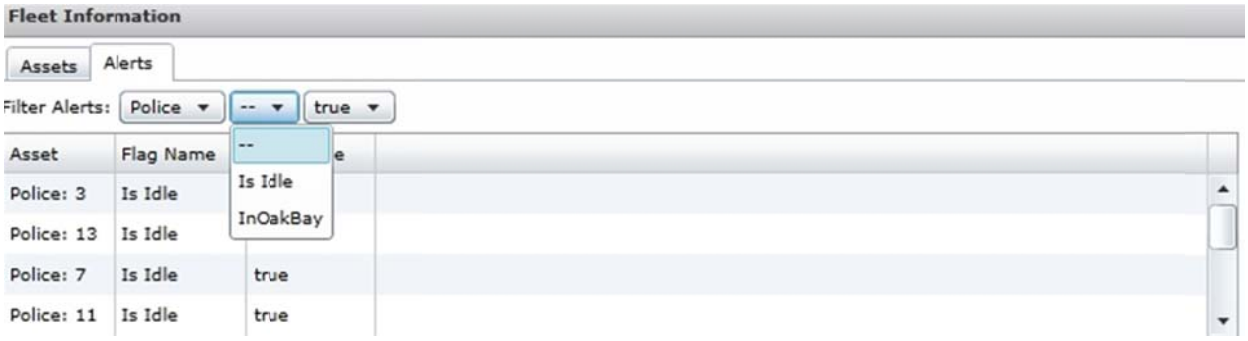
Click on the history scroll icon to the left of the *asset* ID to view the history of one particular asset. Select a start and end time in the dialogue box that pops up. You will see the *Asset History* highlighted on the map as a line. To clear the history, click on the scroll again, make sure *Clear History On OK* is checked, select *Clear Now* and click *Cancel*.



Clicking on an *asset* in the *Assets* table will select the corresponding object and follow its movement in the map. You can only select one *asset* at a time

Conversely, by clicking on *assets* in the map, you will see the *asset* selected and a text box will appear. You can view *Asset Data*, *Alerts* and *Asset History* from this view as well.

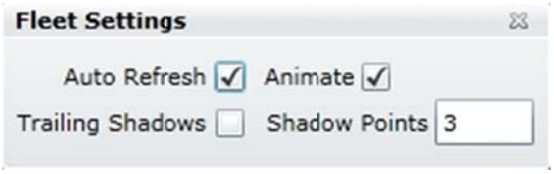
To view your *Alerts*, select the *Alerts* tab at the top of the *Asset Data* table. An a*lert* is a *Asset Monitor* that you can program with Geocortex Fleet Tracker. We will show you how to create and manage your *Asset Monitor* in Section 5. This table will show you all of your active *Alerts* and whether or not the *Asset Monitor* is satisfied.



3.1.4 What are Fleet Settings and how can I use them?

Fleet Settings are used to determine how you would like to view your *Asset Data*. You can choose whether or not you would like the data to be refreshed, your *assets* to be animated, or if you would like trailing shadows on your map. You can change or view your *Fleet Settings* by selecting the 'Settings' button in your *Fleet* menu.

Auto Refresh is a feature that automatically refreshes the *Asset Data* on your map. If you want to pause the data on your map, deselect *Auto Refresh*. Once *Auto Refresh* is active again, your map will be updated with the latest information collected by your Server.



Animate will smooth out the visual transition of your *assets* whenever your map is refreshed. When *Animate* is selected, your *assets* will appear to drive from one point to the next. If *Animate* is deselected, your *assets* will look like they're jumping from location to location.

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

Trailing Shadows is a feature that illustrates the last few locations of your fleet. If *Trailing Shadows* is selected, you will see shadows of your *assets* in their last point(s). You can determine how many shadow points you would like to view by simply entering the number of points in the text field.

Click on the 'X' in the top right to confirm your selections and to return to the main page.

3.2 Address Search

The *Address Search* function in Geocortex Fleet Tracker is just as it sounds. It allows you to search for a particular street address in your map.

3.2.1 How can you use it?

The *Address Search* function is fairly easy to use. It is located below the *Fleets* task in the right-hand task bar. Simply enter the address you want to look up and click *Search*. A purple arrow will point to the address on the map. If there are multiple address search results you will be presented with a list of address matches. Click on an individual address to zoom to it.

3.3 Create Reports

This section will explain what *reports* are and how you can use them.

3.3.1 What are they?

Geocortex Fleet Tracker *reports* are formatted outputs of your data within a specified time range; for example, a PDF report. *Reports* can be generated quickly and easily. You can create a *report* by first selecting the type of report you would like from the drop-down list in the *Reports* menu. Then, select the date range and the output format.

3.3.2 What can you use them for?

The data collected in your *reports* can have many different applications that are of particular interest to your business operations. For example, you can monitor which drivers are consistently speeding or how much fuel is used in a given time-frame. The reports that you see in your application are set up by your system administrator.

