



Admin & User Guide

GeoManager

January 2010



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www.trimble.com/mobile_resource_management

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Preface

System Requirements

Item	Description
Operating System	Microsoft Windows 2000, XP, Vista Microsoft Windows 2000 Professional, XP Professional
CPU	Pentium-class processor (Pentium IV CPU, 2.5 GHz or faster recommended)
Memory	512 MB minimum (1 GB or more recommended)
Display	VGA or better display (1024x768 resolution recommended)
Browser	Internet Explorer: 6.0 and above (IE 8.0 recommended). <hr/> Note: <ul style="list-style-type: none">• All pop-up blockers should be disabled when using GeoManager to prevent conflict with the MapView Control Panel• The Run ActiveX control option must be enabled
Internet Access	High speed access via DSL, Cable or ISDN

New in This Document

The following feature(s) are new in this version of GeoManager:

- Navigation – The tabs for different pages are shown at the top of the screen. Navigation within each tab (after you click one of the tabs at the top) will vary depending on the feature.
- Map Functionality – Easier access to vehicle and Landmark information from the map. Maps can be detached and opened in a new window.
- Device and Landmark Dialogs – Pop up dialogs that appear when you mouse over any device or landmark. Device and Landmark dialogs allow you to view information or perform actions specific to the selected device or Landmark.
- Clusters – Improves the identification of closely located devices and Landmarks on the map.
- Exceptions Alerts – Faster and more obvious notification about Exceptions.

- Quick Administration – Allows you to assign multiple exceptions or scheduled reports to a mobile device simultaneously in addition to setting up work shift definitions and modifying custom field information.
- Live Chat – Provides real-time customer support during business hours via chat for US and Canadian customers.
- Device Path – Improved functionality including tabular display of bread-crumbs and play back option.
- Show Traffic – Provides traffic information on the map in areas where available.
- Driving Directions – Provides detailed driving directions from start to end addresses to help drivers and field technicians get from site to site.
- Point of Interest – Allows user to search for points of interests in a specific area.
- Service Center – Customer News, Support, Training and Service Request information has been moved to the Service Center tab

1 Introduction

Trimble GeoManager provides a leading Field Productivity & Management (FPM) solution that integrates GPS, wireless, satellite data transmission and Internet technologies into mobile software applications that strengthen your ability to manage your mobile workforce. Trimble GeoManager is the flagship Trimble FPM product line, offering a robust set of Mobile Resource Management (MRM) tools with an array of features and options.

Whether you want to instantly map the location of your fleet, find the nearest vehicle to a job, dispatch text messages to workers, log work hours or view and print detailed reports, the Trimble GeoManager solution helps you manage overall mobile workforce performance, reduce costs and maximize customers' satisfaction with your field services. And because it is an on-demand solution, you can use it from any location where you have Internet access.

Trimble GeoManager gives you the following features to help you manage your mobile workforce:

- Measure and manage your mobile workforce daily
 - Use location information, reports, exception notifications to:
 - Measure and set baselines
 - Look for changes
 - Improve driving habits and safety
 - Dispatch
- Manage field operating costs
 - Correct costly problems like speeding and indirect driving, reduce fuel costs
 - Better manage vehicle maintenance, raise MPG
- Improve the quality of customer experience
 - Faster customer response
 - Better service level documentation



Note:

Not all GeoManager features are available on all accounts.

2 Getting Started

Trimble GeoManager is a web-based application that you can access from anywhere you have an Internet connection.

Logging In

To log into GeoManager:

1. Enter the address http://www.trimble.com/mobile_resource_management in the Universal Resource Locator (URL) The Trimble home page, shown in Figure 2–1, appears.



Figure 2–1: Trimble MRM Home Page

2. Select **GeoManager Region 1** from the **Customer Login** drop-down menu. The **GeoManager Login** screen, shown in Figure 2–2, appears.



Figure 2-2: The Trimble GeoManager Login Screen

3. At the prompt, enter the **Username** and **Password**, sent with your equipment.

Username and Password are case sensitive. If you did not receive a Username or Password, please contact the Trimble MRM Administrator or send an email to Trimble Customer Service at mrmsupport@trimble.com.

4. Click the **Sign In** button or press **Enter**.

You can select the **Remember Username** check box if you want the computer to automatically store your username. This is not recommended if more than one person uses a computer.

Click **System Requirements** to view the system requirements recommended to run GeoManager.

The **GeoManager** home page, shown in Figure 2-3, appears.



Note:

GeoManager does not store password information. Please keep your password in a secure location for reference.

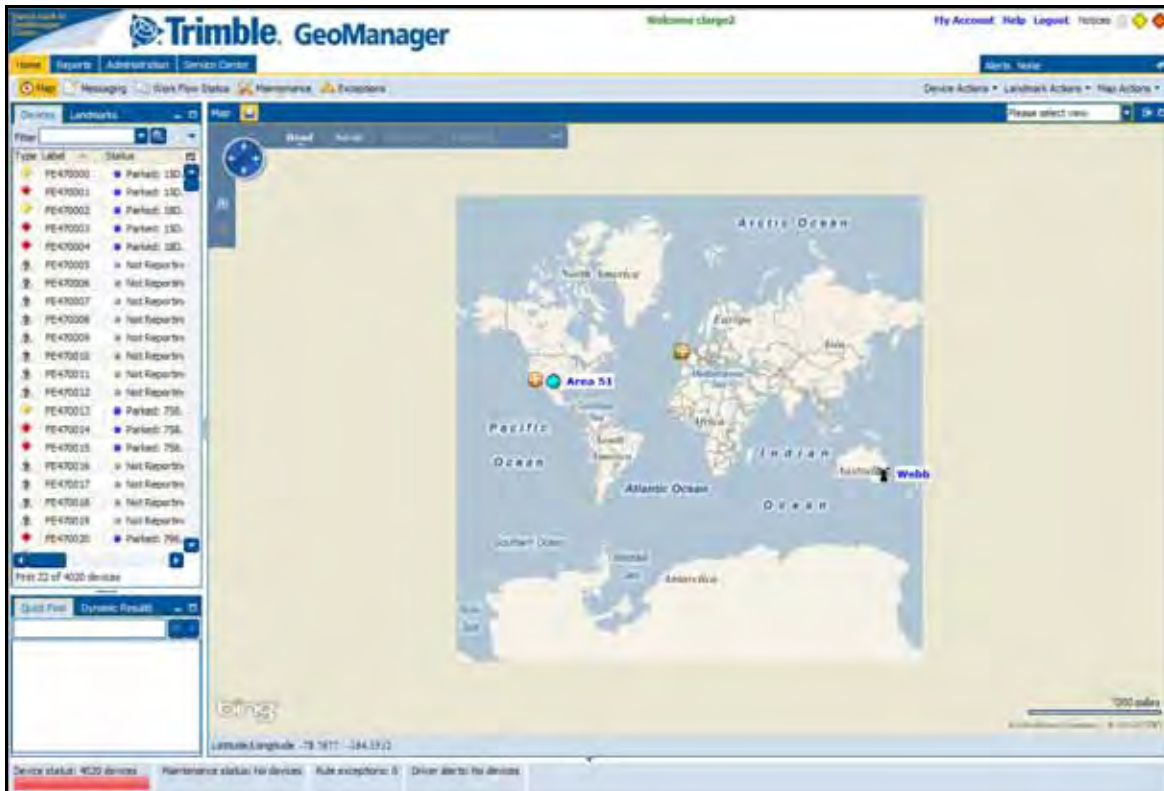
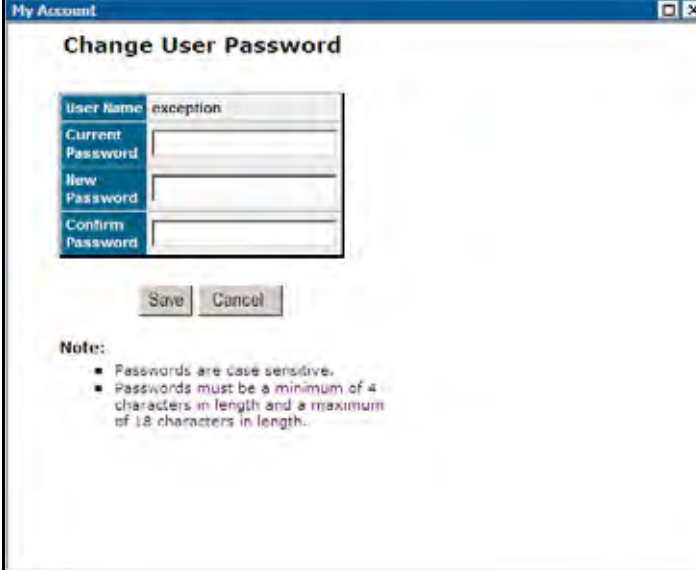


Figure 2-3: GeoManager Home Page

On the top of the screen are informational links that allow you to get help and information you need about your account:

- **Switch Back to GeoManager Classic** - This link allows you to view GeoManager in the classic format. This helps users who are not yet comfortable or have not taken instruction in the new GeoManager format to quickly find the information they need. This link will be removed in the future.
- **Welcome User** - This line displays the name of the user currently logged into the account.
- **My Account** - This link opens a dialog box, that allows you to change your password for your account. You may only change the password for the current account.



The screenshot shows a web browser window titled "My Account" with a sub-header "Change User Password". The form includes a "User Name" field with the value "exception", and three password fields: "Current Password", "New Password", and "Confirm Password". Below the form are "Save" and "Cancel" buttons. A "Note" section at the bottom contains the following text:

- Passwords are case sensitive.
- Passwords must be a minimum of 4 characters in length and a maximum of 18 characters in length.

Figure 2-4: My Account Dialog Box

To change your password:

1. Enter your **Current Password**.
2. Enter your **New Password**. Passwords are case sensitive and must be at least four characters long but no more than 18 characters in length.
3. Re-enter your new password to **Confirm** your **Password**.
4. Click **Save** to change your password.

Click **Cancel** to close the dialog box without changing your password.

- **Help** - This link opens a new window which displays the Customer Support information from the home page.
- **Logout** - This link allows the user to log out of GeoManager. By using this, you can log out of one account and log into another without needing to close your browser window.
- **Notify Me** - This link allows you to sign up for email notices about unexpected issues or planned system maintenance.
- **System Status** - This icon shows you the current system status:
 - Green - System is running normally.
 - Yellow - Some system features may be unavailable.
 - Red - System is currently unavailable or experiencing technical difficulties.
- **Planned Maintenance** - This icon shows you when planned maintenance is about to occur.
 - Green - There is no planned maintenance for 48 hours.

- Yellow - Maintenance is planned within the next 48 hours.
- Red - Maintenance is currently being performed.

To get to classic GeoManager:

Click the **Switch back to GeoManager Classic** banner in the top, left corner of GeoManager. The **GeoManager Classic** home page, shown in Figure 2–5, appears.



Figure 2–5: GeoManager Classic Main Page

The GeoManager Classic home page has a new look, but the functionality for Classic is the same as before. For more information about using GeoManager Classic, please see the *GeoManager Classic Admin & User Guide*.

To get back to the new GeoManager interface:

1. Click the **See the New GeoManager** banner in the top, left corner of GeoManager.

The first time you sign into the new GeoManager interface, you will see a dialog box, shown in Figure 2–6, asking you to accept the terms of the beta test.

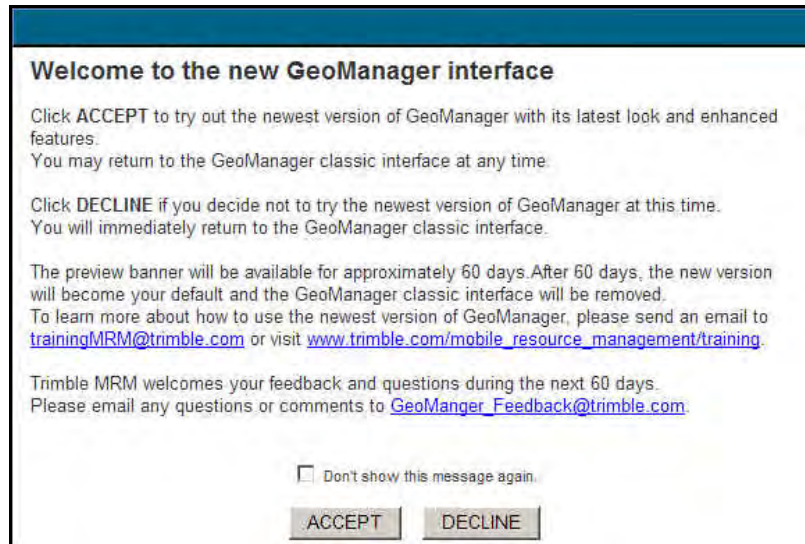


Figure 2–6: GeoManager Conditions Acknowledgement Dialog

If you do not want this dialog box to appear each time you sign in, check the **Do Not Show This Message Again** check box.

2. Click **Accept** to open the New GeoManager interface. The new GeoManager home page, shown in Figure 2–3, appears.

Live Chat

GeoManager allows you to access real-time assistance with the Live Help chat feature.

To start a Live Chat session:

1. Click **Live Chat** in the upper right corner of GeoManager. The **Live Chat** screen, shown in Figure 2–7, appears.

Live Chat by LIVEFEEDON

To help us serve you better, please provide some information before we begin your chat.

Required items indicated with *.

Your name? *

Phone Number

Your company name: *

If you have an open service request number, please mention it below:

Please select your problem type: *

Select One

Start Chat →

Figure 2–7: Live Chat Input Fields

2. Enter **Your name**. This is a required field.
3. Enter your **Phone Number**, if available.
4. Enter **Your company name**. This is a required field.
5. Enter the **service request** number, if available.
6. Select your **problem type**:
 - General Inquiry
 - Unit not tracking/Website issues
 - Unit De-install and Re-install Request
7. Click **Start Chat**. The Live Chat session, shown in Figure 2–8 displays.



Figure 2-8: Live Help Chat Session

8. Enter your question in the provided text field.
9. Click **Send**.
Press **Enter**.

Once your issue has been resolved, click **Close** to end the session. You can also click **Print** to save a copy of the exchange for future reference or click **Email** to send an email copy for your records.

Alerts

GeoManager allows you to receive real-time Exception alerts when drivers or field technicians perform an activity that crosses a threshold you create, such as a speed threshold of 55 mph or an idling threshold of 10 minutes.

The **Alerts** notification box, shown in Figure 2-9, shows the label for the mobile device that has most recently crossed an Exception threshold.

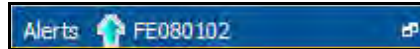


Figure 2-9: Alerts Notification Box

When you click the Restore window (double boxes) on the right side of the Alerts box, you see a drop-down list of the most recent Exception alerts, shown in Figure 2-10. This list shows you the mobile device label, type of Exception and the name of the Exception.

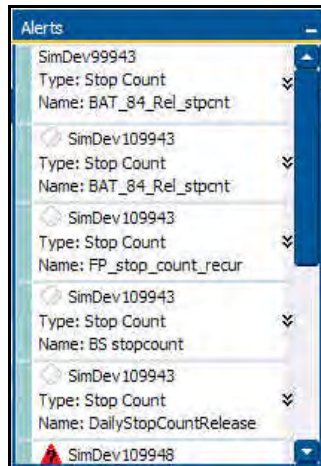


Figure 2-10: Alerts Drop-Down List

On the right side of the **Alerts** drop-down list next to the Alert information is another double arrow signifying an expanded view. When you click the double arrows, an expanded view appears, shown in Figure 2-11, with more specifics about the Alert, such as date and time, location, Exception parameters and number of times the mobile device has exceeded the Exception parameters.

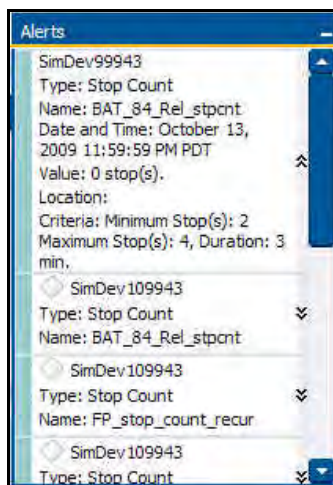


Figure 2-11: Alerts Drop-Down List with Expanded Information

In either the Alerts drop-down list or the list with expanded information, when you roll your pointer over the name of the mobile device, a yellow square and green circle appear. When you roll the cursor over the yellow square, specific information about the mobile device appears, as shown in Figure 2–12.

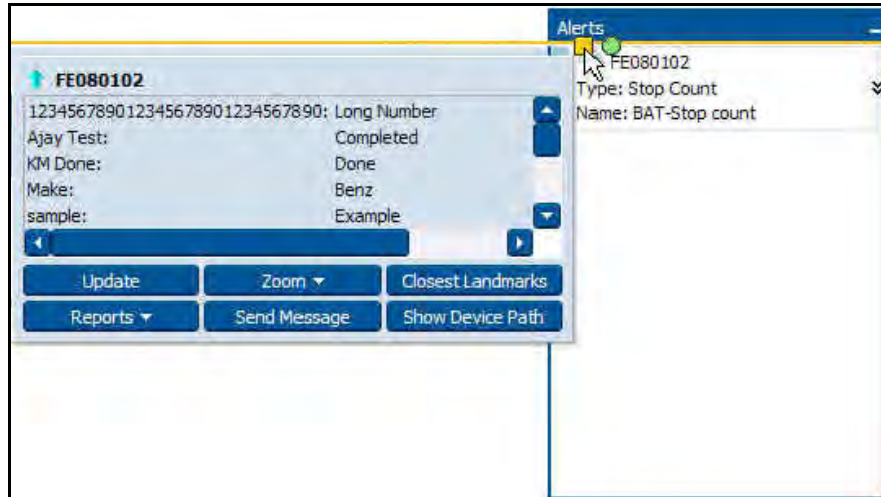


Figure 2–12: mobile device Information from the Alerts Drop-Down List

This is the same information that you will see in the device table and map view pop ups. From this mobile device information box, you can view and print reports, send messages, update the mobile device, etc. For more information on using the mobile device information box, see ‘Map View’ on page 18.

When you roll the cursor over the green circle, a mini map showing the location of the mobile device appears, as shown in Figure 2–13.

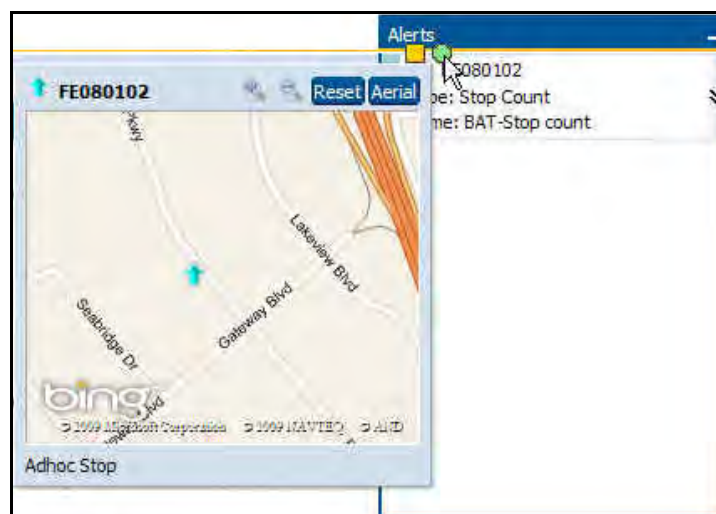


Figure 2–13: mobile device Information from the Alerts Drop-Down List

This is the same information that you will see in the device table pop up. From the mini map pop up, you can see either the road view or aerial view of the mobile device's location. For more information on using mini map, see 'Map View' on page 18.

Click **Minimize window** to collapse the Alerts view.

Navigation

Navigating through GeoManager is easy and fairly intuitive for all types of users. As mentioned before, the first screen shown is the GeoManager home page, which contains several components. The central and largest portion of the screen which shows the Mapview in Figure 2-5, contains the working screen, which allows users to view, enter, edit and otherwise interact with GeoManager.

Above the working screen are four tabs, shown in Figure 2-14, that allow you to navigate to different sections of GeoManager.

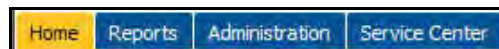


Figure 2-14: Navigation Tabs

These navigation tabs include:

- Home
- Reports
- Administration
- Service Center

When you click any of these tabs, the working screen changes to show features and options that are covered in the next chapters of this guide.

Below the navigation tabs are device navigation tabs used to navigate the different features of the GeoManager section you are currently viewing. These tabs change to correspond to the selected navigation tab.

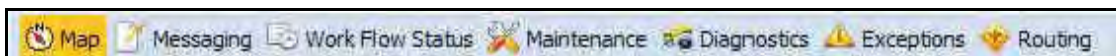


Figure 2-15: Navigation Buttons

These device navigation tabs include:

- Map
- Messaging

- Work Flow Status
- Maintenance
- Diagnostics
- Exceptions
- Routing

Below the device navigation tabs are the Devices and Landmarks tabs which provide the status and location of your devices as well as a list of your landmarks.

Type	Label	Status	Loc
◆	CA001408	Moving: 9 mph, ...	19
◆	CA001412	Parked: 7D:8H:5...	NE
◆	CD890870	Not Reporting	SD
◆	CD890871	Not Reporting	21
◆	CD890872	Moving: 9 mph, I...	CC
◆	CD890873	Moving: 9 mph, I...	90
◆	FE020001	Parked: 8D:9H:4...	21
◆	FE020002	Moving: 9 mph, I...	94
◆	FE020003	Moving: 9 mph, I...	20
◆	FE020004	Parked: 28D:9H:...	CC
◆	FE091871	Not Reporting	17
◆	FE091872	Not Reporting	EL
◆	FE091873	Not Reporting	26
◆	FE091874	Not Reporting	89
◆	FE096770	Not Reporting	CC
◆	FE096771	Not Reporting	PR

Figure 2-16: Devices Tab

Below the Devices and Landmarks view is a **Quick Find** box, shown in Figure 2-17, that allows you to find specific mobile devices or Landmarks.

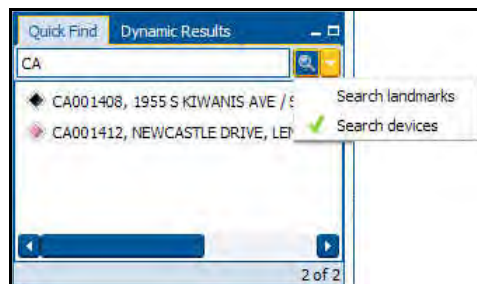


Figure 2-17: Search Box

You may search using a complete or partial name. You must select the type of search you want from the drop menu. Search types include:

- Search Landmarks
- Search Devices

To search for a mobile device or Landmark:

1. Enter the partial or full name or label for which you want to search.
2. Click the magnifying glass next to the text box. This defaults to searching for the last type of searched performed.

If this is the first search performed after opening GeoManager, then the search defaults to a Landmark search.

Below the secondary navigation tabs is the Status View, which gives you a quick overview of the status of your mobile devices. A complete description of the Status View is shown in the **Status View** section on page 14.

Status View

The Status View, shown in Figure 2–18, is a new feature that allows you to get a quick overview about the status of the mobile devices in your fleet.



Figure 2–18: Status View

When you login to GeoManager, the Status View is shown as in Figure 2–18, with the minimum information showing. This view lets you see:

- The number and status of the mobile devices in your fleet
- The status of mobile devices' scheduled maintenance
- If any drivers have surpassed Hours of Service (HOS) rules within the last 24 hours (only shown with Driver Logs enabled)
- If there are any Exception alerts triggered by any of your drivers within the last 24 hours

Hover over each item as shown in Figure 2–19, to view the legend for each section, which shows you what each color on each different bar represents.

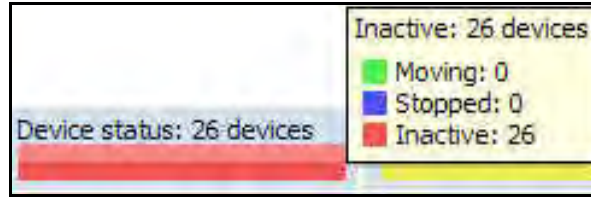


Figure 2-19: The Popup Status View

Service Center

The GeoManager main page initially displays map view. Click the **Service Center** tab to see current customer news shown in Figure 2-20 including product updates, webinars, training information and upcoming events.



Figure 2-20: Service Center News Screen

News

On the right side of the news page are buttons that allow you to view more information about GeoManager. These buttons include:

- News (default) - This shows you current customer news and other relevant information.

- **New Customers** - This page offers the tools needed to get you started, links to support and our Best Practices Guide and a sample billing statement that helps you understand how to read your invoices.
- **Customer Support** - This screen contains the links you need when you require help, including technical support, billing questions, training information and product documentation.
- **Troubleshooting FAQs** - These frequently asked questions may answer or help you fix the most common questions and problems that you encounter.
- **Refer a Friend** - This allows you to send information about friends and colleagues who would benefit from Mobile Resource Management solutions.
- **Training** - This box helps you get information about and register for Trimble MRM training.
 - **Training Schedule** - This page shows you which classes are available for the current month.
 - **Register for Courses** - This link allows you to register for WebEx classes.
 - **Webinar Schedule** - This link shows you the current webinar schedule and allows you to register for the webinar.
- **Legal** - This shows you current legal information.
 - **Terms of Use** - This link displays the general terms of use for Trimble products.
 - **Service Description** - This link displays the available Trimble services, products and their descriptions.
 - **Privacy Policy** - This link displays Trimble's online privacy policy.
 - **Legal Notice** - This link displays Trimble's copyright and trademark information.

Service Request

The Service Request tab allows you to create a service request online. For more information on creating and viewing service requests, see 'Service Requests' on page 277.

Setting Up GeoManager

In the **Devices** tab after you first login to GeoManager, you will see default mobile device information. This allows you to track your mobile devices from the first day your account is active and your mobile devices are installed with hardware.

In order to get more specific information from your GeoManager account, you will need to enter mobile device and employee information, create users, set Exception parameters for your drivers or field technicians and enter other information that will help you get the specific information you need about your fleet. While this seems like a long, time-consuming process, this major set-

up only needs to occur once. Any changes to your account after the initial set-up should be much less involved.

Trimble MRM suggests that you complete these steps in the following order:

1. Enter your mobile device information and create labels for your mobile devices.
2. Create custom fields for your mobile devices.
3. Enter your employee information. This includes drivers, field technicians, etc.
4. Create your Organizational Hierarchy. This will create groups for you to select when generating reports.
5. Create users for GeoManager. Using role-based access, you can limit your users to the appropriate amount of information including groups.
6. Create Landmarks.
7. Set up Exception parameters.
8. Schedule any reports.
9. Set up maintenance schedules for your mobile devices.

The **Administration** section of this guide explains how to complete these steps and set up your GeoManager account. For more information about naming conventions and helpful suggestions to get the most from your GeoManager account, please see the *Best Practices* guide.

3 Map View

The **Map** tab in GeoManager allows you to see your mobile devices and landmarks both in a list and on a map in real time where ever they are in the world. Maps are updated regularly to include new roads, street names and addresses. The standard default refresh rate for Map View is every two minutes. With the enhanced map capabilities, you can find a mobile device or mobile technician, get current status information and view reports specific to the mobile device.

Customizing MapView enables you to create and save maps at country, town or city, or street level.

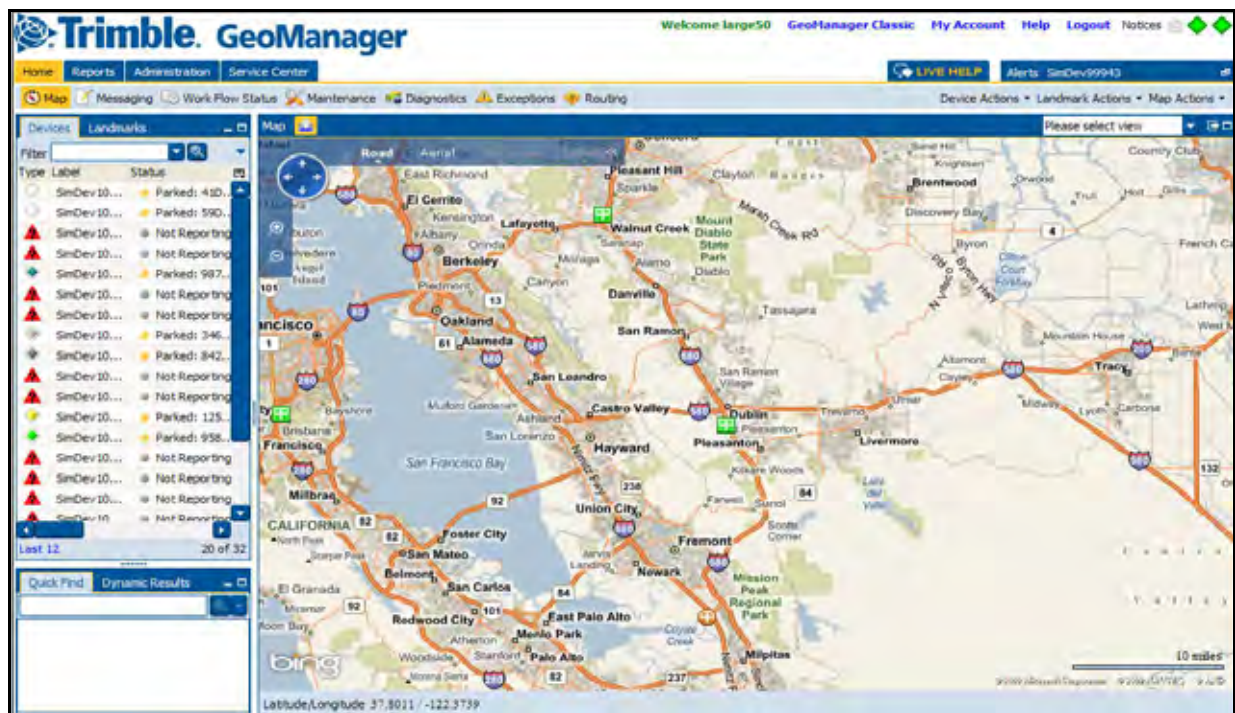


Figure 3-1: Map View Main Page

The map section of the screen has viewing options and navigation objects in the top left corner of the screen.

Above the map to the left are the device navigation tabs that allow you to view different screens for specific types of mobile device or employee information.



Figure 3-2: Device Navigation Tabs

Above the map to the right are three action drop-down menus that allow you to perform different actions for devices, landmarks and the map.



Figure 3-3: Actions Drop Down Menus

Map View

The GeoManager Map View, shown in Figure 3-8, helps you manage your mobile workforce using detailed maps and icons. Maps are updated regularly to include new roads, street names and addresses. The default refresh rate for MapView is every two minutes. Color-coded icons—representing mobile devices—change based on various device conditions, such as parked, moving, or not reporting.

When you mouse over any mobile device in the device table or Map View, a yellow square appears. Hovering over the yellow square displays a dialog box with mobile device information, shown in Figure 3-4. You can see information about each device, such as device name, date, time and current speed. If the device is parked, instead of current speed, you will see time parked.

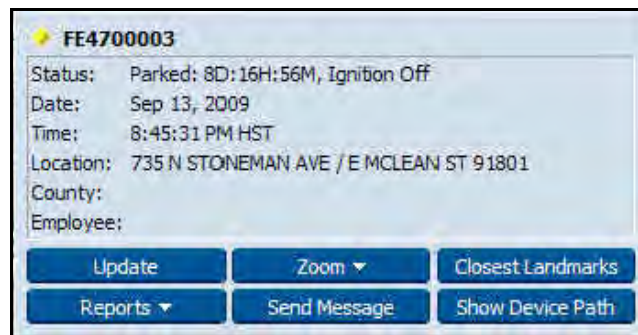


Figure 3-4: Device Dialog Box

You can click the buttons in the lower section of the mobile device dialog box for faster access to common activities, such as:

- Update – This allows you to get a status update on the selected vehicle in between your automatic updates, which may be 15, 5 or 2 minute intervals.
- Zoom – This changes the map to show the landmark or mobile device closest to the selected mobile device
 - Zoom to Closest Landmark – This changes the map to show the closest Landmark(s) to the selected mobile device.
 - Zoom to Closest Device – This changes the map to show the closest mobile devices to the selected mobile device.

- Closest Landmarks – This finds the closest Landmarks to the mobile device and displays them in the Dynamic Results box on the left side of the screen.
- Reports – This displays a number of reports specific to the selected mobile device.
 - Activities Report – This allows you to generate an Activities report for this vehicle for the current business day.
 - Exceptions Reports – This generate an Exception History report for the selected vehicle. The Exception History report shows the last 10 Exceptions the mobile device has triggered in the past 14 days.
 - Forms Report – This generates a report in a separate window that shows the number and type of forms sent within the last 24 hours.
 - Message Report – This generates a Message report that shows the number and types of messages the employee sent in the past 24 hours using the mobile device.
 - Stop Detail Report – This generates a Stop Detail report that shows the number and length of time the mobile device stopped during the current business day.
- Send Message – This opens a separate window with the **Messages for device** screen, shown in Figure 3–81.
- Show Device Path – This changes the map to show the path of the selected mobile device.

If you have created custom fields for your mobile devices and filled in information for each of those fields (up to eight), it will appear in the mouse over information. For more information about Custom Fields, see “Configuring Custom Fields” on page 113.

If you have entered employee information into Organizational Hierarchy, it will also appear in the mouse over information, along with all your custom fields information. For more information about Organizational Hierarchy, see “Organizational Hierarchy Administration” on page 216.

When you mouse over any mobile device in the device table, a yellow square and green circle appear. Hovering over the green circle displays a Mini Map showing the location of the mobile device on the map, shown in Figure 3–5.



Figure 3-5: Mini Map Road View

Click the **Aerial** button to display the aerial view in Mini Map, shown in Figure 3-5. The Aerial button will appear yellow to indicate it is selected.

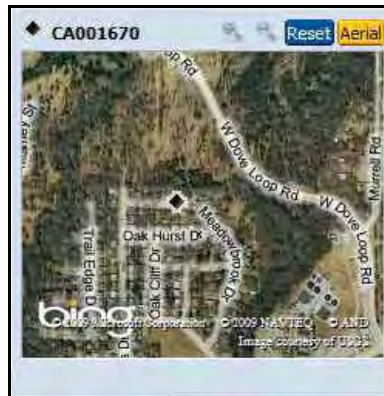


Figure 3-6: Mini Map Road View

- Click the yellow Aerial button to return Mini Map to the road view.
- Click the Magnifying Glass with (+) to zoom in incrementally for a closer look at the map.
- Click the Magnifying Glass with (-) to zoom out incrementally for a more extensive view of the map.
- Click Reset to return Mini Map to the default view.

When you mouse over any Landmark, a dialog box with Landmark information appears, as shown in Figure 3-7. You can see information about each landmark, such as address, Lat/Long, start date and end date.

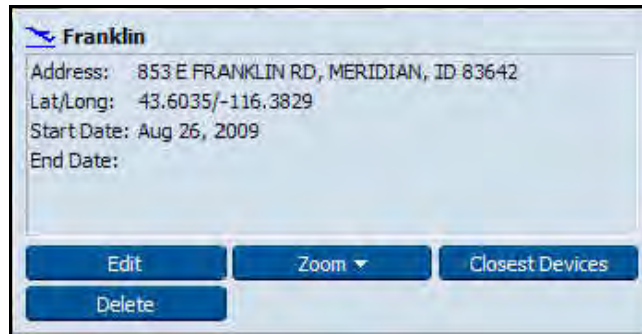


Figure 3-7: Landmark Dialog Box

You can click the buttons in the lower section of the landmark device dialog box for faster access to common activities, such as:

- Edit – This opens the Edit Landmark fields to the right of Map View where you can make desired changes to the selected landmark.
- Zoom – This changes the map to show the landmark or mobile device closest to the selected mobile device
 - Zoom to Closest Landmark – This changes the map to show the closest landmark to the selected landmark.
 - Zoom to Closest Device – This changes the map to show the closest landmark to the selected mobile device.
- Closest Devices – This finds the closest devices to the selected landmark and displays them in the Dynamic Results box on the left side of the screen.
- Delete – This deletes the landmark from your account and Map View.

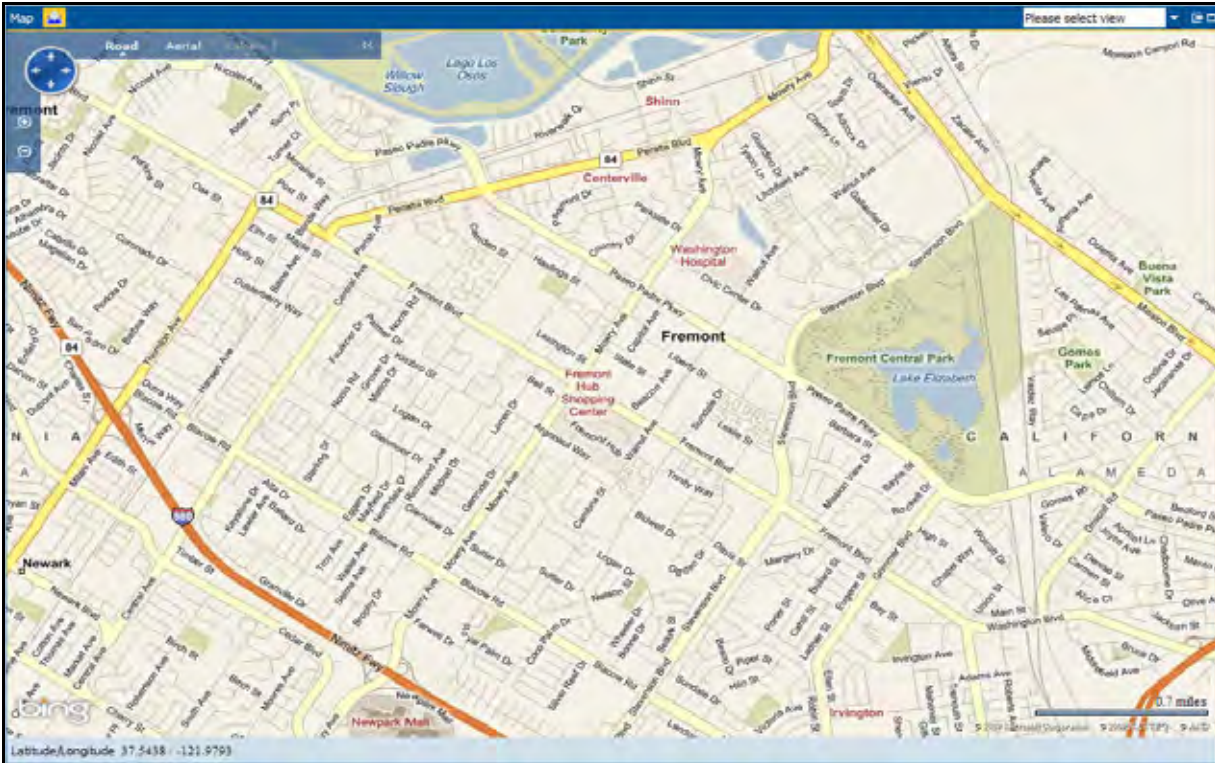


Figure 3–8: GeoManager Map View

When you first open GeoManager, you are shown a default view of the world. Each user may change this view to a customized view that shows the area most important to them. For more information about managing custom views, see “Manage Custom Views” on page 59.

Map View Navigation

In the top, left corner of the map are navigation tools, shown in Figure 3–9, that help you move around the map and get a better idea about where your drivers and field technicians are when in the field.

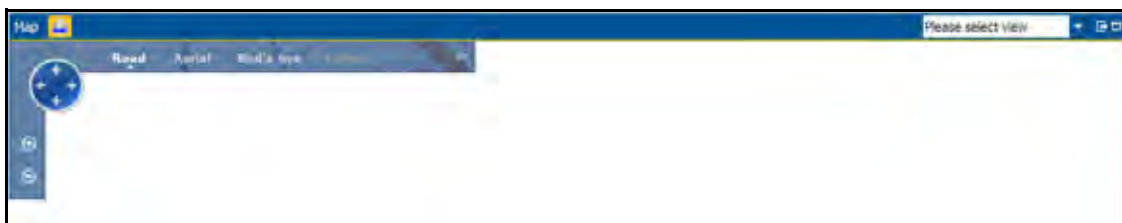


Figure 3–9: Map View Navigation Tools

The **Follow Selection** icon allows you to view the selected devices and landmarks on the map. When enabled, the map will automatically adjust and update to continuously locate the selected mobile device(s) or Landmark(s) on the map. The button will appear yellow to indicate it is selected. This allows you to monitor the progress of specific mobile devices during the day.

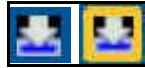


Figure 3-10: Follow Selection Icon

To no longer follow the selected device(s) or Landmark(s), click the icon again.

On the far right of the Map View navigation bar is the View drop-down list. From this menu, you can select the previously saved map views. If a custom view is selected the current map name is shown in the custom view box. If you adjust the map, the custom view box resets to the default **Please select view**.

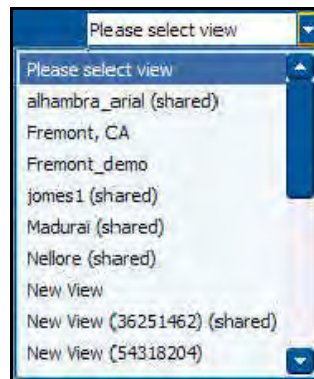


Figure 3-11: View Drop-Down List

For more information about customizing map views, see “Manage Custom Views” on page 59.

Below the row of drop-down features are viewing options for the map.



Figure 3-12: Viewing Options for the Map

The default view for the map is the **2D, Road** view, shown in Figure 3-8. This view shows you the least map detail so you can easily find your mobile devices on the map.

The **Aerial** view, shown in Figure 3-13, allows you to see a satellite image of the area in the map.

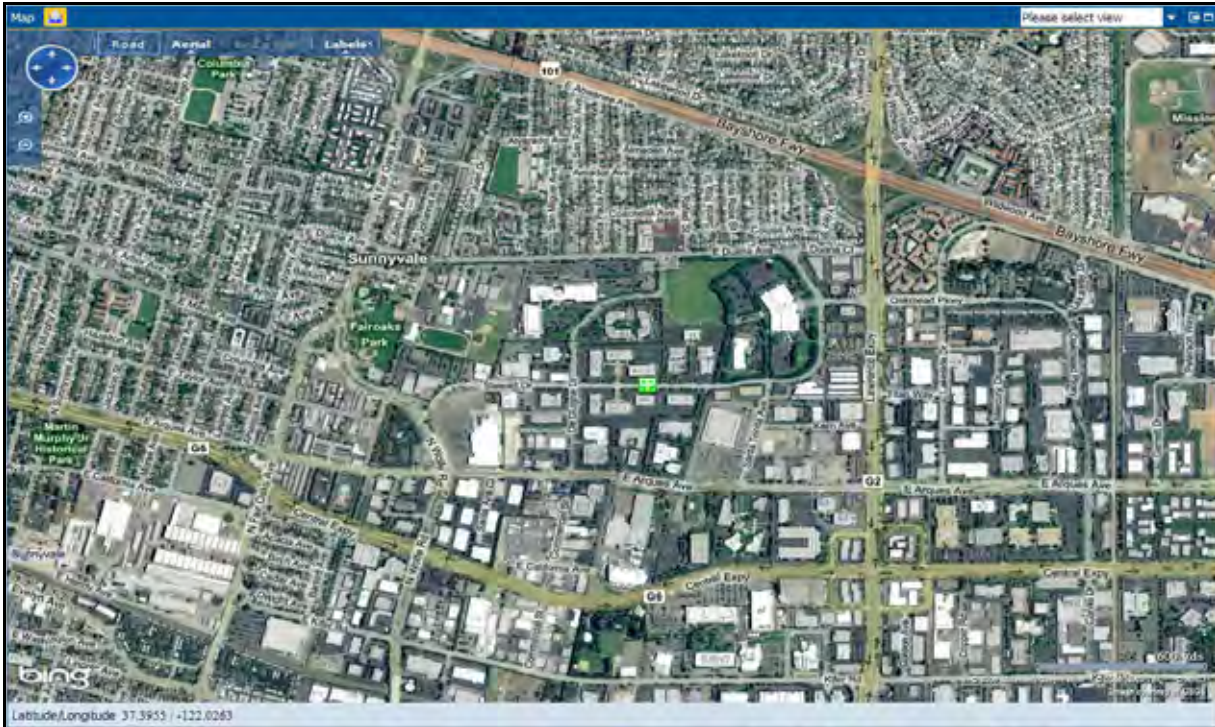


Figure 3-13: Aerial View

The **Bird's Eye** view allows you to see the building and immediate surrounding area for map areas. This can help increase driver safety through cautious driving through particular areas.



Note:
Not all areas have Bird's Eye views available.



Note:

Bird's Eye view of the United States, Canada, Mexico, New Zealand, Australia and Japan may not be used by any government entity or agency or branch thereof (municipal, state, federal state or other form of government and their equivalents in any jurisdiction) unless the parties enter into an explicit agreement for such use, signed by their duly authorized representatives.





Figure 3-14: Bird's Eye View

On the left side of the navigation tools are a series of navigation buttons that help you incrementally adjust the map as needed. Depending on the view you select, different navigation buttons will display. The navigation buttons shown in Figure 3-15 display all possible navigation button options.



Figure 3-15: Map View Navigation Buttons

Icon	Description
	Magnifying Glass with (+) – Zooms in incrementally for a closer look at the map.
	Magnifying Glass with (-) – Zooms out incrementally for a more extensive view of the map.

Just above the zoom tools are the navigation arrows. These arrows move the map incrementally in the direction of the arrow, with North pointing up, East pointing right, South pointing down and West pointing left.



Figure 3-16: Map Navigation Arrows

Clusters

The map automatically replaces groups of device or landmark icons with cluster icons to avoid cluttering, shown in Figure 3-17.

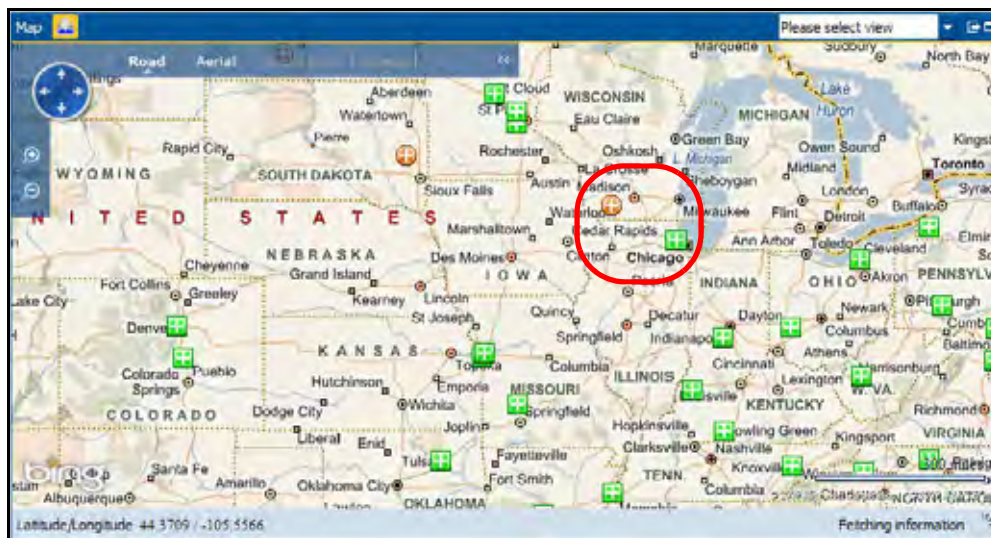


Figure 3-17: Cluster Icons



Note:

Note: The red oval is for illustration purposes only. It does not appear in GeoManager.

Hover the mouse over the cluster icons to display a list of all devices or landmarks that form the cluster.



Figure 3-18: Cluster Icons Pop Ups

Map View Right Click Menu

When you right click on Map View a menu displays allowing you to perform a number of different tasks pertaining to the management of your mobile devices and Landmarks on the map.



Figure 3-19: Map View Right Click Menu

Drive From Here

The **Drive From Here** feature from the Map View right click menu, shown in Figure 3-19, menu, displays a red push pin and address of the selected location in Map View. **Drive From Here** works in conjunction with **Drive To Here** to display driving directions from one location to another using the Map View right click menu. For more information see **Using Drive From Here and Drive To Here to View Driving Directions** on page 30.

To view a desired start location for a mobile device using the right click menu:

1. Place your mouse over the desired start location.
2. Select **Drive From Here** from the Map View right click menu, shown in Figure 3-19. A red push pin icon displays at the start location and the Driving Directions fields will display with the corresponding address in the **Start** field, shown in Figure 3-20.

For more detailed information on driving directions, please see **Driving Directions** on page 62.