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

4 Defined Locations

There are a few different types of *Locations* found in Geocortex Fleet Tracker. This section will give you an overview of the different types of *Locations* and how you can implement them.

4.1 What are they?

Defined Locations are selected areas on your map that you define according to your specific needs. Unlike *assets*, *Locations* are stationary points with coordinates. You can create *Locations*, *Polylines*, *Rectangles* and *Polygons*.

4.2 What can you use them for?

A *Point* is a singular destination defined in your map. You will most likely define *Points* for destinations that your assets visit regularly, such as certain businesses, commercial sites or public utilities. You may also find it useful to create *Points* for specific transit intersections, check points, vehicle weigh stations, or any other *Locations* you would like to monitor. We will show you how to create alerts and other ways to monitor your *assets* in the next section of this document.

Polylines are used to define lines or simple areas on your map. For example, a Seattle-based company that makes regular deliveries to Vancouver, BC, may wish to use the *Polyline* function to draw a line on the U.S. / Canadian border to receive alerts when their vehicles are crossing the border.

A *Boundary* is another term for a polygon or rectangle, which is simply an outline of any shape. The edges of this outline define the area of the *Boundary*, leaving a certain geographical area "fenced in."

Boundaries are used to define particular areas on your map, such as municipalities, counties, city limits, national parks, and so on. Since you define your own *Boundaries*, they can be used for many different purposes. For example, you may want to create *Boundaries* that enclose each of your drivers' routes, so you can monitor when assets leave specified areas. If licensing regulates that your assets are insured within a certain region, you could create a *Boundary* to outline this area.

4.3 How can you use them?

Defined Locations can be created quickly and easily. Go to the *Defined Locations* menu on the right-hand task bar and click on any of the *Defined Locations* icons. Point and click on the point on the map you would like to indicate as a *Defined Location*. A dialogue box will pop up. Enter the desired display name in the 'Name' text box and click *OK*.

4.4 Editing Locations

It is easy to edit *Locations* in Geocortex Fleet Tracker. To edit the name of a *Location*, click on the 'pencil' icon to the right of the *Location* in the *Defined Locations* menu. Simply change the name and click 'OK' to finish. You cannot edit the geometry/shape of the *Location* on the map once it has been created. If you need to change the geometry, you will need to delete the *Location* and create a new *Defined Location* that better suits your

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

needs. Click on the 'X' icon to delete the *Location*. A dialogue box will pop up. Select 'Yes' if you are sure that you would like to delete the *Location*.

5 Asset Monitors

5.1 What are they?

Asset Monitors are *Conditions* that are executed on your assets. They are informational tools designed to notify the necessary individuals when *Conditions* are followed and/or violated. You can add as many different monitors as you would like and you can add them for the following types of *Conditions*: Boundary, Speeding, Attribute, Proximity and Idle. We will explain what each of these different *Conditions* do and how to activate them later in this section.

5.2 What can you use them for?

Asset Monitors can be used to monitor many different types of *asset actions*. For example, you can use *Conditions* to monitor a fleet vehicle's speed. If the *asset* exceeds a pre-determined speed, you can automatically send them a warning email or log the activity to a log file on your server. You can also receive email alerts if an *asset* has been idling for over 10 minutes at a time.

5.3 How can I create an Asset Monitor?

This section will take you through the necessary steps on how to create Geocortex Fleet Tracker *Asset Monitors*. First, we will give you an overview of all of the steps to create a *Monitor* and then we will give you a more comprehensive descriptions and details in following sections.

5.3.1 Asset Monitor Creation: Step-by-Step

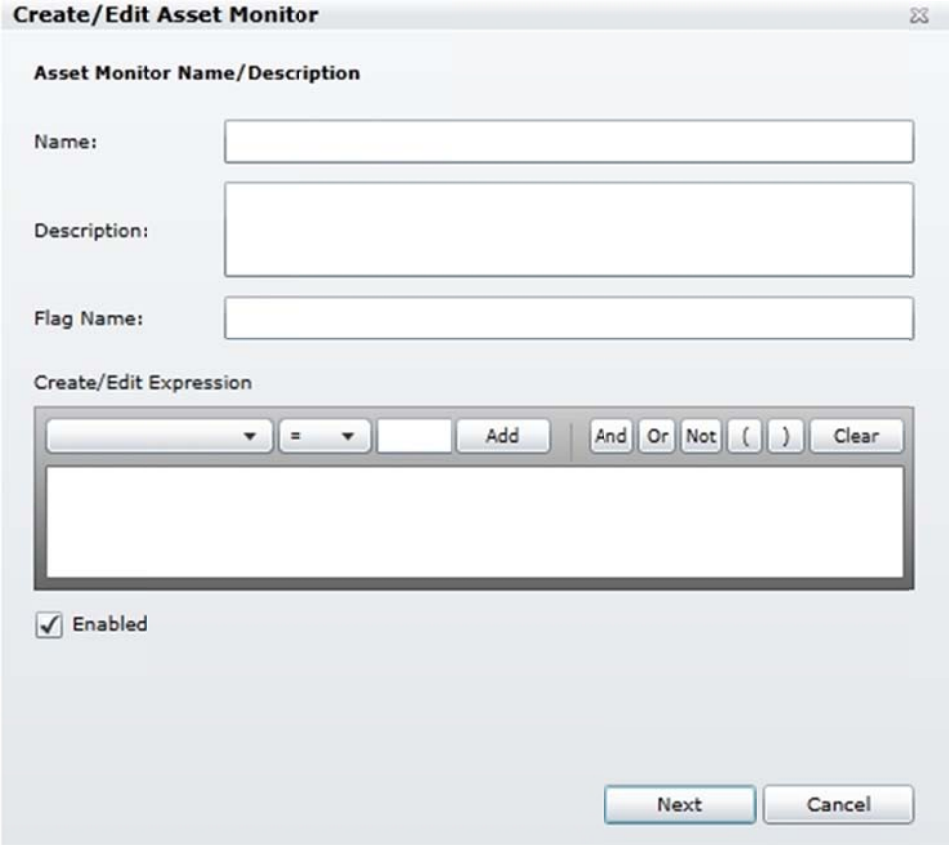
The following is a list of all of the steps you will need to complete to create an *Asset Monitor*:

1. Click on the 'Add Monitor' button
2. Complete the 'Asset Name and Description' fields
3. Define your *Condition*
4. Define *Asset Monitor Actions*

5.3.2 How do I get started?

It's fairly easy to create an *Asset Monitor* in Geocortex Fleet Tracker. We'll walk you through each step with detailed descriptions to help you.

Click on the 'Add Monitor' button to get started. A *Create/ Edit Asset Monitor* dialogue box will open. You will see the following fields: *Name, Description, Flag Name,* and *Create/Edit Expression*.



©2010 Latitude Geographics Group Ltd. All Rights Reserved.

Enter what you would like to call the monitor in the *Name* field. The display name will appear in the *Asset Monitor* menu.

Write a brief statement of the purpose of the monitor in the *Description* field. This field is optional and for your reference only.

Create a *Flag Name*. This display name will appear in the *Alerts* table in the *Fleet Information* menu. For example, if you are creating an asset monitor to implement a Speed Condition, you can name the flag *Speed Monitor*. If you do not define a Flag Name the asset monitor will still be processed, but its results will not appear in the *Alerts* table.

Create an expression: *Expressions* are used throughout Geocortex Fleet Tracker for various purposes. In general, *expressions* seek to define sentences or logic statements using the current values of an *asset*. The *expression* uses tags that will be substituted with *asset* values when they are evaluated. In this case, *expressions* can be used to filter any *assets* you would like to monitor. Leave this field blank if you want the monitor to apply to all *assets* in your fleet. Alternatively, you can screen your assets by ID, Department, Odometer, etc.

You can create an *expression* by using the drop down menus, the text box, and the 'AND', 'OR', 'NOT', '(', ')' buttons. Click 'ADD' to insert the expression in the box below. The following tables have definitions of *expression* tags and conditional formatting terms used in Geocortex Fleet Tracker:

Tag	Description
ID	The name or number of the asset. The name will be determined by your GPS system.
Speed	The velocity at which the *asset* was traveling at the time it was monitored.
Heading	The direction the *asset* was heading.
Date	The date and time at the time of the report.
X	The X coordinate of the *asset*
Y	The Y coordinate of the *asset.*
ATTRIBUTE_NAME	Any other attribute that your asset may possess. Fleet Tracker is an application that allows support for many different types of asset data, so depending on the source data, you may have additional attributes available.

Tag	Description
=	Equal to
<	Less than
<=	Less than or equal to
>	Greater than
>=	Greater than or equal to
<>	Not equal to
IN	Is IN the set of… (Equivalent to SQL 'IN' statement.)

For example, if the driver of vehicle #4 has accrued a number of speeding tickets, you can create a *monitor* just for them. In the expression field, you could create an *expression* like the one below to have the *monitor* apply only to that particular driver:

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

'{ID}' = '4'

Or, if you would like to collect data on just the Police Department, you could use an *expression* like the following:

'{Department}' = 'Police'

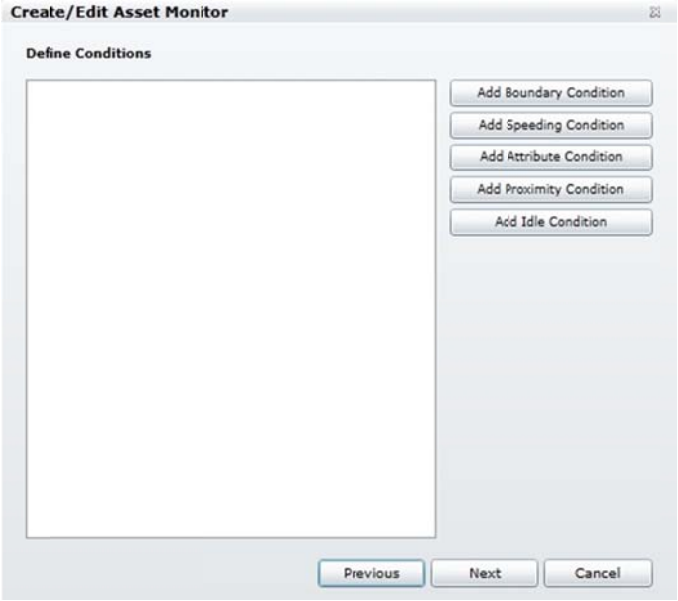
You can also combine more than one expression by using the 'AND', 'OR', 'NOT' buttons.