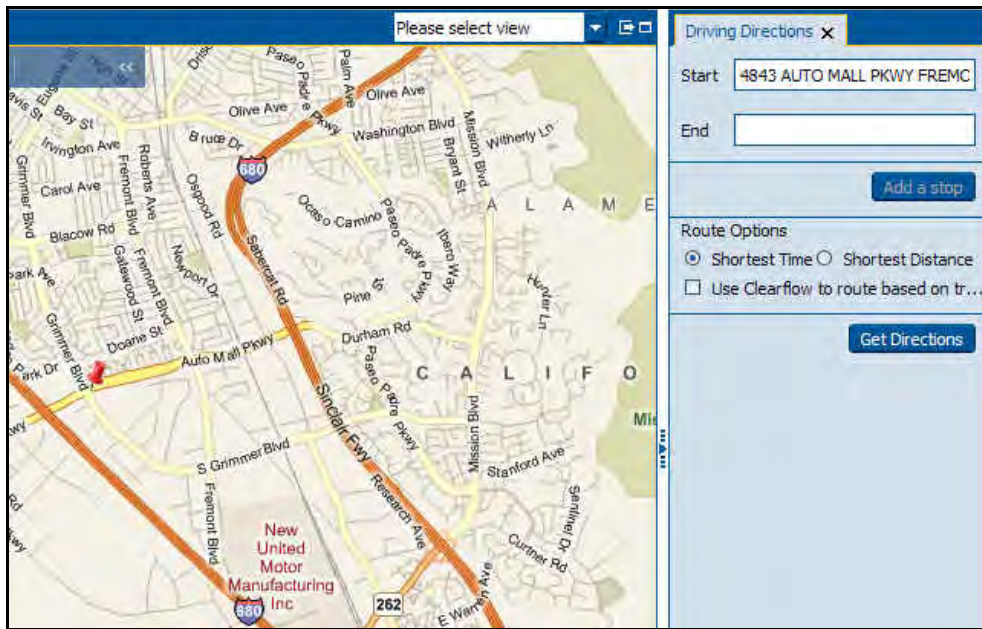


Figure 3–20: Drive From Here

Drive To Here

Selecting **Drive To Here** from the Map View right click menu, shown in Figure 3–19, menu, initiates the second step in accessing driving directions from the right click menu.

To view a desired end location for a mobile device using the right click menu:

1. Place your mouse over the desired end location.
2. Select **Drive From Here** from the Map View right click menu, shown in Figure 3–19. A red push pin icon displays at the end location and the Driving Directions fields will display with the corresponding address in the **End** field, shown in Figure 3–20.

For more detailed information on driving directions, please see **Driving Directions** on page 62.

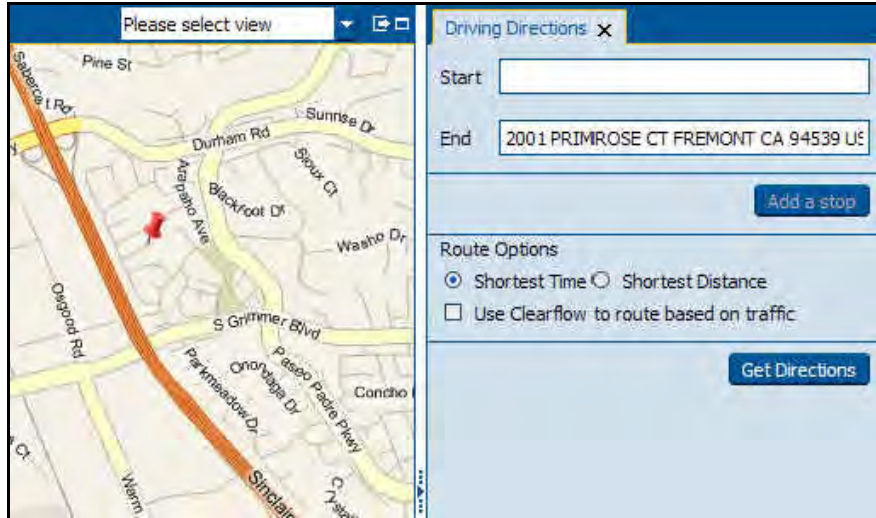


Figure 3-21: Drive To Here

Using Drive From Here and Drive To Here to View Driving Directions

To view Driving Directions for a mobile device using the right click menu:

1. Place your mouse over the desired start location.
2. Select **Drive From Here**. A red push pin icon displays at the start location and the Driving Directions fields will display with the corresponding address in the **Start** field, shown in Figure 3-20.
3. Select **Drive To Here**. Map View and the Driving Directions fields update with the driving path on the map and detailed directions, shown in Figure 3-22.

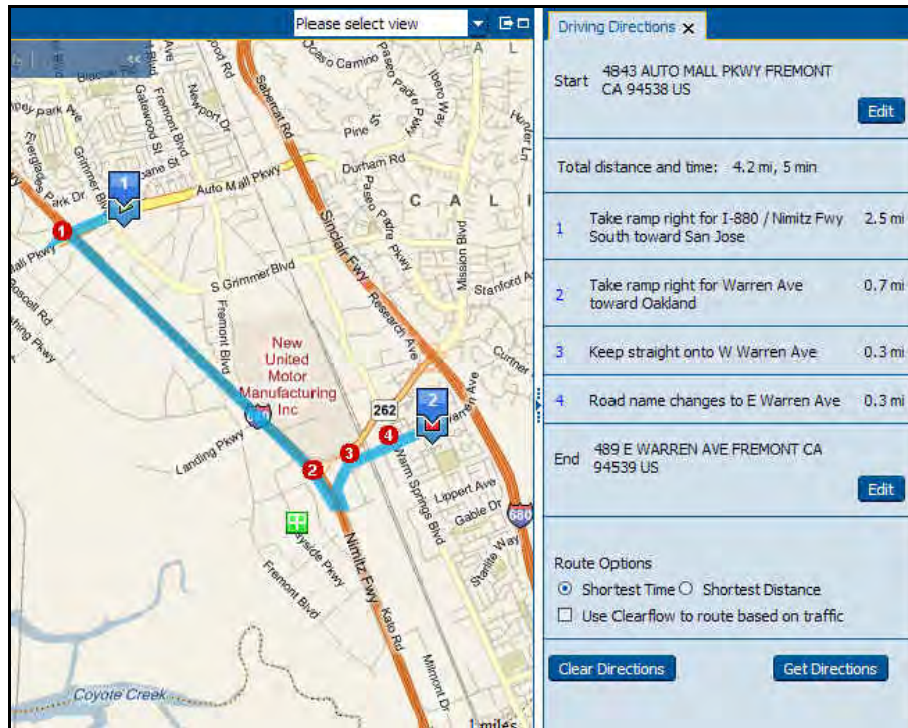


Figure 3-22: Drive To Here Results

For more detailed information on driving directions, please see **Driving Directions** on page 62.

Clear Directions

Selecting **Clear Directions** from the Map View right click menu, shown in Figure 3-19, menu, clears the Driving Directions fields and resets Map View.

Create Landmark

You can create new Landmarks in three ways, by selecting Create from the Landmark Actions drop down menu, the Map View right-click menu or in the Landmark Administration section of GeoManager shown in “Landmark Administration” on page 183.

To create a Landmark from the Map View right click menu:

1. Place your mouse over the desired location.
2. Selected **Create Landmark** from the Map View right click menu, shown in Figure 3-19. The map updates with the selected location and the Create Landmark options display to the right of the map pre-populated with address information, shown in Figure 3-23.

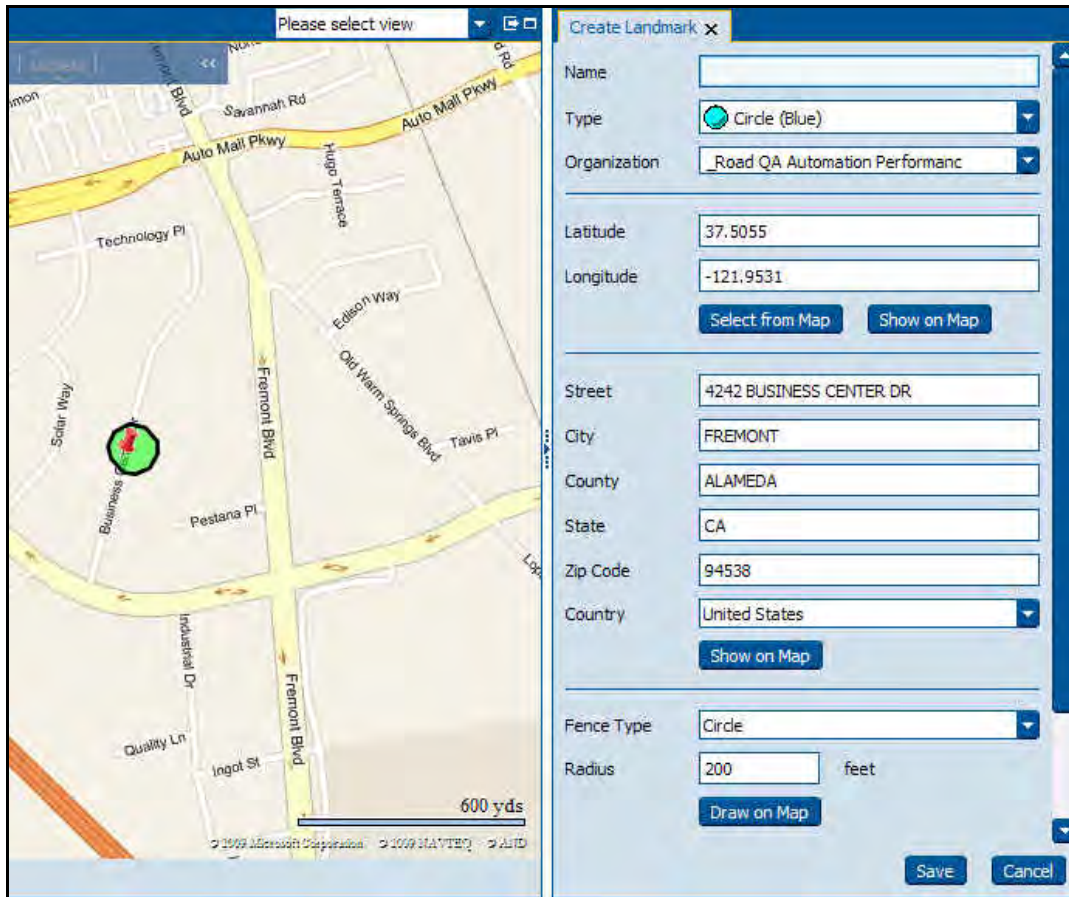


Figure 3-23: Create Landmark Fields

For more detailed information on creating new Landmarks, please see **Create Landmark** on page 50.

Closest Device

To see the closest mobile device to a selected location:

1. Place your mouse over the desired location.
2. Select **Closest Device** from the Map View right click menu, shown in Figure 3-19. The map updates showing the closest mobile device and selected location connected with a line displaying the distance between the two, shown in Figure 3-24.

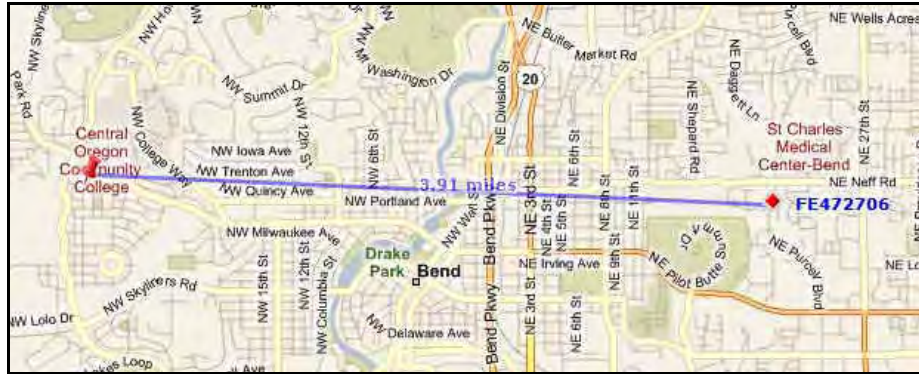


Figure 3-24: Closest Mobile Device to Selected Location

Closest Landmark

To see the closest Landmark to a selected location:

1. Place your mouse over the desired location.
2. Select **Closest Landmark** from the Map View right click menu, shown in Figure 3-19. The map updates showing the closest landmark and selected location connected with a line displaying the distance between the two, shown in Figure 3-25.

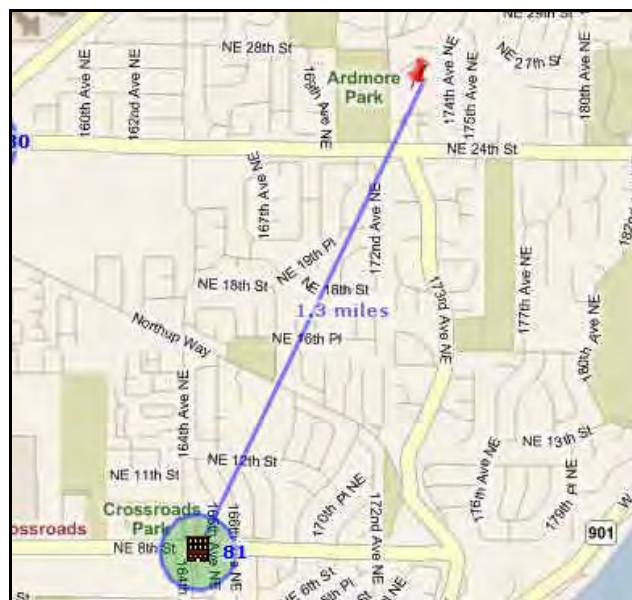


Figure 3-25: Closest Landmark to Selected Location

Clear Closest

Selecting **Clear Closest** from the Map View right click menu, shown in Figure 3-19 clears the line and distance measurements from Map View following the selection of either Closest Device or Closest Landmark from the Map View right click menu.

Find POIs (Points of Interest) Near Here

Find POIs Near Here allows you to search for points of interest in a specific area.

To find a point of interest using the right click menu:

1. From the Map View right click menu, shown in Figure 3–19, select **Find POIs Near Here**. The **Enter Point of Interest** dialog displays in the upper left corner of the map, shown in Figure 3–73.

Figure 3–26: Enter Point of Interest Dialog Map View Right Click

2. Enter the desired point of interest in the **What** field.
Click the **Clear Previous Results** check box to clear previous selections.
3. Click **OK**. The map zooms in and displays red push pin representing all relevant points of interest for the entered criteria, shown in Figure 3–74.

Hover your mouse over a red push pin to see more information about the point of interest.

Click **Cancel** to exit without zooming to the point(s) of interest.

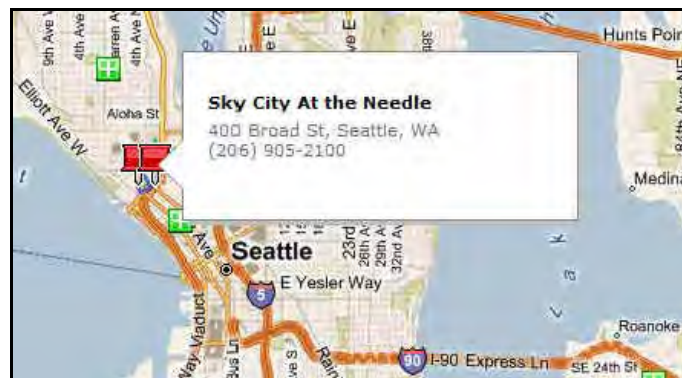


Figure 3–27: Find POI Near Here Results

Clear POIs

Selecting **Clear POIs** From the Map View right click menu, shown in Figure 3–19, menu, clears the point(s) of interest and resets Map View.




Mobile Device Table








The left side of the Map View, shown in Figure 3–28, displays the mobile device table which displays the device type, label, status, location and employee associated with the mobile device.



Figure 3–28: Device Table

When you click a mobile device in the list, the Map View changes to show the current location of the mobile device, as shown in Figure 3–29. You may also select multiple mobile devices to view by holding down the CTRL key while clicking the mobile device names.

Icon	Description
	Colored Diamond – Displayed when the selected vehicle is parked.
	Up Arrow – Displays when the selected vehicle is travelling North.
	Upper Right Arrow – Displays when the selected vehicle is travelling North East.

Icon	Description
	Right Arrow – Displays when the selected vehicle is travelling East.
	Lower Right Arrow – Displays when the selected vehicle is travelling South East.
	Down Arrow – Displays when the selected vehicle is travelling South.
	Lower Left Arrow – Displays when the selected vehicle is travelling South West.
	Left Arrow – Displays when the selected vehicle is travelling West.
	Upper Left Arrow – Displays when the selected vehicle is travelling North West.
	Grey Triangle with Question Mark – Displays when the selected vehicle is not reporting.

**Note:**

Icon colors are customer specified per device.

Status colors are:

- Red circles indicate vehicles that are inactive (the vehicle has not moved in 24 hours)
- Green circles indicate moving vehicles
- Blue circles indicate parked vehicles
- Grey circles indicate vehicles that are not reporting (the vehicle is not communicating with GeoManager)

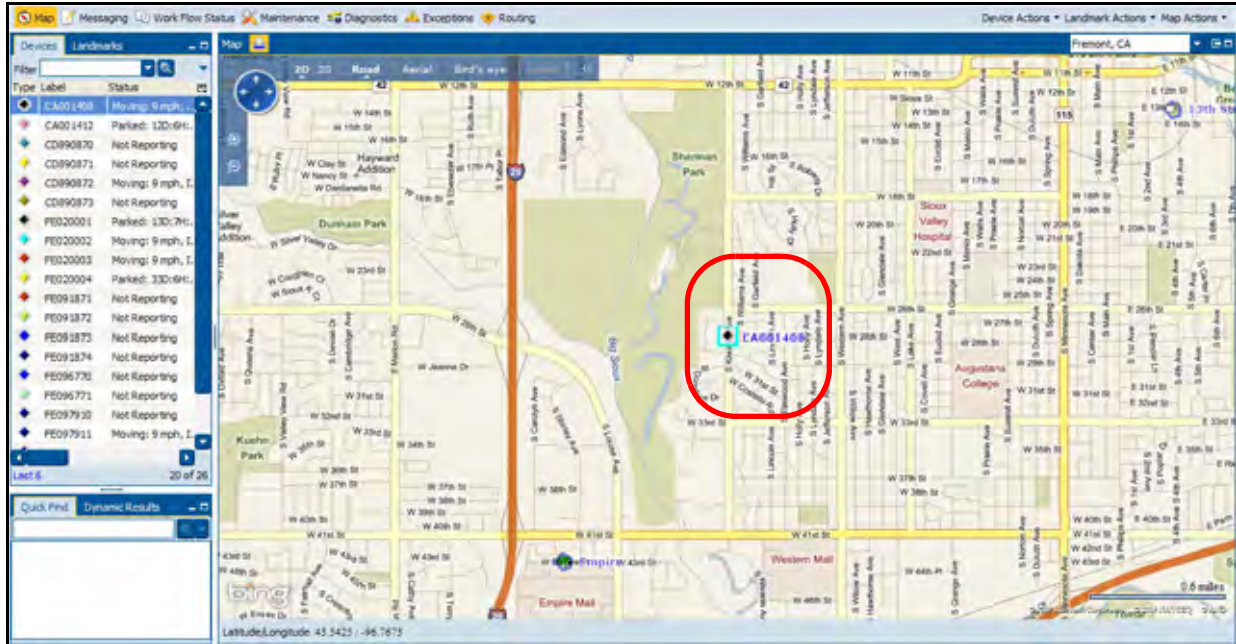


Figure 3-29: Current Mobile Device Location



Note:

Note: The red oval is for illustration purposes only. It does not appear in GeoManager.

You can shorten the list of mobile devices in the mobile device table by using the **Device Filter**, shown in Figure 3-30. The Device Filter allows you to enter certain mobile device name criteria and shorten the list from all your mobile devices to just the ones you want to see in the map.

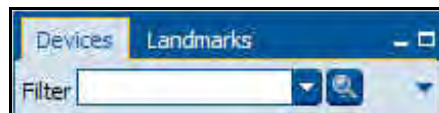


Figure 3-30: Device Filter

To filter your vehicle list:

1. Enter the **Device Filter** information. Once you have entered the information, you can reselect the information from the drop-down menu.
2. Click the **Magnifying Glass**. The mobile device status box changes to show only the mobile devices with the selected criteria.

Click the blue **Down Arrow** to see more mobile device filtering options, shown in Figure 3-31.

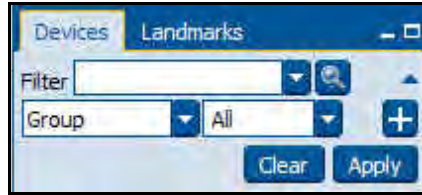


Figure 3-31: Device Filter Options Expanded

Click the **Plus sign** to expand additional filtering criteria.

Click **Clear** to erase all filtering criteria from the Device Filter field and see all the mobile devices in your fleet.

Click **Apply** to show only the mobile devices with the selected criteria.

Click the blue **Up Arrow** to collapse the expanded device filter options view.

The expanded filter options allow you to filter mobile devices by groups and employees as well as mobile device label information. You can also select the same filter option more than once to filter within the specified criteria.

Landmark Table

From the mobile device table view, shown in Figure 3-28, click the **Landmark** tab to show the Landmark Table which displays information about landmarks including the landmark type, name and address associated with the landmark, shown in Figure 3-32.

Type	Name	Address
Collection Point	PETERLEE N761,...	
Collection Point	PETERSFIELD C1...	
Collection Point	PHG LEITH M706...	
Collection Point	PLYMSTOCK E28...	
Collection Point	MANCHESTER G...	
Collection Point	MANCHESTER N...	
Collection Point	MANCHESTER S...	
Collection Point	MANCHESTER-S...	
Collection Point	MANSFIELD K54...	
Collection Point	MANVERS P815, ...	
Collection Point	MARKET RASEN,...	
Collection Point	MARPLE H458, R...	
Collection Point	MILL HILL B72, R...	
Collection Point	MILTON KEYNES ...	
Collection Point	MITCHAM B92, 9...	
Collection Point	MORDEN B96, R...	
Collection Point	MORETON G410...	
Collection Point	MOTHERWELL M...	
Test2	STAINES ROAD, ...	
Webb	22 WEBB ST, ME...	

Last 20 of 969 landmarks

Figure 3-32: Landmark Table

When you click a Landmark in the list, the Map View changes to show the current location of the landmark, as shown in Figure 3-33. You may also select multiple landmarks to view by holding down the CTRL key while clicking the landmarks names.

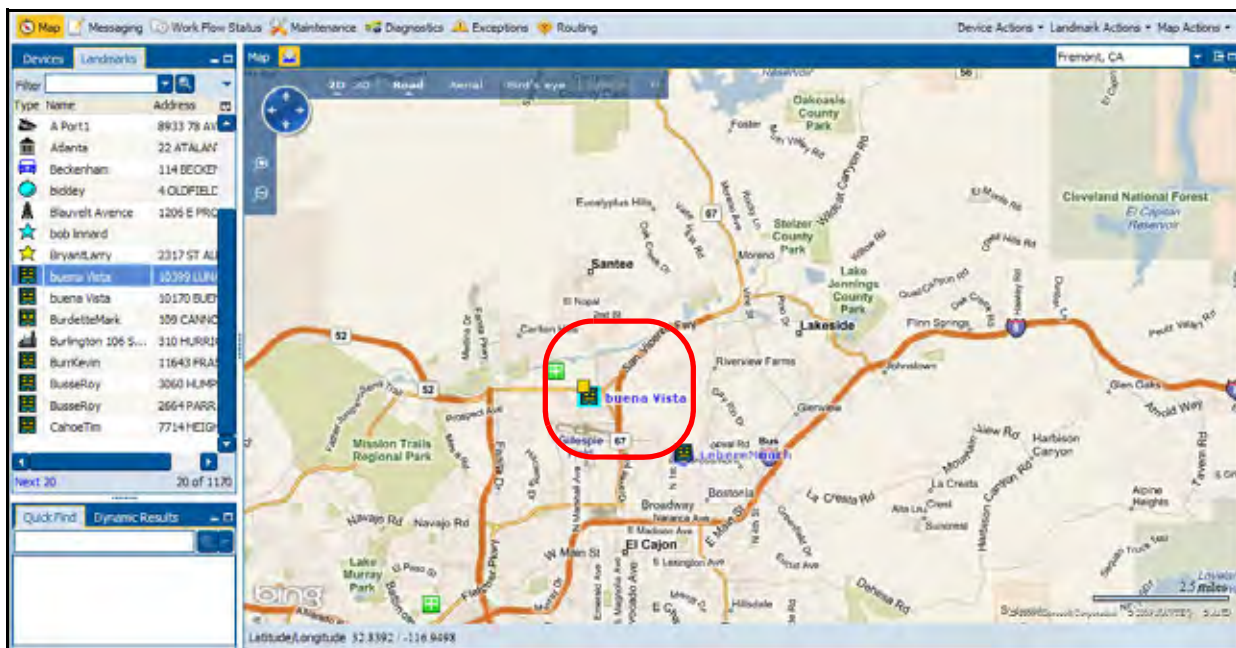


Figure 3-33: Current Mobile Device Location

**Note:**

Note: The red oval is for illustration purposes only. It does not appear in GeoManager.

You can shorten the list of landmarks by using the **Landmark Filter**, shown in Figure 3–30. The Landmark Filter allows you to enter certain landmark criteria and shorten the list from all your landmarks to just the ones you want to see in the map.



Figure 3–34: Landmark Filter

To filter your landmark list:

1. Enter the **Landmark Filter** information. Once you have entered the information, you can reselect the information from the drop-down menu.
2. Click the **Magnifying Glass**. The landmark box changes to show only the landmarks with the selected criteria.

Click the blue **Down Arrow** to see more landmark filtering options, shown in Figure 3–35.

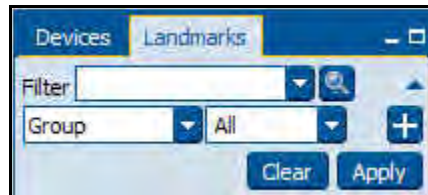


Figure 3–35: Landmark Filter Options Expanded

Click the **Plus sign** to expand additional filtering criteria.

Click **Clear** to erase all filtering criteria from the Landmark Filter field and see all the mobile devices in your fleet.

Click **Apply** to show only the landmarks with the selected criteria.

Click the blue **Up Arrow** to collapse the expanded landmark filter options view.

The expanded filter options allow you to filter landmarks by group, type, city and zip code information.

Device Actions

Above Map View there are three drop down menus, shown in Figure 3–3, that allow you to perform actions specific to Devices, Landmarks and Map View. The Device Actions drop down menu allows you to perform a number of different tasks pertaining to the management of your mobile devices.

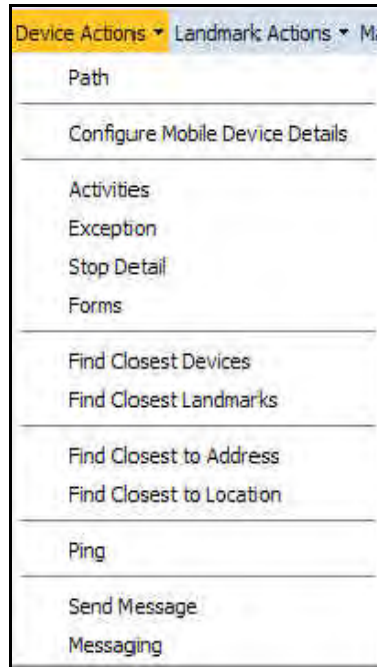


Figure 3–36: Device Actions Drop Down Menu

Path

GeoManager allows you to view the traveled path of any or multiple devices for a selected time frame.

To see a mobile device path:

1. From the **Devices List**, select the desired mobile device. You may select multiple mobile devices by holding down the Ctrl key.
2. Select **Path** from the **Device Actions** drop down menu, shown in Figure 3–36.
3. The **Device Path** options, shown in Figure 3–37, display. Perform the following:

The screenshot shows a dialog box titled "Device Path" with a close button (X). Below the title bar, it displays "Devices : FE098870". There are three input fields: "Date" with the value "9/17/09", "From" with the value "12:00 AM", and "To" with the value "11:59 PM". Each of these fields has a clock icon to its right. Below the input fields, there are two checkboxes: "Show Stop Sequence Only" (unchecked) and "Show Sequence Label" (checked). At the bottom of the dialog, there are two buttons: "Show" and "Clear".

Figure 3-37: Device Path Options

- a. Select the **Date** when you want to see the path the mobile device traveled.
- b. Click the **Clock** button to select the **From** time using the up and down arrows below the time units.
- c. Click the **Clock** button to select the **To** time using the up and down arrows below the time units.
- d. Select the **Device Path Options** you want shown:
 - Select the check box for **Show Stop Sequence Only** to show only stop sequences.
 - Select the check box for to **Show Sequence Labels** for the path.
4. Click **Show**. The map changes to show the path of the selected device. The device path options display information for each directional change as well as stop, shown in Figure 3-38.

When you mouse over a point in the device path additional information is displayed.

Click **Clear** to clear your previous selection.

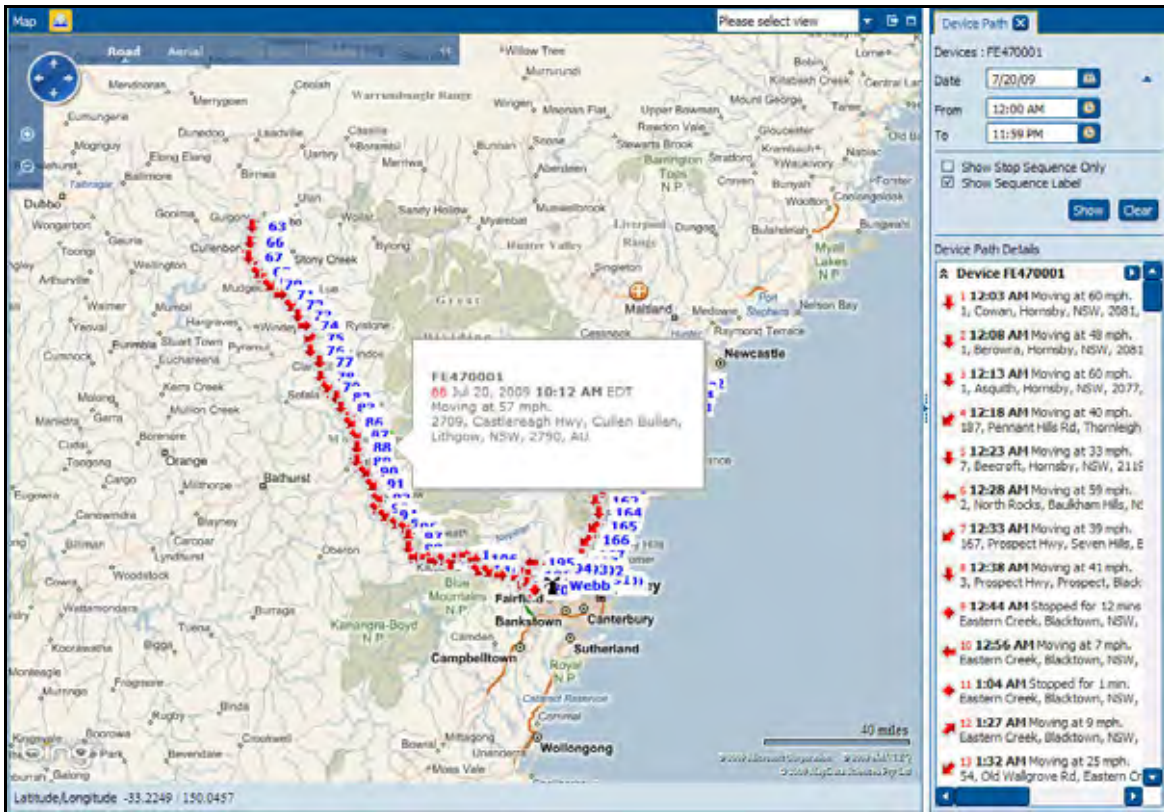


Figure 3-38: Mobile Device Path in Map View

If you selected **Show Stop Sequence Only**, just the stops made by the mobile device will appear on the map, shown in Figure 3-39.

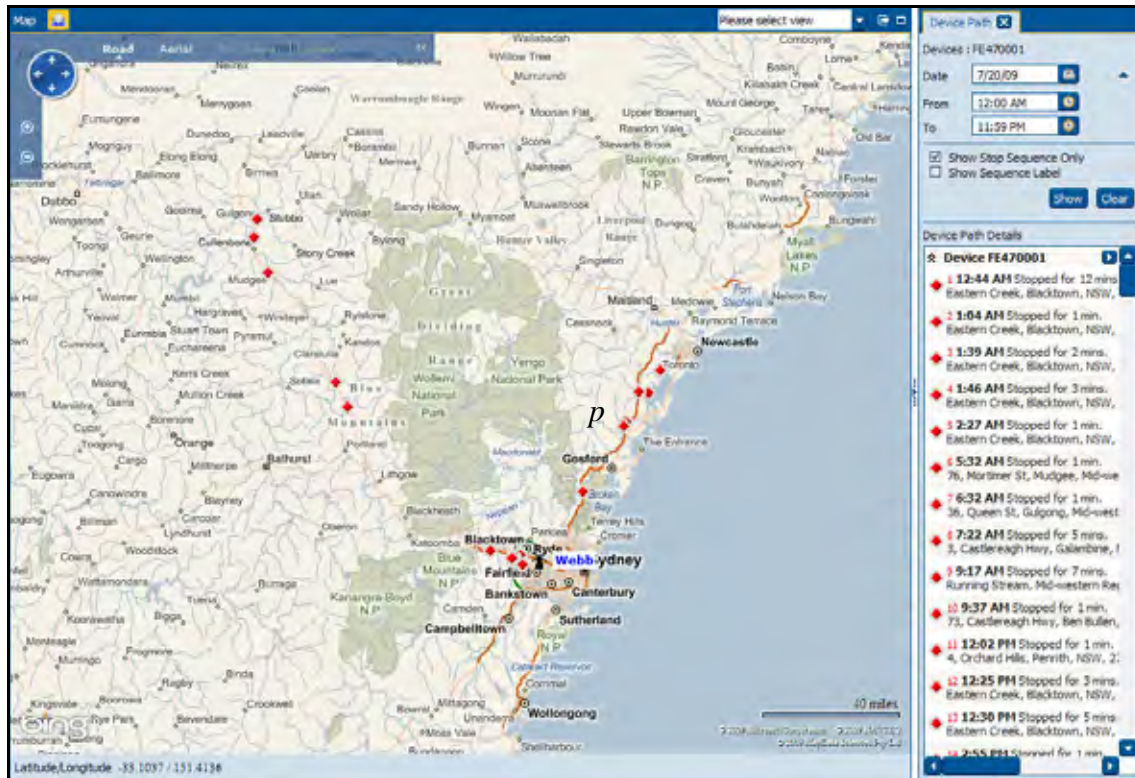


Figure 3–39: Mobile Device Path Showing Stops Only in Map View

Configure Mobile Device Details

Configure Mobile Device Details enables you to configure labels and color icons in map view for each mobile device or vehicle.

Select **Configure Mobile Device Details** from the **Device Actions** drop down menu, shown in Figure 3–36. The **Mobile Device Settings** screen shown in Figure 5–19 displays. For more information on configuring mobile device settings, please see “: Mobile Device Settings Screen” on page 125.

Activities

Selecting **Activities** from the **Device Actions** drop down menu displays the Activity Detail report for the selected device on the current date.

For more information about reports, see the *GeoManager Reports Overview Guide*.

Exception

Selecting **Exception** from the **Device Actions** drop down menu displays the Exception History report for the selected device. This displays up to ten exceptions triggered by the mobile device if any, up to 14 days from the current date.

For more information about exception reports, see the *GeoManager Reports Overview Guide*.

Find Closest Device

To see the closest mobile device to the selected mobile device:

1. From the **Devices List**, select the desired mobile device.
2. Select **Find Closest Devices** from the **Device Actions** drop down menu, shown in Figure 3–36. The closest mobile devices, within a 25-mile radius, display in the Dynamic Results list shown in Figure 3–40.

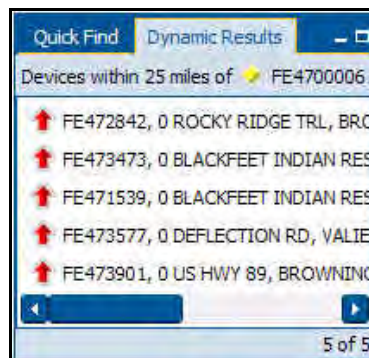


Figure 3–40: Closest Mobile Devices Dynamic Results

Find Closest Landmark

To see the closest mobile device to the selected mobile device:

1. From the **Devices List**, select the desired mobile device.
2. Select **Find Closest Landmarks** from the **Device Actions** drop down menu, shown in Figure 3–36. The closest Landmarks, within a 25-mile radius, display in the Dynamic Results list, shown in Figure 3–41.

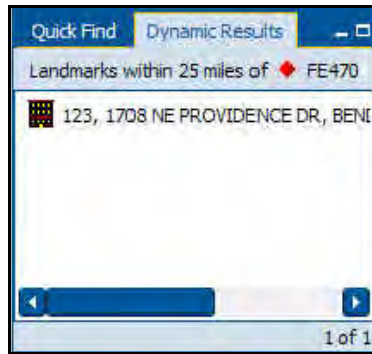


Figure 3-41: Closest Landmarks Dynamic Results

Find Closest (Device) to Address

To see the closest mobile devices to an address:

1. From the **Devices List**, select the desired mobile device.
2. Select **Find Closest to Address** from the **Device Actions** drop down menu, shown in Figure 3-36. The **Enter Address** dialog displays in the upper left corner of the map, shown in Figure 3-42.

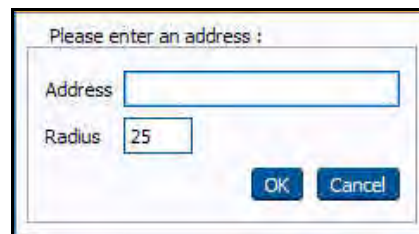


Figure 3-42: Enter Address Dialog

3. Enter the desired address in the **Address** field.
4. Enter the desired distance in the **Radius** field. The default distance is 25 miles.
5. Click **OK**. The closest mobile devices, within the specified distance radius, display in the Dynamic Results list shown in Figure 3-43.

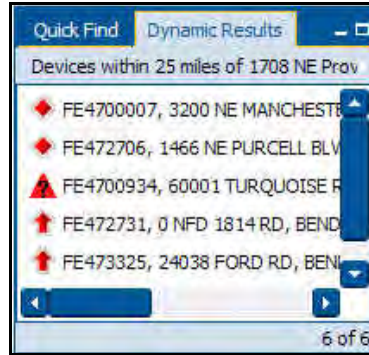


Figure 3–43: Closest Devices to Address Dynamic Results

Find Closest (Device) to Location

To see the closest mobile devices to an address:

1. From the **Devices List**, select the desired mobile device.
2. Select **Find Closest to Location** from the **Device Actions** drop down menu, shown in Figure 3–36. The **Enter Location** dialog displays in the upper left corner of the map, shown in Figure 3–44.

 A dialog box titled "Please enter a location :". It contains three input fields:

- "Latitude" with an empty text box.
- "Longitude" with an empty text box.
- "Radius" with a text box containing "25" and the word "miles" to its right.

 At the bottom of the dialog are two buttons: "OK" and "Cancel".

Figure 3–44: Enter Location Dialog

3. Enter the desired latitude coordinates in the **Latitude** field.
4. Enter the desired longitude coordinates in the **Longitude** field.
5. Enter the desired distance in the **Radius** field. The default distance is 25 miles.
6. Click **OK**. The closest mobile devices, within the specified distance radius, display in the Dynamic Results list shown in Figure 3–43.

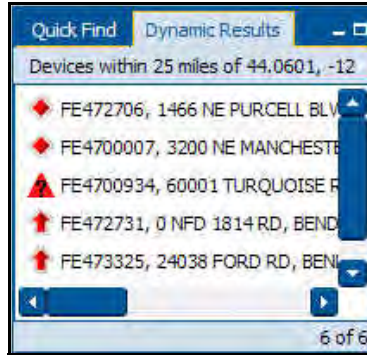


Figure 3–45: Closest Devices to Location Dynamic Results

Update

Update provides you a status update on the selected vehicle in between your automatic updates, which may be 15, 5 or 2 minute intervals.

To update your mobile device:

1. From the **Devices List**, select the desired mobile device.
2. Select **Update** from the **Device Actions** drop down menu, shown in Figure 3–36. GeoManager will send a message to the device to get the latest information on its status.

Send Message

Send Message is an optional GeoManager feature that allows you to easily communicate with drivers.

To send a message to your mobile device:

1. From the **Devices List**, select the desired mobile device.
2. Select **Send Message** from the **Device Actions** drop down menu, shown in Figure 3–36. The **Messages for Device** window opens in a separate window, shown in Figure 3–46.



Figure 3-46: Messages for Device

3. Select a canned message from the **Select a Pre-defined Message** drop down menu.
Enter a message in the **Type New Message** field.
4. Click **SEND**.
Click **Clear** to clear all fields.

For more detailed information on Messaging, please see **Messaging** on page 74.

Messaging

Messaging, an optional GeoManager feature, provides an easy-to-use communication tool.

For more detailed information on Messaging, please see **Messaging** on page 74.

Landmark Actions

Landmarks enable you to define and post special destinations and locations in the GeoManager Map View, then view them in relation to current mobile device locations. Landmarks are an excellent tool for administrators looking to streamline their mobile device routing process while reducing wasted time, fuel costs and other expenses. The Landmark Actions drop down menu allows you to perform a number of different tasks pertaining to the management of your Landmarks.

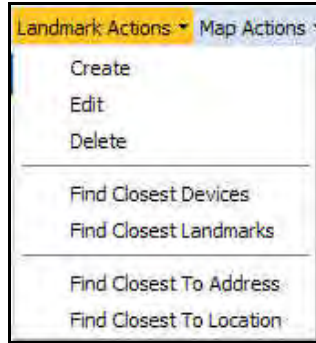


Figure 3–47: Landmark Actions Drop Down Menu

Create Landmark

You can create new Landmarks in three ways, by selecting **Create** from the Landmark Actions drop down menu, the Map View right-click menu or in the Landmark Administration section of GeoManager shown in “Landmark Administration” on page 183.

To create a Landmark from the Landmark Actions drop down menu:

1. Selected **Create** from the Landmark Actions drop down menu, shown in Figure 3–47. The Create Landmark options display to the right of the map for creating a new Landmark, shown in Figure 3–48.

Figure 3-48: Create Landmark Fields

2. Enter the new **Landmark Name**.
 3. Select the Landmark **Type** from the drop-down menu.
 4. Select the **Organization** from the drop-down menu. This list contains the groups you created in Organizational Hierarchy.
 5. There are three ways to place a Landmark on the map:
 - Enter the Latitude and Longitude
 - Select the location on the map
 - Enter the street address
- To enter the Latitude and Longitude:
- a. Enter the **Latitude** for the Landmark.

- b. Enter the **Longitude** for the Landmark.
- c. Click **Show on Map**. If the Landmark appears in the correct location on the map, continue with the Fence step.

To select the location from the map:

- a. Click **Select from Map**. When you move the mouse to the map, you will see that the cursor has changed to a cross hair.
- b. Click the place on the map where you want the Landmark. A temporary push-pin icon appears, as shown in Figure 3–49.



Figure 3–49: Landmark Push Pin Icon

- c. Verify that the location is correct. If it is, continue with the Fence step.
If not, click **Select from Map** again and relocate the Landmark.

To Enter a street address:

- a. Enter the Landmark **Street** address.
 - b. Enter the Landmark **City**.
 - c. Enter the Landmark **County**.
 - d. Enter the Landmark **State/Province**.
 - e. Enter the Landmark **Zip/Postal Code**.
 - f. Select the **Country** from the drop-down menu.
 - g. Click **Show on Map**. If the Landmark appears in the correct location on the map, continue with the Fence step.
If not, check the address information and correct any mistakes.
6. Select the **Fence** type from the drop-down menu. You may select Circle, Polygon or Rectangle.
 7. Enter the **Height**, if known.
 8. Enter the **Width**, if known.

9. Click **Draw on Map**. When you move the mouse to the Landmark location on the map, you will see that the cursor has changed to a cross hair which you can use to create colored circle, rectangle or line for creating a polygon shape, as shown in Figure 3–50. This will create the border around the Landmark.



Figure 3–50: Fence Types

To create a circle or rectangle shape:

- a. Click the spot where you want to start the fence border.
- b. Drag the mouse across the map to select the area for the border.
- c. Right click when you achieve the size you want.

To create a polygon shape:

- a. Click the spot where you want to start the radius.
- b. Move the mouse to draw a line to the next point.
- c. Click the mouse to add a corner.
- d. Repeat steps b and c until you achieve the desired area.
- e. Right click the mouse when finished.

10. Enter the **Start** date for the Landmark. You can also click the calendar and select a date.
11. Enter an optional **End** date for the Landmark. If you enter an end date, the Landmark disappears at midnight of the entered date.
12. Click **Save**. A confirmation dialog box, appears.

Click **Cancel** to erase the information without saving the Landmark.

13. Click **OK**. The Landmark list refreshes to show your current list of Landmarks including the one you just created.

Edit Landmarks

You can edit Landmarks in three ways, by selecting Edit from the Landmark Actions drop down menu, editing the Landmark in Map View or in the Landmark Administration section of GeoManager shown in “Editing a Landmark” on page 185.

To edit a Landmark using Landmark Actions:

1. From the **Landmarks List**, select the Landmark you wish to edit.
2. Select **Edit** from the **Landmark Actions** drop down menu, shown in Figure 3–47. The **Edit Landmark** options, shown in Figure 3–51, display.

The screenshot shows a web-based form for editing a landmark. The form is organized into several sections. The top section contains 'Name' (102), 'Type' (Building (Red)), and 'Organization' (newnode2). The middle section contains 'Latitude' (47.679417) and 'Longitude' (-122.168976) with 'Select from Map' and 'Show on Map' buttons. The address section includes 'Street' (12837 NE 85TH ST), 'City' (KIRKLAND), 'County' (empty), 'State' (WA), 'Zip Code' (98033-8009), and 'Country' (Select Country) with a 'Show on Map' button. The 'Fence Type' section has 'Fence Type' (Circle) and 'Radius' (500 feet) with a 'Draw on Map' button. The bottom section has 'Start' (9/15/09) and 'End' (empty) date pickers, and 'Save' and 'Cancel' buttons at the bottom right.

Figure 3–51: Edit Landmark Options

3. Change the necessary information.
4. Click **Save**.

Click **Cancel** to exit Edit Landmark without saving changes.

To edit a Landmark in Map View:

1. Find the Landmark you want to edit in the map view.
2. Hover your mouse over it until you see the little yellow square appear, shown in Figure 3–52.

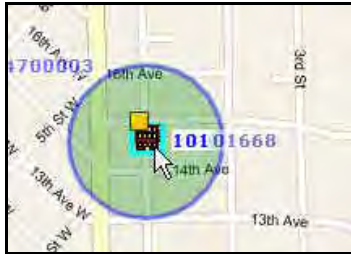


Figure 3–52: Open Landmark Dialog Box

3. Hover over the yellow square. A Landmark dialog box, shown in Figure 3–53, appears with information about the Landmark.



Figure 3–53: Landmark Dialog Box

4. Click **Edit**. The **Edit Landmark** options, shown in Figure 3–51, display.
5. Change the necessary information.
6. Click **Save**.

Click **Cancel** to exit Edit Landmark without saving changes.

Deleting Landmarks

You can delete unnecessary Landmarks in three ways, by selecting Delete from the Landmark Actions drop down menu, deleting the Landmark in Map View or in the Landmark Administration section of GeoManager shown in “Removing a Landmark Type” on page 196.

To delete a Landmark using Landmark Actions:

1. From the **Landmarks List**, select the Landmark you wish to delete.

2. Select **Delete** from the **Landmark Actions** drop down menu, shown in Figure 3–47. A confirmation dialog box appears, shown in Figure 3–54.
3. Click **OK** to delete the Landmark.

Click **Cancel** to close the confirmation dialog without deleting the Landmark.



Figure 3–54: Delete Landmark Confirmation Dialog Box

To delete a Landmark using Map View:

1. Find the Landmark you want to delete in the map view.
2. Hold your mouse over it until you see the little yellow square appear, shown in Figure 3–52.
3. Click the yellow square. A Landmark dialog box, shown in Figure 3–53, appears with information about the Landmark.
4. Click **Delete Landmark**. A confirmation dialog box appears, shown in Figure 3–54.
5. Click **OK** to delete the Landmark.

Click **Cancel** to close the confirmation dialog without deleting the Landmark.

Find Closest Device

To see the closest mobile device to the selected Landmark:

1. From the **Landmarks List**, select the desired Landmark.
2. Select **Find Closest Devices** from the **Landmark Actions** drop down menu, shown in Figure 3–47. The closest mobile devices, within a 25-mile radius, display in the Dynamic Results list shown in Figure 3–55.

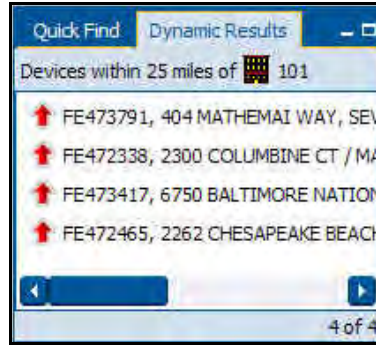


Figure 3–55: Closest Mobile Devices to Landmark Dynamic Results

Find Closest Landmark

To see the closest Landmark to the selected landmark:

1. From the **Landmarks List**, select the desired Landmark.
2. Select **Find Closest Landmarks** from the **Landmarks Actions** drop down menu, shown in Figure 3–47. The closest Landmarks, within a 25-mile radius, display in the Dynamic Results list, shown in Figure 3–56.



Figure 3–56: Closest Landmarks to Landmark Dynamic Results

Find Closest (Landmark) to Address

To see the closest Landmark to an address:

1. From the **Landmarks List**, select the desired Landmark.
2. Select **Find Closest to Address** from the **Landmark Actions** drop down menu, shown in Figure 3–47. The **Enter Address** dialog displays in the upper left corner of the map, shown in Figure 3–42.
3. Enter the desired address in the **Address** field.
4. Enter the desired distance in the **Radius** field. The default distance is 25 miles.