'{ID}' = '4' OR '{Department}' = 'Police'

The *expression* above will let you monitor both vehicle #4 and all Police Department assets.

At the bottom of the 'Create/ Edit Asset Monitor' window, you will see an 'Enable' check box. Make sure this box is checked if you want your *monitor* to be active.

Select 'Continue' to go to the next window to define your *Conditions*. You can have more than one *Condition* per monitor.

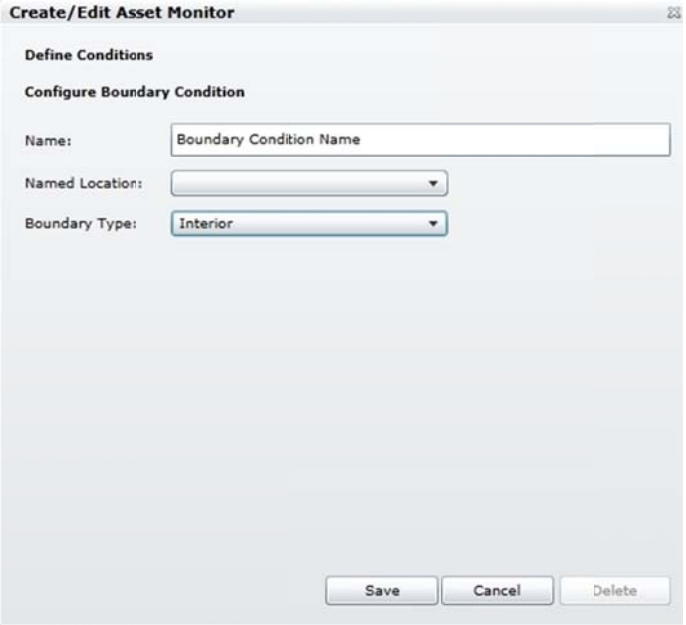


5.4 What are Asset Monitor Conditions?

Asset Monitor Conditions are rules that are defined with specific parameters and evaluated by Geocortex Fleet Tracker. There are five different kinds of *Asset Monitor Conditions* in Geocortex Fleet Tracker. We will explain the different types of Conditions and how you can use them in the following sections.

5.4.1 What are Boundary Conditions and how can I activate them?

As explained in Section 4.3, a *Boundary* is an outline on your map that defines a particular area. A *Boundary Condition* is simply a rule that defines how you want Geocortex Fleet Tracker to monitor how *assets* should operate in relation to a *Boundary* (e.g. *assets* should not enter the area).



You can use *Boundary Conditions* to determine when *assets* travel inside, outside, or across a *Boundary*. They can be applied to any number of *assets* and used for any *Boundary* that has been previously defined.

To activate a Boundary Condition, select 'Add Boundary Condition' from the list of buttons on the left of the dialogue box. A new dialogue box will appear and with *Boundary Condition* options. Here are brief descriptions of the fields:

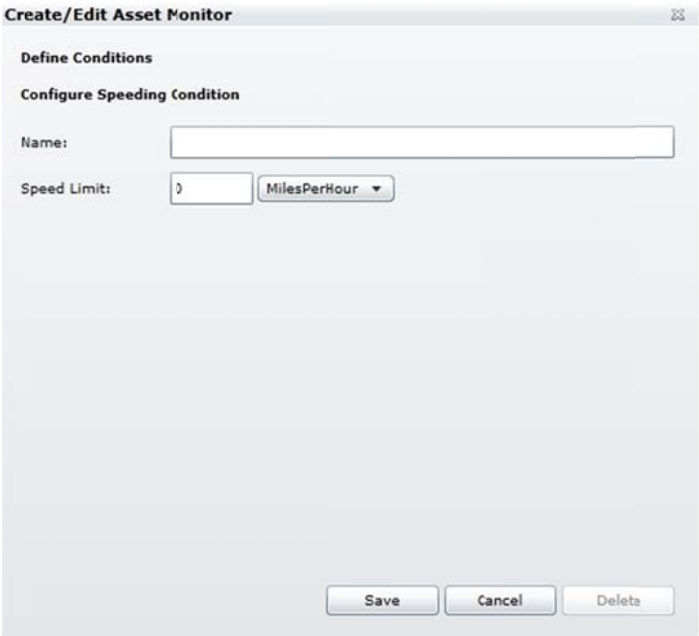
Name: Specify the display name of the *Condition*. For example, if you want your drivers to stay within Washington County, you would name the condition, "Washington County Condition" or "County Condition".

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

Named Location: Select an established location from the drop-down list by clicking on the 'Named Location' field.

Boundary Type: Choose either an *interior* or *exterior* type of *Boundary*. An *interior Boundary* will tell you if an *asset* enters the named location area. For example, if there is an out-of-bounds area that you want your *asset* to avoid, you may want to keep a log of which vehicles are entering that area. Alternatively, an *exterior Boundary* will alert you if an *asset* leaves a location. For example, you can select the city limits or the county as the *Defined Location* and log any employees that cross the city or county limits. We will show you how to create *log* and *email actions* in section 5.5.

Select 'Save' to create the condition.



5.4.2 What are Speeding Conditions and how can I activate them?

Speeding Conditions allow Geocortex Fleet Tracker to execute specified *actions* when assets are traveling above a set speed limit.

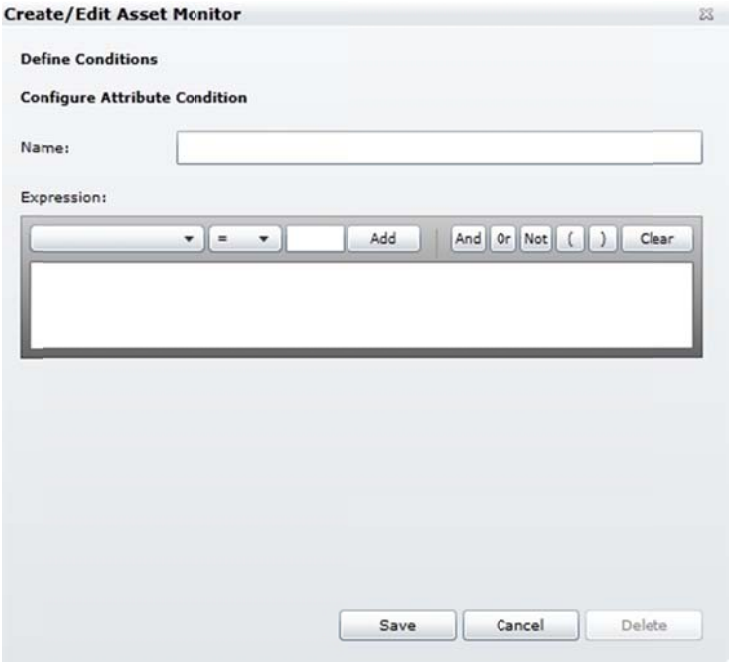
By allowing Geocortex Fleet Tracker to monitor when your assets are traveling at certain speeds, *Speeding Conditions* can help promote safe driving, prevent costly tickets, and maintain a good company reputation. For example, you can enforce a maximum allowable speed limit for your entire fleet by monitoring all *assets*.

To activate a Speeding Condition, select the 'Add Speeding Condition' button from the list of *conditions*. A *Speeding Condition* dialogue box will appear. You will see two fields: 'Name' and 'Speed Limit'.

Name: Give the appropriate display title to the *Condition*.

Speed Limit: Enter the maximum tolerated speed in the text field. Choose the speed units in the drop-down list.

Select 'Save' to create the condition.



5.4.3 What are Attribute Conditions and how can I activate them?

An *attribute* is a characteristic of your *asset*. It can be anything like the odometer reading, the remaining fuel levels, or whether or not the air conditioning is on (depending on the attributes available in your data).

You can use *Attribute Conditions* to monitor vehicle sensors. *Attribute Conditions* are also useful to track the distance traveled by one or all of your fleet *assets* if an odometer reading is available in your data.

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

Activating the Attribute Condition is easy. Select 'Attribute Condition' from the list. The 'Attribute Condition' window will open.

Name: Give the *Attribute Condition* an appropriate display name.

Expression: You can write an *expression* for whichever *attribute* you would like to monitor. For example, to write an *expression* for any *asset* that is nearing the life of their fuel, you would write something like this:

{Fuel Remaining} < 25

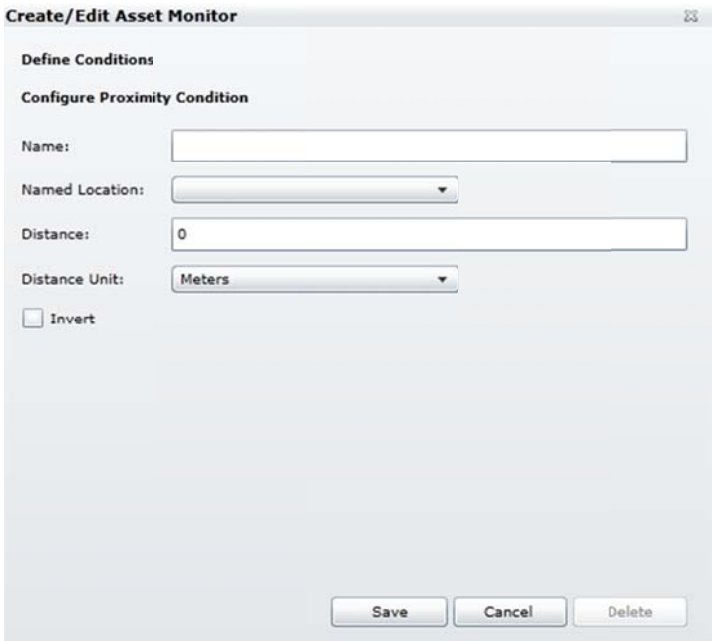
Or, to be alerted if *asset* #3 is speeding, you could use this expression:

'{ID}' = '3' AND '{Speed} > 55

Please refer to section 5.3.1 for more information on how to write expressions.

Select 'Save' to create the condition.

5.4.4 What are Proximity Conditions and how can I activate them?



Proximity Conditions allow Geocortex Fleet Tracker to monitor any *assets* traveling within a specified distance to any pre-determined *Location*.

You can use *Proximity Conditions* to log any *asset* activity near a specified *Location*. For example, you can send email notification to a crew of a sea-vessel if they come within a certain distance from a port or International Waters.

To activate, select 'Proximity Condition' from the list. The 'Proximity Condition' window will open.

Name Give the *Proximity Condition* an appropriate display name.

Select the **named location** from the drop-down list.

Distance: Enter the distance.

Distance Unit: Choose the system of measurement from the drop-down list.

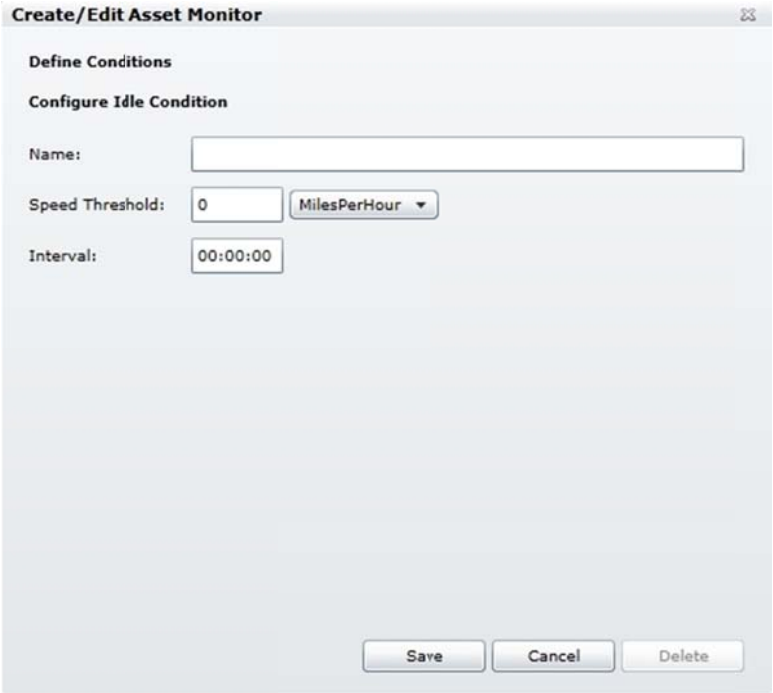
You can **invert** the *Proximity Condition* by selecting the 'invert' box.

Select 'Save' to create the condition.

5.4.5 What are Idle Conditions and how can I activate them?

Idle Conditions are very similar to *Speeding Conditions*. You can create specific actions in Geocortex Fleet Tracker to monitor the movement of your *assets* and to take the appropriate *action* if your *asset* idles for a specified amount of time.

©2010 Latitude Geographics Group Ltd. All Rights Reserved.



You can use *Idle Conditions* to track how long an *asset* is stationary.

To activate, select 'Idle Condition' from the list. The 'Idle Condition' window will open.

Name: Give the *Condition* an appropriate display name by writing it in the indicated field.

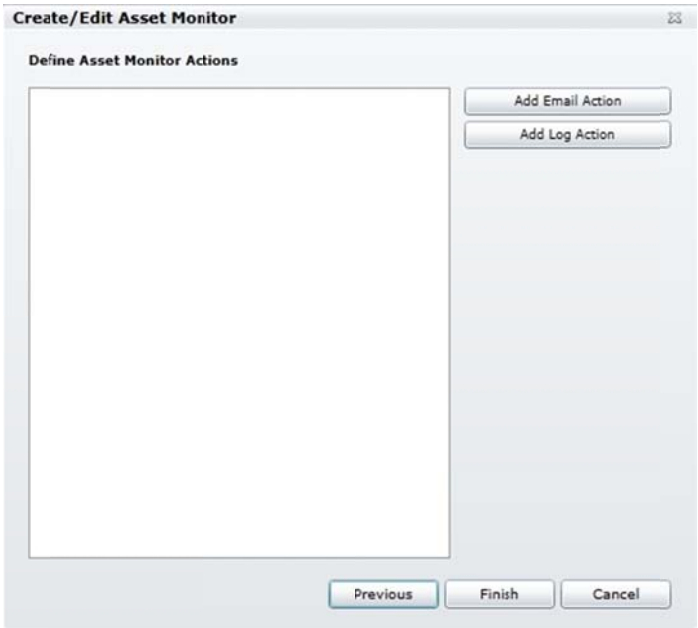
Speed Threshold: Type in the maximum speed. You will need to enter a value greater than '0'. You will need to select the correct measurement of speed from the drop-down list. Note: a speed threshold greater than zero may be required depending on the source of your data.