5. Click **OK**. The closest Landmark, within the specified distance radius, display in the Dynamic Results list shown in Figure 3–43.

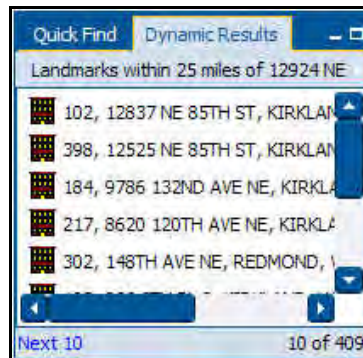


Figure 3–57: Closest Landmarks to Address Dynamic Results

Find Closest (Device) to Location

To see the closest Landmarks to an address:

1. From the **Landmarks List**, select the desired Landmark.
2. Select **Find Closest to Location** from the **Landmark Actions** drop down menu, shown in Figure 3–47. The **Enter Location** dialog displays in the upper left corner of the map, shown in Figure 3–44.
3. Enter the desired latitude coordinates in the **Latitude** field.
4. Enter the desired longitude coordinates in the **Longitude** field.
5. Enter the desired distance in the **Radius** field. The default distance is 25 miles.
6. Click **OK**. The closest Landmarks, within the specified distance radius, display in the Dynamic Results list shown in Figure 3–43.



Figure 3–58: Closest Devices to Location Dynamic Results

Map Actions

The Map Actions drop down menu allows you to perform a number of different tasks pertaining to the management of Map View.

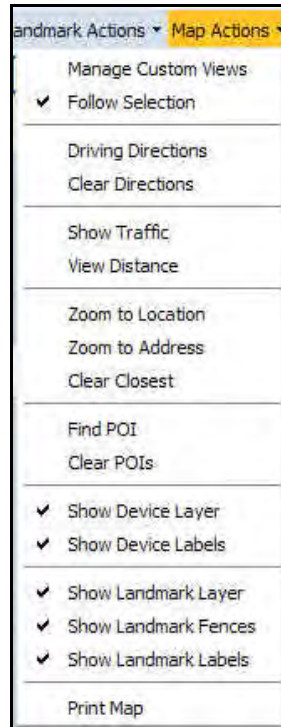


Figure 3–59: Map Actions Drop Down Menu

Manage Custom Views

The Map View allows you to customize specific views for different geographical areas of your business and select a default Map View which initially appears when you log into GeoManager.

To manage your current Map View(s) Select **Manage Custom Views** from the Map Actions drop down menu, shown in Figure 3–59. The Custom View List, shown in Figure 3–60, appears.

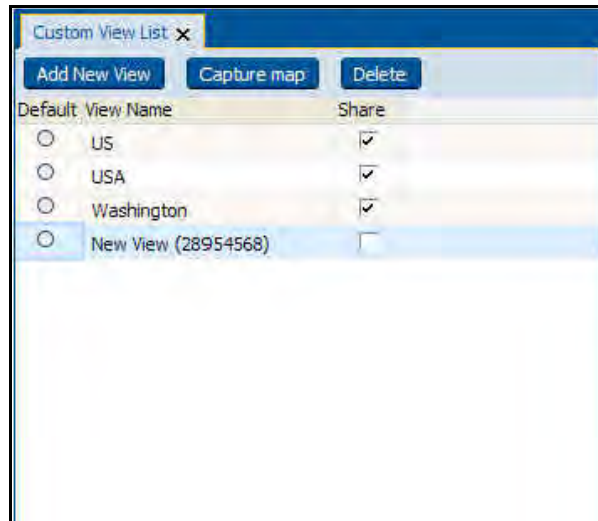


Figure 3–60: Custom Views List

Add a New Custom View

To add a new Custom View to your Custom Views drop-down list:

1. Locate the view you want to create as custom in your map. This may entail zooming in or out and shifting the map around.
2. Once you have the map situated the way you like, click the **Add New View** button at the top of the **Custom View List**.
3. A new, highlighted item appears at the end of the **Custom View List**. The new view has a default name of New View, shown in Figure 3–61.

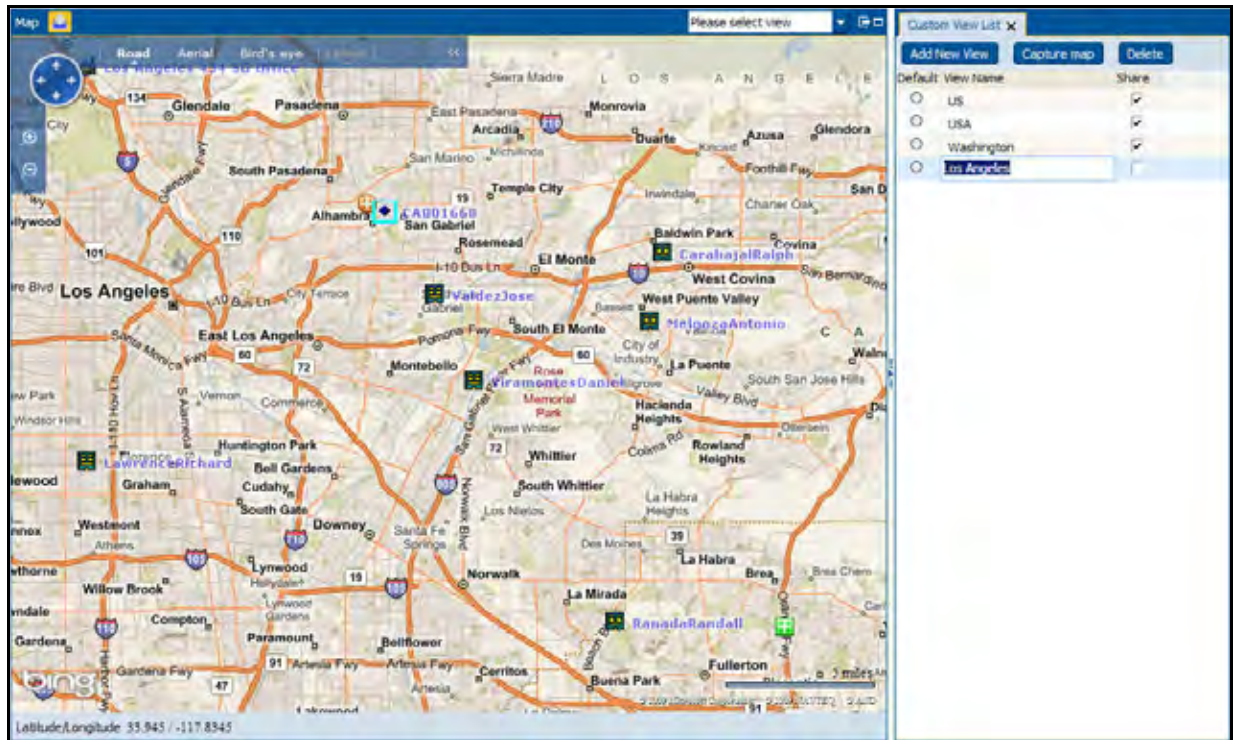


Figure 3–61: New Custom View

4. Enter the desired name for the new view.

Select the **Default** radio button next to the new view if you want to make it the default view for this account.

Click the **Share** check box next to the new view if you want to share this view with other users.

The map now shows the new view.



Note:

The number of custom views you can create is unlimited.

Delete a Custom View

To delete a Custom View:

1. Select the radio button next to the view you want to delete.
2. Click **Delete**. The Delete view dialog, shown in Figure 3–62, displays.



Figure 3–62: Delete View Dialog

3. Click **OK**

Click **Cancel** to exit without deleting the view.

Follow Selection

Selecting the **Follow Selection** feature from the Map Actions drop down, shown in Figure 3–59, menu allows you to continuously locate a mobile device or Landmark on the map. The Follow Selection feature will appear checked in the Map Actions drop down, the Follow Selection icon will appear yellow, shown in Figure 3–10 to indicate it is selected.

To no longer follow the selected item, uncheck **Follow Selection**.

Driving Directions

GeoManager allows you to enter start and end addresses to help drivers and field technicians get from job site to job site. You can also add stops in between the start sight and end sight, allowing you to relay or view all the stops your driver and field technicians need to make during the work day.

To view Driving Directions for a mobile device:

1. Select **Driving Directions** from the Map Actions drop down menu, shown in Figure 3–59. The **Driving Directions** options, shown in Figure 3–63, appears.

Figure 3–63: Enter Driving Directions

2. Enter the **Start** address. You may enter the street address, street name, city, state and zip code separated by commas. While you do not need to enter the entire address, you should enter as much as possible for accurate direction information.

If you do not enter a valid address, an error dialog box appears. Click **OK** and correct the address reverts to the previously entered address.



Figure 3–64: Incorrect Address Dialog Box

3. Click **Add a Stop** if you want to add a stop for your driver or field technician. You must click this button for each stop you want to add.



Note:

You cannot add stops after the addresses are mapped.

If you have added too many **Add a Stop** fields, you can close the unnecessary ones by clicking the red **X** next to the right side of the field, as shown in Figure 3–65.

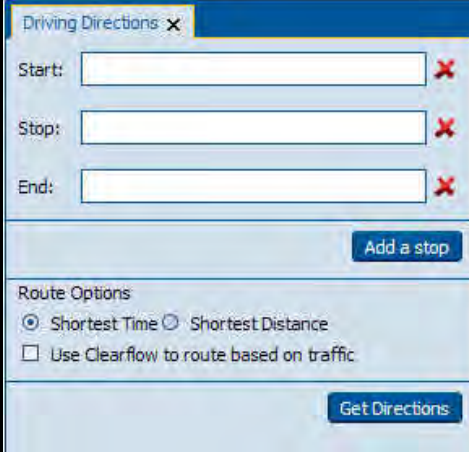
The image shows a 'Driving Directions' dialog box with a close button (X) in the top right corner. It contains three input fields labeled 'Start:', 'Stop:', and 'End:', each with a red 'X' icon to its right. Below these fields is a blue button labeled 'Add a stop'. Underneath is a section titled 'Route Options' containing three options: 'Shortest Time' (selected with a radio button), 'Shortest Distance' (unselected with a radio button), and 'Use Clearflow to route based on traffic' (unselected with a checkbox). At the bottom right of the dialog is a blue button labeled 'Get Directions'.

Figure 3–65: Close Stop Field

4. Enter the **End** address. You may enter the street address, street name, city, state and zip code separated by commas. While you do not need to enter the entire address, you should enter as much as possible for accurate direction information.
5. Select your **Route Option**:
 - Shortest Time
 - Shortest Distance
 - Place a check in the **Use Clearflow to route based on traffic** check box to avoid heavy traffic areas.
6. Click **Get Directions**. The map view changes, shown in Figure 3–66, to show the best route based on your criteria.

Figure 3-66: Driving Directions Map



Note:

While relaying or printing driving directions are good for a small fleet or occasional use, large fleets may require dispatching software.

You can edit any of the addresses you entered by:

1. Click the **Edit** link next to the address you want to change. A **Stop** field appears below the previously entered address.
2. Enter the new stop address. You may enter the street address, street name, city, state and zip code separated by commas. While you do not need to enter the entire address, you should enter as much as possible for accurate direction information.
3. Click the **Get Directions** link just below the Stop field.

The map view changes to show the new directions.



Note:

You can also access driving directions using the Map View right click menu. For more detailed information on viewing driving directions using the Map View right click menu, please see **Using Drive From Here and Drive To Here to View Driving Directions** on page 30.

Clear Directions

Selecting **Clear Directions** from the Map Actions drop down, shown in Figure 3–59, menu, clears the Driving Directions fields and resets Map View.

Show Traffic

Selecting **Show Traffic** from the Map Actions drop down, shown in Figure 3–59, menu, the map view roads change to show a color coded system of how heavy or light traffic may be on the highways, shown in Figure 3–67. A legend displays just beneath the Map View navigation tools indicating the color coding for the traffic flow. Black and red highways show areas of heavy traffic, yellow areas are slow traffic and green areas are light, free flowing traffic.

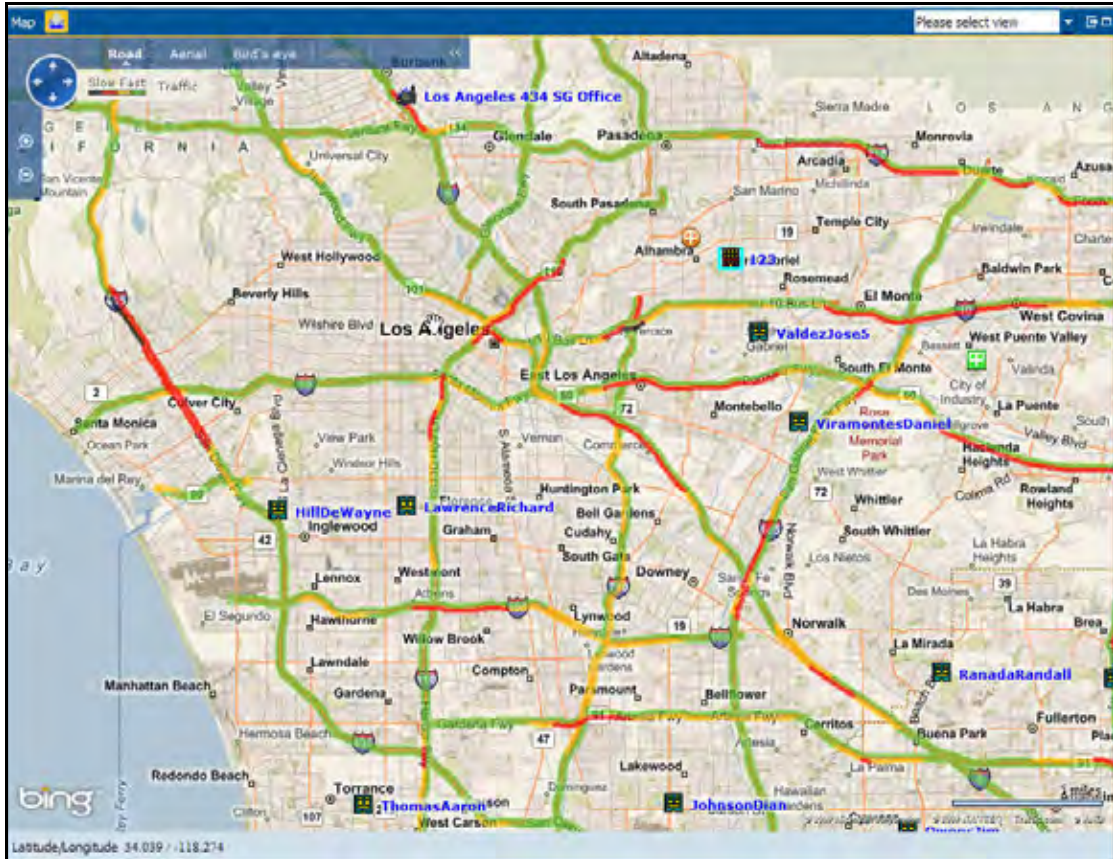


Figure 3-67: Show Traffic Map

View Distance

Selecting **View Distance** from the Map Actions drop down, shown in Figure 3-59, menu, allows you to measure the distance between two or more locations on the map, such as from a mobile device to a Landmark or from a mobile device to an address.

To view distance between two or more locations from the map:

1. From the Map Actions drop-down list, select **View Distance**.
2. Click the desired points on the map. Each click creates a point on the map, shown in Figure 3-68.
3. The map connects each point and displays the distance of each segment.
4. Right click the mouse to terminate the operation.
5. Hover the mouse over the red push pin icon to get the total distance of all segments.

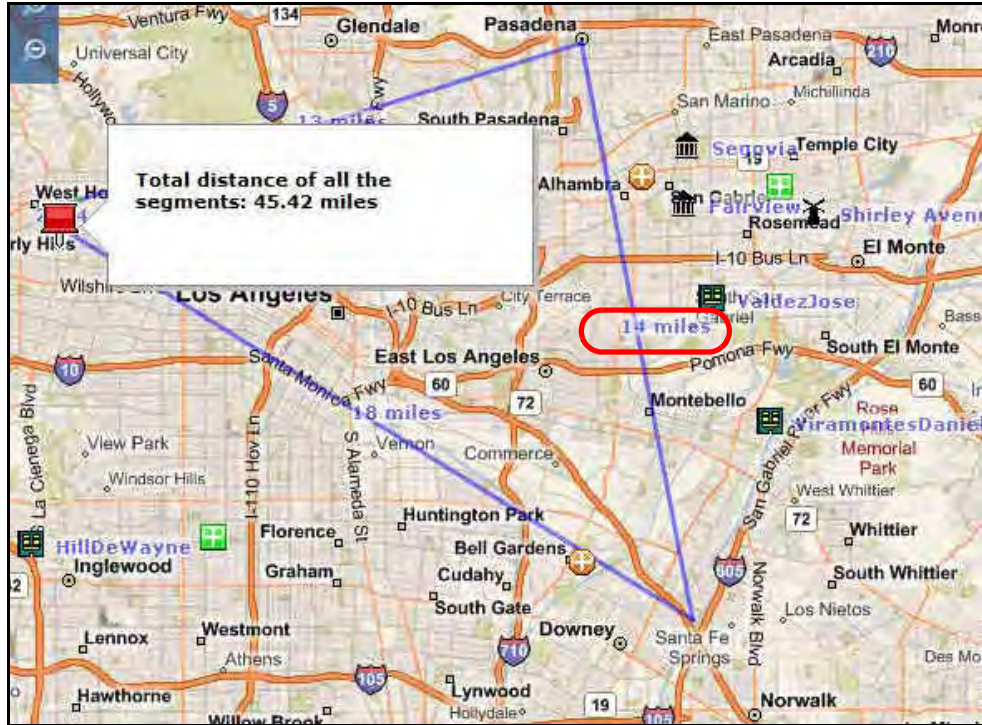


Figure 3-68: View Distance Map

6. Un-check **View Distance** from the **Map Actions** list to clear the distance segments from the map.

Zoom to Location

To zoom to a location on the map using latitude and longitude coordinates:

1. From the Map Actions drop down menu, shown in Figure 3-59, select **Zoom to Location**. The **Enter Location** dialog displays in the upper left corner of the map, shown in Figure 3-69.

The dialog box is titled "Please enter a location:". It contains two input fields: "Latitude" and "Longitude". Below the fields are two buttons: "OK" and "Cancel".

Figure 3-69: Enter Location Dialog Map Actions

2. Enter the desired latitude coordinates in the **Latitude** field.
3. Enter the desired longitude coordinates in the **Longitude** field.

4. Click **OK**. The map zooms in and displays a red push pin indicating the exact latitude and longitude coordinates entered, shown in Figure 3–70.

Click **Cancel** to exit without zooming to location.

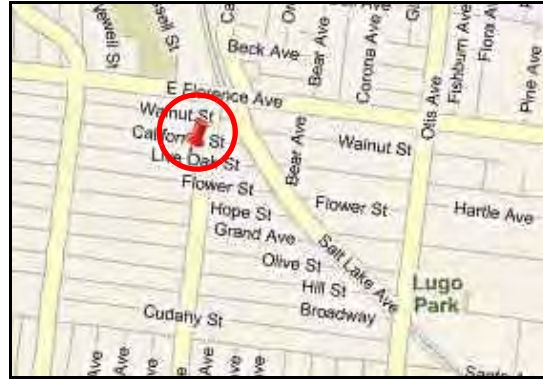


Figure 3–70: Enter Location Results Map Actions

Zoom to Address

To zoom to an address on the map:

1. From the Map Actions drop down menu, shown in Figure 3–59, select **Zoom to Address**. The **Enter Address** dialog displays in the upper left corner of the map, shown in Figure 3–71.



Figure 3–71: Enter Address Dialog Map Actions

2. Enter the desired address in the **Address** field.
3. Click **OK**. The map zooms in and displays a red push pin indicating the exact latitude and longitude coordinates entered, shown in Figure 3–72.

Click **Cancel** to exit without zooming to location.



Figure 3-72: Enter Address Results Map Actions

Clear Closest

Selecting **Clear Closest** from the Map Actions drop down, shown in Figure 3-59, menu, clears the line and distance measurements from Map View following the selection of either Closest Device or Closest Landmark from the Map View right click menu.

Find POI

Find POI allows you to search for points of interest in a specific area.

To find a point of interest:

1. From the Map Actions drop down menu, shown in Figure 3-59, select **Find POI**. The **Enter Point of Interest** dialog displays in the upper left corner of the map, shown in Figure 3-73.

Figure 3-73: Enter Point of Interest Dialog Map Actions

2. Enter the desired point of interest in the **What** field.
3. Enter the desired location in the **Where** field.

Click the **Clear Previous Results** check box to clear previous selections.

4. Click **OK**. The map zooms in and displays red push pin representing all relevant points of interest for the entered criteria, shown in Figure 3-74.

Hover your mouse over a red push pin to see more information about the point of interest.

Click **Cancel** to exit without zooming to the point(s) of interest.

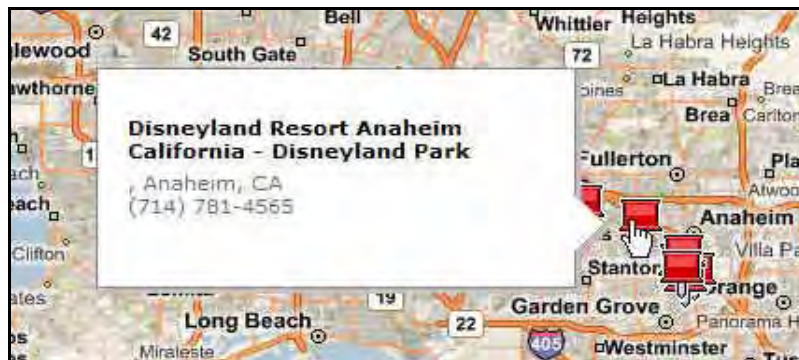


Figure 3-74: Point of Interest Results Map Actions

Clear POIs

Selecting **Clear POIs** from the Map Actions drop down, shown in Figure 3-59, menu, clears the point(s) of interest and resets Map View.

Show Device Layer

Selecting **Show Device Layer** from the Map Actions drop down, shown in Figure 3-59, shows mobile devices icons in Map View, shown in Figure 3-75.



Figure 3-75: Show Device Layer

Uncheck **Show Device Layer** to hide mobile device icons.

Show Device Labels

Selecting **Show Device Labels** from the Map Actions drop down, shown in Figure 3-59, menu, shows mobile devices labels in Map View, shown in Figure 3-76.



Figure 3-76: Show Device Label

Uncheck **Show Device Label** to hide mobile device labels.

Show Landmark Layer

Selecting **Show Landmark Layer** from the Map Actions drop down, shown in Figure 3-59, menu, shows Landmark icons in Map View, shown in Figure 3-77.

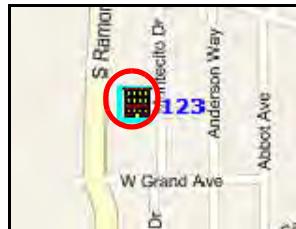


Figure 3-77: Show Landmark Layer

Uncheck **Show Landmark Layer** to hide Landmark icons.

Show Landmark Fences

Selecting **Show Landmark Fences** from the Map Actions drop down, shown in Figure 3-59, menu, shows Landmark fences in Map View, shown in Figure 3-78.

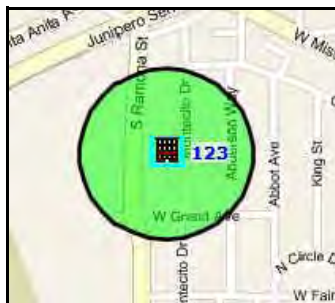


Figure 3-78: Show Landmark Fences

Uncheck **Show Landmark Fences** to hide Landmark fences.

Show Landmark Label

Selecting **Show Landmark Label** from the Map Actions drop down, shown in Figure 3–59, menu, shows Landmark label in Map View, shown in Figure 3–79.



Figure 3–79: Show Landmark Layer

Uncheck **Show Landmark Layer** to hide Landmark labels.

Print Map

You can print the current view Map Actions drop down, shown in Figure 3–59.

To print the current view:

1. Select **Print Map** from the Map Actions drop down. The Print dialogue box appears.
2. Select the correct printer and number of copies.
3. Click **Print**. An example of the printed MapView, shown in Figure 3–80.

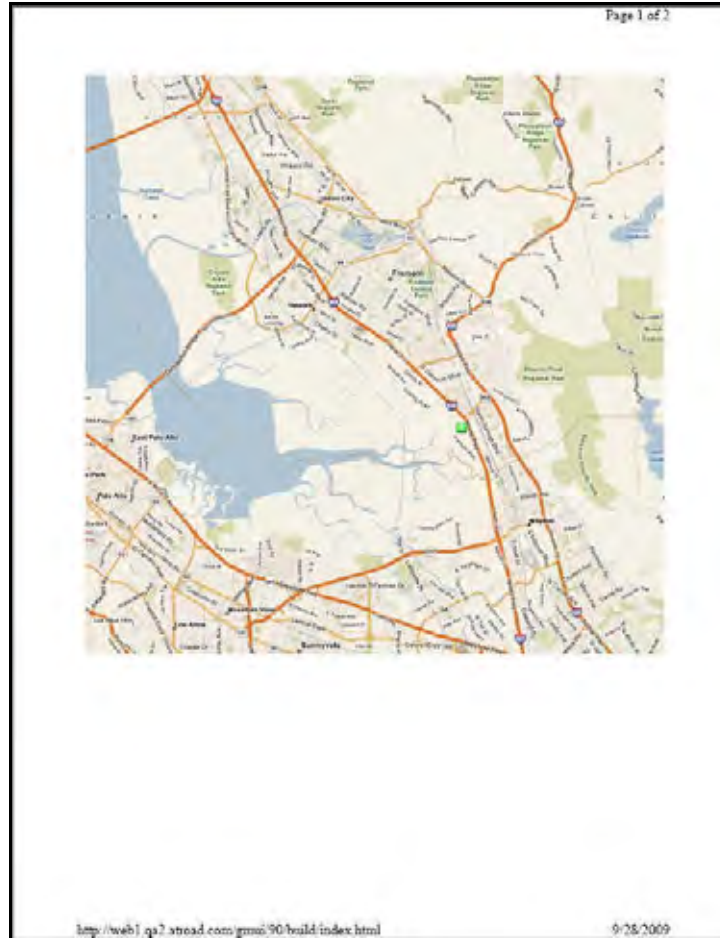


Figure 3–80: Print Map Sample

Messaging

Messaging, an optional GeoManager feature, provides an easy-to-use communication tool. With **Messaging**, administrators can streamline and manage current business processes. It enables the administrator to give instructions as and when required.

Sending a Message to Specific Device

To send a message to a specific device:

1. Select a device from the **Device** table, shown in Figure 3–28, or hover your mouse over the desired device to view the **Device Dialog** box, shown in Figure 3–4.
2. Select **Send Message** from the **Device Dialog** box, shown in Figure 3–4, or the **Device Actions** drop down menu, shown in Figure 3–36. The **Messages for Device** window opens in a separate window shown in Figure 3–81.

Figure 3–81: Send Message Dialog Box

3. Select a Pre-defined Message from the Select a Pre-defined Message drop down menu, or enter a new text message containing up to 480 characters.
4. Click Send to send the message.

Click **Clear** to clear the **Type New Message** field without sending.

Sending and Receiving Messages

Select **Messaging** from the **Device Actions** drop down menu, shown in Figure 3–36. The **Messaging** window opens in a separate window, shown in Figure 3–82. The mouse can be used to roll over the inbound/outbound messages and display the entire contents of a selected message or form.

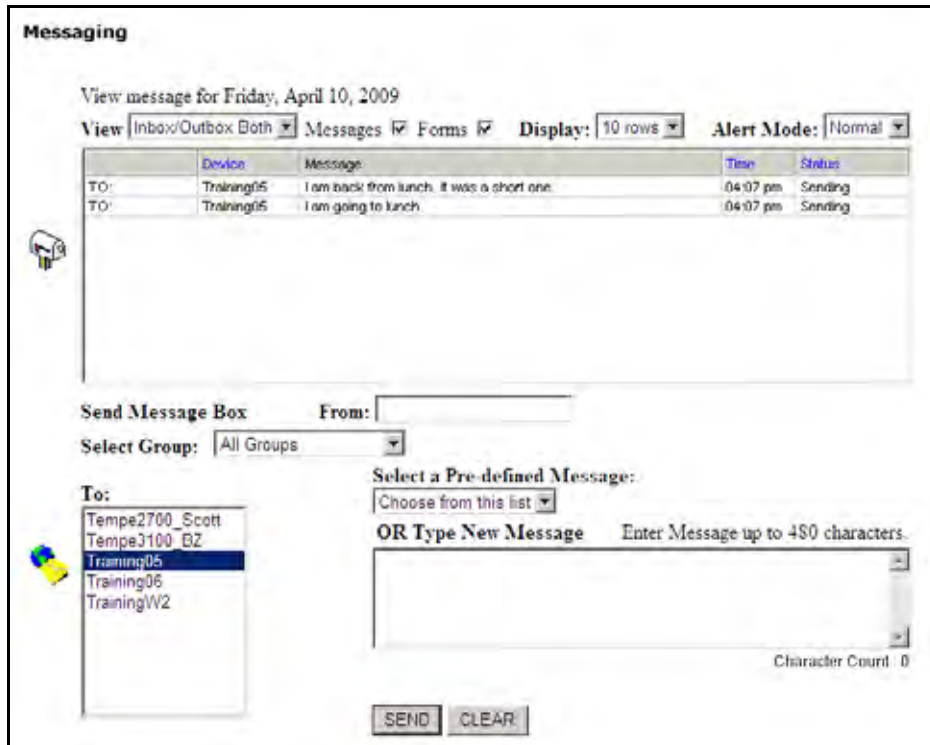


Figure 3-82: Messaging Screen

Field	Description
Inbox/Outbox	Use drop-down menu to view the Inbox , Outbox or both.
View Messages or Forms	Click check boxes to see either or both.
Organize	Click the links to sort messages by Device , Time or Status .
Alert Mode	Select from the drop-down menu, Normal , Away or No Alert .
To	Select a message recipient here or choose a group from Select Group . To select multiple recipients, press and hold the [Ctrl] key and click the recipients.
Select Predefined Message	Use the drop-down menu to choose a message.
Type New Message	Enter a new text message containing up to 480 characters.
From	Enter sender's name in this field.
Send	Click here to send a message.
Clear	Click here to clear the text box.

Messaging Alerts

Messaging Alerts notify you of new messages using audible sounds and/or pop-up window alerts. You may keep the Messaging window open and minimized while you work on other applications.

To use **Messaging Alerts**, you will need:

- Sound card and speakers for Audible Alerts
- Messaging window must be open, minimized or maximized

Setting up Messaging Alerts

You may use **Messaging Alerts** in one of three different modes: **Normal**, **Away** and **No Alert**. Each new message session begins in **Normal** mode.

- Select **Messaging** from the Device Actions drop down menu.
- Select the desired mode from the **Alert Mode** drop down menu.

Normal Alert Mode

Messaging Window Maximized

When the Messaging window is maximized, you will receive a single audible alert when receiving a new message.

Messaging Window Minimized

When the Messaging window is minimized, a pop-up window appears and an audible alert signals a new message. Click the **OK** button to acknowledge the new message and close the pop-up window.

Away Alert Mode

Messaging Window Maximized

When the Messaging window is maximized, a pop-up window appears and a continuous audible alert signals a new message.

- Click **OK** to acknowledge the new message and remain in **Away** mode.
- Click **OK and Switch to Normal Mode** to acknowledge the new message and switch to **Normal** mode.

After clicking either button, the pop-up window closes and the continuous audible sound stops.

Messaging Window Minimized

When the Messaging window is minimized, a pop-up window appears, a continuous audible alert sounds, and a New Message task bar item appears and blinks to signal a new message.

- Click **OK** to acknowledge the new message and remain in **Away** mode.
- Click **OK and Switch to Normal Mode** to acknowledge the new message and switch to **Normal** mode.



After clicking either button, the pop-up window and blinking task bar close, and the continuous audible sound stops.

No Alert Mode

All alert functions are disabled in **No Alert** mode.

Work Flow Status

Work Flow Status, an optional GeoManager feature, gives dispatchers and administrators instant visibility of mobile worker status. The **Work Flow Status** screen, shown in Figure 3–83, is an electronic replacement of the old-fashioned dispatcher’s bulletin board showing which workers are on-duty and available, on-duty and busy, off-duty, at lunch, out sick or any other status in an easy to read table format.

Work Flow Status					
DayStart	DayEnd	Lunch	Break	Lv Office	Customer
Triumph1	Cowin1				
ASparks	JNorris2				
MCastillo 	CBassett				
DiamondDoris					
DemoKit					
ATT CSAT					
MSmith1					
Miguel V 					
MGunzenhaeuser2					
LFox					
JBrooks					


 new mail

Figure 3–83: Work Flow Status Screen

Used with Messaging capabilities, a Work Flow Status is attached to a pre-defined message. When the driver sends a message that has an associated status, the **Work Flow Status** screen updates to reflect the new worker status.

For example, if a mobile worker has completed a job at a customer site, he sends a pre-defined message to the office (dispatch) that the work is complete. After the office (dispatch) receives the electronic message, the worker's status changes from **Working** to **Available**, informing dispatch that he's ready for the next assignment.

Clicking on the mobile device name opens a **Work Flow Status Messaging** screen, shown in Figure 3-84. Enter any message into the text field, then click send to deliver a message to any mobile device using Work Flow Status.

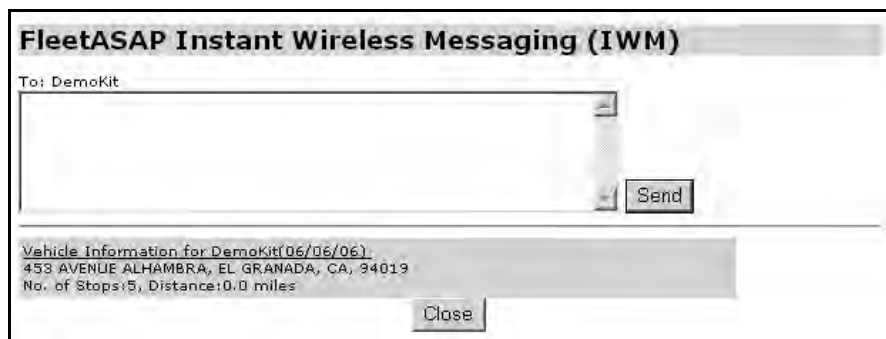


Figure 3-84: Work Flow Status Messaging Screen

Work Flow Status

DayStart	DayEnd	Lunch	Break	Lv Office	Customer
Triumph1	Cown1				
ASparks	JNorms2				
MCastillo	CBassett				
DiamondDoris					
DemoKit					
ATT CSAT					
MSmith1					
Miguel V					
MGuizenhauser2					
LFox					
JBrooks					

new mail

Figure 3-85: Work Flow Status

Maintenance

Trimble GeoManager helps you keep track of your vehicle's maintenance records, making it easier for you to keep your fleet performing at optimum efficiency.

The **Vehicle Maintenance Status Details** screen, shown in Figure 3–86, allows you to view the vehicle maintenance status details for a selected mobile device group.



Figure 3–86: Vehicle Maintenance Status Details Screen

You can retrieve the maintenance details for mobile devices classified under a specific group. You can distinguish the mobile device and its components that are due for maintenance by different color codes. A specific color code shown under each component states whether a vehicle requires no service, is due for service or is overdue for service. Check the **Show Comments** box to view comments.

When you mouse over any color coded dots, a message appears, as shown in Figure 3–87, showing the status details for each maintenance item.

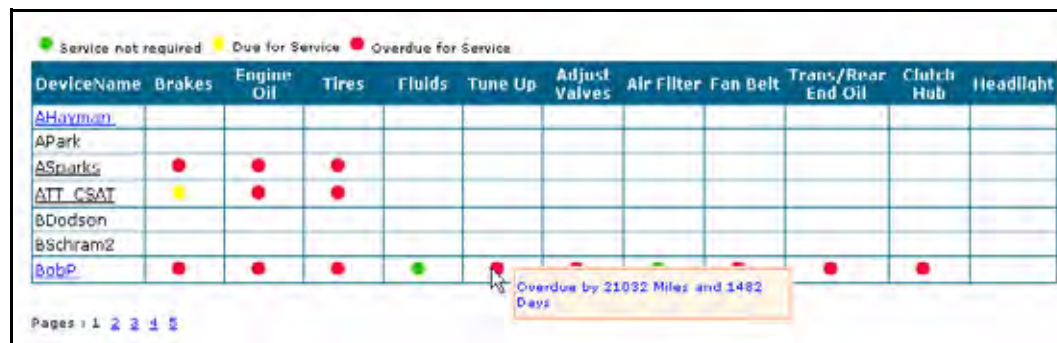


Figure 3–87: Vehicle Maintenance Status Details Mouse Over

To update any of the maintenance items:

1. In the **Vehicle Maintenance Status Details** screen, click the **Device Name** of the vehicle for which you want to update status. The **Update Maintenance Record for Vehicle** screen, shown in Figure 3–88, appears.

Update Maintenance Record for Vehicle: BobP

Add new Maintenance Record

Vehicle Service Performed At (Miles):

Vehicle Service Performed At (Date): (mm/dd/yyyy)

Maintenance Item	Last Serviced Mileage (Miles)	Last Serviced Date	Update Record
Brakes		11/16/2001	<input type="checkbox"/>
Engine Oil	51026	08/20/2002	<input type="checkbox"/>
Tires		11/16/2001	<input type="checkbox"/>
Fluids		11/16/2001	<input type="checkbox"/>
Tune Up		11/16/2001	<input type="checkbox"/>
Adjust Valves		11/16/2001	<input type="checkbox"/>
Air Filter		11/16/2001	<input type="checkbox"/>
Fan Belt		11/16/2001	<input type="checkbox"/>
Trans/Rear End Oil		11/16/2001	<input type="checkbox"/>
Clutch Hub		11/16/2001	<input type="checkbox"/>

Previous Comments: (Last updated by: none / none GMT)

Add New Comments:

characters left

Notes:

- Comments are not associated with a maintenance record but associated with a mobile device.
- A new entry will be appended to the existing "Comments".
- "Comments" field can store a maximum up to 2000 characters.
- Date and Username for Comments will be inserted by the Application
- Only Administrator can edit/delete Comments

Figure 3–88: Update Maintenance Record for Vehicle Screen

2. Select Add New Maintenance Record or Apply Changes to Existing Record from the drop-down list.
3. In the **Vehicle Service Performed At (Miles)** field, enter the mileage when the service was performed.
4. In the **Vehicle Service Performed At (Date)** field, enter the date when the service was performed.

5. In the **Update Record** column, select the check boxes of the maintenance items that were serviced.
6. Enter any **New Comments**. You can enter comments up to 2000 characters.
7. Click **Save**. The **Vehicle Maintenance Status Details** screen appears with the selected maintenance items updated by color code.

Click **Reset** to clear any unsaved information.

Click **Cancel** to return to the **Vehicle Maintenance Status Details** screen.

Vehicle Diagnostics

The Vehicle Diagnostics section provides you a summary of all the diagnostic faults for each vehicle for which they are set up.

Vehicle Diagnostics Summary

The **Diagnostics Summary**, shown in Figure 3–89, shows what fault codes have been triggered for each mobile device. To access Diagnostics:

1. Click the **Diagnostics** link. The **Vehicle Diagnostics Summary** screen, shown in Figure 3–89, appears.

Vehicle Diagnostics Summary

Last reported vehicle status for mobile device [D02_NVRAM_362](#) [Select Another Device](#)

Driver	Odometer	Date	Time	Location	Status
	55152.1	02/27/2008	01:44:11 PM (PST)	Customer: YARD 11284 COMMERCIAL PKWY, CASTROVILLE, CA 95012	Parked DD:3H:2M (Estimated)

Fault History:

Date Last Reported	Time Last Reported	Date First Reported	Time First Reported	Status	Date Link	ECU Address	ECU Description	Manufacturer	ID	Description	Total Count	Rolling Freeze Frame (RFF)
								Flash Code	FMI	FMI Description		
2/22/2008	8:46 AM (PST)	2/17/2008	5:04 PM (PST)	Active	31939	0	Engine #1	Cummins	620	5 Volts DC Supply	0	Available
2/22/2008	8:46 AM (PST)	2/17/2008	5:04 PM (PST)	Active	31567	128	Engine #1	Cummins	5232	3 Volts DC Supply	0	Available
2/19/2008	10:06 AM (PST)	2/19/2008	5:00 AM (PST)	Active	31939	0	Engine #1	Cummins	97	Water In Fuel Indicator	3	Available
2/19/2008	10:06 AM (PST)	2/19/2008	5:00 AM (PST)	Active	31567	128	Engine #1	Cummins	P97	Water In Fuel Indicator	3	Available

Figure 3-89: The Vehicle Diagnostics Summary Screen

Field	Description
Vehicle Diagnostics Summary	The summary of vehicle status for the selected vehicle.
Driver	The driver ID that who is assigned to the device.
Odometer	The odometer reading at the time the fault occurred.
Date	The date the report was requested.
Time	The time the report was requested.
Location	The location of the mobile device when the fault code was triggered. The link in this field opens a MapView window showing the location of the event, shown in Figure 3-89
Status	The status of the mobile device at the time of the report.
Date Last Reported	The most recent update reported for the fault code.
Time Last Reported	The time the fault code was last reported.
Date First Reported	The initial date the fault code was reported.
Time First Reported	The initial time the fault code was reported.
Status	The status of the vehicle at the time the fault was reported.

Field	Description
Data Link	The BUS type installed in the vehicle.
Ecu Address	The address of the electronic controlling unit.
Ecu Description	The description of the electronic controlling unit.
Manufacturer	The manufacturer of the part reporting the fault.
Flash Code	The firmware version # in the ECU.
ID	The source id of the reported fault (e.g. Engine)
FMI	The failure mode indicator code.
Description	The description of the fault code.
FMI Description	The description of the failure mode indicator code.
Total Count	The total number of times the fault occurred.
Rolling Freeze Frame	A link that opens a detailed account of the event in a new window showing the 30 seconds prior to the event, the actual event and the 10 seconds following the event, as shown in Figure 3–91.

- Click the **Select Another Device** link to view summaries for other mobile devices. The **Select Mobile Device** screen, shown in Figure 3–90, appears.

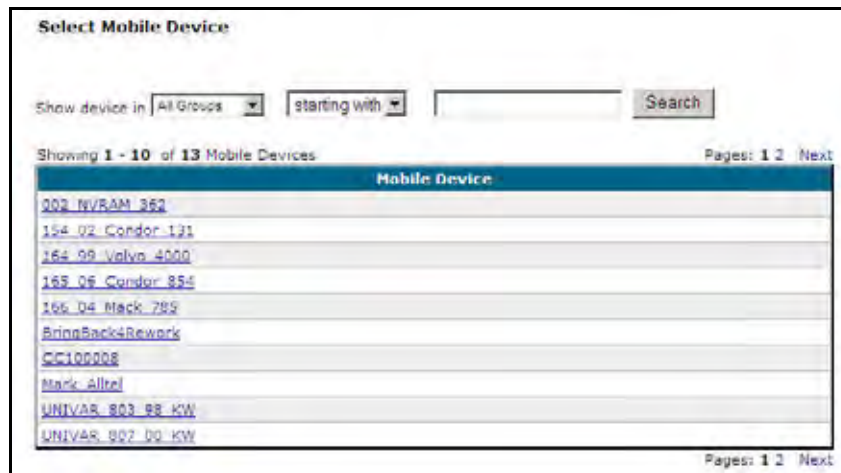


Figure 3–90: Select Mobile Device

- Click on the mobile device for which you want to display a summary. If the mobile devices are not shown, you can find them by:
 - Select the group name from the **Show devices in** drop-down menu.
 - Select **Starting With**, **Ending With** or **Containing** from the drop-down menu.
 - Enter the known criteria in the text box.

Fault Code Detail (Freeze Frame)

If you click the link under Rolling Freeze Frame in the online Fault History report, a detailed account of the 30 seconds before the fault code was triggered and the following 10 seconds after the event displays. This can help determine the behavior that led to the event.

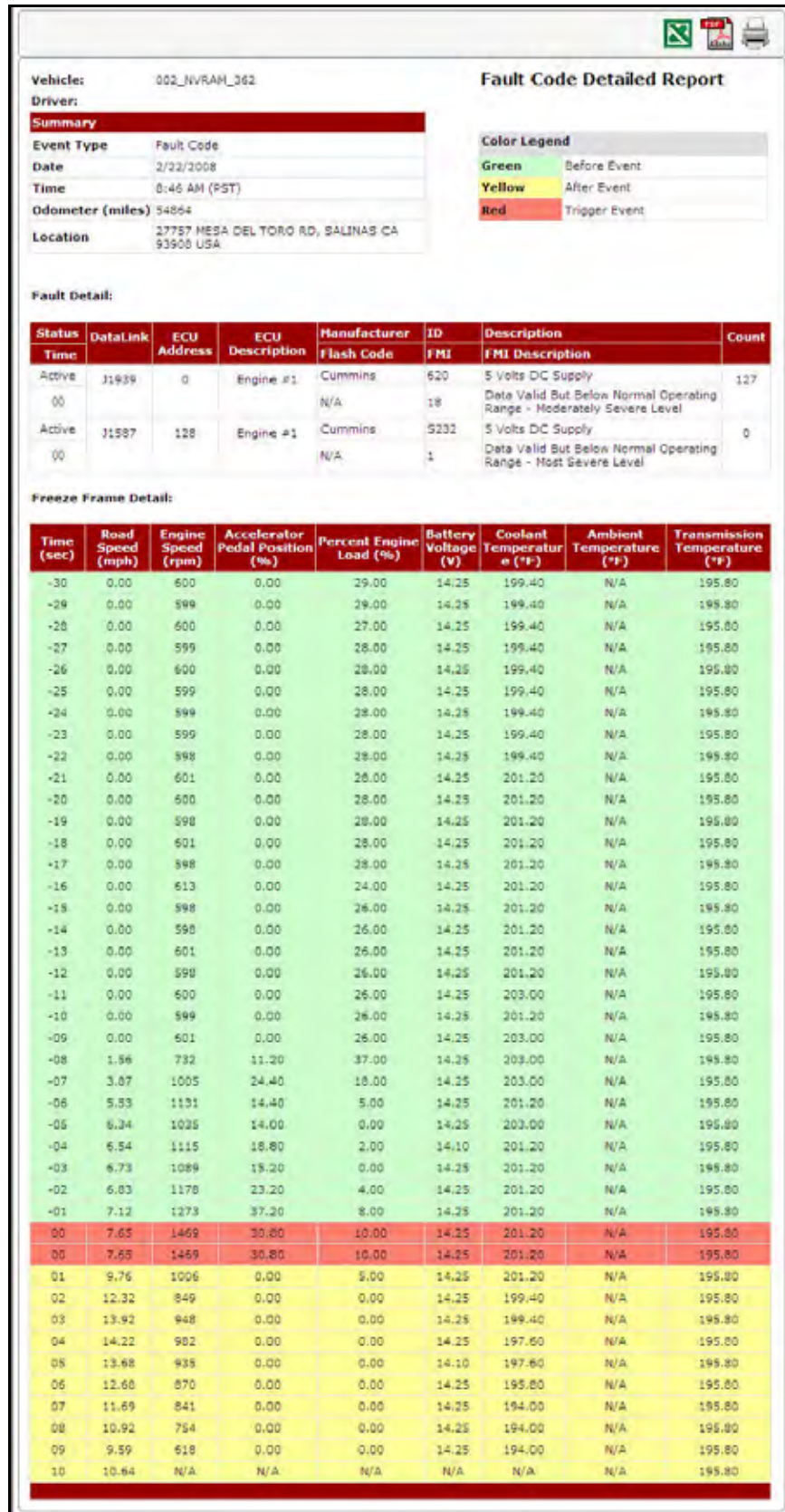


Figure 3-91: The Fault Code Location Detailed Report (Freeze Frame)

Field	Description
Vehicle	The name of the mobile device.
Driver	The employee assigned to drive the mobile device.
Summary	
Event Type	The type of Fault Code event. For this report it will always be hard brake.
Date	The date the event occurred.
Time	The time the event occurred.
Odometer	The odometer reading when the event occurred.
Location	The location of the mobile device when the event occurred.
Fault Detail	
Status / Time	<p>Status</p> <ul style="list-style-type: none"> • The current status of the fault code or (DTC). This column has one of the following values: • J1708 or J1939 (CAN) - Active or Inactive • PBDII - Stored or Pending <p>Time</p> <ul style="list-style-type: none"> • The time the event occurred.
Datalink	<p>The type of data link to the vehicle. This column has one of the following values:</p> <ul style="list-style-type: none"> • J1708 • J1939 (CAN) • OBDII
ECU Address	<ul style="list-style-type: none"> • The numeric identifier of the ECU module reporting the fault or DTC • MID for 1587, source address for 1939 • Module address for OBDII
ECU Description	<ul style="list-style-type: none"> • The SAE defined definition of the source address. MID 128 = Engine #1, Source Address 003 = Transmission #1 • For OBDII the column value will be Powertrain, Chassis or Network

Field	Description
Manufacturer / Flash Code	<p>Manufacturer</p> <ul style="list-style-type: none"> For J1587 or J1939, the name of the company that produced the ECU reporting the fault code. For OBDII, if the code is generic or manufacturer specific Flash Code For J1587 or J1939, the OEM manufacturer's flash code. Derived from the PID/SID/SPN and FMI combination For OBDII, column is not needed.
ID FMI	<p>ID</p> <ul style="list-style-type: none"> For J1587 or J1939, the numeric PID/SID or SPN defined by SAE. For OBDII, the 4 character DTC. Example: P0101 <p>FMI</p> <ul style="list-style-type: none"> The failure mode indicator code.
Description FMI Description	<p>Description</p> <ul style="list-style-type: none"> For J1587 or J1939, the SAE defined text description of the ID field For OBDII, the description of the DTC <p>FMI Description</p> <ul style="list-style-type: none"> For J1587 or J1939, the SAE defined text description of the FMI field For OBDII, not needed
Count	<ul style="list-style-type: none"> For J1587 or J1939 the number of times the ECU has detected the fault description For OBDII, not needed Not all ECU's report this value
ID	The source id of the reported fault (e.g. Engine)
FMI	The failure mode indicator code.
Description	The description of the fault code.
FMI Description	The description of the failure mode indicator code.
Freeze Frame Detail	
Time (sec)	The number of seconds before, during and after the event occurred. This shows 30 seconds before, the second of and 10 seconds after the event occurs.
Road Speed (mph)	The miles per hour the mobile device was traveling during the event and the 30 seconds before and 10 seconds after it occurred.

Field	Description
Engine Speed	The RPM of the mobile device's engine during the event and the 30 seconds before and 10 seconds after it occurred.
Accelerator Pedal Position (%)	The position of the accelerator pedal before, during and after the event occurred. This shows 30 seconds before, the second of and 10 seconds after the event occurs.
Percent Engine Load (%)	The engine load before, during and after the event occurred. This shows 30 seconds before, the second of and 10 seconds after the event occurs.
Battery Voltage (V)	The battery voltage before, during and after the event occurred. This shows 30 seconds before, the second of and 10 seconds after the event occurs.
Coolant Temperature (°F)	The coolant temperature before, during and after the event occurred. This shows 30 seconds before, the second of and 10 seconds after the event occurs.
Ambient Temperature (°F)	The outside temperature before, during and after the event occurred. This shows 30 seconds before, the second of and 10 seconds after the event occurs.
Transmission Temperature (°F)	The temperature of the transmission fluid before, during and after the event occurred. This shows 30 seconds before, the second of and 10 seconds after the event occurs.

Exceptions

The Exceptions Notification Console is a GeoManager browser-based tool that allows you to easily view, sort and manage Exception alerts online. This provides a timely way to learn about Exceptions created by your mobile workers if real-time notifications are not available or enabled for an Exception.

Online Console Notifications are delivered real-time or next day based on how the Exception was configured. Real-time Exception Notifications are immediately sent to the console, if console delivery was selected. Standard Exception Notifications are sent to the Console the following day. If Organizational Hierarchy or Group is enabled, only the devices you manage will be visible, making management of your fleet easier.

To view the Exception Notification Console:

1. Log into GeoManager. For more information about logging in, see the beginning of “Getting Started” on page 2.
2. Click **Exception** link. The **Exception Notification Console**, shown in Figure 3–92, appears in the right part of the screen.

Clicking the **Alerts** link will also launch the Exception Notification Console.

The screenshot shows a web application window titled "Exceptions". It contains a table with the following data:

Row	Date	Mobile Device	Exception Type	Exception Name	Exception Value
1	January 29, 2009 1:59:59 AM PST	FE032917	Stop Count	TC2_BAT_stpcnt	0 stop(s)
2	January 28, 2009 11:59:59 PM PST	NAYAN	Stop Count	Stop Count Testing	0 stop(s)
3	January 28, 2009 11:59:59 PM PST	NAYAN	Stop Count	TC2_BAT_stpcnt	0 stop(s)
4	January 29, 2009 11:59:59 PM PST	FE055192	Stop Count	Stop Count Testing	0 stop(s)
5	January 28, 2009 11:59:59 PM PST	FE094361	Stop Count	Stop Count Testing	0 stop(s)
6	January 28, 2009 11:59:59 PM PST	FE034048	Stop Count	Stop Count Testing	0 stop(s)

Below the table is a section titled "Exception Details" with the text: "Please click any row from above to view details". To the right of this text is a small calendar widget showing the date "Thu Apr 11 16:47:58 PDT".

Figure 3-92: Exceptions Console

Field	Description
Row	Delineates the order Exceptions were received, with the most recent appearing in row 1.
Date	Date and time the Exception occurred.
Mobile Device	The name of the mobile device that incurred the Exception.
Exception Type	General Exception type.
Exception Name	Specific Exception based upon custom parameters.
Exception Value	Details that indicate why Exception was triggered.

You can sort Exceptions shown in the **Exceptions Notification Console** by any of the column headers. To sort data, click on the column heading you want as your sort filter.

You may rearrange the order in which Exception data columns appear on screen. To change the order of your columns, click on the column header you want to move and drag it to the spot on the table in which you would like it to appear.

Message Types are color coded to make identification of like Exceptions easy to find and read.

If you set up real-time alerts, you can elect to receive an audible alert each time a new notification is sent to the Notification Console. To enable or disable this option, click the alert icon. When it is disabled, the icon will appear with a red slash across it.

For additional details on any of the alerts:

1. Scroll to the alert you want to select.
2. Click the alert anywhere on the row.

Details appear in the **Exception Details** area at the bottom of the Exception Notification Console.

The Notification Console highlights your selection and additionally shows the **Criteria** that had to be met to generate the Exception as well as the **Location** of the mobile device when the Exception occurred.

To generate a printable version of this information, press the print icon in the upper right-hand corner of the screen. The system will display the same information in a text format that can be easily printed.

You can print two ways:

- By clicking the **Print** link in the **Details** column of the **Exception Summary** screen. This will print the details for that specific Exception.
- By clicking the **Print Summary** button in the top right corner. This opens the typical **Print** dialogue box. Click **Print** to print the Exception Summary. Click **Cancel** to close the dialogue without printing.

4 Reports

GeoManager reports are designed to help you improve productivity by providing information on the historical activity of your organization's mobile devices.

This feature allows you to generate reports based upon a set of parameters you define. Reports can be emailed to specified personnel on a scheduled basis (i.e., daily, weekly, monthly, etc.) Reports can also be delivered to a custom-created FTP site address hosted by Trimble MRM with private access for just your company so you can download them at your convenience.

If you use Organizational Hierarchy, you can create roll-up reports that give you specific information about each tier of your business, from the branch level up to the corporate level.

In order to set-up or edit GeoManager scheduled reports, you will need GeoManager administration access. For complete information on scheduling reports, see the *Reports Overview Guide*.

The standard GeoManager **On-Demand Reports** screen, shown in Figure 4-1, has two tabbed areas for different types of reports:

- Standard Reports
- Exception Reports

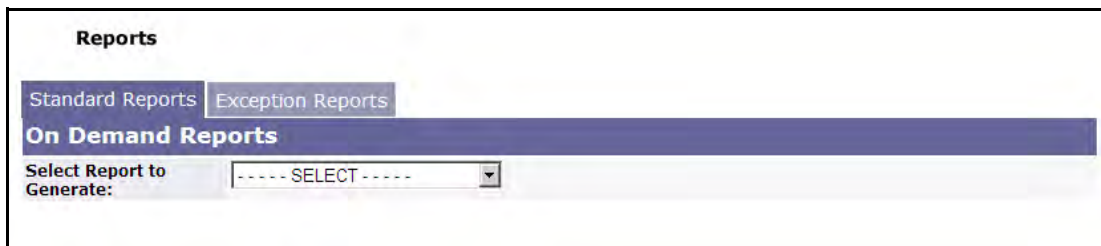


Figure 4-1: On-Demand Reports Screen

The screen defaults to the Standard Reports available in your GeoManager account. The list and types of reports will vary if you have any GeoManager value-added packages. For a complete list of reports available in GeoManager, including their benefits and availability, see the **Trimble MRM Reports Overview**.

If you subscribe to Driver Logs, you will also see a tab for Driver Logs Reports, as shown in Figure 4-2.

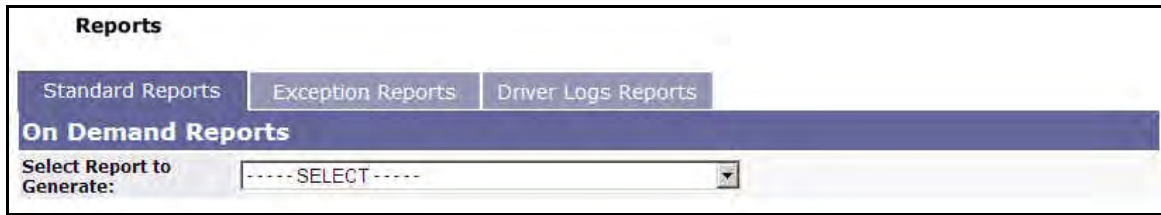


Figure 4-2: On-Demand Reports Tabs with Driver Logs Reports



Note:

If you do not subscribe to Driver Logs, you will not see the Driver Logs Reports tab.

Report Options

View the reports online using any supported browser or download the information to your desktop.

You may create downloadable reports using any of the following formats:

- **Comma Delimited** – Creates a file with report data separated by commas
- **Tab Delimited** – Creates a file with report data separated by tabs
- **Excel Version** – Creates a file with the report information in Microsoft® Excel format

These formats are suitable for importing to or exporting from any standard spreadsheet or database.



Note:

The Excel version is compatible to Microsoft Excel 97 or later.

Generating Standard Reports

Before using GeoManager Reports, you must log into the GeoManager web site.

To create a standard report, complete the following procedure:

1. Click the **Reports** tab at the top of GeoManager. The **Reports** screen, shown in Figure 4-2, appears.

The GeoManager **Reports** screen has two tabbed areas for different types of reports:

- Standard Reports
 - Exception Reports
2. Click the tab for the type of report you want.
 3. Select the **name** of the report from the drop-down menu as shown in Figure 4-3; **Activity-Detail**, for example.

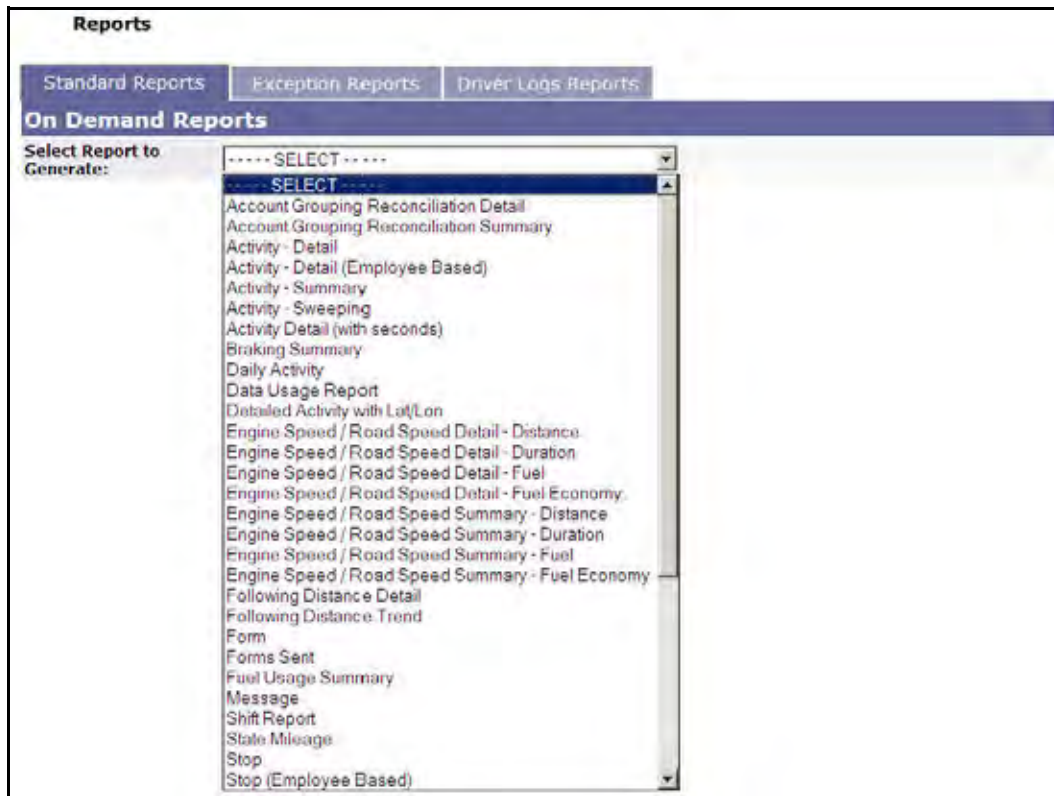


Figure 4-3: Standard Reports Tab

The input fields, shown in Figure 4-4, appear.

Figure 4-4: Activity – Detail Input Fields

Field	Description
Select Report to Generate	This is filled in from the previous screen and shows Consolidated Exception report.
Mobile Device(s) / Group(s)	Combination of radio buttons, drop-menu and text box for organization of mobile devices available for reporting. One radio button must be selected. One or more mobile devices or groups listed must be selected.
Search	Text box and button that help users to shorten the mobile device or group list. Search criteria can be any alpha-numeric character contained within the mobile device or group name.
Time Period	The length of time you want the report to contain. An online report can contain one month or less of data. If you want to generate a report containing more than one month of data, then you must use the Scheduled Reports Tool. For more information about Scheduled Reports, see Section 5.

Field	Description
Report Format	Shows you the available formats for the Exception Reports. Currently: Online Downloadable Format (Tab delimited) Downloadable Format (Comma delimited) Downloadable Format (Excel version)
Check Box	Select if you want to include the header in Comma and Tab delimited downloadable reports.

4. Select the Mobile Device(s) / Group(s) you want included on the report:
 - a. Select the radio button for mobile devices, Groups or mobile devices from Group.
If you select **mobile devices from Group**, select the Group from the drop-menu.
 - b. Select the mobile devices for the report from the text box. Hold down [Ctrl] key to select more than one mobile device or group.

You can also search for the desired mobile device by entering the name or part of the name for the device and clicking **Search**. The mobile device list updates with any mobile devices matching the search criteria, making it easier to find the correct device.

5. Select the **Time Period** from the **From** and **To Day, Month, Year, Hour** and **Min** drop-menus.
6. Select the **Report Format** from the drop-menu.
If you choose to download the Exception Assignment Report select the check box to **Include header in Comma and Tab Delimited downloadable reports** if you want headers included in the report.
7. Click **Generate Report**. The **Activity – Detail** report, shown in Figure 4–5, appears.

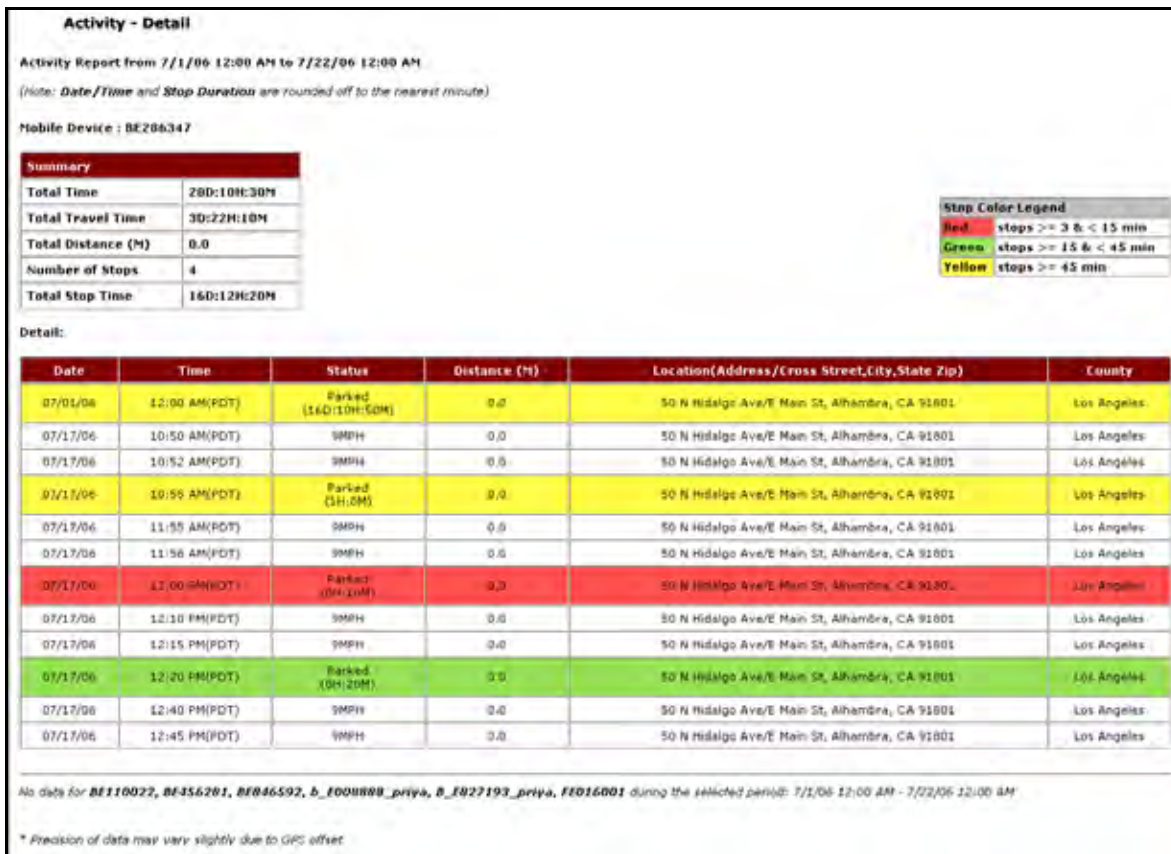


Figure 4-5: Activity - Detail Report

Please email mrmsupport@trimble.com or call toll-free 1-877-728-7623 for more assistance.

You may generate the following standard reports:

- Account Grouping Reconciliation Detail
- Account Grouping Reconciliation Summary
- Activity – Detail
- Activity – Detail (Employee Based)
- Activity – Summary
- Activity – Sweeping
- Activity – Detail (with seconds)
- Braking Summary
- Daily Activity
- Data Usage Report
- Detailed Activity with Lat/Lon
- Engine Speed / Road Speed Detail – Distance

- Engine Speed / Road Speed Detail – Duration
- Engine Speed / Road Speed Detail – Fuel
- Engine Speed / Road Speed Detail – Fuel Economy
- Engine Speed / Road Speed Summary – Distance
- Engine Speed / Road Speed Summary – Duration
- Engine Speed / Road Speed Summary – Fuel
- Engine Speed / Road Speed Summary – Fuel Economy
- Following Distance Detail
- Following Distance Trend
- Form
- Forms Sent
- Fuel Usage Summary
- Message
- RBAC Audit Trail
- Shift Report
- State Mileage
- Stop
- Stop (Employee Based)
- Stop – Sweeping
- Stop Detail
- Stop Summary at Landmark Type Device
- Stop Summary at Landmark Type by Landmark
- Time Period Evaluation
- Timecard (Employee Based)
- Trip Report – Detail
- Trip Report – Summary
- User Logon Report
- Vehicle Maintenance History
- Vehicle Maintenance Overdue
- Vehicle Mileage Record
- WLAN Hourly Usage Report
- Weekly Time Variance

- Work Flow Status

For more information about individual Standard reports, see the *GeoManager Reports Overview*.

Exception Reports

The GeoManager Exceptions feature offers comprehensive monitoring and reporting tools that help efficiently manage daily mobile workforce operations and improve business productivity. Through various notifications and reports, Exceptions help managers monitor activities and events that are unexpected or out of company-set bounds.

The various Exception reports available are:

- Diagnostics Fault
- Forms
- Handset Usage
- Hard Brake
- Idling
- Landmark
- Landmark Proximity
- Low Battery
- Messaging
- Mileage
- Mobile Device Vicinity
- Off Hours Use
- Speed
- Stop
- Stop Count
- Stop Duration
- Sudden Acceleration
- Switch Status
- Temp Status
- Zone

For more information about individual Exception reports, see the *GeoManager Reports Overview*.

Exception Report Uses

- Helps you maximize productivity and resources (mobile device, work force)
- Effective fuel management tool
- Helps driver compliance with regulatory norms such as speed limits, hours-of-service, hazmat transportation, fuel tax etc.

Exception Notification Console

The Exception Notification Console is a browser-based tool that allows you to easily view, sort and manage alerts online. This provides a timely way to learn about Exceptions created by your mobile workers if real-time notifications are not available or enabled for an Exception.

Online Console Notifications are delivered real-time or next day based on how the Exception was configured. Real-time Exception Notifications are immediately sent to the console, if console delivery was selected. Standard Exception Notifications are sent to the Console the following day.

To view the Exception Notification Console:

1. Log in to your Trimble Solution. For more information about logging in, see the beginning of Section 2, Getting Started
2. From the Trimble home page, click **Exceptions** under the **Control Panel** on the left of the home page. The **Exception Notification Console**, shown in Figure 4–6, opens.

Row	Date	Mobile Device	Exception Type	Exception Name	Exception Value
1	06/06 10:04:59 AM PDT	FE023566(SVM)	Stop Duration	SVM Stop Dur	6 min.
2	06/06 09:58:57 AM PDT	FE023566(SVM)	Landmark Proximity	SVM Landmark Proximity	Arrival
3	06/05 11:59:59 PM PDT	FE023566(SVM)	Stop	SVM Stop	985 min.
4	06/05 09:46:44 PM PDT	FE023566(SVM)	Off Hours Use	SVM Off Hour	06/05/2006 00:46 pm to 06/05/2006
5	06/05 07:02:13 PM PDT	FE023566(SVM)	Stop Duration	SVM Stop Dur	6 min.
6	06/05 05:03:46 PM PDT	FE023566(SVM)	Landmark Proximity	SVM Landmark Proximity	Departure
7	06/05 01:52:52 PM PDT	FE023566(SVM)	Stop Duration	SVM Stop Dur	6 min.
8	06/05 01:47:00 PM PDT	FE023566(SVM)	Landmark	SVM Landmark	Stop for 281 minutes at Office
9	06/05 01:44:24 PM PDT	FE023566(SVM)	Landmark Proximity	SVM Landmark Proximity	Arrival
10	06/05 01:41:16 PM PDT	FE023566(SVM)	Mileage	SVM Mileage	3.4 miles.

Exception Details

Please click any row from above to view details

5 Thu Apr 11 10:47:58 PDT
6 Thu Apr 11 10:47:58 PDT

Figure 4–6: Exceptions Notification Console

Field	Description
Row	Delineates the order Exceptions were received, with the most recent appearing in row 1.
Date	Date and time the Exception occurred.
Mobile Device	The name of the mobile device that incurred the Exception.
Exception Type	General Exception type.
Exception Name	Specific Exception based upon custom parameters.
Exception Value	Details that indicate why Exception was triggered.

You can sort Exceptions shown in the **Exceptions Notification Console** by any of the column headers. To sort data, click on the column heading you want as your sort filter.

You may rearrange the order in which Exception data columns appear on screen. To change the order of your columns, click on the column header you want to move and drag it to the spot on the table in which you would like it to appear.

Message Types are color coded to make identification of like Exceptions easy to find and read.

If you set up real-time alerts, you can elect to receive an audible alert each time a new notification is sent to the Notification Console. To enable or disable this option, click the alert icon. When it is disabled, the icon will appear with a red slash across it.

For additional details on any of the alerts:

1. Scroll to the alert you want to select.
2. Click the alert anywhere on the row.

Details appear in the **Exception Details** area at the bottom of the Exception Notification Console.

The Notification Console highlights your selection and additionally shows the **Criteria** that had to be met to generate the Exception as well as the **Location** of the mobile device when the Exception occurred.

To generate a printable version of this information, press the print icon in the upper right-hand corner of the screen. The system will display the same information in a text format that can be easily printed.

You can print two ways:

- By clicking the **Print** link in the **Details** column of the **Exception Summary** screen. This will print the details for that specific Exception.

- By clicking the **Print Summary** button in the top right corner. This opens the typical **Print** dialogue box. Click **Print** to print the Exception Summary. Click **Cancel** to close the dialogue without printing.

Generating Exception Reports

Exception Reports may be generated at any time. Steps for creating reports for all of the Exceptions are virtually the same. Below are steps for generating each report format:

1. Click the **Reports** link from the Control Panel on the left. The **Reports** screen, shown in Figure 4-2, opens.
2. Click the **Exceptions Reports** tab, shown in Figure 4-7.

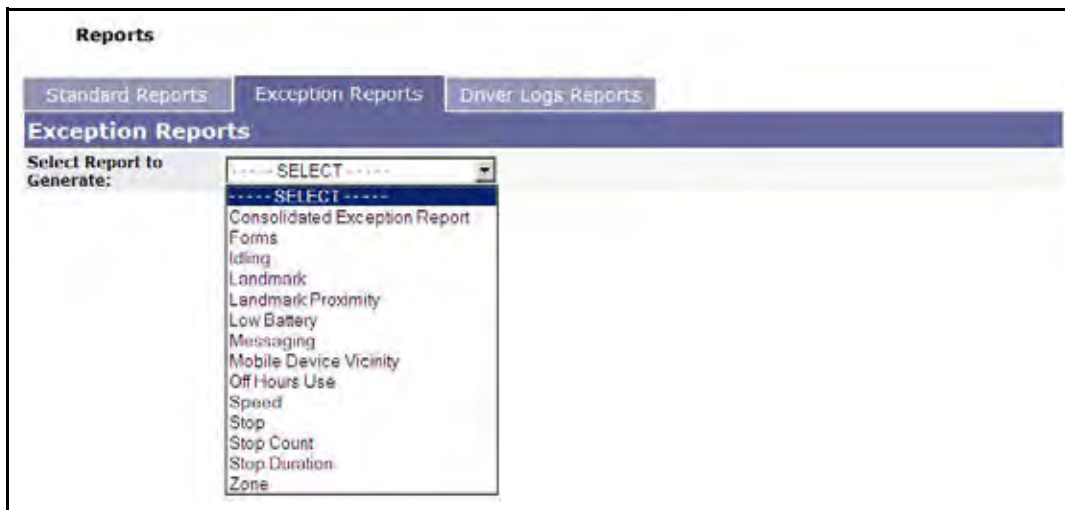


Figure 4-7: Exceptions Reports Tab

3. Select the type of Exception report to generate from the **Select Report to Generate** dropdown menu.
 - If you select Consolidated Exception Report, the **Exception Report Options** screen, shown in Figure 4-8, appears.

Figure 4-8: Consolidated Exception Report Options

Field	Description
Select Report to Generate	This is filled in from the previous screen and shows Consolidated Exception report.
Mobile Device(s) / Group(s)	Combination of radio buttons, drop-menu and text box for organization of mobile devices available for reporting. One radio button must be selected. One or more mobile devices or groups listed must be selected.
Search	Text box and button that help users to shorten the mobile device or group list. Search criteria can be any alpha-numeric character contained within the mobile device or group name.
Time Period	The length of time you want the report to contain. An online report can contain one month or less of data. If you want to generate a report containing more than one month of data, then you must use the Scheduled Reports Tool. For more information about Scheduled Reports, see Section 5.

Field	Description
Report Format	Shows you the available formats for the Exception Reports. Currently: <ul style="list-style-type: none"> • Online • Downloadable Format (Tab delimited) • Downloadable Format (Comma delimited) • Downloadable Format (Excel version)
Check Box	Select if you want to include the header in Comma and Tab delimited downloadable reports.

- a. Select the radio button for **Mobile Devices, Groups** or **Mobile Devices from Group**.

If you select **Mobile Devices from Group**, select the group from the drop-menu.

You can also search **Mobile Devices, Groups** or **Mobile Devices from Group** by entering your search criteria in the **Search** text box and clicking **Search**.

- b. Select the mobile devices for the report from the text box. Hold down [Ctrl] key to select more than one mobile device or group.
- c. Select the **Time Period** from the **From** and **To Day, Month, Year, Hour** and **Min** drop-menus.
- d. Select the **Report Format** from the drop-menu.

If you choose to download the Exception Assignment Report select the check box to **Include header in Comma and Tab Delimited downloadable reports** if you want headers included in the report.

- e. Click **Generate Report**.
 - If you chose to view the report online, a new browser window opens with the Consolidated Exception Report, as shown in Figure 4-9.

Exceptions				
Consolidated Exception Report from 10/3/07 12:00 AM to 10/4/07 12:00 AM				
<i>(Note: Date/Time is rounded off to the nearest minute.)</i>				
Date	Time	Exception Name	Exception Type	Exception Details
10/03/07	06:26 AM(PST)	Early Bird	Off Hours Use	10/03/2007 06:26 am to 10/03/2007 07:34 am
10/03/07	06:31 AM(PDT)	Golf9 Gym	Landmark	Stop for 42 minutes at Pumping Iron (Pumping Iron) 604 W HAMILTON AVE, CAMPBELL, CA 95008
10/03/07	07:29 AM(PDT)	Daddy's Going Big	Speed	71 mph., 4 min. 0 I 880, MILPITAS, CA 95035
10/03/07	07:31 AM(PST)	No Zone	Zone	Arrival 0 I 880, FREMONT, CA 94538
10/03/07	07:32 AM(PDT)	Daddy's Going Big	Speed	82 mph., 2 min. 0 LAKEVIEW, FREMONT, CA 94538
10/03/07	07:34 AM(PST)	No Zone	Zone	Departure 0 I 880, FREMONT, CA 94538
10/03/07	08:02 PM(PST)	Early Bird	Off Hours Use	10/03/2007 08:02 pm to 10/03/2007 09:12 pm
10/03/07	08:11 PM(PDT)	Daddy's Going Big	Speed	78 mph., 3 min. 0 STATE HWY 17, LOS GATOS, CA 95032
10/04/07	12:00 AM(PDT)	allenstops	Stop	986 min.

No data for ASparks

Figure 4-9: Online Consolidated Exception Report

- If you chose to download the Consolidated Exception Report, a download dialogue box, as shown in Figure 4-10, appears.

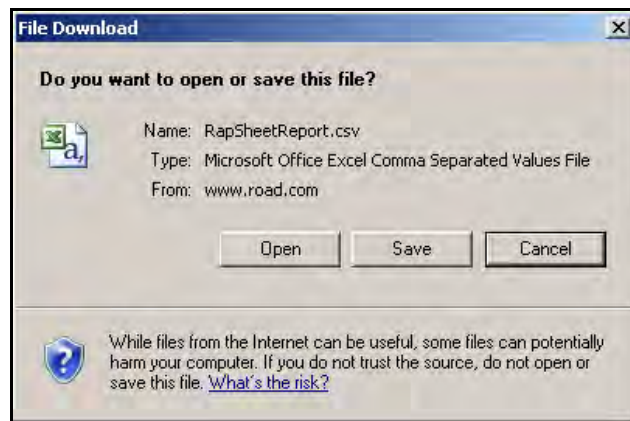


Figure 4-10: File Download dialogue Box

- Click **Open** to open the file in a default application. Click **Save** to save the file to your computer. Click **Cancel** to return to the **Exception Reports Options** screen.
- If you select any other individual Exception Report, the **Exception Report Options** screen, shown in Figure 4-11, appears.

Reports

Standard Reports | **Exception Reports** | Driver Logs Reports

Exception Reports

Select Report to Generate: Speed

Exception Name: Daddy's Gong Big

Select Mobile Device(s) to Include in the report:
 Mobile Device(s)
 Groups
 Select Mobile Device(s) from Group

 Branch29

Search: 102-GH_Training07

Device / Group search will list the all device / group with name containing the given search word. This search is not case sensitive.

Time Period:

From: Month: January, Day: 15, Year: 2008, Hour: 12 AM, Min: 00

To: Month: January, Day: 16, Year: 2008, Hour: 12 AM, Min: 00

Note: data available for 95 days

Report Format: Online Report

Include header in Comma and Tab Delimited downloadable reports

Generate Report

* Required field

Figure 4-11: Individual Exception Report Options

Field	Description
Select Report to Generate	This is filled in from the previous screen and shows Consolidated Exception report.
Exception Name	Contains a list of all the Exceptions available for report creation.
Select mobile device(s) to Include in the Report	Combination of radio buttons, drop-menu and text box for organization of mobile devices available for reporting. One radio button must be selected. One or more mobile devices or groups listed must be selected.
Time Period	The length of time you want the report to contain. An online report can contain one month or less of data. If you want to generate a report containing more than one month of data, then you must use the Scheduled Reports Tool. For more information about Scheduled Reports, see Section 5.

Field	Description
Report Format	Shows you the available formats for the Exception Reports. Currently: Online Downloadable Format (Tab delimited) Downloadable Format (Comma delimited) Downloadable Format (Excel version)
Check Box	Select if you want to include the header in Comma and Tab delimited downloadable reports.

- a. Select **Exception Name** from the drop-menu.
- b. Select the radio button for Mobile Devices, Groups or Mobile Devices from Group.
- c. If you select **Mobile Devices from Group**, select the Group from the drop-menu.
- d. Select the mobile devices for the report from the text box. Hold down [Ctrl] key to select more than one mobile device or group.
- e. Select the **Time Period** from the **From and To Day, Month, Year, Hour and Min** drop-menus.
- f. Select the **Report Format** from the drop-menu.

If you choose to download the Exception Assignment Report select the check box to **Include header in Comma and Tab Delimited downloadable reports** if you want headers included in the report.

- g. Click **Generate Report**.
 - If you chose to view the report online, a new browser window opens with the Exception Report, as shown in Figure 4-12.

Exceptions

Speed Exception Report from 10/1/07 12:00 AM to 10/3/07 12:00 AM
 (Note: Date/Time is rounded off to the nearest minute)

Configuration Parameters	
Exception Name	Daddy's Going Big
Exception Type	Speed
Maximum Speed	60 MPH
Duration	2 min(s)
Monitoring Scheduling Type	24 x 7
Monitoring Schedule	Begin date: 09/06/2007 3:30 PM (PST)
Device(s) Monitored	102-GH_Training07

Mobile Device : 102-GH_Training07

Summary	
Number of Exceptions	8

Detail:

Date	Time	Speed(Highest Attained)(MPH)	Duration(min)	Location(Address/Cross Street, City, State Zip)	County
10/01/07	06:34 AM (PDT)	71	2	STATE HWY 17, CAMPBELL, CA 95008	SANTA CLARA
10/01/07	07:46 AM (PDT)	75	6	47249 KATO RD, FREMONT, CA 94538	ALAMEDA
10/01/07	04:47 PM (PDT)	80	4	1 880, SAN JOSE, CA 95131	SANTA CLARA
10/01/07	05:00 PM (PDT)	76	5	STATE HWY 17, LOS GATOS, CA 95032	SANTA CLARA
10/02/07	07:29 AM (PDT)	73	2	1 880, SAN JOSE, CA 95110	SANTA CLARA
10/02/07	07:38 AM (PDT)	79	3	47209 KATO RD, FREMONT, CA 94538	ALAMEDA
10/02/07	04:45 PM (PDT)	81	3	1 880, HILPITAS, CA 95035	SANTA CLARA
10/02/07	05:02 PM (PDT)	78	2	STATE HWY 17, LOS GATOS, CA 95032	SANTA CLARA

* Precision of data may vary slightly due to GPS offset

Figure 4-12: Online Exception Report

- If you chose to download the Exception Report, a download dialogue box, as shown in Figure 4-13, appears.

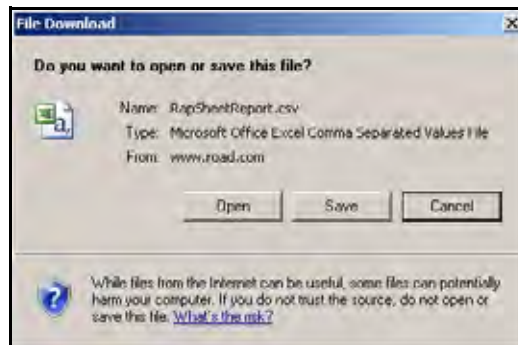


Figure 4-13: File Download dialog Box

- Click **Open** to open the file in a default application. Click **Save** to save the file to your desktop.

5 Administration

GeoManager Administration enables you to configure Trimble GeoManager to match your business processes and get the information your business requires to make intelligent business decisions.



Note:

There are varying degrees of administrative access to GeoManager due to Role-Based Management. Users with complete administrative access can create other users with limited or no administrative access. Users with no administration access will not see the Administration navigation tab. For complete information about User Administration, see “User Administration” on page 246.

To access Administration, click the **Administration** tab at the top of GeoManager. The Administration drop down menus appear on the left-hand side of the screen. The number of navigation links will vary depending upon your level of administrative access in GeoManager.

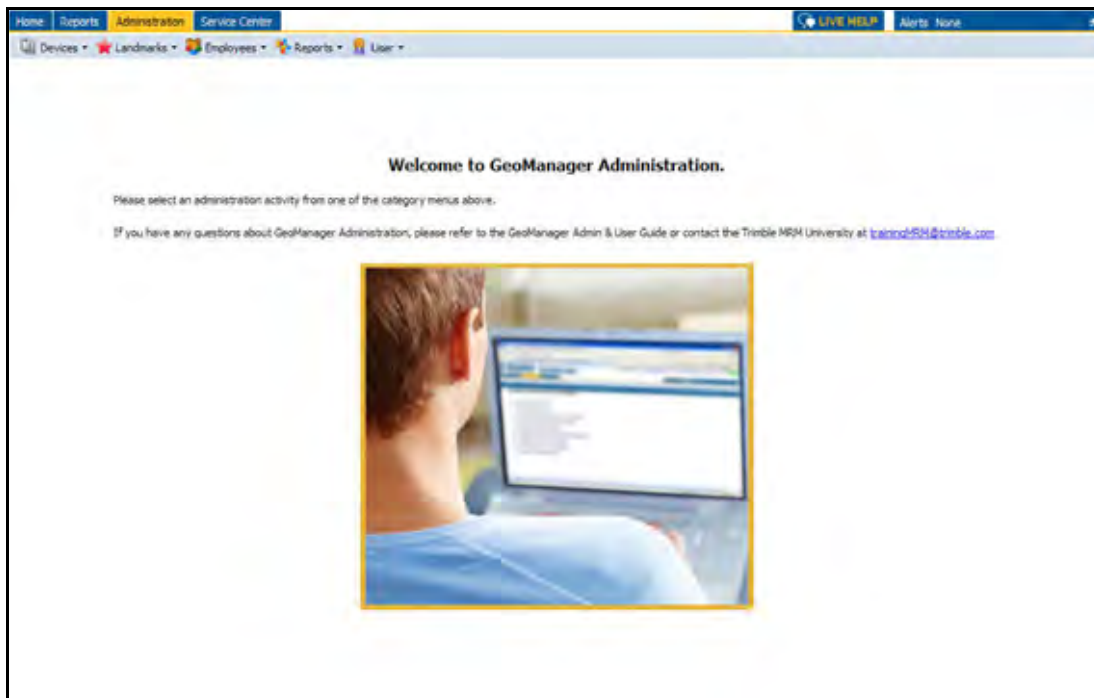


Figure 5-1: Devices Administration Links

Users who have complete administration access will see:

- Devices
- Landmarks
- Employees

- Reports
- User

Users with limited administration access will see some of these tabs.

Second level administration screens have a link in the upper right hand corner of the screen to navigate to the previous menu.

Device Administration

GeoManager Device Administration allows you to enter and configure the information about your mobile devices to get the information you need to make intelligent business decisions.

To administer mobile device information:

From the **Administration** tab, click the **Devices** drop down menu under the **Navigation** links. The **Devices Administration** links, shown in Figure 5–2, appear.



Figure 5–2: Devices Administration Links

Billing Management

Configuring Billing Info Upload

This function allows larger organizations to localize billing, enabling you to upload information with a billing template.

1. From the **Devices** drop down menu, shown in Figure 5–2, click the **Billing Management** link. The **Billing Information Upload Details** screen, shown in Figure 5–3, appears.

Billing Management Details

Instructions for Billing Management

1. [Download Billing Management Template](#) - Download and use the template for Billing Management.
2. Open file in Excel. Notice that there are 13 columns ("Mobile Device Label, Serial Number, Employee Number, Mobile Device Cell Number, District name/number, Dept Cost Center, Vehicle Identification Number, Vehicle Lease Number, Additional Data Field1, Additional Data Field2, Additional Data Field3, Additional Data Field4 and Account Name").
(IMPORTANT: DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS)
3. Modify the appropriate values for the columns Employee Number, Mobile Device Cell Number, District name/number, Dept Cost Center, Vehicle Identification Number, Vehicle Lease Number, Additional Data Field1, Additional Data Field2, Additional Data Field3 or Additional Data Field4.
(IMPORTANT: DO NOT CHANGE ANYTHING IN THE COLUMNS MOBILE DEVICE LABEL, SERIAL NUMBER AND ACCOUNT NAME)
4. Save file as csv (comma-delimited), for example "billing_management.csv".
5. Upload the file.
6. File size is limited to 1 MB.

[FAQ](#) | [Show Last Billing Management Result](#) | [Show Billing Management History](#)

Figure 5-3: Billing Information Upload Screen

2. Download the **Billing Management Template**.
3. Open the file in Excel. Notice that there are 13 columns, Mobile Device Label, Serial Number, Employee Number, Mobile Device Cell Number, District name/number, Dept Cost Center, Vehicle Identification Number, Vehicle Lease Number, Additional Data Field1, Additional Data Field2, Additional Data Field3, Additional Data Field4 and Account Name.



WARNING!

DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMN!

4. Modify the appropriate definitions. Each line must have Mobile Device Label, Serial Number, Employee Number, Mobile Device Cell Number, District name/number, Dept Cost Center, Vehicle Identification Number, Vehicle Lease Number, Additional Data Field1, Additional Data Field2, Additional Data Field3, Additional Data Field4 and Account Name.
5. Name the file **billing_info_upload.csv**.
6. Save the file as .csv (comma-delimited). The File size is limited to 1MB.
7. Click **Browse** to locate the .csv file you created.
8. Click **Upload File**. A confirmation dialogue box, shown in Figure 5-4, appears.

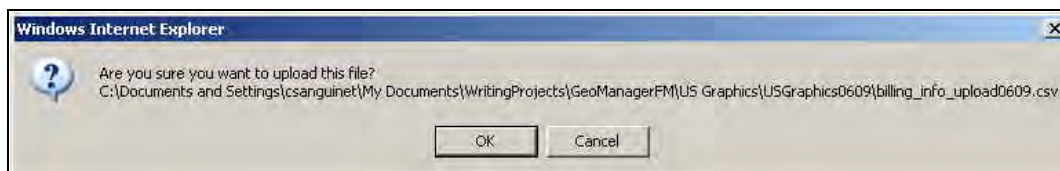


Figure 5-4: Upload File Confirmation Dialog Box

9. Click **OK**.

- If the upload is successful, the **Upload Completed** screen, shown in Figure 5–5, appears.

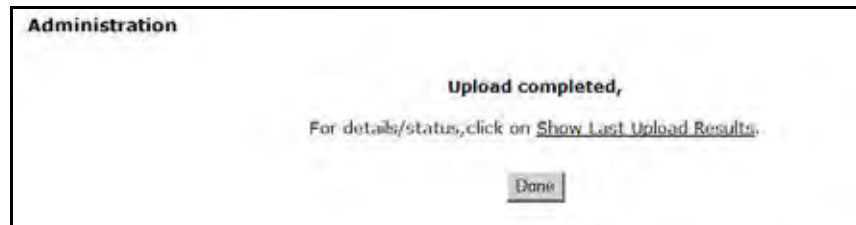


Figure 5–5: Upload Completed Screen

- If the upload is not successful, the Upload Failed screen, shown in Figure 5–6, appears.

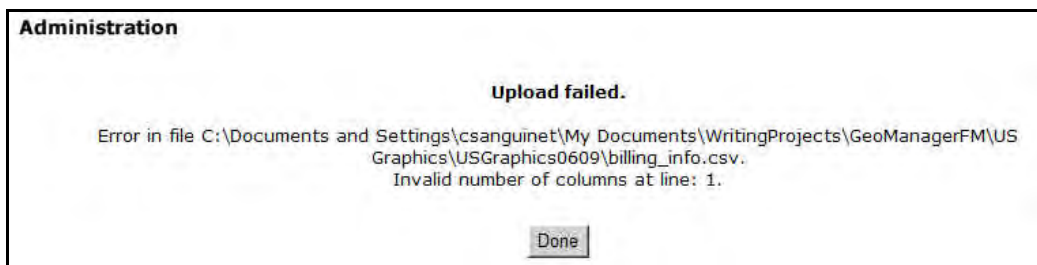


Figure 5–6: Upload Failed Screen

10. Click **Done**. The **Billing Information Upload Details** screen appears.

After the files are uploaded, you can see the results from the last upload by clicking the **Show Last Billing Information Upload Result** link. The **Show Billing Information Last Upload** screen, shown in Figure 5–7, appears.

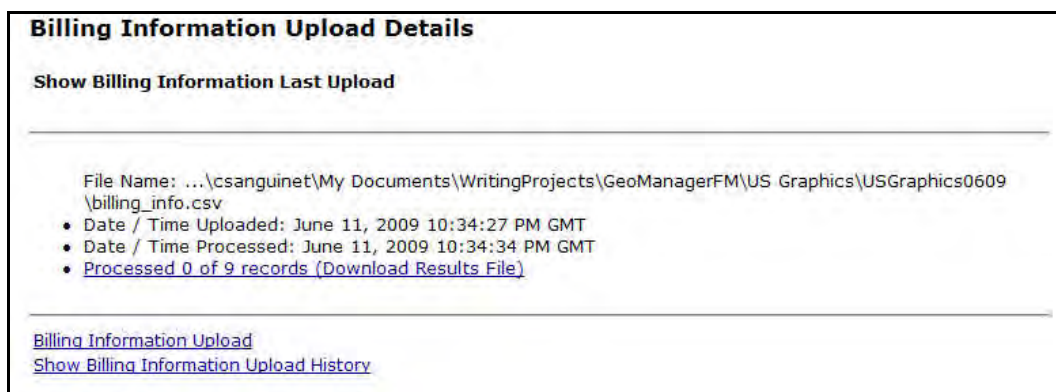


Figure 5–7: Show Billing Information Upload Screen

You can open the .csv file by clicking the **Processed x of x Records (Download Results File)** link to see if any errors occurred.

You can view the upload history by clicking the **Show Billing Information Upload History** link in the **Billing Information Upload Details** screen. The **Billing Information Upload Details** screen, shown in Figure 5–8, appears.

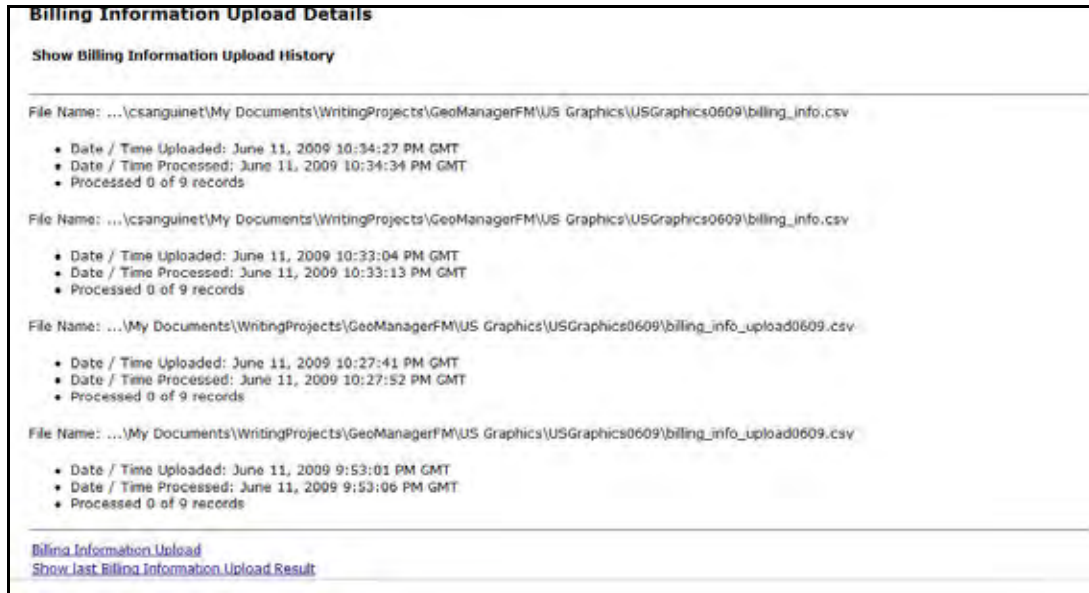


Figure 5–8: Show Billing Information Upload History Screen

To return to the **Billing Information Upload Details** screen, click the **Billing Information Upload** link.

Configuring Custom Fields

GeoManager permits administrators to create custom fields for report information and mobile device location in MapView. After you set up the custom field labels, you must go to the Mobile Device settings page to enter the custom field information.

To create Custom Field Labels:

1. From the **Devices** drop down menu, shown in Figure 5–2, click **Device Custom Field Labels**. The Configure Device Custom Field Labels screen, shown in Figure 5–9, appears.

Custom Field Labels

Configure Device Custom Field Labels

Field 1: to

Field 2: test1

Field 3: Make

Field 4: Model

Field 5: Year

Field 6: VIN

Field 7:

Field 8:

Save Reset

Note:

- You must enable "Show Custom Fields" in MapView to display the assigned labels.
- After custom field label setup, go to the Configure Mobile Device Details Settings page to enter the custom field information for each device.