Interval: Enter the maximum amount of time you would like the *asset* to be stationary before the *action* is activated. The time is in hours: minutes: seconds format.

Select 'Save' to create the condition.

5.5 How can I create Asset Monitor Actions?

5.5.1 What are Asset Monitor Actions?



Actions are tasks that are executed after *Conditions* are validated. They are designed to notify the necessary individuals when *Conditions* are followed and/or violated. Although Geocortex Fleet Tracker is constantly monitoring *assets* to determine whether *Conditions* are being satisfied, follow up only takes place when *actions* have been specified. There are two types of *Asset Monitor* actions: *Email Actions* and *Log Actions*.

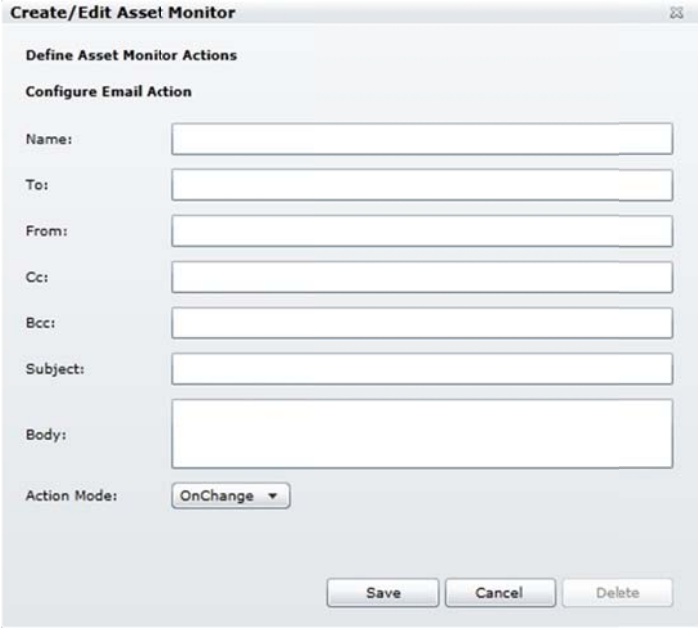
Email Actions are useful for notifying individuals in response to events. For example, you may want to have an email message sent to your fleet manager whenever an *asset* is found to be speeding. Initially, you may want to create one new *Email Action* for each *Condition*. You can always add additional *Email Actions* later.

Log Actions allow you to maintain detailed records of events that are of particular interest to your business operations. You may want to log the arrival times of *assets* at a particular set of *Locations*, or you might want to record the *assets* that enter a given *Boundary*. As with your *Email Actions*, you may likely find it useful to create *log actions* for each type of *Condition*. For example, you might start with an *Arrival Log*, *Out of Bounds Log*, a *Speeding Log* and then create more *log actions* as necessary.

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

5.5.2 How can I create an Email Action?

Email Actions only allow one email address to be listed as 'From' (sender) but multiple recipients are allowed. To send an *Email Action* to more than one person, separate listed email addresses with commas. You can also enter the subject heading for the email. A space for your message is provided. You can use simple string replacement tags in the body and in the subject line. Please refer to Section 5.3.2 for a list of tag definitions.



Fill in all of the *Email Action* fields, just as if you were creating a regular email.

Select which *Action Mode* you would like to apply from the drop-down list. For your convenience, we have created a list of definitions for the different *Action Modes* below:

Action Mode	Description
Always	The *Condition* is evaluated every time the server retrieves updated data and the *Action* is always carried out, regardless of the result of the *Condition*.
IfReset	The *Action* is triggered every time the *Condition* is false. The *Action* will continue to be triggered as long as the *Condition* is not satisfied.
IfSet	The *Action* is triggered every time the *Condition* is true (E.g. if an *asset* is speeding, the *action* will continue to be executed until the *asset* stops speeding.)
Never	The *Action* is not carried out regardless of whether or not the *Condition* is true or false. This may be useful to temporarily disable an action.
OnChange	The *Action* is executed every time the *Condition* changes from true to false or from false to true.
OnReset	The *Action* is executed every time the *Condition* changes from true to false.
OnSet	The *Action* is executed every time the *Condition* changes from false to true.