[Custom Fields Home](#)

Figure 5-9: Configure Device Custom Field Labels Screen

2. Enter the name for each custom field.
3. Click **Save**. The **Configure Custom Field Labels** screen refreshes, saving the custom field information.
Click **Reset** to clear any unsaved information.
4. Click **Custom Fields Home** to return to the Custom Field Labels screen.

Configuring Messaging Details

If you have the optional Messaging feature as part of GeoManager, you can create pre-defined messages, send free-form messages, define and receive work status, set hot-keys for faster messaging and create simple forms for drivers to send using the optional *iDT 3000* or the *mDT 4000*. For more information about the *iDT 3000*, please see the *iDT 3000 User Guide*. For more information about the *mDT 4000*, please see the *mDT 4000 User Guide*.

To configure messaging details:

1. From the **Devices** drop down menu, shown in Figure 5-2, click **Configure Messaging Details**. The **Messaging Administration** screen, shown in Figure 5-10, appears. The **Driver Messaging** screen is shown as the default screen.

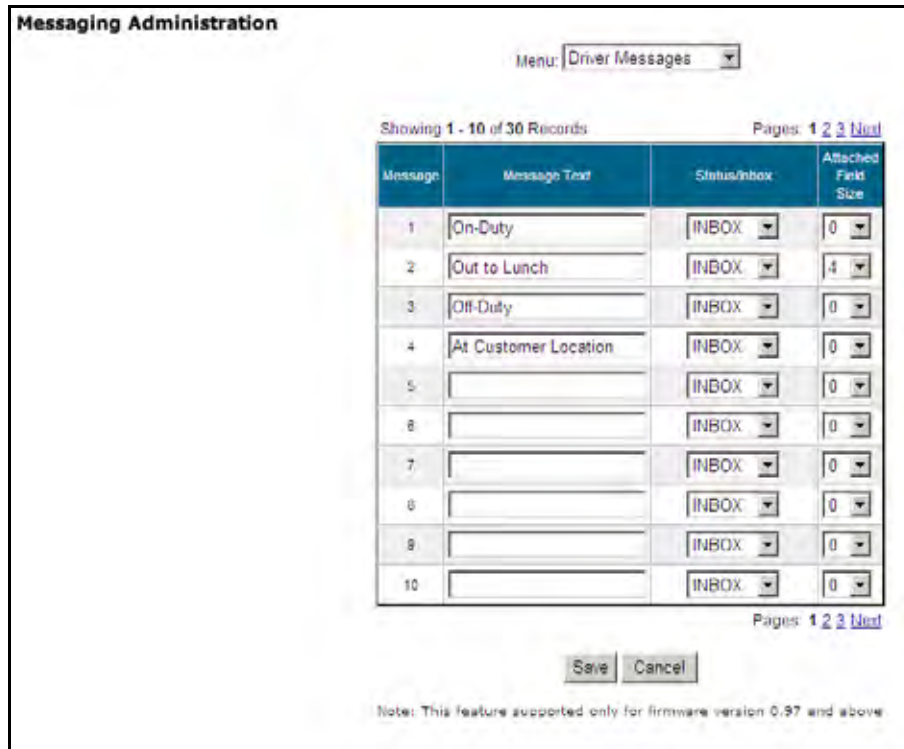


Figure 5–10: Messaging Administration Screen

2. Select the type of messaging detail you require by clicking the down arrow on the drop-down menu near the top right of the screen, shown in Figure 5–11.

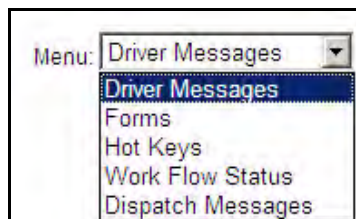


Figure 5–11: Messaging Drop-Down Menu

Configuring Driver Messages

The **Driver Messages** menu item enables you to configure up to 30 predefined messages for users. You may predefine up to 20 characters in each **Driver Message**, and users may customize these messages by adding up to 20 characters at the end of each message. These user-defined characters enable further explanation or detail for a predefined message.

Menu: **Driver Messages**

Showing 1 - 10 of 30 Records Pages: 1 2 3 Next

Message	Message Text	Status/Inbox	Attached Field Size
1	On-Duty	INBOX	0
2	Out to Lunch	INBOX	4
3	Off-Duty	INBOX	0
4	At Customer Location	INBOX	0
5		INBOX	0
6		INBOX	0
7		INBOX	0
8		INBOX	0
9		INBOX	0
10		INBOX	0

Pages: 1 2 3 Next

Save Cancel

Note: This feature supported only for firmware version 0.97 and above

Figure 5-12: Driver Messages Administration Screen

To configure a **Driver Message**:

1. From the **Devices** drop down menu, shown in Figure 5-2, click the **Configure Messaging Details** link.
2. Select **Driver Messages** from the **Messaging Administration** drop-down menu.
3. Enter the text for the message in the **Message Text** column.
4. Select the appropriate attached message length for the message in the **Attached Field Size** column. The default size is zero.
5. After you have entered the information for 10 messages, click **Save**. You must save the first 10 messages before you can set up the next 10.
6. Click the **<11-20>** link to set up the next 10 user messages.
7. Click **Save** to keep all changes, refresh the window and display the new configuration. Click **Cancel** to exit without making any changes.

Configuring Forms

The **Forms** menu enables you to configure up to 10 forms. Each form may contain up to 10 fields, with each field containing up to 20 characters. You may configure each field to accept alpha (text), numeric (numbers), alphanumeric (text and numbers), currency, or Yes/No as user input.

Menu: Forms

Form	Name	Status/Inbox	Form fields	# of fields
1	Lunch Time	INBOX	Edit	3
2		INBOX	Edit	0
3		INBOX	Edit	0
4		INBOX	Edit	0
5		INBOX	Edit	0
6		INBOX	Edit	0
7		INBOX	Edit	0
8		INBOX	Edit	0
9		INBOX	Edit	0
10		INBOX	Edit	0
11	Task Form	INBOX	View	0

Save Cancel

Note1: This feature supported only for firmware version 0.97 and above.
 Note2: Form with no fields will not be reflected in the JDT.
 Note3: A Form name with an "*" next to it means it is a form created through the API.
 This form cannot be edited from the UI.

Figure 5-13: Forms Administration Screen

To configure Forms:

1. From the **Devices** drop down menu, shown in Figure 5-2, click the **Configure Messaging Details** link.
2. Select **Forms** from the **Messaging Administration** drop-down menu.
3. Enter a form name in the **Name** box. For example, enter **Invoice Confirmation** in the box under **Name** for **Form 1**.
4. The **Status/Inbox** column contains a predefined list of **Work Flow Status** labels. Refer to the **Setting up Work Flow Status** section to use the form for **Work Flow Status**.
5. Click **Save**.

If you do not save the form name, a dialogue box, shown in Figure 5-14, appears. Click **OK** to save the form and create custom fields for the form.

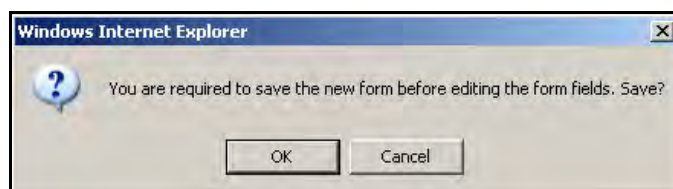


Figure 5–14: Save Form Dialog Box

- Click the **Edit** link to create custom fields for the form. The Form Fields screen, shown in Figure 5–15, appears.

The screenshot shows a web interface for configuring form fields. At the top, there is a 'Menu:' dropdown set to 'Form Fields'. Below it, the title is 'Form Details :Lunch Time'. The main area is a table with the following columns: 'Fields', 'Field Label', 'Required', 'Length', 'Type', and 'Numeric/Currency Min/Max'. There are 10 rows, each representing a field. The 'Required' column has a 'No' dropdown for each row. The 'Length' column has a '20' dropdown for each row. The 'Type' column has an 'Alphanumeric' dropdown for each row. The 'Numeric/Currency Min/Max' column has two empty input boxes for each row. At the bottom of the table, there are 'Save' and 'Cancel' buttons.

Fields	Field Label	Required	Length	Type	Numeric/Currency Min/Max
1		No	20	Alphanumeric	
2		No	20	Alphanumeric	
3		No	20	Alphanumeric	
4		No	20	Alphanumeric	
5		No	20	Alphanumeric	
6		No	20	Alphanumeric	
7		No	20	Alphanumeric	
8		No	20	Alphanumeric	
9		No	20	Alphanumeric	
10		No	20	Alphanumeric	

Figure 5–15: Form Fields Screen

- Enter labels for the fields in the **Field Labels** column.
- Choose **Yes** in the **Required** column if users must complete a field.
- Enter an appropriate input length in the **Length** column, (up to 20 characters, for each field).
- Select an appropriate input type in the **Type** column for each field:
 - Alphanumeric
 - Alpha (text)
 - Numeric (numbers)
 - Currency
 - Yes/No
- For numeric and currency type fields, enter a minimum and maximum value in the **Numeric/Currency/Min/Max** column.
- Click the **Save** button to keep the form. The screen returns to the **Forms Administration** screen, shown in Figure 5–13.

Click the **Cancel** button to exit without making changes.

The Trimble MRM servers send the newly created forms to mobile devices the next time each reports its status.

Configuring Hot Keys

The **Hot Keys** screen enables you to select frequently used messages and allows users to send these messages back to your dispatchers with the touch of a button. You may configure up to two **Hot Keys**.

To set up Hot Keys:

1. From the **Devices** drop down menu, shown in Figure 5–2, click the **Configure Messaging Details** link.
2. Select **Hot Keys** from the **Messaging Administration** drop-down menu. The Configure Hot Keys screen, shown in Figure 5–16, appears.

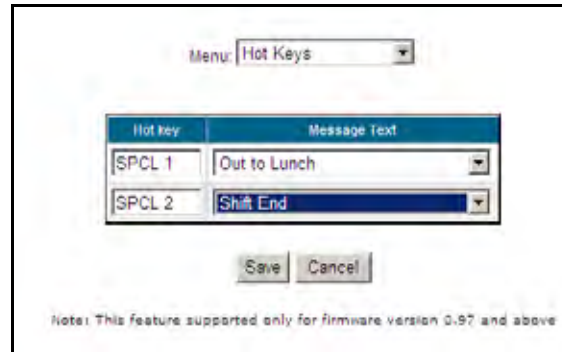


Figure 5–16: Messaging Administration – Configure Hot Keys Screen

3. Select a canned message for the appropriate key from the **Message Text** drop-down menu. **SPCL1** and **SPCL2** correspond to keys on the *iDT*.



Note:

You must set up the messages first.

4. Click **Save** to apply the configuration. Click **Cancel** to exit the screen.

As soon as mobile devices report to the Trimble MRM servers, the **Hot Keys** will upload onto the *iDT* terminals.

Configuring Work Flow Status

Work Flow Status enables you to create up to 10 status events. You may assign a status to any predefined message or form. The statuses entered here appear on the **Status/Inbox** menu when configuring forms and predefined messages.

To configure Work Flow Status:

1. From the **Devices** drop down menu, shown in Figure 5–2, click the **Configure Messaging Details** link.
2. Select **Work Flow Status** from the **Messaging Administration** drop-down menu. The Configure Workflow Status screen, shown in Figure 5–17, appears.

DayStart	DayEnd	Lunch	Break	Lv Office	Customer
Triumph1	Cowan1				
ASparks	JNorms2				
MCastillo	CBassett				
DiamondDoris					
DemoKit					
ATT CSAT					
MSmith1					
Miguel V					
MGuizenhauser2					
LFox					
JBrooks					

new mail

Figure 5–17: Messaging Administration – Configure Workflow Status Screen

3. Enter a label of up to 20 characters for each status under the **Status Header** column.
4. Enter a corresponding abbreviation of up to four characters under the **Abbreviation** column. The abbreviations are displayed in the Status Header.
5. Click **Save** to keep all changes, refresh the window and display the new configuration. Click **Cancel** to exit without making changes.



Note:

Each configured status header appears in the **Work Flow Status** screen.

Dispatching Messages

The **Dispatch Messages** feature enables the dispatcher to predefine frequently sent messages. Configuring these messages allows the dispatcher to send a message by simply selecting from a drop-down menu on the **Messaging** window. The dispatcher has the ability to configure up to 10 predefined messages with up to 480 characters each.

To configure dispatch messages:

1. From the **Devices** drop down menu, shown in Figure 5–2, click the **Configure Messaging Details** link.
2. Select **Dispatch Messages** from the **Messaging Administration** drop-down menu. The Dispatch Messages screen, shown in Figure 5–16, appears.



Figure 5–18: Messaging Administration – Dispatch Messages Screen

3. Enter a message into one of the ten available message boxes.
4. Click **Save** to keep all changes, refresh the window and display the new configuration. Click **Cancel** to exit without making changes.

Configuring Mobile Device Details

Configure Mobile Device Details enables you to configure labels and color icons in MapView and several different reports for each mobile device or vehicle.

From the **Devices** drop down menu, shown in Figure 5–2, click **Configure Mobile Device Details**. The **Configure Mobile Device Details** screen, shown in Figure 5–19, appears.



Figure 5–19: Configure Mobile Device Details Screen

The following options appear after you click Configure Mobile Device Details:

- Configure Business Hours
- Configure Mobile Device
- Configure Mobile Devices (Batch Configuration)
- Inactivity Settings
- Upload Mobile Device Configuration
- Upload Mobile Device Custom Fields
- Upload Work Shift Definitions

Configure Business Hours

The Configure Business Hours screen, shown in Figure 5–20, allows you to set the hours of operation for your mobile devices.

1. Click **Configure Business Hours** from the **Configure Mobile Device Details** screen. The **Configure Business Hours** screen, shown in Figure 5–20, appears.

Configure Mobile Device Details

Configure Business Hours

Configure Business Hours

Start: 08:00 AM

End: 05:00 PM

24x7

Save Reset

[Mobile Device Configuration Home](#)

Figure 5–20: Configure Business Hours

2. Click the **Radio** button to set Business Hour Start and End times.
3. Click the **Clock** icon to change business hours as needed.

Click the **Radio** button next to **24x7** to set business hours to round the clock.

- Click **Save** to accept the Business Hours change(s).
- Click **Reset** to reset the Business Hours field.

Click the **Mobile Device Configuration Home** link to exit and return to the **Configure Mobile Device Details** screen.

Configure Mobile Device

Configure Mobile Device enables you to configure labels and color icons in the GeoManager map and several different reports for each mobile device or vehicle. In addition, Configure Mobile Device Settings allows you to assign or unassign one or more exceptions or scheduled reports to a device simultaneously. You can also modify custom field information and set up work shift definitions. All changes are saved in real time and take effect immediately.

1. Click **Configure Mobile Device** from the **Configure Mobile Device Details** screen. The **Configure Mobile Device** screen, shown in Figure 5–21, appears.

Configure Mobile Device Details

Configure Mobile Device

Search	Search Pattern	Search Text
By Label	starting with	<input type="text"/>

Display Records per page

Showing 1 - 10 of 14 Records Pages: [1](#) [2](#) [Next](#)

<input type="checkbox"/>	Current Label	Serial Number	New Label
<input type="checkbox"/>	FE333123	FE333123	<input type="text" value="FE333123"/>
<input type="checkbox"/>	FE333124	FE333124	<input type="text" value="FE333124"/>
<input type="checkbox"/>	live2	CA000316	<input type="text" value="live2"/>
<input type="checkbox"/>	CA000318	CA000318	<input type="text" value="CA000318"/>
<input type="checkbox"/>	FE333131	FE333131	<input type="text" value="FE333131"/>
<input type="checkbox"/>	FE333132	FE333132	<input type="text" value="FE333132"/>
<input type="checkbox"/>	FE333133	FE333133	<input type="text" value="FE333133"/>
<input type="checkbox"/>	FE333134	FE333134	<input type="text" value="FE333134"/>
<input type="checkbox"/>	CA000372	CA000372	<input type="text" value="CA000372"/>
<input type="checkbox"/>	CA000374	CA000374	<input type="text" value="CA000374"/>

[Settings](#) [Work Shift Definitions](#)

[Mobile Device Configuration Home](#)

Figure 5–21: Configure Mobile Device

2. Enter a new name with up to 20 characters, no spaces, for each mobile device under the **New Label** column.
3. Click **Save** to accept the change(s).

Click **Reset** to reset the New Label field.

The screen lists 10, 15, 20, or 25 devices at a time. If you manage more than 15 devices, the screen also shows the number of pages. Select the appropriate page number to move to the desired page.

Mobile Device Settings Screen

The **Mobile Device Settings** screen, shown in Figure 5–22, allows you to change the color for the amount of time your mobile devices are stopped if you want different stop status definition colors. These colors appear in the **Mobile Device Status** screen, shown in Figure 5–22.

The following options can also be customized from one location using Mobile Device Settings:

- Update Mobile Device Settings including:
 - Stop Status Definitions
 - Time Zone
 - Device Icon Color
 - Organization Hierarchy
 - Custom Field Information
 - Exceptions assigned to the device
 - Scheduled Reports assigned to the device
 - Work Shift Definitions
1. From the **Configure Mobile Device** screen, shown in Figure 5–21, click the **check box** next to the mobile device to configure the **Stop Status Definition, Time Zone, Automatic Update Rate** and the display icon color for the selected device.
 2. Click **Settings**. The **Mobile Device (iLM) Settings** screen, shown in Figure 5–22, appears.

Mobile Device(iLM) Settings

Configured Filters:

Mobile Device: CA001104
 Device: CA001104
 Device Serial#: CA001104

Stop Status Definitions:

Short (Green) (1 ~ 3000) mins
 Medium (Yellow) (1 ~ 5000) mins
 Long (Red) (1 ~ 5000) mins

Time Zone: (GMT-5:00) Eastern Time (US & Canada)

Device Icon Color: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

OrgHierarchy: org3

Custom Information about this Mobile Device

Exception Reassignment

Scheduled Report Reassignment

Work Shift Editor

Submit Cancel

Figure 5–22: Mobile Device Settings Screen

**Note:**

The Automatic Update Rate can not be changed by some accounts.

- Click **Submit** to accept the Mobile Device change(s).
- Click **Cancel** to exit and return to the Configure Mobile Device screen.

Assigning Organizational Hierarchy to a Device

To assign organization hierarchy to a device:

1. Click the **OrgHierarchy** button from the **Mobile Device (iLM) Settings** screen, shown in Figure 5–22. The **Select Org Hierarchy Tree** dialog, shown in Figure 5–23, displays

You can search for the desired organization by entering the name of part of the name for the organization and clicking the **Magnifying Glass**. The organization list updates with any organizations that match the search criteria, making it easier to find the correct organization.

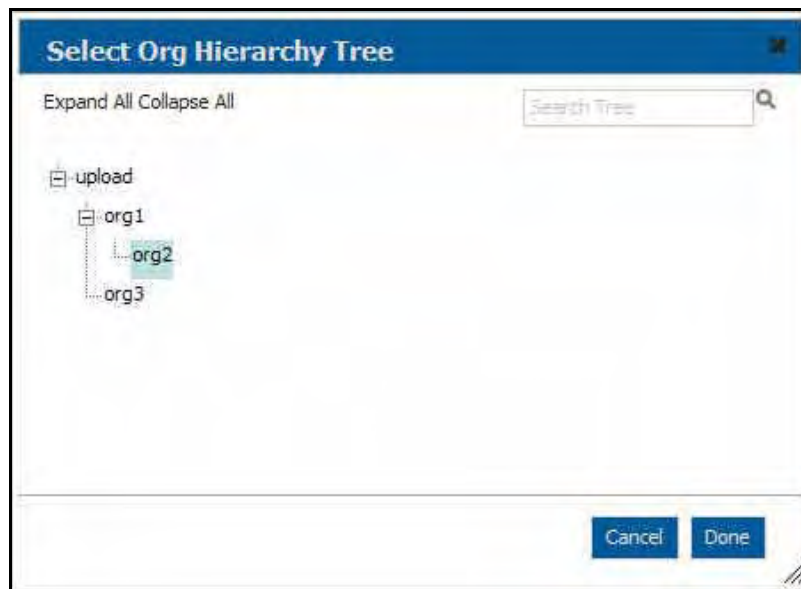


Figure 5–23: Select Org Hierarchy Tree Dialog

2. Select the desired organization from the list.
3. Click **Done**.
Click **Cancel** to close the dialog without making changes.

Updating Device Custom Field Information

To update custom field information for a device:

1. Click the **Custom Information about this Mobile Device** link from the **Mobile Device (iLM) Settings** screen, shown in Figure 5–22. The **Custom Information about this Mobile Device** link expands, shown in Figure 5–24, displays

Custom Information about this Mobile Device	
Vehicle Type	Truck
Model	v200
Year	2008
Engine	
Make	Ford
Color	Black

Exception Reassignment

Scheduled Report Reassignment

Work Shift Editor

Submit Cancel

Figure 5–24: Custom Information about this Mobile Device

2. Change the desired information.
3. Click **Submit**.
Click **Cancel** to close the dialog without making changes.

Assigning Multiple Exceptions to a Device

To assign multiple exceptions to a device:

1. Click the **Exception Reassignment** link from the **Mobile Device (iLM) Settings** screen, shown in Figure 5–22. The **Exception Reassignment** link expands, shown in Figure 5–25, displays.

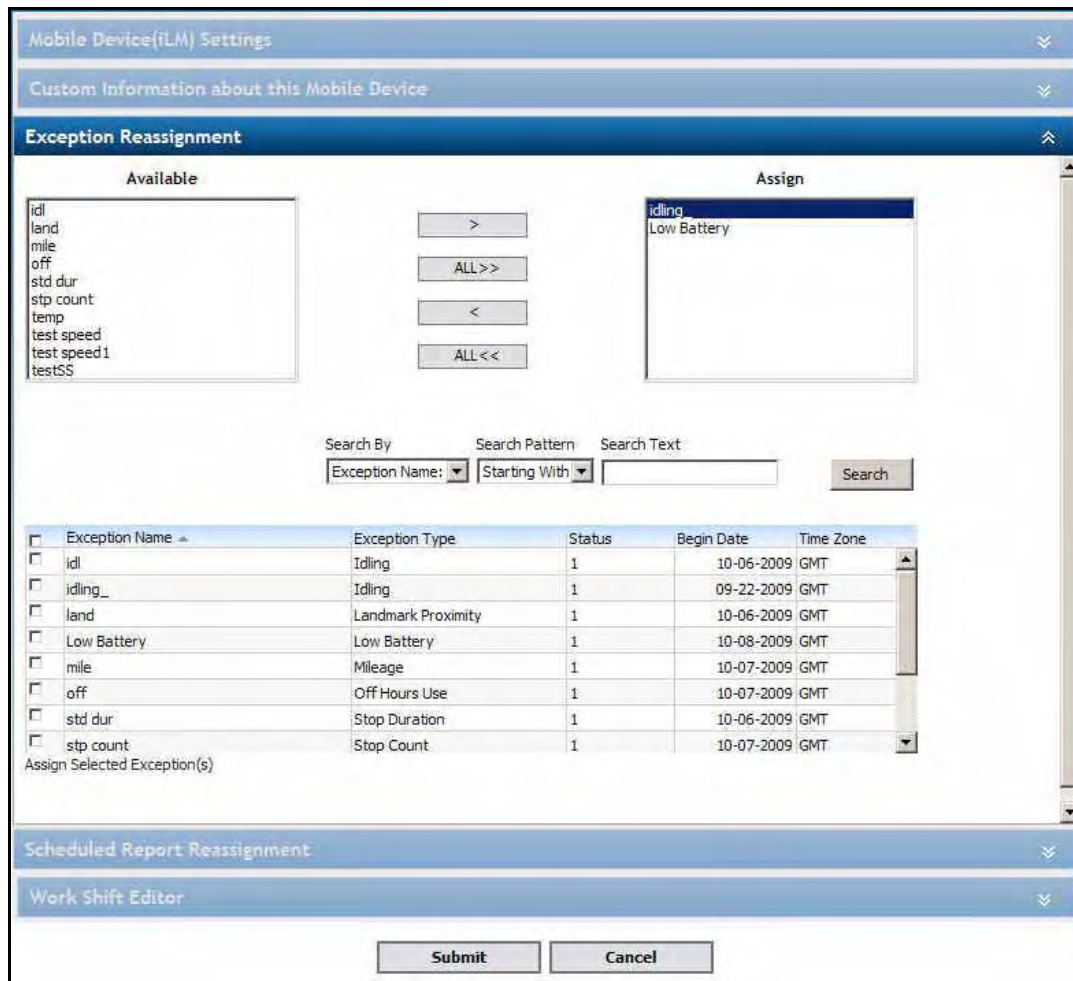


Figure 5–25: Exception Reassignment

2. Select the exception(s) from the **Available** exception field to assign to the mobile device.
3. Click the > button to move the exception(s) to the **Assign** field.
 - Click **All >>** to add all available exceptions to the device.
 - Click < to unassign the selected exception(s) to the device.
 - Click **All <<** to unassign all exceptions to the device.
4. Click **Submit** to save changes.
 - Click **Cancel** to close the dialog without making changes.

You can also assign exceptions using the Exceptions list:

1. From the **Exception Reassignment** screen, check the exception(s) you would like assign to the mobile device. If you have a large number of exceptions, you can search for a specific exception:
 - a. Select the search criteria from the drop-down menu. Available criteria are:

- Exception Name
 - Exception Type
 - Email ID
 - Mobile Device
- b. Select **Starting With**, **Ending With**, or **Containing** from the drop-down menu to further narrow down the search.
 - c. In the **Search Text** box, enter the first few letters of the search criteria.
 - d. Click **Search**. The **Exception Reassignment** screen refreshes to show only the results that match your criteria.
2. Click **Submit**.
Click **Cancel** and no changes will be saved.

Assigning Multiple Scheduled Report to a Device

To assign multiple reports to a device:

1. Click the **Scheduled Report Reassignment** link from the **Mobile Device (iLM) Settings** screen, shown in Figure 5-22. The Scheduled Report Reassignment link expands, shown in Figure 5-26, displays.

The screenshot shows the 'Scheduled Report Reassignment' window. It features two main sections: 'Available' and 'Assign'. The 'Available' section contains a list of reports: Actibitysummary1, detailmileagenode3, FaultScheduledReport, mileagenode1, and mileagenode2. The 'Assign' section contains the report RBACAuditTrailcarriercrop. Between these sections are buttons for '>', 'ALL >>', '<', and 'ALL <<'. Below the lists is a search section with 'Search By' (Scheduled Report Name), 'Search Pattern' (Starting With), and 'Search Text' fields, along with a 'Search' button. A table below the search section lists the reports with columns for Report Name, Report Type, Delivery Type, and Delivery By. At the bottom of the window are 'Submit' and 'Cancel' buttons.

<input type="checkbox"/>	Report Name	Report Type	Delivery Type	Delivery By
<input type="checkbox"/>	Actibitysummary1	Activity - Summary (Employee Based)	HTML	8:00 AM
<input type="checkbox"/>	detailmileagenode3	Detail - Mileage (Employee Based)	HTML	8:00 AM
<input type="checkbox"/>	FaultScheduledReport	Diagnostics Fault	HTML	8:00 AM
<input type="checkbox"/>	mileagenode1	Detailed - Mileage Report	HTML	8:00 AM
<input type="checkbox"/>	mileagenode2	Detailed - Mileage Report	HTML	8:00 AM
<input type="checkbox"/>	RBACAuditTrailcarriercrop	RBAC Audit Trail	HTML	8:00 AM

Figure 5-26: Scheduled Report Reassignment

2. Select the report(s) from the **Available** report field to assign to the mobile device.
3. Click the > button to move the report(s) to the **Assign** field.
 Click **All >>** to add all available reports to the device.
 Click < to unassign the selected report(s) to the device.
 Click **All <<** to unassign all reports to the device.
4. Click **Submit** to save changes.
 Click **Cancel** and no changes will be saved.

You can also assign reports using the Reports list:

1. From the **Scheduled Report Reassignment** screen, check the reports(s) you would like assign to the mobile device. If you have a large number of scheduled reports, you can search for a specific report:
 - a. Select the search criteria from the drop-down menu. Available criteria are:

- Scheduled Report Name
 - Scheduled Report Type
 - Email ID
 - Mobile Device
- b. Select **Starting With**, **Ending With**, or **Containing** from the drop-down menu to further narrow down the search.
 - c. In the **Search Text** box, enter the first few letters of the search criteria.
 - d. Click **Search**. The **Scheduled Report Reassignment** screen refreshes to show only the results that match your criteria.
2. Click **Submit**.
Click **Cancel** to close the dialog without making changes.

Work Shift Editor

The accuracy of many reports is determined by the values entered for work shift start-time and end-times. GeoManager allows a user to create up to 10 work shift definitions per vehicle.

To define a work shift:

1. Click the **Work Shift Editor** link from the **Mobile Device (iLM) Settings** screen, shown in Figure 5–22. The Scheduled Report Reassignment link expands, shown in Figure 5–27, displays.

Mobile Device(LAM) Settings

Custom Information about this Mobile Device

Exception Reassignment

Scheduled Report Reassignment

Work Shift Editor

You can define upto 10 Work Shifts per Mobile Device
 You have 95 days of storage. Based on today's date (October 9, 2009), there should be at least one work shift defined earlier than July 6, 2009 for proper reporting.
 Work Shifts are initially shown sorted by "Effective Date"

Remove	Effective Date	Start Time	End Time
<input type="checkbox"/>	2/15/09	12:00 AM	09:00 AM
<input type="checkbox"/>	3/19/09	02:00 PM	10:00 PM
<input type="checkbox"/>		08:00 AM	05:00 AM
<input type="checkbox"/>		09:00 AM	09:00 AM
<input type="checkbox"/>		08:00 AM	08:00 AM
<input type="checkbox"/>		08:00 AM	08:00 AM
<input type="checkbox"/>		09:00 AM	09:00 AM
<input type="checkbox"/>		08:00 AM	08:00 AM
<input type="checkbox"/>		08:00 AM	09:00 AM
<input type="checkbox"/>		08:00 AM	08:00 AM

Submit Cancel

Figure 5-27: Work Shift Editor for Mobile Device

2. Select the **Effective Date** for the work shift using the **Calendar** pop up menu.
3. Select the **Start and End** times for the work shift using the **Clock** icon.
4. Click **Submit**.
Click **Cancel** to exit without saving changes.
5. Repeat for each mobile device for which you want to define work shifts.

To remove a work shift, select the check box in the **Remove** column of the Work Shift Editor and click **Submit**.



Note:

You can also define work shifts by clicking the **Work Shift Definitions** link from the **Configure Mobile Device** screen, shown in Figure 5-21.

Configure Mobile Devices (Batch Configuration)

The Configure Mobile Devices (Batch Configuration) screen, shown in Figure 5–28, allows you to make stop status definition color changes for multiple mobile devices or groups of mobile devices. These colors appear in the Mobile Device Status screen, shown in Figure 5–21.

1. From the **Configure Mobile Device Details** screen, shown in Figure 5–19, click **Configure Mobile Device Details (Batch Configuration)**. The Configure Mobile Devices (Batch Configuration) screen, shown in Figure 5–28, appears.
2. Select the Radio button for:
 - Mobile Device(s)
 - Group(s)
 - Mobile Devices from Group

You can search for the desired mobile device or group by entering the name or part of the name for the device or group and clicking **Search**. The mobile device or group list updates with any mobile devices or groups matching the search criteria, making it easier to find the correct device or group.

Configure Mobile Device Details

Configure Mobile Devices (Batch Configuration)

Configurations:

Mobile Device(s) / Group(s): Mobile Device(s), Group(s) OR Mobile Devices from Group: All

Select Mobile Devices to Configure:

Available Mobile Devices: Search

100033B2B	>	
100033B2C	>	
100033B2D	>	
100033B2E	>	

Stop Status Definitions:

Short (Green) (1 ~ 5000) mins

Medium (Yellow) (1 ~ 5000) mins

Long (Red) (1 ~ 5000) mins

Time Zone: (GMT-4:00) Atlantic Time (Canada)

Device Icon Color:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Mobile Device Configuration Home](#)

Figure 5–28: Configure Mobile Devices Batch Configuration Screen

Configure Mobile Device Details

Configure Mobile Devices (Batch Configuration)

Configurations:

Mobile Device(s) / Group (s): Mobile Device(s) Group(s) OR Mobile Devices from Group:

Select Groups to Configure:

Available Groups: Search

Groups to Configure:

Stop Status Definitions:

Short (Green): (1 - 5000) mins

Medium (Yellow): (1 - 5000) mins

Long (Red): (1 - 5000) mins

Time Zone:

Device Icon Color:

[Mobile Device Configuration Home](#)

Figure 5–29: Configure Groups Batch Configuration Screen

3. Select the mobile device(s) or group(s) from the **Available Mobile Devices** or **Available Groups** field you want to configure.
4. Click the > button to move the device(s) or group(s) to the **Mobile Device to Configure** or **Groups to Configure** field.
5. Make desired configuration changes.
 - Click **Save** to accept the change(s). The **Configure Mobile Devices (Batch Configuration)** screen, shown in Figure 5–28, appears with a message that the configuration was successfully applied.
 - Click **Reset** to clear the Mobile Device or Group field.
 - Click **Mobile Device Configuration Home** to exit and return to the Configure Mobile Device Details screen.



Figure 5–30: Successfully Configured Mobile Devices (Batch Configuration) Screen

Upload Mobile Device Configuration

This function enables you to create configuration file templates for new groups and to assign mobile devices to a manager.

1. Click **Upload Mobile Device Configuration** from the **Configure Mobile Device Details** screen, shown in Figure 5–19. The Mobile Device Configuration File Upload (For Defining Mobile Device Configurations only) screen, shown in Figure 5–31, appears.

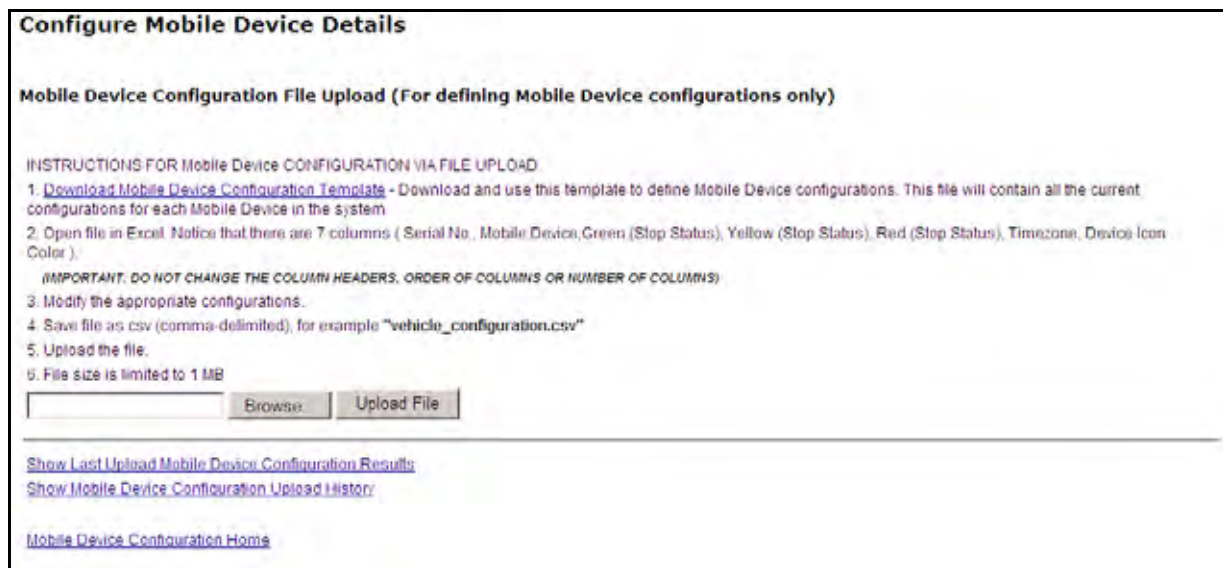


Figure 5–31: Mobile Device Configuration File Upload Screen

2. Download the Mobile Device Configuration Template.
3. Open the file in Excel. Notice that there are 7 columns, Serial No, Mobile Device, Green (Stop Status), Yellow (Stop Status), Red (Stop Status), Timezone and Device Icon Color.

**WARNING!**

DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMN!

4. Modify the appropriate definitions. Each line must have Serial No, Mobile Device, Green (Stop Status), Yellow (Stop Status), Red (Stop Status), Timezone and Device Icon Color.
5. Name the file **vehicle_configuration.csv**.
6. Save the file as csv (comma-delimited). The File size is limited to 1MB.
7. Click **Browse** to locate the .csv file you created.
8. Click **Upload File**. A confirmation dialogue box, shown in Figure 5–32, appears.

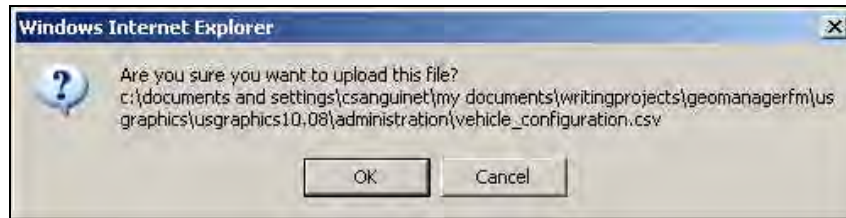


Figure 5–32: Upload File Confirmation Dialog Box

9. Click **OK**.
 - If the upload is successful, the **Upload Completed** screen, shown in Figure 5–33, appears.

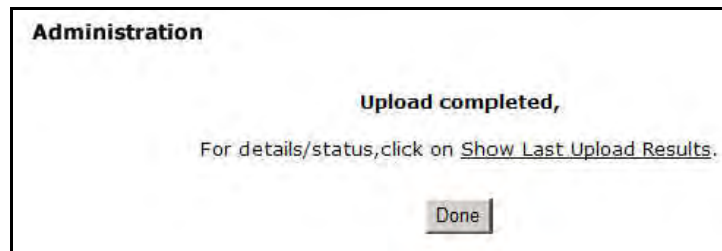


Figure 5–33: Upload Completed Screen

- If the upload is not successful, the Upload Failed screen, shown in Figure 5–34, appears.

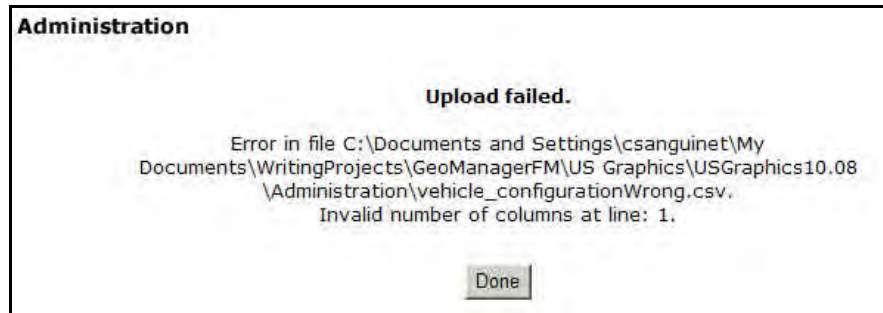


Figure 5-34: Upload Failed Screen

10. Click **Done**. The **Custom Fields File Upload** screen appears.

After the files are uploaded, you can see the results from the last upload by clicking the **Show Last Custom Fields Upload Result** link. The **Show Last Custom Fields Upload Result** screen, shown in Figure 5-35, appears.



Figure 5-35: Show Last Mobile Device Configuration Upload Screen

You can open the .csv file by clicking the **Processed x of x Records (Download Results File)** link to see if any errors occurred.

You can view the upload history by clicking the **Show Mobile Device Configuration Upload History** link in the **Mobile Device Configuration File Upload** screen. The **Configuration Upload - Last Mobile Device Configuration Upload Results** screen, shown in Figure 5-36, appears.

Configure Mobile Device Details

Configuration Upload - Last Mobile Device Configuration Upload Results

File Name: ...ritingProjects\GeoManagerFM\US Graphics\USGraphics10.08
\Administration\vehicle_configuration2.csv

- Date / Time Uploaded: October 21, 2008 5:57:42 PM GMT
- Date / Time Processed: Pending

File Name: ...ingProjects\GeoManagerFM\US Graphics\USGraphics10.08
\Administration\vehicle_configuration1008.csv

- Date / Time Uploaded: October 21, 2008 5:51:27 PM GMT
- Date / Time Processed: October 21, 2008 5:51:28 PM GMT
- Processed 2 of 9 records (Download Results File)

[Show Last Upload Mobile Device Configuration Results](#) [Configure Mobile Device Upload](#)

Figure 5–36: Show Configuration Upload - Last Mobile Device Configuration Upload Results Screen

To return to the **Mobile Device Configuration File Upload** screen, click the **Configure Mobile Device Upload** link.

Inactivity Settings

Inactivity Settings allow you to specify the amount of time a vehicle can be inactive prior to displaying not reporting status. You can also specify the amount of time after which the vehicle will no longer display on the map.

1. Click **Inactivity Settings** from the **Configure Mobile Device Details** screen, shown in Figure 5–19. The **Define behavior for devices that are “Not Reporting”** screen, shown in Figure 5–37, appears.

Configure Mobile Device Details

Define behavior for devices that are “Not Reporting”

Mark devices as “Not Reporting” after	5 minutes
Remove “Not Reporting” devices from the map after	50000 minutes

- “Not Reporting” devices are indicated by an icon (🚗) on the map.
- Setting either threshold value to “0” indicates that the corresponding behavior does not apply.

[Mobile Device Configuration Home](#)

Figure 5–37: Inactivity Settings Screen

2. Enter the desired number of minutes in the **Mark devices as “Not Reporting” after** field. Devices inactive for longer than the specified time will display with a **Not Reporting** icon indicating they are inactive. The default inactive time prior to displaying the “Not Reporting” icon is **5 minutes**.
3. Enter the desired number of minutes in the **Remove “Not Reporting” devices from the map after** field. Devices inactive for longer than the specified time will be removed from Map View. The default inactive time prior to removing vehicles from the map is **50,000 minutes**.
4. Click **Save**.

Click **Reset** the default values.



Note:

In the **Devices Table** the icon **Type** will display as one of the following depending on the device's length of inactivity:

- A yellow triangle with a question mark indicates the vehicle is not reporting.
 - A grey triangle with a question mark indicates the vehicle is not reporting for an extended time and has been removed from Map View.
-

Upload Mobile Device Custom Fields

This function enables you to create configuration file templates for custom fields which provide additional information you need to know about your mobile devices. Examples of custom fields can include: make, model, year, vin number etc.

1. Click **Upload Mobile Device Custom Fields** from the **Configure Mobile Device Details** screen. The Custom Fields File Upload screen, shown in Figure 5–38, appears.

Configure Mobile Device Details

Custom Fields File Upload

INSTRUCTIONS FOR CUSTOM FIELDS VIA FILE UPLOAD

1. [Download Custom Fields To Device Assignment Template](#) - Download and use the template for Custom Fields to Device Assignment.
2. Open file in Excel. Notice that there are 10 columns ("Vehicle Label,Serial Number,and 8 optional Custom Fields").

(IMPORTANT: DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS)

3. Modify the appropriate configurations. Each line must have "Vehicle Label,Serial Number,and 8 optional Custom Fields" .
4. Save file as csv (comma-delimited), for example "**customfields_deviceassignment.csv**" .
5. Upload the file.
6. File size is limited to 1 MB .

[Show Last Custom Fields Upload Result](#)
[Show Custom Fields Upload History](#)

[Mobile Device Configuration Home](#)

Figure 5–38: Mobile Device Custom Fields to Device Assignment File Upload Screen

2. Download the Custom Fields to Device Assignment Template.
3. Edit the template and save the file as customfields_deviceassignment.csv to your computer.
4. Click **Browse** to locate the .csv file you created.
5. After locating the file, click **Upload File**.

To see the results of the last upload, click **Show Last Custom Fields Upload Result**. Example shown in Figure 5–39.

Configure Mobile Device Details

Configuration Upload - Last Custom Fields Upload Result

File Name: ...jects\GeoManagerFM\US Graphics\USGraphics10.08
Administration\customfields_deviceassignment2.csv

- Date / Time Uploaded: October 21, 2008 10:49:42 PM GMT
- Date / Time Processed: October 21, 2008 10:49:46 PM GMT
- [Processed 0 of one record \(Download Results File\)](#)

[Show Custom Fields Upload History](#) [Custom Field Upload](#)

Figure 5–39: Show Last Custom Fields Upload Result Screen

To see the mobile device configuration upload history, click **Show Custom Fields Upload History**. Example shown in Figure 5–40.

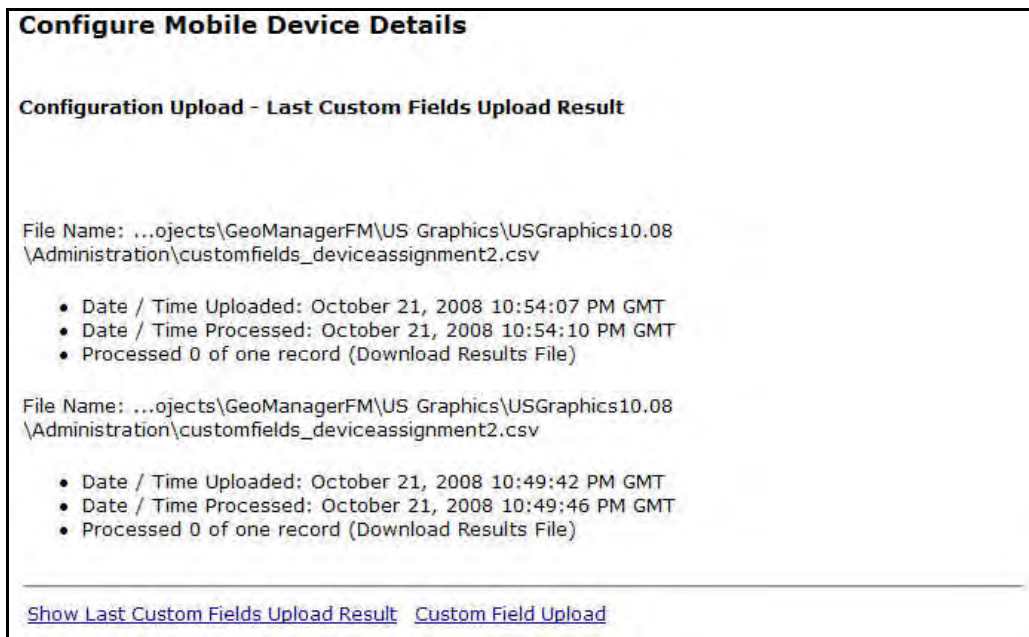


Figure 5–40: Show Last Custom Fields Upload History Screen

To return to the **Custom Fields File Upload** screen, click the **Custom File Upload** link.

Work Shift Definition File Upload

This allows the administrator to modify work shift definitions for multiple mobile devices.

1. Click **Upload Work Shift Definition** from the **Configure Mobile Device Details** screen. The Work Shift File Upload screen, shown in Figure 5–41, appears.

Configure Mobile Device Details

Work Shift File Upload

INSTRUCTIONS FOR WORKSHIFT DEFINITIONS VIA FILE UPLOAD

1. [Download Work Shift Definition Configuration File](#) - This will give the current work shift configuration for each Mobile Device in the system.
Open file in Excel. Notice that there are 4 columns (Mobile Device , Effective Date, Start Time, End Time).
2. **(IMPORTANT: DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS)**
3. Modify the appropriate definitions.
4. Save file as csv (comma-delimited), for example "**work_shift.csv**" .
5. Upload the file.
6. File size is limited to 1 MB

[Show Last Upload Work Shift Definition Results](#)

[Show Work Shift Definition Upload History](#)

[Mobile Device Configuration Home](#)

Figure 5-41: Work Shift File Upload Screen

2. Download the Work Shift Definition Configuration.
3. Edit the template and save the file as work_shift.csv to your computer.
4. Click **Browse** to locate the .csv file you created.
5. After locating the file, click **Upload File**.
 - Uses the same directions, as Vehicle Configurations Upload except the file format is different.
 - File must be uploaded under the “Work Shift Definition Upload” section of the File Upload page.
 - Download the file “Work Shift Definition Configuration File” first.
 - The file will contain the most current work shift for each mobile device. The file must contain four columns: Mobile Device, Effective Date, Start Time, and End Time.

When uploading work shift definitions:

- Mobile Device must belong to the account. Otherwise the Results column in the Result file will be updated as ‘Mobile Device not found’
- Effective Date Format: MM/DD/YY. Otherwise the Results column in the Result file will be updated as ‘Incorrect Date Format’
- Start / End are time values that need to be in the following format HH:MM AM/PM. Otherwise the Results column in the Result file will be updated as ‘Incorrect Time Format’.

- If the Effective Date already exists for a mobile device, the Start and End times will be updated to the defined time, if and only if the input Start and End times are different than the times already present in the system.
- If the Effective Date does not exist for a mobile device in the system, then this shift definition is added to the system.
- The Start Time should be lesser than End Time. Otherwise the Results column in the Result file will be updated as 'Invalid Time Range'.
- Duplicate records in the uploaded .csv file are just ignored and updated in the Result file as 'Duplicate Effective Date for a Mobile Device'.
- If a row has more than one error, all the errors are shown in the Results column of the result file separated by comma.

To see the results of the last work shift upload, click **Show Last Upload Work Shift Definition Results**. Example shown in Figure 5–42.



Figure 5–42: Show Last Work Shift Upload Results Screen

To see the Work Shift upload history, click **Show Work Shift Definition Upload History**. Example shown in Figure 5–43.

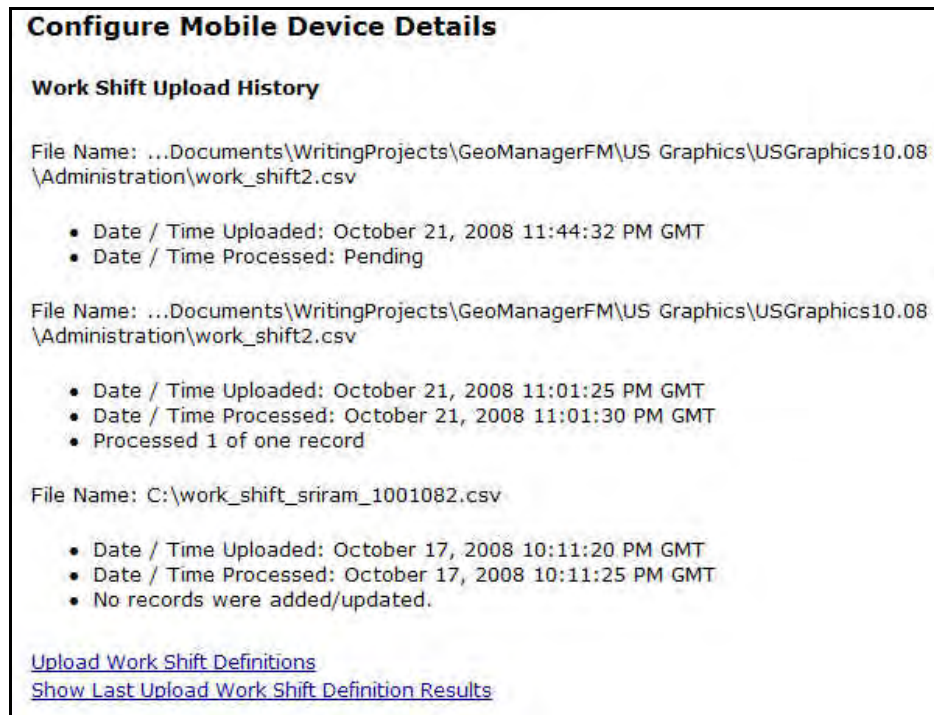


Figure 5–43: Show Work Shift Upload History Screen

Exception Administration

GeoManager addresses the challenges of managing mobile workers with Exceptions, a comprehensive monitoring and reporting tool that helps efficiently manage daily mobile workforce operations and improve business productivity through event-based monitoring and timely alerts.

Exceptions give you the ability to define a normal range of parameters for events or activities, then capture any deviance from this range. The parameters and range settings vary by Exception type but most often include less than and/or greater than values, duration and time frame for monitoring.

For information about using Exceptions, see the *GeoManager Exceptions Admin and User Guide*.

Fleet Management

Fleet Management enables you to configure carbon emission profiles and assign them for each mobile device or vehicle.

From the **Devices** drop down menu, shown in Figure 5–2, click **Fleet Management** from the **Devices** drop down menu. The **Fleet Administration** screen, shown in Figure 5–44, appears.

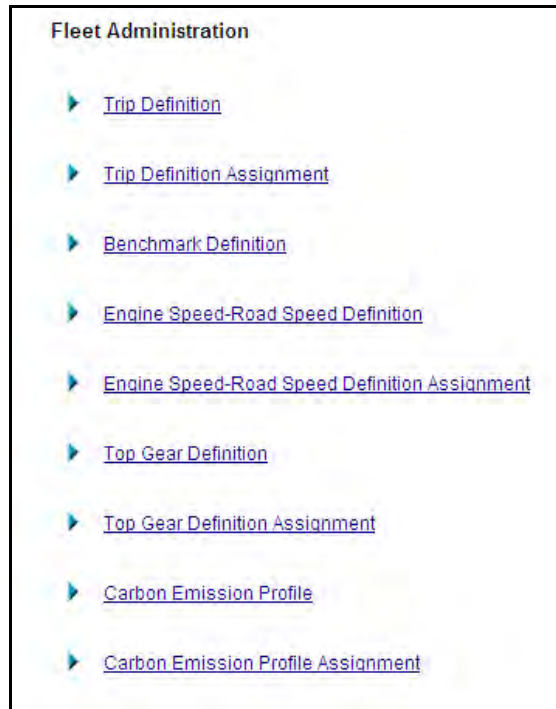


Figure 5-44: Fleet Administration Screen

The following options appear after you click Fleet Administration:

- Carbon Emission Profile
- Carbon Emission Profile Assignment

Benchmark Definitions

Benchmark Definitions are perfect-world scenarios showing how your mobile devices should perform if all systems are working correctly and drivers are performing within specified parameters. Types of Benchmark Definitions available in Vehicle Diagnostics are:

- Following Distance – The optimum distance behind other vehicles that a vehicle should be for safety.
- Brake Summary – The acceptable amount of braking that a vehicle performs.
- Engine RPM Road Speed – Managers may determine the amount of time vehicles are operating in the optimum zone when in use and when they may be lugging, idling, coasting or over speed, giving them better information about vehicle and driver performance.
- Fuel Usage – Managers can specify the acceptable percentage of time that drivers can spend idling, in top gear, coasting, etc. for better fuel consumption statistics.



Note:

While Benchmark Definitions are perfect-world scenarios, they must reflect the actual capabilities of the vehicle. Heavy duty trucks are not likely to get 45 MPG, even with

favorable winds and an empty truck. Refer to the vehicle's Owner's Manual for actual capabilities.

Creating New Benchmark Definitions

After you have completed the B&P workbook, you can create the benchmark information for your vehicles. You can use benchmarks for multiple vehicles.

To create a Benchmark Definition:

1. In the **Vehicle Diagnostics Administration** screen, click **Benchmark Definition**. The **Benchmark Administration** screen, shown in Figure 5–45, appears.

	Name	Description	
<input type="checkbox"/>	Accident Prone	Shows tailgating drivers	Edit
<input type="checkbox"/>	Leo Definition Test 1	LDT1	Edit
<input type="checkbox"/>	SinramTest#DBM	Sinram Testing Following Distance Benchmark	Edit
<input type="checkbox"/>	Too Close	Often too close to the vehicle in front	Edit

Figure 5–45: Benchmark Administration Screen

The **Benchmark Administration** screen defaults to the **Following Distance** benchmarks list.

2. Select the **Type** of benchmark you want to create. Options are:
 - Following Distance
 - Brake Summary
 - Engine RPM Road Speed
 - Fuel Usage

The **Benchmark Administration** screen changes to show any current benchmarks for the selected type.

3. Click **Create New**. The **New Benchmark Definition** screen, shown in Figure 5–46, appears.

Figure 5-46: New Benchmark Definition Screen

4. Enter a **Name** for the benchmark.
5. Enter a **Description** of the benchmark.
6. Click **Next**. The **New Benchmark Definition** screen changes to show fields for the required information, as shown in Figure 5-47 through Figure 5-50.
 - To set **Following Distance** benchmarks, shown in Figure 5-47:
 - a. In the **Following Distance Distribution** area, enter the percentage amounts that show the optimal following distances for safety.

Following Distance Distribution (4-5 second)		Net Following Distance % of Road Time	
0-1 second %	0	0-1 second %	0
1-2 second %	0	1-2 second %	0
2-3 second %	0	2-3 second %	0
3-4 second %	0	3-4 second %	0
4-5 second %	100	4-5 second %	0

(Must add up to 100%)

Figure 5-47: Following Distance Fields

- b. In the **Net Following Distance % of Road Time** area, enter the optimal percentage of road time that drivers can follow other vehicles for that distance.
- To set **Brake Summary** benchmarks, shown in Figure 5-48:

Administration

New Benchmark Definition

Name: Hard Brake
 Description: On the brakes too often to fast
 Type: Brake Summary

Braking

Hard Braking per 1000 Miles	<input type="text" value="100"/>
Brake Miles % of road time	<input type="text" value="0"/>

<< Back Save Cancel

Note: * means a required field

Figure 5-48: Brake Summary Fields

- a. In the Braking area, enter the acceptable amount of times the driver can use **Hard Braking per 1000 Miles**.
 - b. Enter the optimum percentage for **Brake Miles % of Road Time**.
- To set **Engine RPM Road Speed** benchmarks, shown in Figure 5-49:

Administration

New Benchmark Definition

Name: RPM Test
 Description: RPM Test
 Type: Engine RPM Road Speed

Road Speed Engine RPM Report

	% Engine on Time	% Driving Distance	% Fuel Used	MPG
Idle %	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Fast Idle %	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Coast %	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0.00"/>
Lugging %	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0.00"/>
Optimum %	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0.00"/>
Governed %	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0.00"/>
Overspeed %	<input type="text" value="100"/>	<input type="text" value="100"/>	<input type="text" value="100"/>	<input type="text" value="0.00"/>

(Must add up to 100%)

<< Back Save Cancel

Note: * means a required field

Figure 5-49: Engine RPM Road Speed Fields

- a. In the **% Engine on Time** column, enter:
 - The acceptable percentage of time the engine can be **Idle**.
 - The acceptable percentage of time the engine can be in **Fast Idle**.
 - The acceptable percentage of time the engine can **Coast**.

- The acceptable percentage of time the engine can be **Lugging**.
 - The percentage of time the engine should be **Optimum**.
 - The acceptable percentage of time the engine can be **Governed**.
- b. In the % **Driving Distance** column, enter:
- The acceptable percentage of time the engine can **Coast**.
 - The acceptable percentage of time the engine can be **Lugging**.
 - The percentage of time the engine should be **Optimum**.
 - The acceptable percentage of time the engine can be **Governed**.
- c. In the % **Fuel Used** column, enter:
- The acceptable percentage of time the engine can be **Idle**.
 - The acceptable percentage of time the engine can be in **Fast Idle**.
 - The acceptable percentage of time the engine can **Coast**.
 - The acceptable percentage of time the engine can be **Lugging**.
 - The percentage of time the engine should be **Optimum**.
 - The acceptable percentage of time the engine can be **Governed**.
- d. In the **MPG** column, enter:
- The acceptable percentage of time the engine can **Coast**.
 - The acceptable percentage of time the engine can be **Lugging**.
 - The percentage of time the engine should be **Optimum**.
 - The acceptable percentage of time the engine can be **Governed**.
 - The acceptable percentage of time the engine can be **Overspeed**.



Note:

Benchmark percentages (%) must add up to 100%.

- To set Fuel Usage benchmarks, shown in Figure 5–50:

Figure 5-50: Fuel Usage Fields

- a. Enter the optimum **MPG**.
- b. Enter the optimum **Cruise % Distance**.
- c. Enter the acceptable **Top Gear % Distance**.
- d. Enter the optimum **Driving % Time**.
- e. Enter the acceptable **Idle % Time**.
- f. Enter the acceptable **PTO % Time**.
- g. Enter the optimum **Cruise % Driving Time**.
- h. Enter the acceptable **Top Gear % Driving Time**.

**Note:**

Whenever Benchmark percentages (%) are entered, they must add up to 100%.

7. After you have entered the necessary benchmark information, click **Save**. The system saves the benchmark and the screen returns to the Benchmark Definition screen showing the new benchmark.
8. Repeat the benchmark creation process for each needed benchmark.

After you have created all the necessary benchmarks, you can create Trip, RPM-Road Speed and Top Gear Definitions.

Trip Definitions

Trip Definitions help managers differentiate drivers who are moving around a yard or a site from actual travel time between customer sites. By creating Trip Definitions, managers can get more accurate reports about vehicle and driver performance.

Creating Trip Definitions

To create a new Trip Definition:

1. From the Fleet Administration screen, click **Trip Definition**. The **Trip Administration** screen, shown in Figure 5–51, appears.

The screenshot shows the 'Trip Administration' screen. At the top, it says 'Showing 1 - 10 of 10 Records' and 'Display 10 Records per page'. Below this is a table with columns for Name, Description, and Type. Each row has a checkbox on the left and an 'Edit' link on the right. A note at the bottom states: 'Note: Some definition(s) have been disabled for deletion because devices have been assigned to those definition(s)'. There are links for 'Create New' and 'Delete Selected', and a 'Pages: 1' indicator.

	Name	Description	Type	
<input type="checkbox"/>	FWQAIgnitionBased		Ignition Based	Edit
<input type="checkbox"/>	FWQAIgnitionOnly	All values are 0 except for 30 secs Igniton On/Off To be use on the car-ILMs (OBDII)	Ignition Based	Edit
<input type="checkbox"/>	FWQARPMBasedTrip		RPM Based	Edit
<input type="checkbox"/>	FWQASpeedBased		Speed Based	Edit
<input type="checkbox"/>	RPMBased		RPM Based	Edit
<input type="checkbox"/>	SpeedBased		Speed Based	Edit
<input type="checkbox"/>	TD138		Ignition Based	Edit
<input type="checkbox"/>	TripIgnitionBased1	TripIgnitionBased1	Ignition Based	Edit
<input type="checkbox"/>	rpmbased		RPM Based	Edit
<input type="checkbox"/>	trip2		Ignition Based	Edit

Note: Some definition(s) have been disabled for deletion because devices have been assigned to those definition(s).

[Create New](#) [Delete Selected](#) Pages: 1

[Vehicle Diagnostics Administration Home](#)

Figure 5–51: Trip Administration Screen

2. Click **Create New**. The **Create Trip Definition** screen, shown in Figure 5–52, appears.

Figure 5-52: Create Trip Definition Screen

3. Enter a **Name** for the new definition.
4. Enter a **Description**. This is an optional field.
5. Select a **Type** of definition. This is the type of trigger that causes a Trip Start.

Choices are:

- Ignition Based
- Speed Based
- RPM Based



Note:

You can create only one Trip Definition per vehicle.

6. Enter the **Trip Start Condition**. A Trip Start occurs when the trigger (ignition, speed or RPM) is followed by a qualifying condition (time, distance, etc.).

For example, if you want an ignition based definition, you should enter information in the Time with Ignition Exceeds field. Other corresponding fields are:

- Distance Traveled Exceeds – The number of miles a vehicle must travel before a trip is considered started.
- RPM Exceeds – The number of RPMs a vehicle must reach before movement is considered a trip.
- Speed Exceeds – The speed a vehicle must reach before movement is considered a trip.

- Time with Ignition Exceeds – The amount of time the engine must be running before a trip is considered started.
7. Enter the **Ignition Off Duration** to signal the **Trip End Condition**. This is rounded to the nearest 10 seconds.
 8. Click Save. The screen returns to the Trip Administration screen showing the new Trip Definition.
 9. Repeat steps 2 through 8 for each Trip Definition.

When you've finished creating the necessary Trip Definitions, you can assign them to vehicles.

Editing Trip Definitions

To edit existing Trip Definitions:

1. From the **Trip Administration** screen, click **Edit** next to the definition you want to change. The **Edit Trip Definition** screen, shown in Figure 5–53, appears.

Figure 5–53: Edit Trip Definition Screen

2. Change the definition **Name** or **Description**, if desired.
3. Change the parameters required by the trip Type. For example, if the trip Type is Speed Based, then change the Speed Exceeds text.
4. Click **Update**. The new settings for this Trip Definition are saved.
5. Click **Cancel** to return to the **Trip Administration** screen which shows the changed definition.

Assigning Trip Definitions

Vehicles that perform different types of tasks will need different Trip Definitions assigned to them. Vehicles with multiple Trip Definition assignments result in multiple trip reports. If the vehicle has multiple assignments during the report period, data is displayed for each assignment.

To assign a Trip Definition:

1. From the **Fleet Administration** screen, click **Trip Definition Assignment**. The **Trip Assignment** screen, shown in Figure 5–54, appears.

The screenshot shows the 'Trip Assignment' interface. At the top, there are filters: 'Show devices in' with a dropdown set to 'All Groups', 'starting with' with an empty text box, and 'Assigned to' with a dropdown set to 'All Definitions'. A 'Refresh' button is next to the 'Assigned to' dropdown. On the right, there is a 'Display' dropdown set to '10' and 'Records per page', and 'Pages: 1'. Below the filters, it says 'Showing 1 - 7 of 7 Records'. The main content is a table with two columns: 'Mobile Device' and 'Definition'. The table contains seven rows of data. At the bottom left, there is a 'Change Assignment' link, and at the bottom right, it says 'Pages: 1'. A footer link 'Vehicle Diagnostics Administration Home' is also visible.

Mobile Device	Definition
CD000112	FWQAlignmentBased
CD000132_JG_Deck	FWQARPMBasedTrip
CD000136	TD136
CD000139_JG_RampVan	FWQAlignmentOnly
CD000142_DG_CRV	FWQAlignmentBased
CD000144_DG_DESK	FWQAlignmentBased
CD000147_KJ	rdmBased

Figure 5–54: Trip Assignment Screen

2. Find the mobile devices for which you want to change the assignments. If the mobile devices are not shown, you can find them by:
 - a. Select the group name from the **Show devices in** drop-down menu.
 - b. Select **Starting With**, **Containing** or **Ending With** from the drop-down menu.
 - c. Enter the known criteria in the text box.
 - d. Select the type of **Trip Definition** the mobile device is currently assigned to, if any. If it is not assigned, select All Definitions.
 - e. Click **Search**. The **Mobile Device** list refreshes to show any mobile devices assigned to that Trip Definition.
3. Click **Change Assignment**. The **Trip Assignment** screen changes to show assignment selections, shown in Figure 5–55.

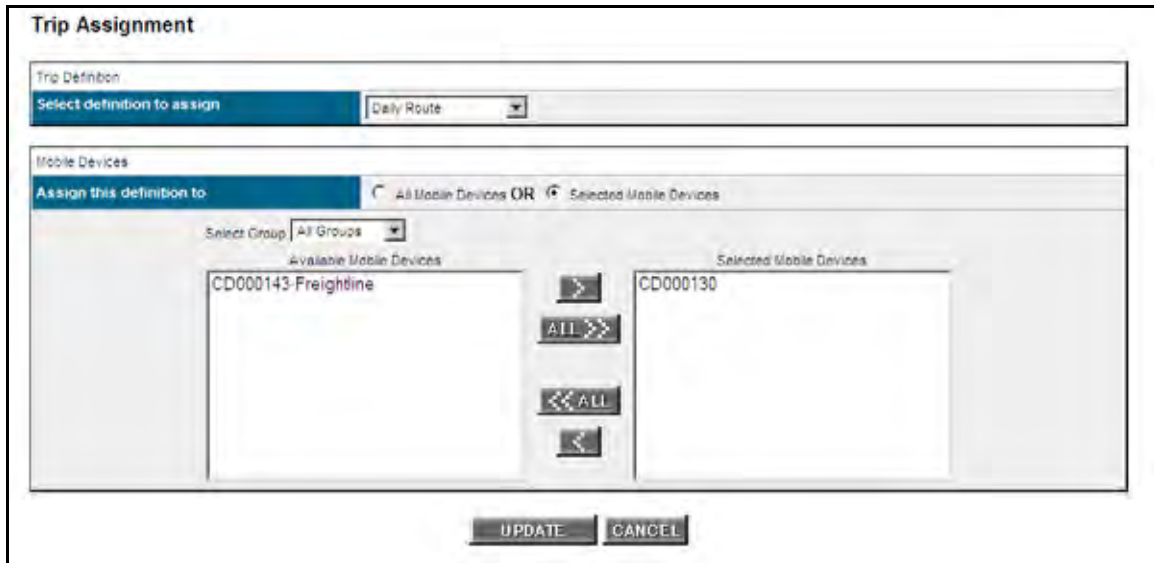


Figure 5-55: Trip Assignment Screen with Assignment Selection

4. If not previously done, select the **Trip Definition to Assign** from the drop-down menu. This defaults to show the currently selected Trip Definition.
5. Select the radio button to **Assign this Definition to**:
 - **All Mobile Devices** – shows all mobile devices.
 - **Selected Mobile Devices** – allows user to select specific groups from which to choose mobile devices.
6. If you chose **Selected Mobile Devices**, select the desired group from the **Select Group** drop-down menu.
7. Select the mobile device(s) that you want to assign to the Trip Assignment. You can select mobile devices in either the **Available Mobile Devices** list or the **Selected Mobile Devices** list.
8. Click the > button to move the selected mobile device(s) to the **Selected Mobile Devices** list. Click the >> button to move all mobile devices to the **Selected Mobile Devices** list.
9. Click **Update**. The screen refreshes to show the mobile devices in their new assignments.
10. Click **Cancel** to return to the **Trip Assignment** screen

Editing Trip Definition Assignments

1. From the **Trip Assignment** screen, click **Change Assignment**.
2. Select the Trip Definition for which you want to change assignments from the **Select Definition to Assign** drop-down menu.

**Note:**

You can also select the Trip Definition from the **Trip Assignment** screen before clicking **Change Assignment**.

3. Select the mobile device for which you want to change the Trip Assignment. You can select mobile devices in either the **Available Mobile Devices** list or the **Selected Mobile Devices** list.
4. Click the > button to move the selected mobile device(s) to the **Selected Mobile Devices** list.
Click the < button to move the selected mobile device(s) to the **Available Mobile Devices** list.
Click the >> button to move all mobile devices to the **Selected Mobile Devices** list.
Click the << button to move all mobile devices to the **Available Mobile Devices** list.
5. Click **Update**. The screen refreshes to show the mobile devices in their new Trip Assignments.
6. Click **Cancel** to return to the **Trip Assignments** screen.

Engine RPM – Road Speed Definitions

Engine RPM – Road Speed Definitions allow managers to get more accurate information about employee driving patterns and engine performance. By setting an Engine RPM – Road Speed definition, you can see when the vehicle is coasting, lugging or performing in an acceptable manner, saving both fuel and wear and tear on your vehicles.

Creating New Engine RPM – Road Speed Definitions

To create a new Engine RPM – Road Speed definition:

1. From the **Vehicle Diagnostics Administration** screen, click **Engine RPM – Road Speed Definition**. The **Engine RPM – Road Speed Administration** screen, shown in Figure 5-56, appears.

	Name	Description	
<input type="checkbox"/>	engine	engine	Edit
<input type="checkbox"/>	BrianTestEngineRPM	Brian Testing Engine RPM	Edit
<input type="checkbox"/>	TrainingTest	Test	Edit

Note: Some definition(s) have been disabled for deletion because either they are assigned to devices or predefined.

[Create New](#) [Delete Selected](#) Pages: 1

[Vehicle Diagnostics Administration Home](#)

Figure 5-56: Engine RPM – Road Speed Administration Screen

2. Click **Create New**. The **New Engine RPM – Road Speed Definition** screen, shown in Figure 5-57, appears.

Figure 5-57: New Engine RPM – Road Speed Definition Screen

3. Enter a **Name** for the definition.
4. Enter a **Description** for the definition.
5. Click **Next >>**. The **New Engine RPM – Road Speed Definition** screen changes, as shown in Figure 5-58.

Figure 5-58: Next Engine RPM – Road Speed Definition Screen

6. Enter the Speed (MPH) increments from the B&P workbook across the top of the definition table.
7. Enter the RPM increments from the B&P workbook down the rows of the definition table.
8. Select the transmission performance for each speed and RPM cell. These can be:
 - Coasting
 - Lugging
 - Optimum

You can select the settings from the B&P workbook.



Tip:

Using keyboard shortcuts makes entering RPM/Speed values faster and easier. Simply tab between cells, then use the up and down arrow keys to change the values.

9. Click **Save**. The settings for this Engine RPM – Road Speed Definition are saved.
10. Click **Cancel** to return to the **Engine RPM – Road Speed Administration** screen which shows the new definition.

Editing Engine RPM – Road Speed Definitions

To edit existing Engine RPM – Road Speed Definitions:

1. From the **Engine RPM – Road Speed Administration** screen, click **Edit** next to the definition you want to change. The **Edit Engine RPM – Road Speed Definition** screen, shown in Figure 5-59, appears.

Edit Engine RPM - Road Speed Definition			
ID:	47	Created By:	vd35
Name:	engine	Created Date:	8/2/2007 9:40:17 AM
Description:	engine	Updated By:	
Type:	Engine RPM Road Speed Definition	Updated Date:	

Name	engine *
Description	engine *
Type	Engine RPM Road Speed Definition

Next >> Cancel

Note: * means a required field

Figure 5-59: Edit Engine RPM – Road Speed Definition Screen

2. Change the definition **Name** or **Description**, if desired.

3. Click **Next >>**. The **Edit Engine RPM – Road Speed Definition** screen changes, as shown in Figure 5–60.

Edit Engine RPM - Road Speed Definition

ID: 47 Created By: v035
 Name: engine Created Date: 8/2/2007 9:40:17 AM
 Description: engine Updated By:
 Type: Engine RPM Road Speed Definition Updated Date:

		Speed (mph)													
		0	1	5	11	15	21	25	31	35	41	45	51	55	60
	5														
	10														
	15														
	20														
	25														
	30														
	35														
	40														
	45														
	50														
	55														
	60														
800	Idle	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim
900	Fast Idle	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim
1000	Fast Idle	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim
1100	Fast Idle	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim
1200	Fast Idle	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim
1300	Fast Idle	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim
1400	Fast Idle	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim	Optim
1500	Fast Idle	Governed	Governed	Governed	Governed	Governed	Governed	Governed	Governed	Governed	Governed	Governed	Governed	Governed	Governed
1600	Over Speed	Over speed	Over speed	Over speed	Over speed	Over speed	Over speed	Over speed	Over speed	Over speed	Over speed	Over speed	Over speed	Over speed	Over speed

<< Back Save Cancel

Note: * means a required field

Figure 5–60: Next Edit Engine RPM – Road Speed Definition Screen

4. Change the RPM or the Speed (MPH) increments in the table.
5. Change any transmission performances.
6. Click **Save**. The new settings for this Engine RPM – Road Speed Definition are saved.
7. Click **Cancel** to return to the **Engine RPM – Road Speed Administration** screen which shows the changed definition.

Assigning Engine RPM – Road Speed Definitions

Vehicles that perform different types of tasks will need different Engine RPM – Road Speed Definitions assigned to them.

To assign a Engine RPM – Road Speed Definition:

1. From the **Vehicle Diagnostics Administration** screen, click **Trip Definition Assignment**. The **Engine RPM – Road Speed Assignment** screen, shown in Figure 5–61, appears.

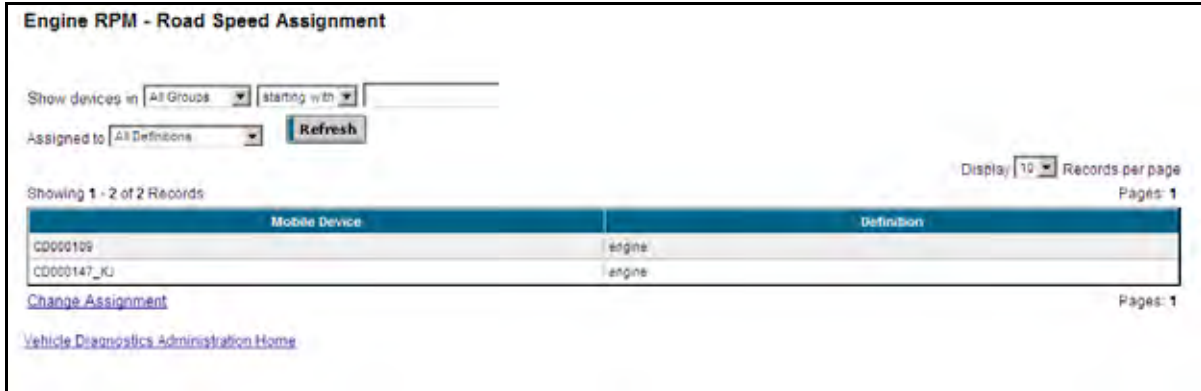


Figure 5-61: Engine RPM – Road Speed Assignment Screen

2. Find the mobile devices for which you want to change the assignments. If the mobile devices are not shown, you can find them by:
 - a. Select the group name from the **Show devices in** drop-down menu.
 - b. Select **Starting With**, **Containing** or **Ending With** from the drop-down menu.
 - c. Enter the known criteria in the text box.
 - d. Select the type of **Engine RPM – Road Speed Definition** the mobile device is currently assigned to, if any. If it is not assigned, select **All Definitions**.
 - e. Click **Search**. The **Mobile Device** list refreshes to show any mobile devices assigned to that Trip Definition.
3. Click **Change Assignment**. The **Engine RPM – Road Speed Assignment** screen changes to show assignment selections, as shown in Figure 5-62.

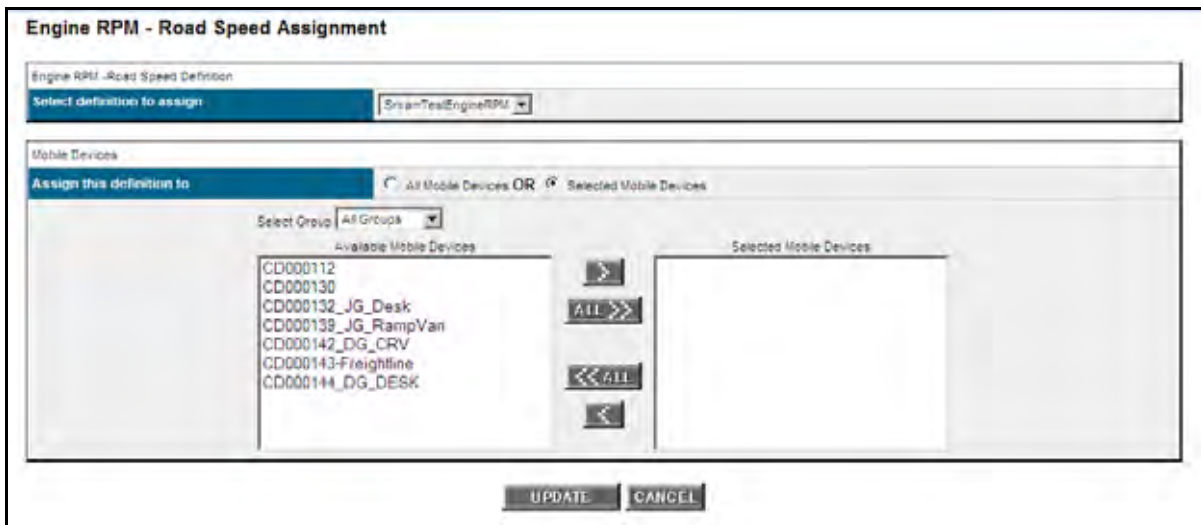


Figure 5-62: Engine RPM – Road Speed Assignment Screen with Assignment Selection

4. If not previously done, select the **Engine RPM – Road Speed Definition to Assign** from the drop-down menu. This defaults to show the currently selected Trip Definition.
5. Select the radio button to **Assign this Definition to:**
 - All Mobile Devices – shows all mobile devices.
 - Selected Mobile Devices – allows user to select specific groups from which to choose mobile devices.
6. If you chose Selected Mobile Devices, select the desired group from the **Select Group** drop-down menu.
7. Select the mobile device(s) that you want to assign to the Engine RPM – Road Speed Assignment. You can select mobile devices in either the **Available Mobile Devices** list or the **Selected Mobile Devices** list.
8. Click the > button to move the selected mobile device(s) to the **Selected Mobile Devices** list.
Click the >> button to move all mobile devices to the **Selected Mobile Devices** list.
9. Click **Update**. The screen refreshes to show the mobile devices in their new assignments.
10. Click **Cancel** to return to the **Engine RPM – Road Speed Assignment** screen.

Top Gear Definitions

Top Gear Definitions allow reporting of time of spent, distance traveled and fuel burned when a vehicle was traveling in it's highest gear.

Creating Top Gear Definitions

To create a Top Gear Definition:

1. From the **Vehicle Diagnostics Administration** screen, click **To Gear Definition**. The **Top Gear Administration** screen, shown in Figure 5–63, appears.



The screenshot shows the 'Top Gear Administration' interface. At the top, it says 'Showing 1 - 4 of 4 Records' and 'Display 10 Records per page'. Below this is a table with four columns: Name, Description, Type, and an edit button (E). The table contains four rows of data. Below the table, there is a note: 'Note: Some definition(s) have been disabled for deletion because devices have been assigned to those definition(s)'. There are also links for 'Create New', 'Delete Selected', and 'Vehicle Diagnostics Administration Home'. The page number 'Pages: 1' is shown at the bottom right.

Name	Description	Type	
SriramTestORTopGear	Sriram Testing Gear Ratio Top Gear Definition	Gear Ratio based	E
SriramTestRPMMPHTopGear	Sriram Testing RPM/MPH based Top Gear	RPM/MPH Ratio based	E
test100		RPM/MPH Ratio based	E
test111	test	RPM/MPH Ratio based	E

Figure 5–63: Top Gear Administration Screen

2. Click **Create New**. The **Create Top Gear Definition** screen, shown in Figure 5–64, appears.

Create Top Gear Definition

Name

Description

Type: Gear Ratio based

Overall Gear Reduction

Top Transmission Gear Ratio: 0.0

Aux Transmission Gear Ratio (Enter 1 if no aux transmission is used): 0.0

Rear Axle Ratio: 0.0

Tire information

Revs per Mile: 0

Note: * means a required field

SAVE CANCEL

Figure 5–64: Create Top Gear Definition Screen

3. Enter a **Name** for the definition.
4. Enter a **Description** for the definition.
5. Select the **Type** of Top Gear Definition. The **Create Top Gear Definition** screen changes to show the required fields for the selected type. This can be either:
 - Gear Ratio Based (default), as shown in Figure 5–64
 - a. Enter the **Top Transmission Gear Ratio**.
 - b. Enter the **Auxiliary Transmission Gear Ratio**, if there is one. This is an optional field.
 - c. Enter the **Rear Axle Ratio**.
 - d. Enter the **Tire Revs Per Mile**.
 - RPM/MPH Ratio Based, as shown in Figure 5–65

Create Top Gear Definition

Name: Overdrive

Description: Fuel saving gear

Type: RPM/MPH Ratio based

RPM/MPH Ratio

Engine Speed (Revolutions per Minute): 0

Road Speed (Miles per Hour): 0.0

Note: * means a required field

SAVE CANCEL

Figure 5–65: Create Top Gear RPM/MPH Ratio Based Definition Screen

- a. Enter the **Engine Speed (Revolutions per Minute)**.
 - b. Enter the **Road Speed (Miles per Hour)**.
6. Click **Save**. GeoManager saves the Top Gear Definition and the **Top Gear Administration** screen reappears showing the new definition.

Editing Top Gear Definitions

To edit existing Top Gear Definitions:

1. From the **Top Gear Administration** screen, click **Edit** next to the definition you want to change. The **Top Gear Definition** screen, shown in Figure 5–66, appears.

Edit Top Gear Definition

Name: Overdrive

Description: Fuel saving gear

Type: RPM/MPH Ratio based

RPM/MPH Ratio

Engine Speed (Revolutions per Minute): 1800

Road Speed (Miles per Hour): 50.0

Note: * means a required field

UPDATE CANCEL

Figure 5–66: Edit Top Gear Definition Screen

2. Change any incorrect information:

- Name
- Description
- Ratio Information

**Note:**

You cannot change the Type.

If you do not need to change any information, click **Cancel**.

3. Click **Update**. GeoManager saves the Top Gear Definition information and the **Top Gear Administration** screen reappears.

Assigning Top Gear Definitions

Vehicles that perform different types of tasks will need different Top Gear Definitions assigned to them.

To assign a Top Gear Definition:

1. From the **Vehicle Diagnostics Administration** screen, click **Top Gear Definition Assignment**. The **Top Gear Assignment** screen, shown in Figure 5–67, appears.

Mobile Device	Definition
CD000147_KJ	SrvamTestRPMUPHTopGear

Figure 5–67: Top Gear Assignment Screen

2. Find the mobile devices for which you want to change the assignments. If the mobile devices are not shown, you can find them by:
 - a. Select the group name from the **Show devices in** drop-down menu.
 - b. Select **Starting With**, **Containing** or **Ending With** from the drop-down menu.
 - c. Enter the known criteria in the text box.
 - d. Select the type of **Top Gear Definition** the mobile device is currently assigned to, if any. If it is not assigned, select All Definitions.

- e. Click **Search**. The **Mobile Device** list refreshes to show any mobile devices assigned to that Trip Definition.
3. Click **Change Assignment**. The **Top Gear Assignment** screen changes to show assignment selections, as shown in Figure 5–68.

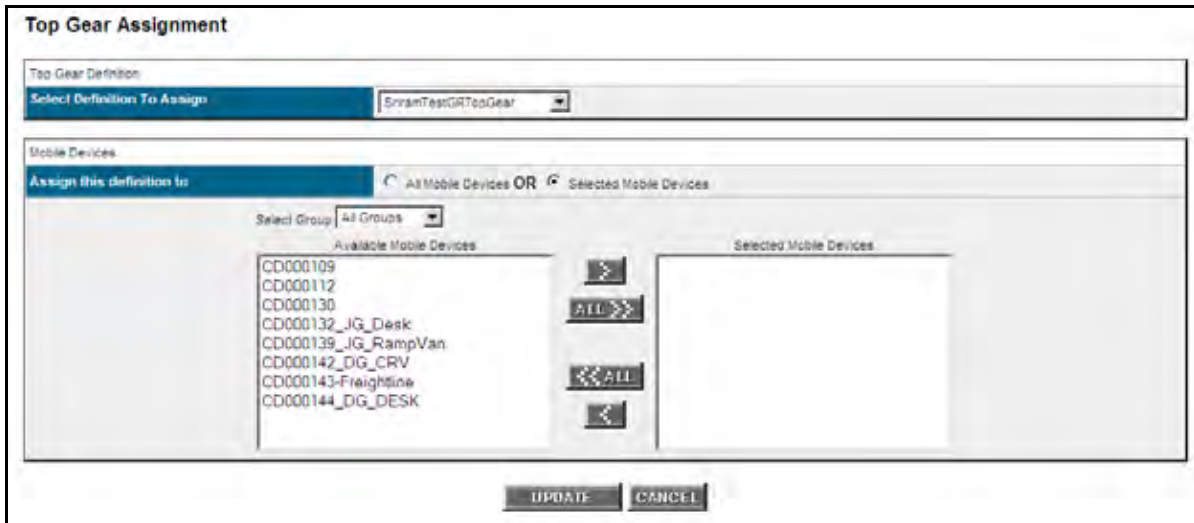


Figure 5–68: Top Gear Assignment Screen with Assignment Selection

4. If not previously done, select the **Top Gear Definition to Assign** from the drop-down menu. This defaults to show the currently selected Trip Definition.
5. Select the radio button to **Assign this Definition to**:
 - All Mobile Devices – shows all mobile devices.
 - Selected Mobile Devices – allows user to select specific groups from which to choose mobile devices.
6. If you chose Selected Mobile Devices, select the desired group from the **Select Group** drop-down menu.
7. Select the mobile device(s) that you want to assign to the Top Gear Assignment. You can select mobile devices in either the **Available Mobile Devices** list or the **Selected Mobile Devices** list.
8. Click the > button to move the selected mobile device(s) to the **Selected Mobile Devices** list. Click the >> button to move all mobile devices to the **Selected Mobile Devices** list.
9. Click **Update**. The screen refreshes, shown in Figure 5–69, to show the mobile devices in their new assignments.

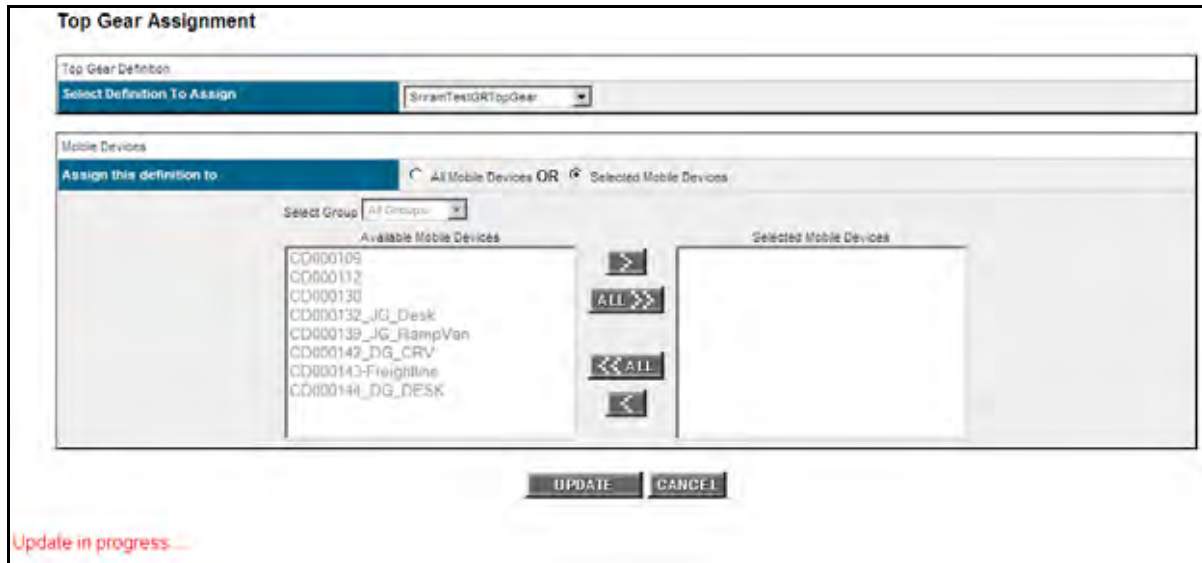


Figure 5-69: Top Gear Assignment Screen with Updating Assignment Selection

10. Click **Cancel** to return to the **Top Gear Assignment** screen.

Editing Top Gear Assignments

1. From the **Top Gear Assignment** screen, click **Change Assignment**.
2. Select the Top Gear Definition for which you want to change assignments from the **Select Definition to Assign** drop-down menu.



Note:

You can also select the Top Gear Definition from the **Top Gear Assignment** screen before clicking **Change Assignment**.

3. Select the mobile device for which you want to change the Top Gear Assignment. You can select mobile devices in either the **Available Mobile Devices** list or the **Selected Mobile Devices** list.
4. Click the > button to move the selected mobile device(s) to the **Selected Mobile Devices** list.
Click the < button to move the selected mobile device(s) to the **Available Mobile Devices** list.
Click the >> button to move all mobile devices to the **Selected Mobile Devices** list.
Click the << button to move all mobile devices to the **Available Mobile Devices** list.
5. Click **Update**. The screen refreshes to show the mobile devices in their new Top Gear Assignments.
6. Click **Cancel** to return to the **Top Gear Assignments** screen.

After all your definitions are created, assigned and your vehicles have started their daily workloads, you can run reports for the affected mobile devices.

Carbon Emission Profile

The Carbon Emission Profile screen allows you to specify the conversion rules to apply in computing the carbon emissions for your vehicles. Carbon dioxide (CO₂) emission from vehicles is primarily determined by the amount of Carbon burned in the fuel used. GeoManager uses the following factors to calculate the Carbon emission from fuel used:

- 1 gallon diesel fuel = 22.2 pounds or equivalent of CO₂
- 1 gallon gasoline fuel = 19.4 pounds or equivalent of CO₂

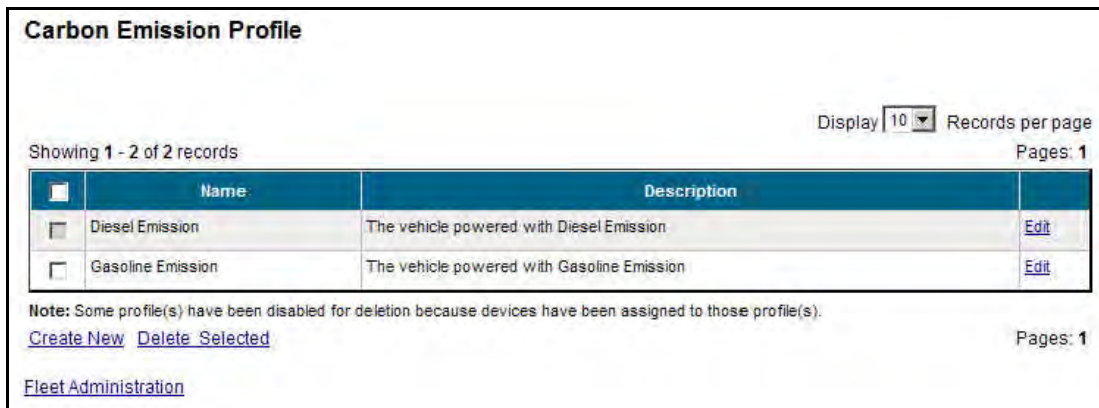


Note:

The diesel fuel is assumed for Heavy duty fleets and gasoline for Light and Medium duty vehicles.

While the above assignment will work for most fleets, there are exceptional cases for example, a light duty vehicle using diesel fuel. In such cases the customer can define their own translation factor, create a Carbon Emission Profile and assign it to specific vehicles.

1. Click **Carbon Emission Profile** from the **Fleet Administration** screen, shown in Figure 5–44. The **Carbon Emission Profile** screen, shown in Figure 5–70, appears.



Carbon Emission Profile

Showing 1 - 2 of 2 records Display Records per page

<input type="checkbox"/>	Name	Description	
<input type="checkbox"/>	Diesel Emission	The vehicle powered with Diesel Emission	Edit
<input type="checkbox"/>	Gasoline Emission	The vehicle powered with Gasoline Emission	Edit

Note: Some profile(s) have been disabled for deletion because devices have been assigned to those profile(s).

[Create New](#) [Delete Selected](#) Pages: 1

[Fleet Administration](#)

Figure 5–70: Carbon Emission Profile Screen

2. Click **Create New**. The **Create New Carbon Emission Profile** screen, shown in Figure 5–71, appears.

Figure 5-71: Create New Carbon Emission Profile Screen

3. Enter the **Name**. This is a required field.
4. Enter the **Description**, if known.
5. Enter the **Carbon Emission per 1 Unit of Measure of Fuel**. This is a required field.
6. Click **Save** to accept the Carbon Emission Profile change(s).

Click **Cancel** to return to the **Carbon Emission Profile** screen without saving changes.

To edit Carbon Emission Profile:

1. From the **Carbon Emission Profile** screen, shown in Figure 5-72, check the box next to the **Carbon Emission Profile** you want to edit.
2. Click **Edit**.

Figure 5-72: Edit Carbon Emission Profile Screen

3. Make the necessary changes.
4. Click **Update**. The **Carbon Emission Profile** screen reappears.

Click **Cancel** to return to the **Carbon Emission Profile** screen without saving changes.

To Delete Carbon Emission Profile:

1. From the **Carbon Emission Profile** screen, shown in Figure 5–70, check the box next to the **Carbon Emission Profile** you want to edit.
2. Click **Delete Selected**.

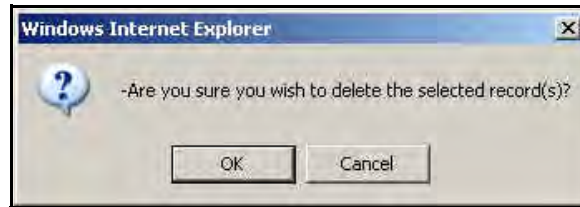


Figure 5–73: Delete Carbon Emission Profile Confirmation Dialog

3. Click **OK**. The **Carbon Emission Profile** screen reappears without the deleted carbon emission profile.

Click **Cancel** to close the dialog box without making changes.

Carbon Emission Profile Assignment

Carbon Emission Profile Assignment allows you to assign a Carbon Emission Profile to use while generating Carbon Emission reports. Once assigned, the system will use the new translation factor from the assigned profile instead of the default rules for computing the Carbon Emission.

1. Click **Carbon Emission Profile Assignment** from the **Fleet Administration** screen, shown in Figure 5–44. The **Carbon Emission Profile Assignment** screen, shown in Figure 5–74, appears.

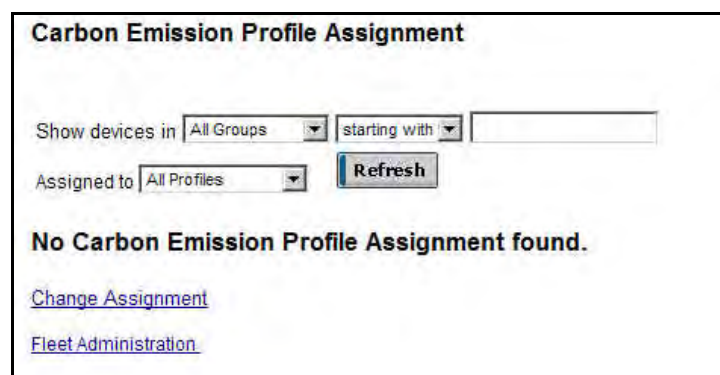


Figure 5–74: Carbon Emission Profile Screen

2. Click **Change Assignment**. The **Carbon Emission Profile Assign Mobile Device** screen, shown in Figure 5–75, appears.