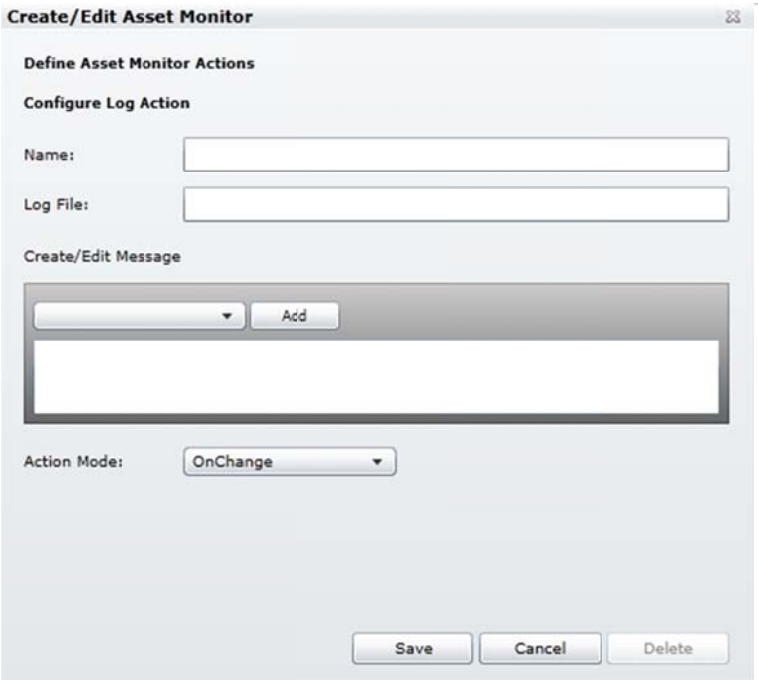
Select 'Save' to create your *Email Action*.

WARNING: Fleet Tracker can collect and process huge volumes of data. When you create *Email Actions,* you need to consider the volume of emails that may result from that command. For example, let's assume you have 10 vehicles that update their locations every 30 seconds. If you create an *Asset Monitor* that applies to all these vehicles, it will be evaluated 9600 times in an 8 hour day. Depending on how you configure your actions, this *Email Action* could result in 9600 email notifications per day or more. It is often most appropriate to set the action mode of your email actions to *OnChange*, *OnSet*, or *OnReset*.

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

5.5.3 How can I create a Log Action?

You can define your *action* by clicking 'Add Log Action' in the *actions* dialogue box. You will be prompted configure your *Log Action*.



Name: Define your *Log Action* display name accordingly.

Log File: Enter the name of the log file to where you would like to save your log entries. The logs will be written to the server and will only be accessible to people with access to the server.

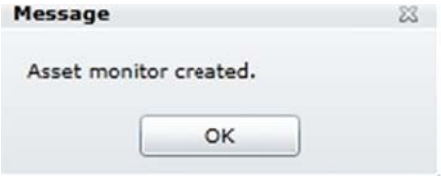
Create/Edit Message: *Log Actions* can be created by entering simple log descriptions in the space provided. You can enter as many lines as you would like using the simple string replacement scheme provided. Definitions of simple string replacement tags are found in Section 5.3.2.

Action Mode: Select the *Action Mode* from the drop-down menu. A list of *Action Mode* definitions can be found in Section 5.5.2.

Select 'Save' to create your *Log Action*.

5.5.4 Finishing your Asset Monitor

If you have chosen to create an *Email Action* or *Log Action*, clicking 'Save' will take you back to the 'Define Asset Monitor Actions' box. You can add another *action* or click 'Finish' to return to Geocortex Fleet Tracker.



Click 'OK' when prompted by the 'Asset Monitor Updated' message.

You will see in the *Asset Monitors* menu that the monitor you just created will be listed there. Select the (pencil) icon to edit your *Monitor*. Clicking on the 'X' will delete the *Monitor*.

©2010 Latitude Geographics Group Ltd. All Rights Reserved.

Appendix A – Glossary

Actions	Defined tasks that are executed when Conditions are satisfied.
ArcGIS	ArcGIS is an integrated collection of computer software and data used to view and manage geographic information. It is produced by Esri.
Assets	Any object tracked by your GPS system.
Attribute Condition	A *Condition* that evaluates any measurable characteristic of your *assets*.
Boundary	A polygon or rectangle outline of any shape.
Boundary Condition	A *Condition* that defines how *assets* should operate in relation to any given *Boundary*.
Conditions	Evaluations that are defined with specific parameters and evaluated by Geocortex Fleet Tracker.
Email Action	A configurable email notification set to be sent whenever applied *Conditions* are satisfied.
Idle Condition	A *Condition* that evaluates if *assets* have been stationary over a given amount of time.
Location	A defined point location.
Log Action	A configurable log message set to be recorded whenever applied *Conditions* are satisfied.
Proximity Condition	A *Condition* that allows Geocortex Fleet Tracker to monitor any *assets* traveling within a specified distance to any pre-determined *Location*.
Speeding Condition	A *Condition* that evaluates when *assets* are traveling above a maximum speed limit.

©2010 Latitude Geographics Group Ltd. All Rights Reserved.