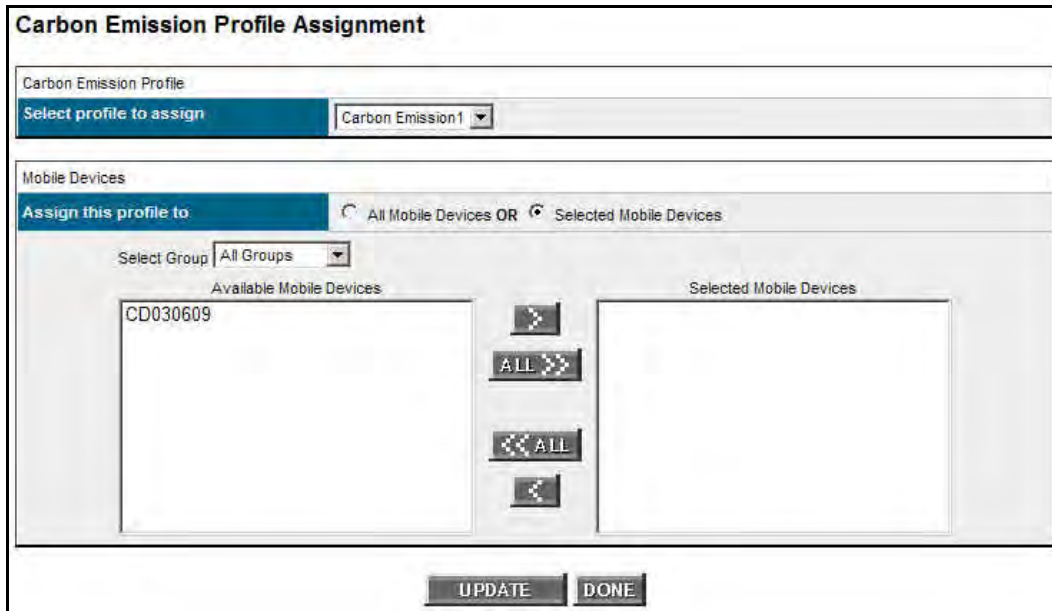


Figure 5-75: Carbon Emission Profile Assign Mobile Device Screen

3. Select the desired profile from the **Select Profile to Assign** drop down menu if not selected.
4. Select the mobile device(s) from the **Available Mobile Devices** field you want to assign the carbon emission profile.
5. Click the > button to move the mobile device(s) to the Selected Mobile Devices field.
6. Click **Update**.
7. Click **Done** to save the carbon emission profile assignment. The **Carbon Emission Profile Assignment** screen refreshes with the mobile device assigned, shown in Figure 5-76

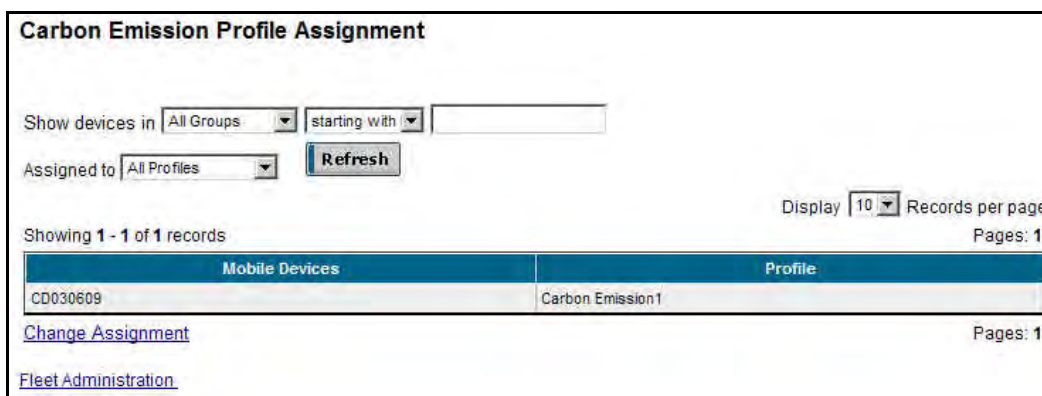


Figure 5-76: Carbon Emission Profile Mobile Device Assigned Screen

Click **Fleet Administration** to return to the Fleet Administration screen, shown in Figure 5-44.

Mobile Device Group Administration

Some GeoManager customers use Mobile Device Grouping to administer their mobile workers into groups. For more information about Mobile Device Grouping, please see the *GeoManager Mobile Device Grouping Administration Addendum*.

TimeConnect Administration

TimeConnect is an optional GeoManager feature. It allows managers and administrators to keep track of the amount of time users and drivers use when sending data to and from the *iLM* installed in the vehicle. This helps reconcile wireless usage time.

To configure TimeConnect for your account, click TimeConnect in the Navigation links under Devices. The TimeConnect Administration screen, shown in Figure 5–77, appears.



Figure 5–77: TimeConnect Administration Screen

For more information about TimeConnect and its administration, please see the *TimeConnect Admin & User Guide*.

Vehicle Maintenance Administration

GeoManager Vehicle Maintenance is designed to streamline the planning of regular fleet maintenance, helping you realize the benefits of fuel savings, reduced downtime and service interruptions, and reduced maintenance costs.

With the Vehicle Maintenance module, you can designate which maintenance items to track, access reports showing maintenance status and set up automatic reminder notifications when maintenance is due.

You can set up your own maintenance items or choose from the 13 default maintenance items:

- Change oil and filter
- Rotate tires
- Lubricate suspension/steering

- Repack front wheel bearings
- Replace air filter
- Replace auto transmission fluid and filter
- Change engine coolant
- Replace spark plugs
- Replace fuel filter
- Replace manual transmission fluid
- Replace accessory drive belts
- Replace rear axle lubricant
- Registration/smog check

From the **Devices** drop down menu, shown in Figure 5–2, click **Vehicle Maintenance** under Devices to go to the main **Vehicle Maintenance** administration screen, shown in Figure 5–78.

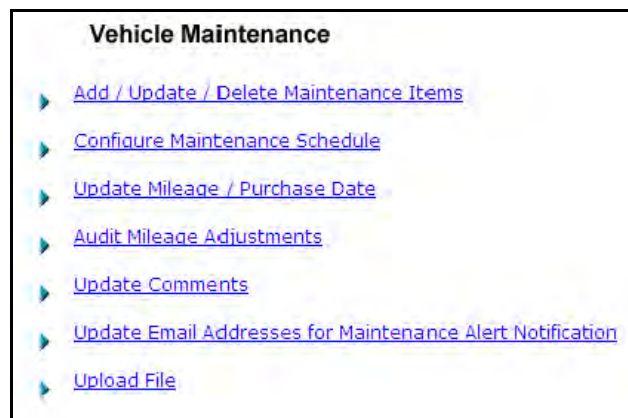


Figure 5–78: Vehicle Maintenance Administration Screen

Maintenance Items

You can add, update and delete vehicle maintenance items.

To add a Vehicle Maintenance item:

1. From the **Vehicle Maintenance** screen, shown in Figure 5–78, click **Add/Update/Delete Maintenance Items**. The **Add/Update/Delete Maintenance Items** screen, shown in Figure 5–79, appears.

Vehicle Maintenance

Add/Update/Delete Vehicle Maintenance Items

Maintenance Item	Maintenance Notification Lead Time (days)	Maintenance Notification Lead Mileage (Miles)	Select to Update
Oil and Filter change	30	300	<input checked="" type="checkbox"/>
Rotate Tires	30	300	<input checked="" type="checkbox"/>
Lubricate suspension/steering	30	300	<input checked="" type="checkbox"/>
Repack Front Wheel Bearings	30	300	<input checked="" type="checkbox"/>
Replace Air Filter	30	300	<input checked="" type="checkbox"/>
Replace Auto Trans fluid and filter	30	300	<input checked="" type="checkbox"/>
Change Engine Coolant	30	300	<input checked="" type="checkbox"/>
Replace Spark Plugs	30	300	<input checked="" type="checkbox"/>
Replace Fuel Filter	30	300	<input checked="" type="checkbox"/>
Replace manual transmission fluid	30	300	<input checked="" type="checkbox"/>
Replace accessory drive belt(s)	30	300	<input checked="" type="checkbox"/>
Replace rear axle lubricant	30	300	<input checked="" type="checkbox"/>
Smog Check	30	300	<input checked="" type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

Notes:

- Maintenance items configured above are common to all of the mobile device/vehicles in this account.
- When a maintenance item is deleted, the maintenance schedule and maintenance history records corresponding to that maintenance item for all the vehicles will be lost.

Reset Save Delete Cancel

Figure 5-79: Add Vehicle Maintenance Item Screen

2. Enter any new Maintenance Item(s) you want to track:
 - a. Enter a name in an empty **Maintenance Item** text field.
 - b. Enter the number of days you want to be notified prior to the maintenance due date in the **Maintenance Notification Lead Time** text field.
 - c. Enter the number of miles you want to be notified prior to the mileage due date in the **Maintenance Notification Lead Mileage** text field.
 - d. A check mark already appears in the **Select to Update** column.
 - e. Click **Save**. The screen refreshes, saving the new maintenance item.

Click **Reset** to clear any unsaved maintenance items.

Click **Cancel** to return to the Administration screen without making any changes.

3. To update any Maintenance Item:
 - a. Update the Maintenance Item information. You can change the **Maintenance Notification Lead Time** and/or **Maintenance Notification Lead Mileage** text. You can change multiple items.
 - b. Click the Select to Update check box for each changed item.
 - c. Click Save. The screen refreshes, saving the new maintenance item.
Click **Reset** to clear any unsaved maintenance items.
Click **Cancel** to return to the Administration screen without making any changes.
4. To delete any Maintenance Item:
 - a. Click the **Select to Update** check box for each item you want to delete.
 - b. Click **Delete**. A confirmation dialogue box, shown in Figure 5–80, appears.



Figure 5–80: Delete Maintenance Item Confirmation Dialog Box

- c. Click **OK**. The **Add Vehicle Maintenance Item** screen refreshes without the selected items.

Maintenance Schedule

After you have decided which maintenance items you want to track, you must configure a Maintenance Schedule for each mobile device you want to track.

To configure a Maintenance Schedule:

1. From the **Vehicle Maintenance** screen, shown in Figure 5–78, click **Configure Maintenance Schedule**. The **Configure Vehicle Maintenance Schedules** screen, shown in Figure 5–81, appears.

Vehicle Maintenance

Configure Vehicle Maintenance Schedules

Select Vehicle Group: Select Mobile Device:

Maintenance Item	Schedule Service Every X Miles	Schedule Service Every X Months
Oil and Filter change	<input type="text" value="3000"/>	<input type="text" value="6"/>
Rotate Tires	<input type="text" value="3000"/>	<input type="text" value="6"/>
Lubricate suspension/steering	<input type="text" value="3000"/>	<input type="text" value="6"/>
Repack Front Wheel Bearings	<input type="text" value="3000"/>	<input type="text" value="6"/>
Replace Air Filter	<input type="text" value="3000"/>	<input type="text" value="6"/>
Replace Auto Trans fluid and filter	<input type="text" value="3000"/>	<input type="text" value="6"/>
Change Engine Coolant	<input type="text" value="3000"/>	<input type="text" value="6"/>
Replace Spark Plugs	<input type="text" value="3000"/>	<input type="text" value="6"/>
Replace Fuel Filter	<input type="text" value="3000"/>	<input type="text" value="6"/>
Replace manual transmission fluid	<input type="text" value="3000"/>	<input type="text" value="6"/>
Replace accessory drive belt(s)	<input type="text" value="3000"/>	<input type="text" value="6"/>
Replace rear axle lubricant	<input type="text" value="3000"/>	<input type="text" value="6"/>
Smog Check	<input type="text" value="3000"/>	<input type="text" value="6"/>

Apply the above settings to any of the following Mobile Devices. (This is an optional step):

Training10
 Training2
 Training3
 Training4
 Training5
 Training6
 Training7
 Training8
 Training9

Figure 5–81: Configure Vehicle Maintenance Schedule Screen

2. Select the **Vehicle Group** from the drop-down list.
3. Select the **Mobile Device** from the drop-down list.
4. For each **Maintenance Item**, enter the number of miles between each service in the **Schedule Service Every X Miles** text box.
5. For each **Maintenance Item**, enter the number of months between each service in the **Schedule Service Every X Months** text box.
6. If desired, select any other vehicles to which you want to apply this schedule. You can select more than one vehicle by holding down the [Ctrl] key and clicking with the mouse.
7. Click **Save** to save the maintenance schedule. The **Configure Vehicle Maintenance Schedules** screen refreshes, saving the schedule information.

Click **Reset** to clear any unsaved schedule information.

Click **Cancel** to return to the Vehicle Maintenance screen.

Mileage and Purchase Date

GeoManager allows you to enter the current vehicle mileage and purchase date to accurately schedule maintenance for your vehicles.

To enter a vehicle's mileage and purchase date:

1. From the **Vehicle Maintenance** screen, shown in Figure 5-78, click **Update Mileage/Purchase Date**. The **Update Mileage/Purchase Date** screen, shown in Figure 5-82, appears.

Update Mileage

Select Vehicle Group: Search Device: Display:

<input type="checkbox"/>	Device Name	Purchase Date	Last Reported Time	GPS Reported Mileage	Current Adjusted Mileage	New Mileage	%	Adjustment
<input type="checkbox"/>	102-GH_Training07	09/12/2006	01/16/08 12:40 PM	4618.2	36529.2	41720.8	<input checked="" type="checkbox"/>	803.4
<input type="checkbox"/>	Testing1	01/31/2007	03/22/07 04:29 PM	79.4	5479.4	5479.4	<input type="checkbox"/>	5400
<input type="checkbox"/>	Testing2	10/18/2007	03/23/07 02:42 PM	655	2914.8	2914.8	<input checked="" type="checkbox"/>	345
<input type="checkbox"/>	Training01	01/01/2006	01/16/08 01:02 PM	10439.8	7989.4	7989.4	<input type="checkbox"/>	-2450.4
<input type="checkbox"/>	Training02	01/01/2006	01/15/08 08:42 AM	3353.7	3252	3252	<input type="checkbox"/>	-101.7
<input type="checkbox"/>	Training03	10/09/2007	09/06/07 03:50 AM	4909.4	5056.7	5056.7	<input checked="" type="checkbox"/>	3
<input type="checkbox"/>	Training04	01/01/2006	09/06/07 05:14 AM	13173	7400.9	7400.9	<input type="checkbox"/>	-5772.1
<input type="checkbox"/>	Training05	01/12/2007	09/06/07 04:59 AM	513.3	743.2	743.2	<input type="checkbox"/>	229.9
<input type="checkbox"/>	Training06	04/10/2005	05/07/07 12:19 PM	9800.2	8072.7	8072.7	<input type="checkbox"/>	-1727.5
<input type="checkbox"/>	Training08	01/01/2006	02/28/06 08:45 AM	134.6	148.1	148.1	<input checked="" type="checkbox"/>	10

Page Navigation: [prev](#) [1](#) [2](#) [next](#)

Rows Not Modified

New Mileage > Previous Mileage

New Mileage < Previous Mileage

Figure 5-82: Update Mileage/Purchase Date Screen

2. Select the **Vehicle Group** from the drop-down list.
Enter search criteria in the **Search Device** field to locate devices not displayed.
If there are 10 or more devices, you can select **10**, **20**, **50** or **100** from the **Display** drop down menu.
3. If known, enter the **Purchase Date** for each device. If not known, the purchase date defaults to January 1 of this year.
4. Enter the **New Mileage** for each device based on the odometer readings if it differs significantly from the **GPS Reported Mileage**.
5. Click **Save**. The **Update Mileage** screen saves the information and refreshes.
Click **Reset** to clear any unsaved information.

Click **Cancel** to return to the **Vehicle Maintenance** screen.

GPS Drift



Note:

Due to GPS drift, it may be necessary to adjust the GPS mileage to match the actual mileage. If you know the actual mileage based on odometer readings enter it in the **New Mileage** field.

1. Check the % box to enable mileage adjustment by percentage.

Enter the numeric percentage in the **Adjustment** field. The fields are automatically updated with the change.

Audit Mileage Adjustments

All mileage updates and changes can be viewed in the Mileage Audit Report.

To view the Mileage Audit Report:

1. From the **Vehicle Maintenance** screen, shown in Figure 5–78, click **Audit Mileage Adjustments**. The **Mileage Audit Report** screen, shown in Figure 5–82, appears.

Mileage Audit Report

From Date: 1/14/09 To Date: 10/16/09
 From Time: 12:00 AM To Time: 12:00 AM
 Select Vehicle Group: - ALL -
 Select Device: demo **SEARCH** Display: 10

Device Name	Original Mileage	Adjustment	isPercentage	Adjustment Time	Adjusted By
DemoVanEast_old	102119.5	7525	false	1/14/09 1:54 PM	ma77en

Page: 1 [Back to Vehicle Maintenance Administration](#)

Figure 5–83: Mileage Audit Report Screen

2. Select the **From Date** and **To Date** for the mileage adjustment using the **Calendar** pop up menu.
3. Select the **From Time** and **To Time** times for the mileage adjustment using the **Clock** icon.
4. Select the **Vehicle Group** from the drop down list.

5. Enter search criteria in the **Select Device** field to locate devices not displayed.

If there are 10 or more devices, you can select **10, 20, 50** or **100** from the **Display** drop down menu.

6. Click **Search**.

Click **Back to Vehicle Maintenance Administration** to return to the Vehicle Maintenance screen.

Update Comments

You can enter and save comments about each vehicle in Vehicle Maintenance. This can be any type of information about the vehicle, including repair work, cosmetic defects, recurring issues or any other pertinent information.

To enter a comment about a vehicle:

1. From the **Vehicle Maintenance** screen, shown in Figure 5–78, click **Update Comments**. The **Update Maintenance Comments** screen, shown in Figure 5–84, appears.

Figure 5–84: Update Maintenance Comments Screen

2. Select the **Mobile Device** from the drop-down list.
3. Enter any comments about the vehicle’s maintenance. You can enter a maximum of 2000 characters. The **Characters Left** field shows you the number of characters still available to enter.

4. Click **Save**. The **Update Maintenance Comments** screen refreshes, saving the enter comment(s).

Click **Reset** to clear any unsaved comments.

Click **Cancel** to return to the Vehicle Maintenance screen.

Click **Delete** to delete all comments. A confirmation dialogue box, shown in Figure 5–85, appears.

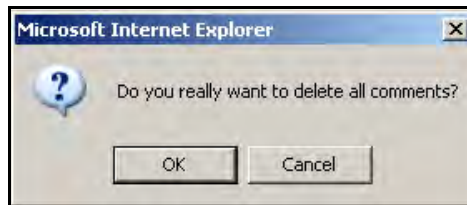


Figure 5–85: Delete All Comments Confirmation Dialog Box

Click **OK** to delete all comments.

Notifications

You can select who gets notified by email when vehicles need maintenance.

To enter or update email addresses when vehicles need maintenance:

1. From the **Vehicle Maintenance** screen, shown in Figure 5–78, click **Update Email Addresses for Maintenance Alert Notification**. The **Maintenance Alert Notification** screen, shown in Figure 5–86, appears.

Figure 5–86: Maintenance Alert Notification Screen

2. Enter the email address(es) where you want alerts sent. You can enter up to 4 email addresses.

3. Click **Save**. The **Maintenance Alert Notification** screen refreshes, saving any entered addresses.

Click **Reset** to clear any unsaved information.

Click **Cancel** to return to the Vehicle Maintenance screen.

To delete a previously entered email address, delete the address from the **Update Email Address List**, then click **Save**.

Uploading Odometer Information

If you have a spreadsheet or text file with all your user information contained within it, you can upload that information rather than enter each user individually.

To upload odometer information:

1. From the **Vehicle Maintenance** screen, shown in Figure 5–78, click the **Upload File** link. The **Odometer Spreadsheet File Upload** screen, shown in Figure 5–87, appears.

Administration

Odometer Spreadsheet File Upload

INSTRUCTIONS FOR ADJUSTING ODOMETER VIA FILE UPLOAD

1. [Download Odometer Spreadsheet Template](#) - Download and use the template to make odometer adjustments.
2. Open file in Excel. Notice that there are 3 columns (DEVICE LABEL, PURCHASE DATE, CURRENT MILEAGE READING). **(IMPORTANT: DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS)**
3. Modify the appropriate columns.*
4. Save file as csv (comma-delimited), Name the file "odometer_adjustment.csv".
5. Upload the file

* Mileage value must be < 10,000,000. Upload file must be less than 1MB.

[Show Last Odometer Adjustment Upload Result](#)
[Show Odometer Adjustment Upload History](#)
[Back to Vehicle Maintenance Menu](#)

Figure 5–87: Odometer Spreadsheet File Upload Screen

2. Download and use the template **Odometer Spreadsheet Template**, shown in Figure 5–88.

	A	B	C
1	DEVICE LABEL	PURCHASE DATE	CURRENT MILEAGE READING
2	102-GH Training07	9/12/2006	96529.15496
3	Testing1	1/31/2007	6479.411236
4	Testing2	10/18/2007	2914.787373
5	Training01	1/1/2006	7969.443809
6	Training02	1/1/2006	3251.964598
7	Training03	10/8/2007	5056.691651
8	Training04	1/1/2006	7400.907195
9	Training05	1/12/2007	743.2147416
10	Training06	4/10/2005	8072.704304
11	Training08	1/1/2006	148.0890002
12	Training09	1/1/2006	140.4130199
13	TrainingW1	12/6/2006	2105.777495
14	TrainingW2		9512.092676

Figure 5–88: Odometer Spreadsheet Template Sample

3. Open the file in Excel. Notice that there are three columns:

- Device Label
- Purchase Date
- Current Mileage Reading



WARNING!

DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS!

4. Modify the appropriate definitions.
5. Save the file as csv (comma-delimited) without renaming it. The File size is limited to 1 MB.
6. Click **Browse** to find and select the saved file.
7. Click **Upload File**. A confirmation dialogue box, shown in Figure 5–156, appears.
8. Click **OK**.
 - If the upload is successful, the **Upload Completed** screen, shown in Figure 5–157, appears.
 - If the upload is not successful, the **Upload Failed** screen, shown in Figure 5–158, appears.
9. Click **Done**. The **Odometer Spreadsheet File Upload** screen appears.

After the files are uploaded, you can see the results from the last upload by clicking the **Show Last Odometer Adjustment Upload Result** link. The **Last Odometer Adjustment Upload** screen, shown in Figure 5–215, appears.

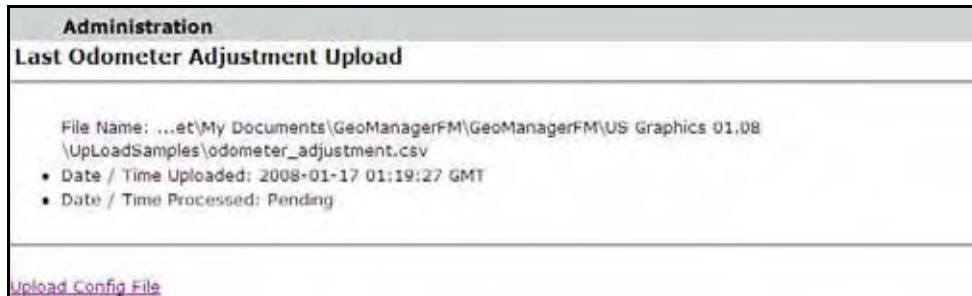


Figure 5–89: Last Odometer Adjustment Upload Result Screen

You can view the upload history by clicking the **Show Odometer Adjustment Upload History** link in the **Odometer Spreadsheet File Upload** screen. The **Odometer Adjustment Upload History** screen, shown in Figure 5–216, appears.



Figure 5–90: Odometer Adjustment Upload History Screen

To return to the **Odometer Spreadsheet File Upload** screen, click the **Upload Config File** link.

WLAN Security Administration

The WLAN Administration feature of Trimble GeoManager_{SM} enables customers to remotely configure **iLM 3100-W Series** access point security, authentication, and other parameters. The current and/or new access point configurations can be viewed at any time via the **Trimble GeoManager WLAN Security Administration** screen.



Note:

Only a Super Admin has access to WLAN Administration capabilities.

WLAN access point administration relates to two types of data: **Configuration Data** and **Usage Data**. **Configuration Data** includes all parameter data required to configure the access point. **Usage Data** includes hourly statistics of traffic through the WLAN interface.

The WLAN Administration feature consists of three sub-features:

- **WLAN remote configuration** – Allows access point configuration via browser.
- **CSV Upload** – Enables the upload of many iLM 3100-W Series access point configurations in bulk using CSV format.
- **Reports** – Provides configuration audit and data usage reports.

For more information about WLAN Security Administration, see the *GeoManager iLM[®] 3100-W Series WLAN Admin Guide*.

Landmark Administration

You can create Landmarks in the administration section of GeoManager if you know the address. If you do not know the address, you can create Landmarks by placement in MapView.

To create a Landmark by address:

1. From the **Landmarks** drop down menu, shown in Figure 5–91, click the **Landmarks** drop down menu under the **Navigation** links. The **Devices Administration** link, shown in Figure 5–91, appear. The default screen shown is Landmark Administration.

The **Landmark Administration** screen, shown in Figure 5–92, appears.



Figure 5–91: Landmark Administration Drop Down Menu

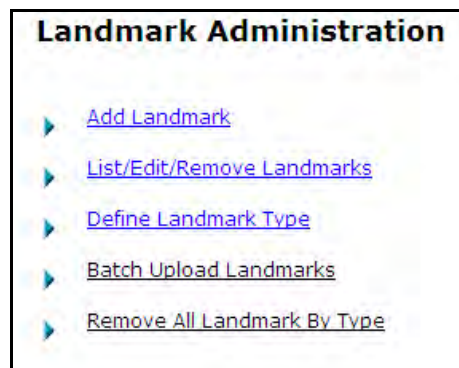
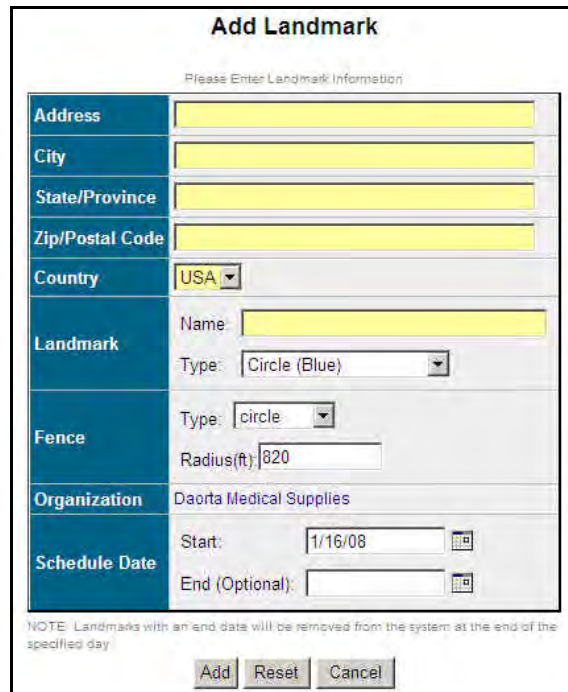


Figure 5–92: Landmark Administration Screen

2. Click **Add Landmark**. The **Administration – Add Landmark** screen, shown in Figure 5–93, appears.



Add Landmark

Please Enter Landmark Information

Address	<input type="text"/>
City	<input type="text"/>
State/Province	<input type="text"/>
Zip/Postal Code	<input type="text"/>
Country	USA
Landmark	Name: <input type="text"/>
	Type: Circle (Blue)
Fence	Type: circle
	Radius(ft): 820
Organization	Daorta Medical Supplies
Schedule Date	Start: 1/16/08
	End (Optional): <input type="text"/>

NOTE: Landmarks with an end date will be removed from the system at the end of the specified day

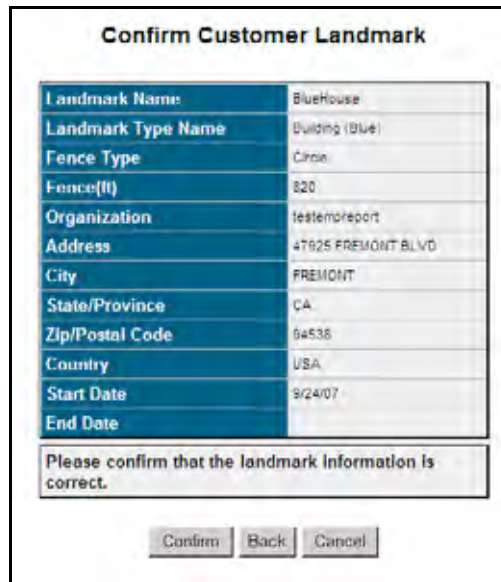
Add Reset Cancel

Figure 5–93: Administration - Add Landmark Screen

3. Enter the Landmark **Address**.
4. Enter the Landmark **City**.
5. Enter the Landmark **State/Province**.
6. Enter the Landmark **Zip/Postal Code**.
7. Select the **Country** from the drop-down menu.
8. Enter the Landmark **Name**.
9. Select the Landmark **Type** from the drop-down menu.
10. Select the **Fence** type from the drop-down menu.
11. Enter the **Radius** for the proximity fence.
12. Enter the **Start** date for the Landmark. You can also click the calendar and select a date.
13. Enter an optional **End** date for the Landmark. If you enter an end date, the Landmark disappears at midnight of the entered date.
14. Click **Add**. An **Administration – Confirm Customer Landmark** screen, shown in Figure 5–94, appears.

Click **Reset** to clear the entered information.

Click **Cancel** to return to the Administration screen.



Confirm Customer Landmark	
Landmark Name	BlueHouse
Landmark Type Name	Building (Blue)
Fence Type	Circle
Fence(ft)	820
Organization	featemproport
Address	47925 FREMONT BLVD
City	FREMONT
State/Province	CA
Zip/Postal Code	94538
Country	USA
Start Date	9/24/07
End Date	

Please confirm that the landmark information is correct.

Confirm Back Cancel

Figure 5-94: Add Landmark Confirmation Screen

15. Check the Landmark information.

16. Click **Confirm**. The Customer Landmark is Added screen, shown in Figure 5-95, appears.

Click **Redefine** to change any information.

Click **Cancel** to return to the **Administration** screen without creating the Landmark.



Customer Landmark Is Added

Customer Landmark (@Road Headquarters) is added successfully.

* Press "Add Another Landmark" button to add another landmark.
* Press "Done" button to exit.

Add Another Landmark Done

Figure 5-95 Customer Landmark Added Screen

17. Click **Add Another Landmark** if you have more Landmarks to create.

Click **Done** to return to the **Administration** screen.

Editing a Landmark

After Landmarks have been created, you can review the current Landmarks, edit the Landmark's information, give it an end date or remove it from GeoManager.

To edit a Landmark:

1. From the **Landmark Administration** menu, shown in Figure 5–92, click **List/Edit/Remove Landmark**. The **List Landmark** screen, shown in Figure 5–96, appears.

Organization: testemoreport

Search Criteria:

Landmark Type: All

Location: All

Landmark Name:

Search

Pages: 1

Remove	Landmark	Address	Lat/Long	Type	Fence (ft)	Start Date	End Date
<input type="checkbox"/>	testlandmark2	1561 EASTRIDGE AVE, RIVERSIDE, CA, 92507, USA	33.931145/-117.30267	Home	820	9/18/07	
<input type="checkbox"/>	testlm1	47801 FREMONT BLVD, FREMONT, CA, 94538, USA	37.4748/-121.9432	Home	820	9/15/07	
<input checked="" type="checkbox"/>	testlm4	47825 FREMONT BLVD, FREMONT, CA, 94538, USA	37.470815/-121.93828	Building (Blue)	820	9/24/07	

Pages: 1

NOTE1: Landmarks with an end date will be removed from the system at the end of the specified day.
NOTE2: Landmarks associated with other components cannot be defined and removed from other components.

Remove Checked Records Select All Reset Cancel

Figure 5–96: List Landmark Screen

2. Find the Landmark you want to edit. All search criteria are optional.
 - a. In the **Search Criteria** section, select the **Landmark** type from the drop-down menu.
 - b. Select the **Location** type from the drop-down menu:
 - All
 - City
 - State
 - Zip
 - c. In the **Location** text box, enter the Location information. For example, CA for California.
 - d. Enter the **Landmark Name**. You can search using the first letter or number of the name. You cannot search for letters or numbers in the middle of a Landmark name.
 - e. Click **Search**. The **List Landmark** screen refreshes with a list of matching Landmarks.
3. In the **Landmark** column, click the name of the Landmark you want to edit. The **Edit Landmark** screen, shown in Figure 5–97, appears.

**Note:**

If the Landmark is not editable because it is associated with a Landmark Proximity Exception, the Landmark name is not a hyperlink. You must dissociate the Exception before making any modifications.

Edit Landmark

Please Enter Landmark Information

Address	47071 BAYSIDE PKWY
City	FREMONT
State	CA
Zip Code	94538-651
Country	UNITED STATES
Landmark	Name: addresslm Type: Star (Blue)
Fence	Type: circle Radius(ft): 820
Organization	FP_USA_Client
Schedule	Start: 12/26/08 End (Optional): [] Clear

NOTE: Landmarks and all associated data will be removed from the system at the end of the specified day.

Modify Reset Cancel

Figure 5-97: Edit Landmark Screen

4. Change the Landmark information.
5. Click **Modify**. The **Landmark Confirmation** screen, shown in Figure 5-94, appears.
6. Click **Confirm**. The **Customer Landmark is Modified** screen, shown in Figure 5-98, appears.

Customer Landmark is Modified

Customer Landmark is Modified

Customer Landmark (BlueHouse) is saved successfully.

* Press "Modify Another Landmark" button to modify another landmark.
* Press "Done" button to exit.

Modify Another Landmark Done

Figure 5-98: Customer Landmark is Modified Screen

7. Click **Done** if you are finished modifying Landmarks.
Click **Modify Another Landmark** to return to the **Landmark List** screen.

Defining a Landmark Type

You can create categories for Landmarks in GeoManager, allowing you to locate specific Landmark types when generating reports or looking at MapView. If a Landmark Type name is changed, the changed name appears in any reports that show that Landmark Type.

To define a Landmark type:

1. From the **Landmark Administration** menu, shown in Figure 5–92, click **Define Landmark Type**. The **Define Landmark Type** screen, shown in Figure 5–99, appears.

Define Landmark Type

Landmark Type (No.)	Landmark Type Label	Expiration (days)
(1)	Circle (Blue)	
(2)	Coffee House	
(3)	Circle (Red)	
(4)	Circle (Yellow)	
(5)	Star (Blue)	
(6)	Star (Green)	
(7)	Star (Red)	
(8)	Remote Terminal	
(9)	Transportation (Tractor)	
(10)	Transportation (Car)	
(11)	Building (Factory)	
(12)	Building (Grey)	
(13)	Building (Red)	
(14)	Work Center	
(15)	Building (Black)	
(16)	Building (Tower 1)	
(17)	Building (Tower 2)	
(18)	Water (Dock)	
(19)	Transportation (Airport)	
(20)	Building (House)	

Note: The system will automatically remove landmarks based on the expiration setting. The setting one says from the time the landmark was added. Leave the field blank if you do not want the landmark to expire automatically.

Save Reset Cancel

Figure 5–99: Define Landmark Type Screen

The **Define Landmark Type** screen contains default Landmark type information.

2. Change the **Landmark Type Label**. This can be any alpha-numeric combination.
3. If desired, enter the number of days before the Landmark's **Expiration** date. After this date, the Landmark disappears from MapView.

- Click **Save**. The Landmark Types are updated in the system. The **Cancel** button changes to a **Done** button.

Click **Reset** to undo any changes without saving them.

Click **Done** or **Cancel** to return to the Landmark Administration screen.

Landmark Batch Files

A Landmarks batch file is a text file containing one or more Landmarks—up to 2,000 for a basic subscription. The file must use comma-separated values (*.csv) or text (*.txt) format, and the information for each Landmark must be in a specific order. You can set up a Landmarks list in either a spreadsheet or database application. Most of these applications can save your file using the proper format in one step.

You can also create a Landmark batch file manually, using a text editor.

A Landmark batch file requires specific fields in a specific order, separated by commas. Retain the comma as a placeholder in the case of missing or blank fields, so that the application can keep track when uploading the data. The file format for Landmarks identified by latitude/longitude is as follows:

```
[Landmark Name],[Latitude],[Longitude],[Address],[City],[Post Code],[Range],[Landmark Type],[Start Date],[End Date]
```

The file format for Landmarks identified by address is as follows:

```
[Landmark Name],[Address],[City],[Post Code],[Range],[Landmark Type],[Start Date],[End Date]
```

The system enables you to correct unprocessed Landmarks for up to 72 hours after the original file upload. The field requirements for Landmarks identified by latitude/longitude are as follows:

Field	Required/Optional	Rules
Landmark Name	Required	30 characters maximum. Over 30 characters will be truncated.
Latitude	Required	South indicated by minus sign (-), otherwise numeric with up to six digits after the decimal point. Over 6 digits will be truncated.
Longitude	Required	West indicated by minus sign (-), otherwise numeric with up to six digits after the decimal point. Over 6 digits will be truncated.

Field	Required/Optional	Rules
Address	Optional	Alphanumeric. Must be a valid street address.
Town or City	Optional	Alphanumeric.
Post Code	Optional	Alphanumeric. Five digits (00000) or 5+4 digits (00000-0000). If fewer than five digits, leading zeroes are entered (e.g., 00456).
Range	Optional (default value if blank)	<p>Circle: Enter the number of feet for the radius. The range is from 250 to 52800. Use numbers only, for example, 2500.</p> <p>Rectangle: Enter the number of feet for the length and width, from 500 to 105600 per side. Use an "x" between the length and width, for example, 500x500).</p> <p>A blank field defaults to a circle with a 250-foot radius.</p>
Landmark Type	Required	Landmark Type (1 to 20). A blank field defaults to a Type 1. For an explanation of the fields, click the Define Landmark Type link in the Administration area of GeoManager.
Start Date	Optional	Landmark is not active until this date. Must be a date in the future. (Date formats: dd-mm-yy,dd-mm-yyyy)
End Date	Optional	Landmark is inactive after this date. Must be a date in the future. (Date formats: dd-mm-yy, dd-mm-yyyy)

The field requirements for a Landmark identified by address are as follows:

Field	Required/Optional	Rules
Landmark Name	Required	30 characters maximum. Over 30 characters will be truncated.
Address	Required	Alphanumeric. Must be a valid street address. City Required Alphanumeric.
Post Code	Required	Alphanumeric. Five digits (00000) or 5+4 digits (00000-0000). If fewer than five digits, leading zeroes are entered (e.g., 00456).

Field	Required/Optional	Rules
Range	Optional (default value if blank)	<p>Circle: Enter the number of feet for the radius. The range is 250 to 52800. Use numbers only, for example, 2500.</p> <p>Rectangle: Enter the number of feet for the length and width, from 500 to 105600 per side. Use an "x" between the length and width, for example, 500x500. A blank field defaults to a circle with a 250-foot radius.</p>
Landmark Type	Required	Landmark Type (1 to 20). A blank field defaults to a Type 1. For an explanation of the fields, click the Define Landmark Type link in the Administration area of GeoManager.
Start Date	Optional	Landmark is not active until this date. Must be a date in the future. (Date formats: dd-mm-yy, dd-mm-yyyy)
End Date	Optional	Landmark is inactive after this date. Must be a date in the future. (Date formats: dd-mm-yy, dd-mm-yyyy)

Exporting Landmarks from a Spreadsheet or Database Application

If you maintain Landmarks in a spreadsheet or database application, you may translate your file directly into the required comma-separated *.csv file using, for example, the Microsoft Excel Save As function.

- Enter all required fields for each Landmark, even if you want to modify only a single field.
- For Landmarks identified by latitude/longitude, use 11 columns. For Landmarks identified by address, use 9 columns.

You can also download a pre-formatted file, sample shown in Figure 5–100, by clicking the **Download by Address** or **Download by Lat/Lon** link in the **Upload Landmarks** screen, shown in Figure 5–101.

	A	B	C	D	E	F	G	H	I	J
	Landmark Name	Address	City	State	Zip Code	Range	Landmark Type	Start Date	End Date	Org Unit
1	STARBUCKS COFFEE	4848E WARM SPRINGS BLVD	FREMONT	CA	94539	820	2	05/16/2007		Road - Training Dept
2	STARBUCKS COFFEE - FREMONT	46170 FREMONT BLVD	FREMONT	CA	94538	820	1	05/16/2007		Road - Training Dept
3	MCDONALDS	4101 CUSHING PKY	FREMONT	CA	94536	820	7	05/17/2007		Road - Training Dept
4	@ROAD HEADQUARTERS	47071 BAYSIDE PKY	FREMONT	CA	94538	820	14	05/23/2007		Road - Training Dept
5										
6										
7										
8										
9										
10										

Figure 5–100: Upload Landmarks by Address Template Sample

Creating a text file

GeoManager reads the text (*.txt) file format. Use this file format if you do not have a database or spreadsheet application, or your application does not process the translation correctly. In addition, database and spreadsheet applications can translate files into this format.

- Enter each Landmark in its own line.
- Separate each field in a line by a comma with no spaces.
- If any field is blank, retain the comma as a placeholder.
- Enter all required fields for each Landmark, even if you only want to modify a single field.
- Place a carriage return at the end of each Landmark. The **Enter** or **Return** key on the keyboard produces a carriage return.
- Enter the data into the Landmarks file without extra keystrokes, such as spaces around the commas or at the end of the line.
- List as few or as many Landmarks as you want to add or modify.

Uploading a Landmarks File

To make entering Landmarks easier, you can upload Landmarks in a batch file.

1. From **Landmark Administration**, click **Batch Upload Landmarks**. The **Upload Landmark** screen, shown in Figure 5–101, appears.

Figure 5–101: Upload Landmark Screen

2. Click **Browse**.

3. Locate the desired **.csv** or **.txt** file.
4. Click **Upload File**.

**Note:**

Every field in the **.csv** or **.txt** file requires some kind of entered data. If that particular field does not require data, enter a blank space by pressing the space bar on your keyboard.

The **Upload Landmark** screen allows users to see current Landmark uploading information, such as limits and upload numbers. The items in the **Account Information** box at the top are:

- **Current Number of Customer Landmarks** – shows the number of Landmarks currently contained in the Landmarks file.
- **Customer Landmark Limit** – shows the maximum number of Landmarks you may define for your account.
- **Uploads per month allowed** – shows the maximum number of uploads the system allows per month.
- **Uploads completed this month** – shows the number of uploads actually completed for the current month.

If you have completed the maximum number of uploads for the month, the form near the bottom of the window changes.

**Note:**

You are allowed eight uploads per month unless otherwise noted in your contract.

If a duplicate Landmark is in the file, the system replaces or adds the Landmarks according to the following rules:

If the old and new Landmark both have the same:	This happens:
Name and either Address or Lat/Long	The new Landmark replaces the old Landmark.
Name only	The new Landmark is added. The old Landmark remains. You will have two Landmarks with the same name and different addresses or latitudes/longitudes.
Address or Lat/Long only	The new Landmark replaces the old Landmark.

- New Landmarks will be added to the existing database.

- Certain Landmarks may not be processed properly due to an incorrect address, incomplete information, or map data limitations.

If the upload fails, click the **OK** button in the resulting window and review the file. Correct any errors and upload the file again.

When the upload completes a confirmation window, shown in Figure 5–102, appears.

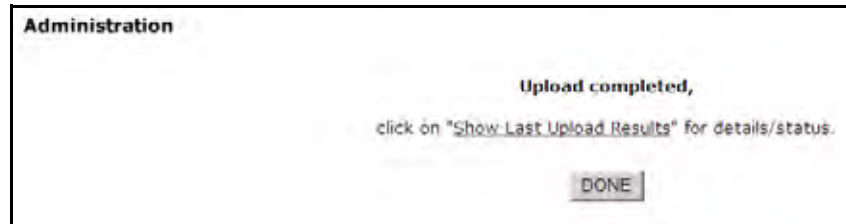


Figure 5–102: Upload Completed Screen

Click **Done** to go back to the Administration window.

Click **Show Last Upload Results** to see results of the last uploaded file, as shown in Figure 5–103.



Figure 5–103: Last Upload Results Screen

The drop-down menu provides links to other locations in the Administration area. Use the links at the bottom of the window to do any of the following:

Show Last Updated Results displays the upload file and the results of the most recent upload in a column to the right of the Landmark entry.

List of result messages for Address Landmarks

- Invalid Post Code
- Invalid Street Address
- Invalid Type
- Successfully Replaced
- Invalid Range
- Successfully Added

List of result messages for Lat/Long Landmarks

- Invalid Post Code
- Invalid Street Address
- Invalid Type
- Invalid Range
- Invalid Lat/Long
- Successfully Added
- Successfully Replaced

Show Upload History displays a summary of all uploads, as shown in Figure 5–104.

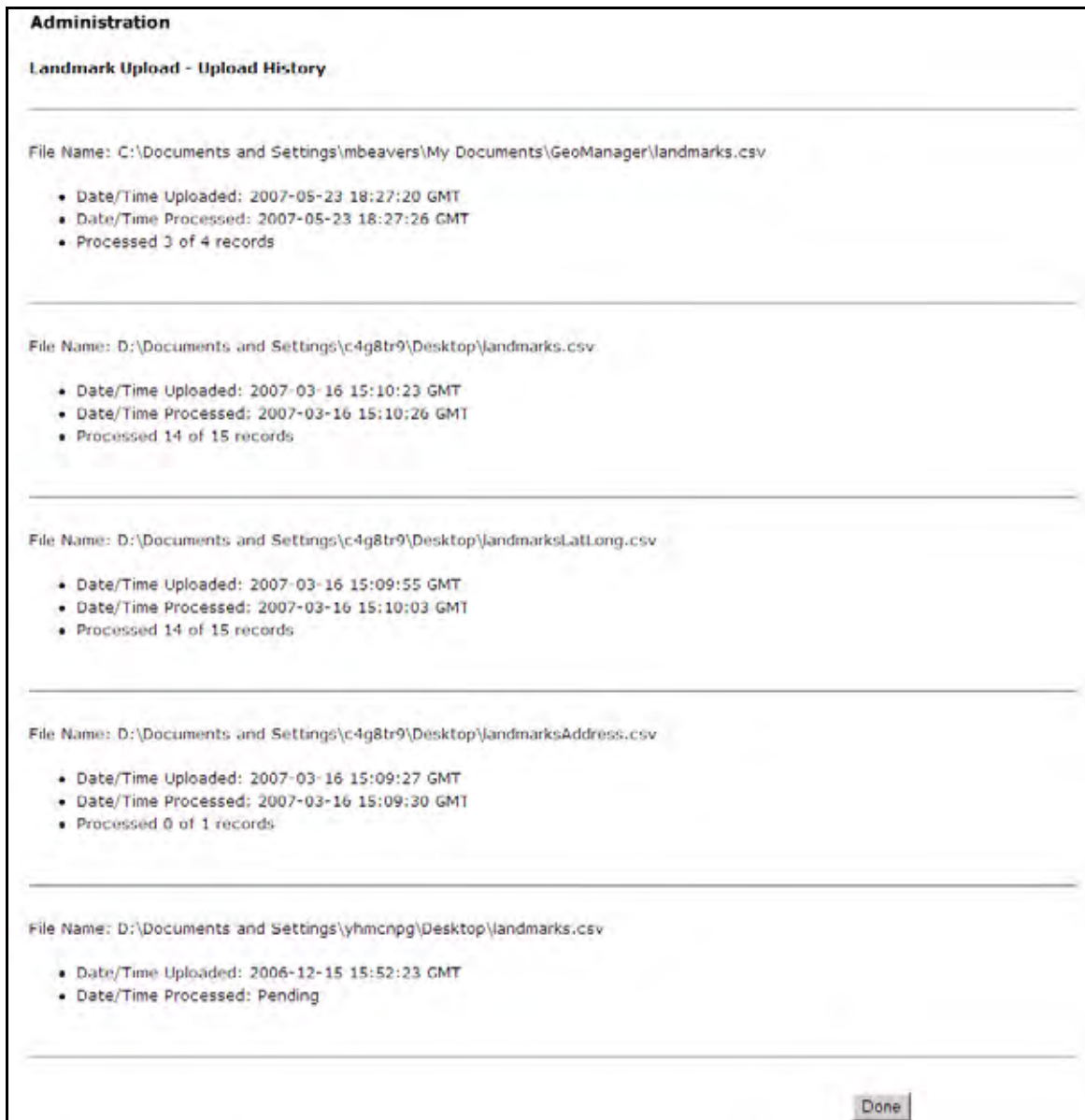


Figure 5–104: Show Upload History Screen

- **Download Landmark File (by Address or by Lat/Long)** includes links for downloading the Landmarks files identified by address or by latitude/longitude.

Removing a Landmark Type

You can remove Landmarks by type from your account. To remove Landmarks by type:

1. From the **Landmark Administration** screen, click **Remove All Landmarks by Type**. The **Remove Landmarks by Type** screen, shown in Figure 5–105, appears.



Figure 5–105: Remove Landmarks by Type Screen

- From the list, select the Landmark type you want to remove.



WARNING!

Warning! Removing Landmarks by type deletes all the Landmark information from the system for the selected type of Landmark.



WARNING!

Any Landmarks that are associated with Exceptions must be disassociated before you can delete the Landmarks.

- Click **Remove**. A confirmation dialogue box, shown in Figure 5–106, appears.

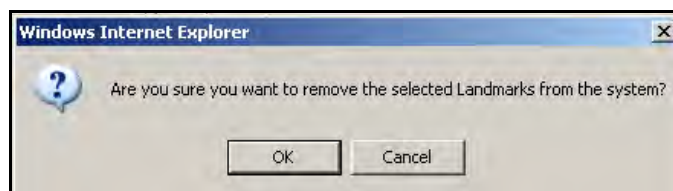


Figure 5–106: Remove Landmarks by Type Confirmation Dialog Box

- Click **OK**. A successfully completed dialogue box, shown in Figure 5–107, appears stating that the Landmarks of the selected type have been removed from the system.

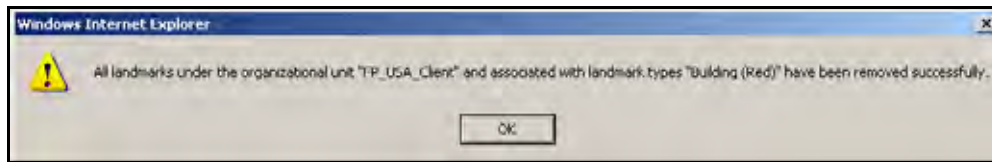


Figure 5–107: Remove Landmarks by Type Successful Screen

- Click **OK**. The **Remove Landmarks by Type** screen reappears.
- Click **Done**. The **Landmark Administration** screen appears.

Employees

The creation and administration of employee information is important for you to get the most from your GeoManager solution. By entering employee information and creating an organizational hierarchy structure, you can gather more specific information about your employees and their activities so that you can increase productivity and get more deliveries or jobs completed per day.

You can access the Employee Administration links by clicking the down-arrow next to Employees under the Administration Navigation links, as shown in Figure 5–108.

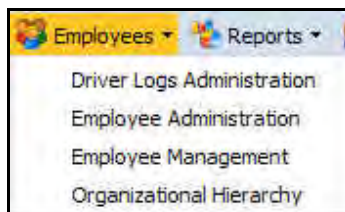


Figure 5–108: Employee Administration Drop Down Menu

Driver Logs Administration

Driver Logs, an optional GeoManager feature, allows driver hours and activities to be recorded throughout the day with the use of the *iDT*. Entries such as location, date, time, mileage, time calculations, etc. are automatically transmitted from the vehicle via wireless. The system accurately monitors driver hours and availability on a real-time basis and aids in downloading this information onto computers for viewing at a later time.

For more information about using Driver Logs, see the *GeoManager Driver Logs User Guide*.

Employee Administration

You can create and upload employee information into GeoManager. Employee information is used for mobile device association, MapView information, Organizational Hierarchy and reports.

To manage employee administration, click the Employee drop down menu shown in Figure 5–108 at the top of the GeoManager screen. The Employee Management screen, shown in Figure 5–109, appears.

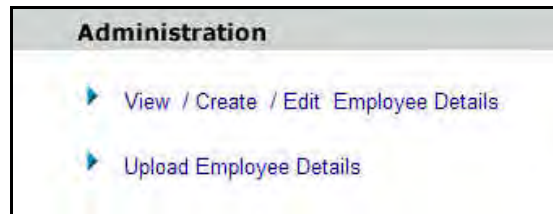


Figure 5–109: Employee Management Screen

Creating Employee Details

Custom Fields and Driver Logs are optional features. Depending on your configuration, Driver Logs and Custom Fields may not be available.

To enter general employee information:

1. From the **Employee** drop down menu, shown in Figure 5–108, click **Employee Administration**.
2. Click **View/Create/Edit Employee Details**. The **View/Edit Employees** screen, shown in Figure 5–110, appears with no employee information.

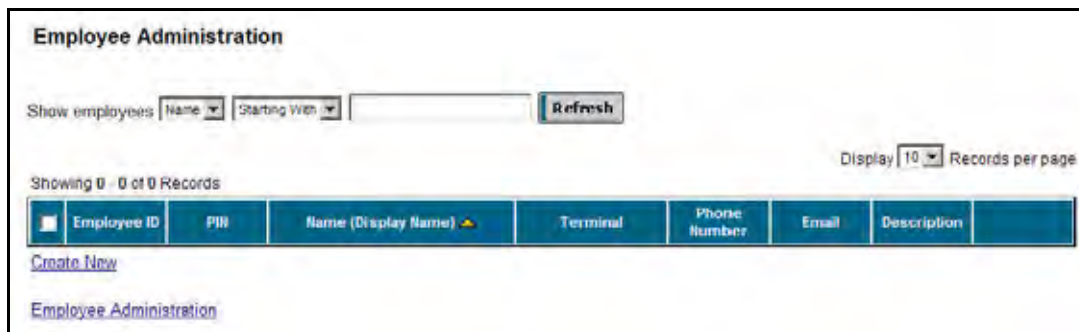


Figure 5–110: Initial View/Edit Employees Screen

3. Click **Create New**. The **Add New Employee** screen, shown in Figure 5–111, appears.

Employee Administration

General | Driver Log | Custom

Add New Employee

Employee Information:

First Name *

Last Name *

Display Name

Employee ID * *(uppercase only)

Date of Joining

Status

Address Information:

Street Address

City

State

Zip Code

Contact Information:

Home Phone (##) ### ####

Mobile Phone (##) ### ####

Work Phone (##) ### ####

Fax (##) ### ####

Email Address

Miscellaneous Information:

Description

Note: * means a required field

Figure 5-111: Add New Employee Screen

4. Enter the employee's **First Name**. This is a required field.
5. Enter the employee's **Last Name**. This is a required field.
6. Enter the **Display Name**, if known.
7. Enter the **Employee ID**. This is a required field.
8. Click the calendar and select the **Date of Joining**, if known.
9. Select the employee's **Status**. This is a required field.
10. Enter the employee's **Street Address**, if known.
11. Enter the employee's **City**, if known.
12. Select the employee's **State** from the drop down-menu, if known.
13. Enter the employee's **Zip Code**, if known.
14. Enter the employee's **Home Phone Number**, if known.
15. Enter the employee's **Mobile Phone Number**, if known.

16. Enter the employee's **Work Phone Number**, if known.
 17. Enter the employee's **Fax Phone Number**, if known.
 18. Enter the employee's **Email** address, if known.
 19. Enter a **Description** for the employee. This can be their title, level or any other identifying information.
 20. Click **Save** to save the employee information and return to the **View/Edit Employee** screen.
- Click **Cancel** to return to the **Employee Administration** screen without saving the information.

To enter driver log employee information:

1. In the **Add New Employee** screen, click the **Driver Log** tab. The **Add New Employee Driver Log** screen, shown in Figure 5-112, appears.

Employee Administration

General Driver Log Custom

Add New Employee

HOS:

HOS Rule: *

Terminal Information:

Terminal: *

Terminal Logon PIN:

Terminal Logon PIN:

Other Information:

License Type:

Previous Company:

Note: * means a required field

SAVE CANCEL

Figure 5-112: Add New Employee Driver Log Screen

2. Select the **HOS Rule**. This is a required field.
3. Select the **Terminal**. This is a required field.
4. Select the **Terminal Logon PIN**, if known.
5. Enter the **License Type**, if known.
6. Enter the **Previous Company**, if known.

7. Click **Save** to save the employee information and return to the **Add New Employee** screen.
8. Click **Cancel** to return to the **Employee Administration** screen without saving the information.

To enter custom employee information:

1. In the **Add New Employee** screen, click the **Custom** tab. The **Add New Employee Custom Fields** screen, shown in Figure 5–112, appears.



Note:

Custom Fields need to be configured in the Configure Custom Fields section

The screenshot shows the 'Employee Administration' interface. At the top, there are three tabs: 'General', 'Driver Log', and 'Custom'. The 'Custom' tab is selected. Below the tabs is the 'Add New Employee' section. Underneath, there is a sub-section titled 'Custom Information About This Employee' which contains three input fields: 'MobileNumber', 'EmployeeNumber', and 'WorkShift'. At the bottom of the form, there are two buttons: 'SAVE' and 'CANCEL'.

Figure 5–113: Add New Employee Driver Log Screen

2. Enter the requested information in the fields provided.
3. Click **Save** to save the employee information and return to the **Add New Employee** screen.
Click **Cancel** to return to the **Employee Administration** screen without saving the information.

To edit employee details:

1. From the **View/Edit Employee** screen, shown in Figure 5–114, check the box next to the Employee ID for whom you want to change information.

Employee Administration

Show employees: Starting With:

Showing 1 - 10 of 12 Records per page Display: Records per page
Pages: 1 2 Next

<input type="checkbox"/>	Employee Id	Name (Display Name) ▲	Terminal	Phone Number	Email	Description	Status	
<input type="checkbox"/>	7742	ACTIVE_JI	Centrica_Terminal				InActive	[Edit] [Shift Definition]
<input type="checkbox"/>	1484	BROOKE SHIELDS					Active	[Edit] [Shift Definition]
<input type="checkbox"/>	1488	DAVID GILMORE					Active	[Edit] [Shift Definition]
<input type="checkbox"/>	1481	GNEWTH PALTRÖW					Active	[Edit] [Shift Definition]
<input type="checkbox"/>	1483	HUANG SUE					Active	[Edit] [Shift Definition]
<input type="checkbox"/>	1492	JESSICA ALBA	Centrica_Terminal				Active	[Edit] [Shift Definition]
<input type="checkbox"/>	1485	KATE WINSLET					Active	[Edit] [Shift Definition]
<input type="checkbox"/>	41236	MOORE ROGER					Active	[Edit] [Shift Definition]
<input type="checkbox"/>	1479	PIERCE BROSNAN	Centrica_Terminal				Active	[Edit] [Shift Definition]
<input type="checkbox"/>	1478	SURESH KRISHNAN					Active	[Edit] [Shift Definition]

[Create New](#) [Delete Selected](#) Pages: 1 2 Next

[Employee Shift Threshold Definition](#)

[Employee Administration](#)

Figure 5-114: View/Edit Employees Screen

2. Click **Edit**. The **Edit Employee** screen, shown in Figure 5-115, appears.

Figure 5-115: Edit Employee Screen

3. Make the necessary changes.
4. Click **Save**. The **View/Edit Employees** screen reappears.

Click **Cancel** to return to the **View/Edit Employees** screen without saving the changes.

To delete an employee:

1. From the **View/Edit Employee** screen, shown in Figure 5-114, check the box next to the Employee ID(s) you want to delete. You can delete multiple employees at a time.
2. Click **Delete Selected**. A confirmation dialogue box, shown in Figure 5-116, appears.

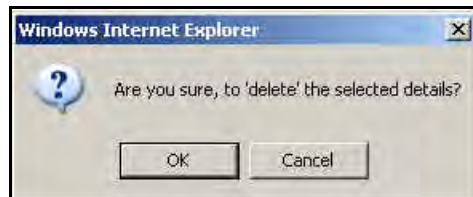


Figure 5-116: Delete Employee(s) Confirmation Dialogue Box

3. Click **OK**. The **View/Edit Employees** screen refreshes without the deleted employee.
Click **Cancel** to close the dialog box without deleting the employee.

To enter employee shift threshold definitions:

1. From the **View/Create/Edit Employee Details** screen, shown in Figure 5–114, click the **Employee Shift Threshold Definition** link. The **Employee Shift Threshold Definition** screen, shown in Figure 5–117, appears with no employee information.

Figure 5–117: Employee Shift Threshold Definition Screen

2. Select the **Shift Start Threshold** from the drop down menu.
3. Select the **Shift End Threshold** from the drop down menu.
4. Click **Save**.

Click **Done** to return to the **View/Create/Edit Employee Details**.

Click **Employee Administration** to return to the **Employee Management** screen.

Uploading Employee Details

GeoManager allows you to upload CSV files pre-populated with employee details, saving you time and effort.



WARNING!

Save a copy of the current CSV file and verify that all edits to the new CSV file are correct before uploading it to the system. The new file will overwrite the old file, making the previously uploaded file non-recoverable if there is a problem.

To upload employee definition and shift definition CSV files:

1. From the **Employee** drop down menu, shown in Figure 5–108, click the **Upload Employee Details** link. The **Employee Definition File Upload** and **Shift Definition File Upload** screen, shown in Figure 5–118, appears.

Administration

Employee Definition File Upload

INSTRUCTIONS FOR DEFINING EMPLOYEES VIA FILE UPLOAD

1. Download Employee Definition Template - Download and use the template to define new employees.
2. Open file in Excel. Notice that there are 8 columns (Employee ID, First Name, Last Name, Email, Phone, Description, Category, Org Unit Name)
(IMPORTANT: DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS)
3. Modify the appropriate definitions
4. Save file as csv (comma delimited). Name the file "define_employee.csv"
5. Upload the file

Shift Definition File Upload

INSTRUCTIONS FOR EMPLOYEE WORK SHIFT DEFINITION VIA FILE UPLOAD

1. Download Employee Shift Definition Template - Download and use the template to define work shift for existing employees.
2. Open file in Excel. Notice that there are 4 columns (Employee ID, Effective Date, Start Time, End Time)
(IMPORTANT: DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS)
3. Modify the appropriate definitions
4. Save file as csv (comma delimited). Name the file "employee_workshift.csv"
5. Upload the file

[Show Last Employee Definition Upload Result](#) [Show Last Employee Shift Definition Upload Result](#)
[Show Employee Definition Upload History](#) [Show Employee Shift Definition Upload History](#)

[Employee Administration](#)

Figure 5-118: Employee to Device Assignment File Upload Screen

2. Download and use the template **Employee Device Assignment Template**.
 - a. Click the **Download Employee Definition Template** link.
 - b. A **File Download** dialogue box appears.
 - c. Click **Save**.
 - d. Navigate to the correct location on your hard drive.
 - e. Save the file with a new name. Suggested names are employee_definition_12Oct.csv or employee_definition1.csv.
 - f. Click **Save**. The file is saved to your hard drive.
3. Open the file in Excel. Notice that there are 8 predefined columns: Employee ID, First Name, Last Name, Email, Phone Number, Description Category and Org Unit Name.

	A	B	C	D	E	F	G	H
1	Employee ID	First Name	Last Name	Email	Phone Number	Description	Category	Org Unit Name
2	ID11	BEN	AFFLECK					ABC International
3	45	JANE	SMITH		1234567890			ABC International
4	5000	JOHN	BROWN		1234567abc			ABC International
5	534	CHRIS	CHAN					ABC International
6	1001	FIRST_NAME	LAST_NAME					SVMTESTSM
7	34	FIRST_NAME	LAST_NAME					ABC International
8	654	FIRST_NAME	LAST_NAME					ABC International
9	1119	ITOP5	ITOP5					ABC International
10	345234	RFIRST1	RLAST1					ABC International

Figure 5-119: Employee Device Assignment CSV File Sample



WARNING!

Do NOT change the column headers, order of columns or number of columns!

4. Modify the appropriate definitions.
5. Rename the file. Suggested file names are employee_device_assignment1.csv or employee_device_assignment_12Oct.csv.
6. Save file as CSV (comma-delimited). The File size is limited to 1 MB. If files are bigger than 1 MB, break the big file into smaller files and then upload the smaller files.
7. In the **GeoManager Employee Definition File Upload** screen, click **Browse** to find and select the saved file.
8. Click **Upload File**. A confirmation dialogue box, shown in Figure 5-120, appears.

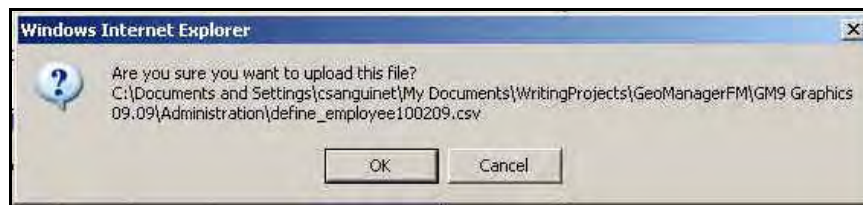


Figure 5-120: Upload File Confirmation dialogue Box

9. Click **OK**. An **Upload Completed** screen, shown in Figure 5-121, appears.

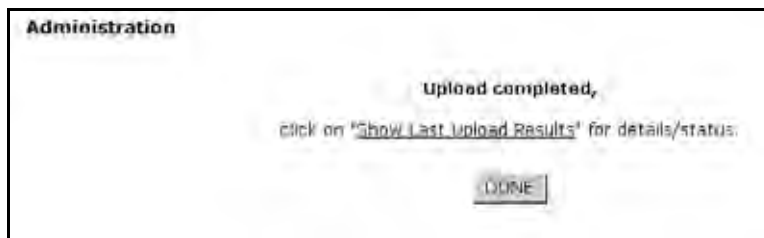


Figure 5-121: File Upload Completed Screen

10. Click **Done**. The **Employee Definition File Upload** screen, shown in Figure 5–118, appears.

After you have finished uploading the Employee device assignment file(s) successfully, if you need to verify which and when files were uploaded last, you can click the **Show Last Employee Definition Upload Result** link at the bottom of the **Employee Definition File Upload** screen, shown in Figure 5–118. The **Last Employee Device Assignment Upload Result** screen, shown in Figure 5–135, appears.

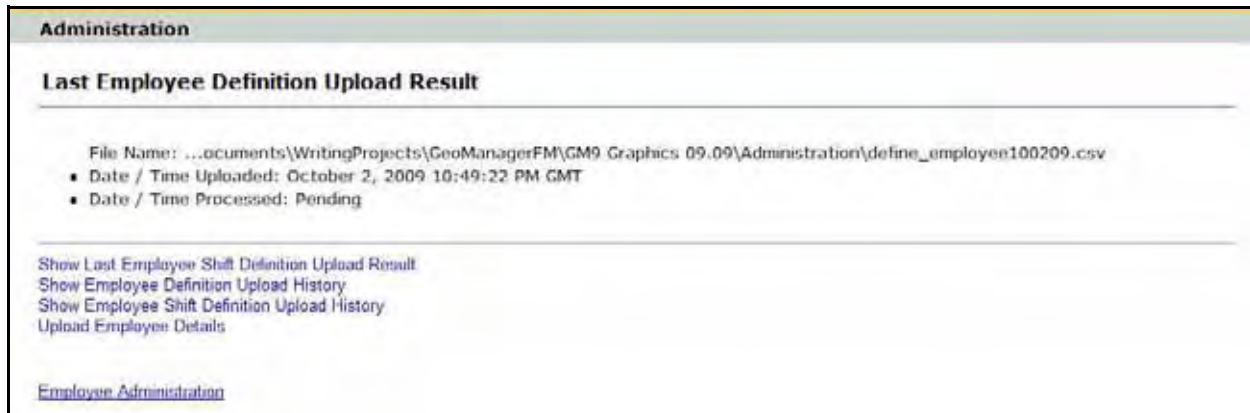


Figure 5–122: Last Employee Device Assignment Upload Result Screen

This screen shows the file name, date and time that the file was uploaded and processed, as well as the number of records processed.

If you click the Processed X of X Records (Download Results File), you are prompted to Save or Open the file.

If you want to view the history of Employee Device Assignment uploads, you can click the **Show Employee Device Assignment Upload History** link at the bottom of the **Employee to Device Assignment File Upload** screen, shown in Figure 5–131. The **Show Employee Device Assignment Upload History** screen, shown in Figure 5–136, appears.

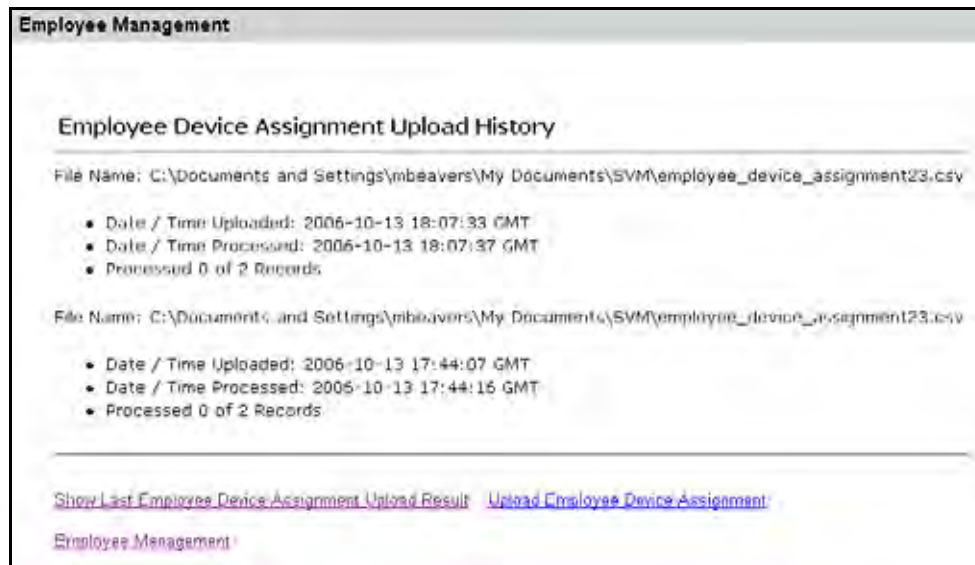


Figure 5–123: Employee Device Assignment Upload History Screen

The **Employee Device Assignment Upload History** screen shows the file name, upload date and time, processed date and time, and number of records processed for all uploaded files

Employee Management

An additional feature of GeoManager is the ability to manage information about employees who use mobile devices.

To manage employee information, click the Employee tab at the top of the GeoManager screen. The Employee Management screen, shown in Figure 5–124, appears.



Figure 5–124: Employee Management Screen

Associating Employees to Devices

Employee Management allows you to associate employees to mobile devices.

To associate an employee to a mobile device:

1. From the **Employee Management** screen, click **Associate Employee to Devices**. The **Associate Employee(s) to Devices** screen, shown in Figure 5–125, appears.

Employee Management

Associate Employee(s) To Devices

Search Associations where

Current | Future | Historical

<input type="checkbox"/>	Employee Name	Employee Id	Mobile Device	Start Date	End Date	
<input type="checkbox"/>	bachthandam, priya	433834	FE450451	08/15/07 08:08	-	Edit
<input type="checkbox"/>	sharma, nitin	433835	FE450452	08/15/07 10:35	-	Edit
<input type="checkbox"/>	ban, John	JOHN	-	-	-	New

[Terminate Checked Associations](#)

[Employee Management](#)

Figure 5-125: Assign Employee(s) to Devices Screen

2. Locate the name of the employee with whom you want to associate a device.

You can search for the correct employee name by entering the first few letters or the entire name in the **Search** text box and clicking **Search**.

3. Click **New** in the last column of the employee's information. The **Employee to Device Association** screen, shown in Figure 5-126, appears.

Associate Device To Employee

Employee To Device Association

Selected Employee/Device Association:

Employee Id	PSIMON
Employee Name	SIMMON,PAUL

Select Device:

Available Device:

<input type="text"/>	<input type="button" value="Search"/>
FE450453	
FE450454	
FE450455	
FE450456	
FE450457	

Select Dates:

Start Date	<input type="text"/>
End Date	<input type="text"/>

Figure 5-126: Select Employee Screen

4. Select the desired mobile device from the **Available Device** list.

You can search for the correct employee name by entering the first few letters or the entire name in the **Search** text box and clicking **Search**.

5. Select the **Start** date by clicking the calendar icon next to the **Start** text box. A pop-up calendar, shown in Figure 5–127, appears.



Figure 5–127: Pop-Up Calendar

6. Click on the effective date. This must be the current date or later.

The selected date appears in the **Start Date** box in the **Employee to Device Association** screen.

7. Select the **Start** time by clicking the clock icon. A pop-up menu, shown in Figure 5–128, appears.

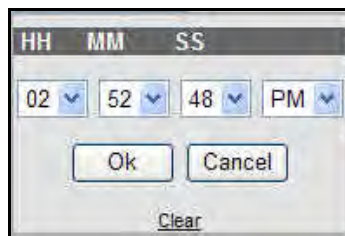


Figure 5–128: Pop-Up Clock

8. Select the effective time.

The selected date appears in the **Start Time** box in the **Employee to Device Association** screen.

9. Select the **End Date**, if desired, by clicking the calendar icon next to the **End Date** text box. A pop-up calendar, shown in Figure 5–127, appears.

10. Click on the end date. This must be the current date or later.

The selected date appears in the **End Date** box in the **Employee to Device Association** screen.

11. Select the **End Time**, if desired, by clicking the clock icon. A pop-up calendar, shown in Figure 5–128, appears.

12. Select the end time.

The selected date appears in the **End Time** box in the **Employee to Device Association** screen.

- Click **Save**. The **Successful Device Association** screen, shown in Figure 5–129, appears.



Figure 5–129: Successful Device Association Screen

- Click **Ok**. The **Associate Employees to Device(s)** screen reappears with the new employee/device association displayed, shown in Figure 5–125.



Note:

Devices can be unassigned from an Employee, but another device has to be assigned the Employee. Otherwise the System prompts a Please Select a Device alert. The other option is to delete the Employee Device Assignment completely by clicking Delete Checked in the View / Edit Employee Device Assignment page.

Terminating Device to Employee Associations

If you want to associate an employee with a different device or an association is no longer needed, you can terminate the association by:

- In the **Associate Employee(s) to Devices** screen, click the check box next to the name of the employee for whom you wish to terminate mobile device association.
- Click **Terminate Checked Associations**. The **Terminate Device Association** dialogue box, shown in Figure 5–130, appears.

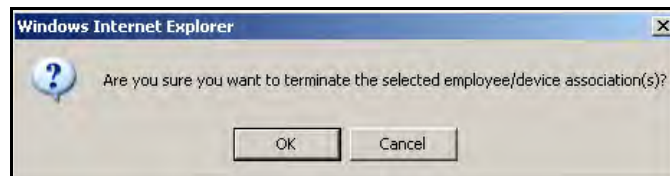


Figure 5–130: Terminate Device Association dialogue Box

- Click **OK** to terminate the association.

Click **Cancel** to return to the Associate Employee(s) to Devices screen without terminating the association.

Uploading Employee Device Assignments

GeoManager allows you to upload CSV files pre-populated with employee information, saving you time and effort.



WARNING!

Save a copy of the current CSV file and verify that all edits to the new CSV file are correct before uploading it to the system. The new file will overwrite the old file, making the previously uploaded file non-recoverable if there is a problem.

To upload device assignment CSV files:

1. From the **Employee Management** screen, click the **Upload Employee to Device Assignment** link. The **Employee to Device Assignment File Upload** screen, shown in Figure 5–131, appears.

Employee Management

Employee to Device Association File Upload

INSTRUCTIONS FOR ASSOCIATING EMPLOYEE TO DEVICE VIA FILE UPLOAD

1. [Download Employee Device Association Template](#) - Download and use the template to associate employees to devices.
2. Open file in Excel. Notice that there are 7 columns (Device Label, Serial Number, Employee ID, Effective Date(mm/dd/yy hh24 mi) in mobile device timezone, First Name, Last Name, Valid_Until).

IMPORTANT:
DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS.
VALID UNTIL COLUMN IS OPTIONAL. IT IS ADDED JUST FOR AN INFORMATION AND IT WILL BE IGNORED.

3. Modify the appropriate definitions. Each line must have Device Label, Serial Number, Employee ID, Effective Date(mm/dd/yy hh24 mi) in mobile device timezone, First Name and Last Name.
4. Save file as csv (comma-delimited). Name the file "employee_device_assignment.csv"
5. Upload the file
6. File size is limited to 1 MB.

[Show Last Employee Device Association Upload Result](#) [Show Employee Device Association Upload History](#)

[Employee Management](#)

Figure 5–131: Employee to Device Assignment File Upload Screen

2. Download and use the template **Employee Device Assignment Template**.
 - a. Click the **Download Employee Device Association Template** link.
 - b. A **File Download** dialogue box appears.
 - c. Click **Save**.
 - d. Navigate to the correct location on your hard drive.
 - e. Save the file with a new name. Suggested names are employee_device_assignment_12Oct.csv or employee_device_assignment1.csv.
 - f. Click **Save**. The file is saved to your hard drive.

- Open the file in Excel. Notice that there are 6 predefined columns: Device Label, Serial Number, Employee ID, Effective Date, First Name and Last Name.

	A	B	C	D	E	F	G
1	DEVICE LABEL	SERIAL NUMBER	EMPLOYEE ID	EFFECTIVE DATE	FIRST NAME	LAST NAME	VALID UNTIL
2	FE450451	FE450451	433634	8/15/2007 9:08	prya	sachinrandam	
3	FE450453	FE450453	433635	8/15/2007 10:35	mlin	sharma	
4	FE450459	FE450459	PSIMMON	9/25/2007 15:20	PAUL	SIMMON	9/25/2007 15:22
5	FE450455	FE450455	JSMITH	10/1/2007 15:19	JOHN	SMITH	
6							
7							
8							

Figure 5-132: Employee Device Assignment CSV File Sample



WARNING!

Do NOT change the column headers, order of columns or number of columns!

- Modify the appropriate definitions.
- Rename the file. Suggested file names are employee_device_assignment1.csv or employee_device_assignment_12Oct.csv.
- Save file as CSV (comma-delimited). The File size is limited to 1 MB. If files are bigger than 1 MB, break the big file into smaller files and then upload the smaller files.
- In the **GeoManager Employee Management File Upload** screen, click Browse to find and select the saved file.
- Click **Upload File**. A confirmation dialogue box, shown in Figure 5-133, appears.

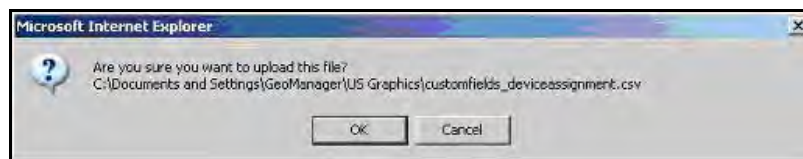


Figure 5-133: Upload File Confirmation dialogue Box

- Click **OK**. An **Upload Completed** screen, shown in Figure 5-134, appears.

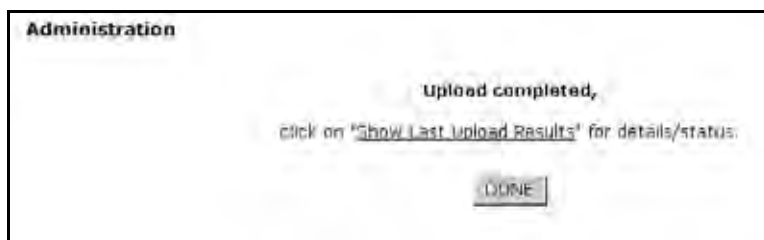


Figure 5-134: File Upload Completed Screen

10. Click **Done**. The **Employee to Device Assignment File Upload** screen, shown in Figure 5–131, appears.

After you have finished uploading the Employee device assignment file(s) successfully, if you need to verify which and when files were uploaded last, you can click the **Show Last Employee Device Assignment Upload Results** link at the bottom of the **Employee to Device Assignment File Upload** screen, shown in Figure 5–131. The **Last Employee Device Assignment Upload Result** screen, shown in Figure 5–135, appears.

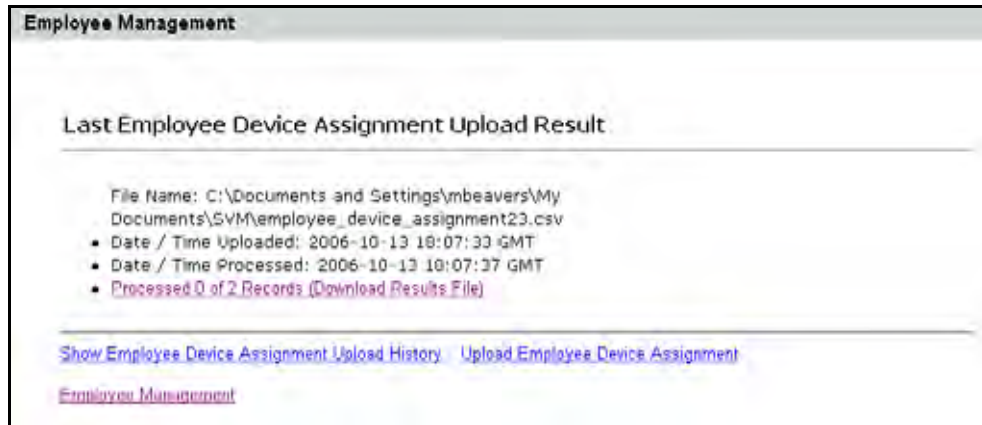


Figure 5–135: Last Employee Device Assignment Upload Result Screen

This screen shows the file name, date and time that the file was uploaded and processed, as well as the number of records processed.

If you click the Processed X of X Records (Download Results File), you are prompted to Save or Open the file.

If you want to view the history of Employee Device Assignment uploads, you can click the **Show Employee Device Assignment Upload History** link at the bottom of the **Employee to Device Assignment File Upload** screen, shown in Figure 5–131. The **Show Employee Device Assignment Upload History** screen, shown in Figure 5–136, appears.

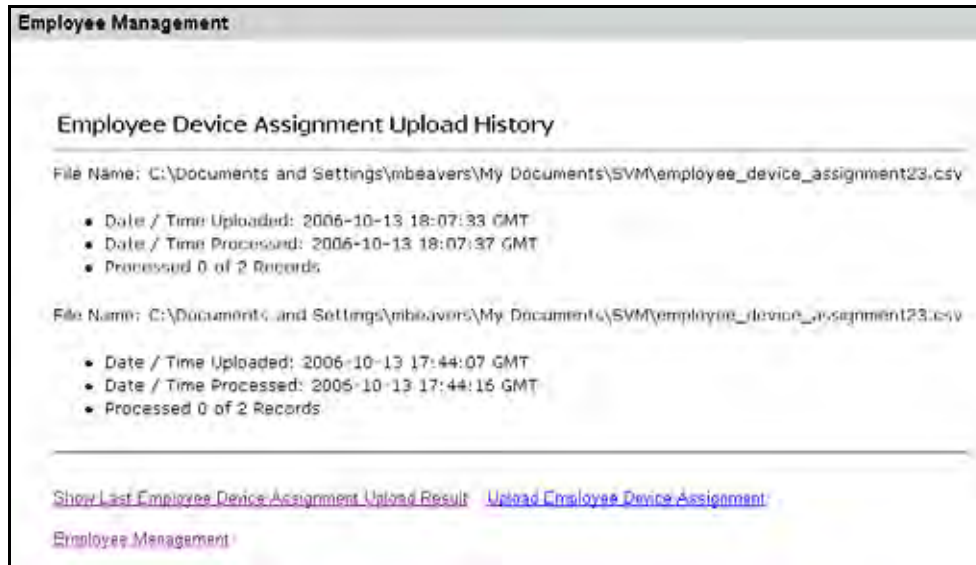


Figure 5-136: Employee Device Assignment Upload History Screen

The **Employee Device Assignment Upload History** screen shows the file name, upload date and time, processed date and time, and number of records processed for all uploaded files.

Organizational Hierarchy Administration

Organizational Hierarchy administration is an optional feature that gives you the ability to organize your business in a multi-tier configuration within GeoManager.



Note:

Before you can create roll-up reports, you must first create the hierarchy structure, enter mobile devices, then create users in User Administration and employees in Employee Management.

From the **Employee** drop down menu, shown in Figure 5-108, click **Organizational Hierarchy**. The **Organizational Hierarchy Administration** screen, shown in Figure 5-137, appears.

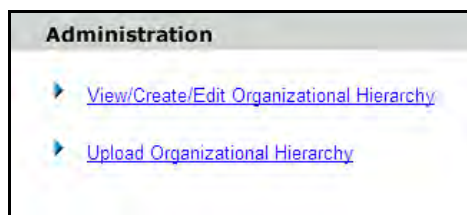


Figure 5-137: Organizational Hierarchy Administration Screen

Creating an organizational hierarchy requires you to create the hierarchy structure, enter employee and user information and then organize those employees and their mobile devices. You can also upload organizational information from a previously created file.

Creating an Organizational Hierarchy

From the **Organizational Hierarchy Administration** screen:

1. Click the **View/Edit/Create Organizational Hierarchy** link. The GeoManager **Organizational Hierarchy** screen, shown in Figure 5–138, appears, showing the current name for your organization. This can be changed at any time by entering the new information, then clicking **Update**.

Figure 5–138: View/Edit/Create Organizational Hierarchy Screen

Item	Description
Org Entities	The building blocks that make up your organizational hierarchy.
Organizational Category	Pre-defined hierarchy levels that can be assigned to your hierarchy information.
Organizational Unit	Specific information assigned to each piece of the hierarchy, such as name, description, category, etc.
Org Hierarchy	The organizational hierarchy structure you set up. This will change as units are added to your hierarchy.
Search	Allows users to search the Organizational Hierarchy for specific information, such as employee, mobile devices and organizational units.

Item	Description
Configure Organizational Unit	This is a dynamic section of the screen that changes depending on the unit, tab or entity you click.
Properties	The properties assigned to the hierarchy root. This includes name, organization code and description.
Assign Users	A list of users who have the authority to create and edit an organizational hierarchy.

2. Click **Organizational Category**. The right side of the screen changes to the **Organizational Category** screen, shown in Figure 5–139.



Figure 5–139: Organizational Category Screen

3. Verify the **Category Names** are correct for the Organizational Hierarchy.
 - If you need to create a new category:
 - a. Click **Create New**. The Organizational Category screen changes to an empty screen, shown in Figure 5–140.



Figure 5–140: Create Organizational Category Screen

- b. Enter a **Name** for the new category.
- c. Enter a **Description** for the new category.

- d. Click **Save**. The screen returns to the Organizational Category screen with the new category listed.

Click **Cancel** to return to the Organizational Category screen without saving the new category.

- If you need to edit a category:
 - a. Click the check box next to the **Category Name** you want to change. You can select only one category at a time.
 - b. Click **Edit**. The **Organizational Category** tab changes to an editable screen, as shown in Figure 5-141.

Figure 5-141: Edit Organizational Category Screen

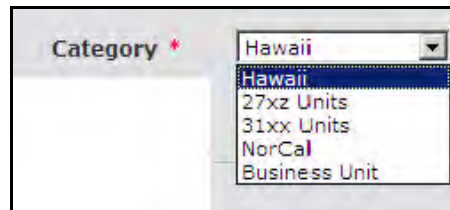
- c. Change the **Category Name**.
 - d. Change the **Category Description**.
 - e. Click **Save**. The **Organizational Category** screen re-appears.
4. Under the **Org Entities** area, click **Organizational Units**. The **Create Organizational Unit** screen, shown in Figure 5-142, appears.

Figure 5–142: Create Organizational Unit Screen

5. Enter the **Name** for the organizational unit.

If you are creating the Organizational Hierarchy from the top level down to the lowest level, the first name you enter will be the Business Unit name, such as Long Haul Tucking. The corporate name is automatically entered as the account name or the root name.

6. Enter the **Organization Code**.
7. Enter the unit's **Description**. This is an optional field that should be used to document the department number and name.
8. Select the **Business Unit** from the **Category** drop-down menu. These are the categories you previously created. Examples are shown in Figure 5–143.

**Figure 5–143: Business Unit Drop-Down Menu****WARNING!**

Be sure to select the correct organizational unit level. If an organizational unit is deleted, then any units beneath that level move up to the next level and cannot be re-assigned to a lower level. If you need to delete an organizational unit, first re-assign any dependent units to a different organizational unit of the same level as the one you need to delete, then delete the unit. For more information, please see the *Changing the Organizational Hierarchy* section of this guide.

9. Click the **Assign Parent** link next to the **Parent** field. The **Select Parent** pop-up screen, shown in Figure 5–144, appears.

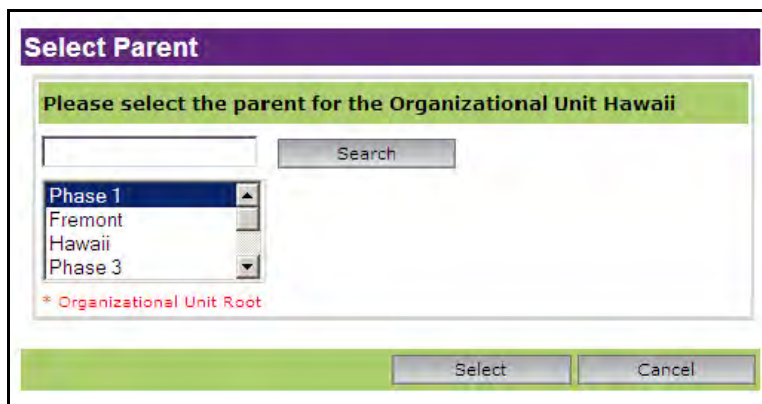


Figure 5-144: Select Parent Pop-Up Screen

A parent unit is the unit directly above the unit you are currently creating. For example, DOT25_ps, the Corporate entity, is the parent unit for Long Haul Trucking, a Business Unit.

10. Select the parent unit from the **Select Parent** text box. You may have to scroll through options to find the correct parent.

You can use the **Search** feature by entering the first few letters of the desired parent name and clicking **Search**. This field is not case sensitive.

11. Click **Select**. You return to the **Configure Organizational Unit** screen, which shows the parent you selected.

Click **Cancel** to close the screen without selecting a parent.

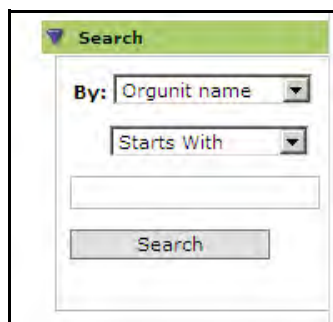
12. Click **Save**. The **Org Hierarchy** section of the screen updates to show the new organizational unit.

13. Repeat steps 3 through 12 for your entire organization's hierarchy, for example, starting with Business Units, then Divisions, Regions and Branches. Following this top-down order helps keep your hierarchy units at the correct unit level.

When you are finished entering the Organizational Hierarchy, you must assign mobile devices, employees and users to the correct hierarchy unit. Only units assigned to the lowest hierarchy level will appear on roll-up reports.

Searching Organizational Hierarchy

You can easily find an employee, mobile device, user or an organizational unit by using the Search function in the Organizational Hierarchy navigation bar, shown in Figure 5-145.

**Figure 5-145: Search Function**

To search the Organizational Hierarchy:

1. Select the desired search type from the **By** drop-down menu. Choices are:
 - Orgunit name
 - Employee first name

- Employee last name
 - Employee ID
 - Mobile device label
 - Mobile device serial number
 - User name
 - User first name
 - User last name
2. Select **Starts With** or **Contains** from the next drop-down menu.
 3. Enter the search criteria in the text box. This is case sensitive.
 4. Click **Search**. The results are returned in a text box, shown in Figure 5–146.

The screenshot displays the 'Org Entities' and 'Org Hierarchy' sections. Under 'Org Hierarchy', there is a 'Search' section with a 'By:' dropdown set to 'Employee last name', a 'Starts With' dropdown, and a text input field containing 'a'. A 'Search' button is present. Below the search input is a 'Matches' section containing a text box with the following results: 'Ethans Team(ALLEN,ETHAN)' and 'Fred's Team(ASHBURY,FRED)'. At the bottom, the organizational hierarchy is shown as a tree structure: 'Daorta Plumbing' (root), 'Canada' (child), 'East Coast' (child of Canada), and 'West Coast' (child of Canada).

Figure 5–146: Search with Results Text Box

Assign Mobile Devices

After the Organizational Hierarchy is complete, you must assign mobile devices to the correct hierarchy unit.

1. In the **Org Hierarchy** section of the screen, select the name of the unit to which you want to assign mobile devices. This should be the Service Manager level if you want the information to appear on roll-up reports.

For this example, we'll use Service Manager Marion Berry at the Cherry Hill branch.

- Click the **Assign Devices** tab in the **Configure Organizational Unit** section of the screen. The section changes to show the **Assign Devices** tab, shown in Figure 5–147. The default view shows any currently assigned devices.

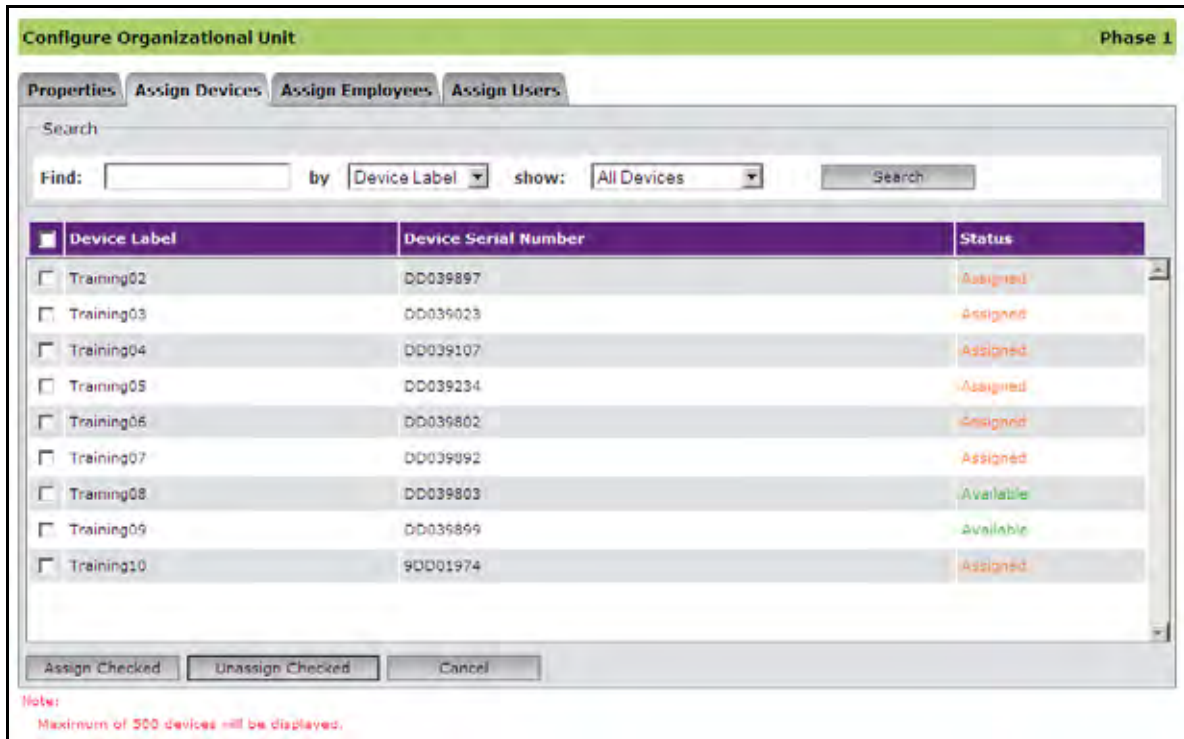


Figure 5–147: Assign Devices Tab



Note:

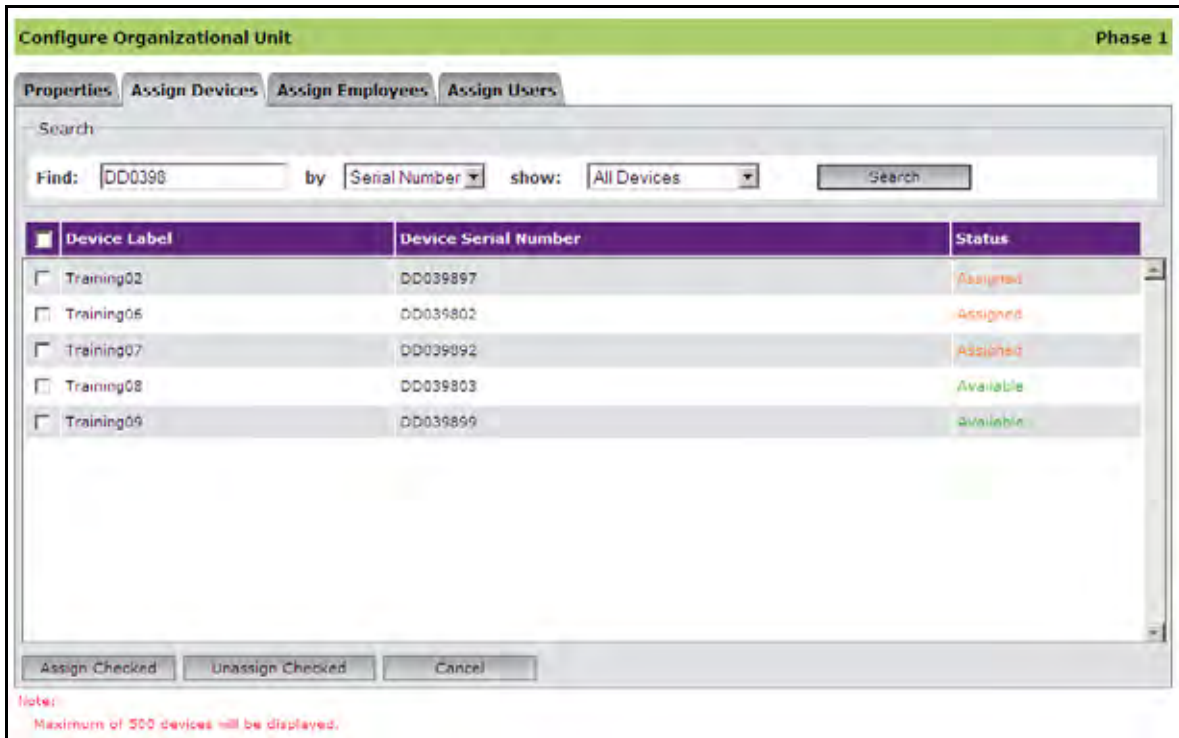
Device search is case sensitive. Maximum of 500 users will be displayed. If you do not see the desired user in the Devices list, please change your search criteria.

- In the **Search** area of the **Assign Devices** tab, click the **Show** drop-down menu.
- Select **Available Devices**.



- Click **Search**. The text box refreshes to show all devices available for assignment.

If you know the **Device Label** or **Serial Number** for the mobile devices, you can enter the first few letters or numbers into the **Find** text box, select either Device Label or Serial Number from the **By** drop-down menu, then click **Search**.



- Click the check box next to the **Device Label** for the desired mobile device(s).
To select all available mobile devices, click the check box in the header of the table.
- Click **Assign Checked**. The devices disappear from the available devices list.
To see the assigned devices, select **Assigned Devices** or **All Devices** from the **Show** drop-down menu and click **Search**.

Assign Employees

After you have assigned devices to the organizational unit, you must assign employees to the organizational unit.

- Click the **Assign Employees** tab in the **Organizational Unit Configuration** section of the screen. The **Assign Employees** tab, shown in Figure 5-148, appears.

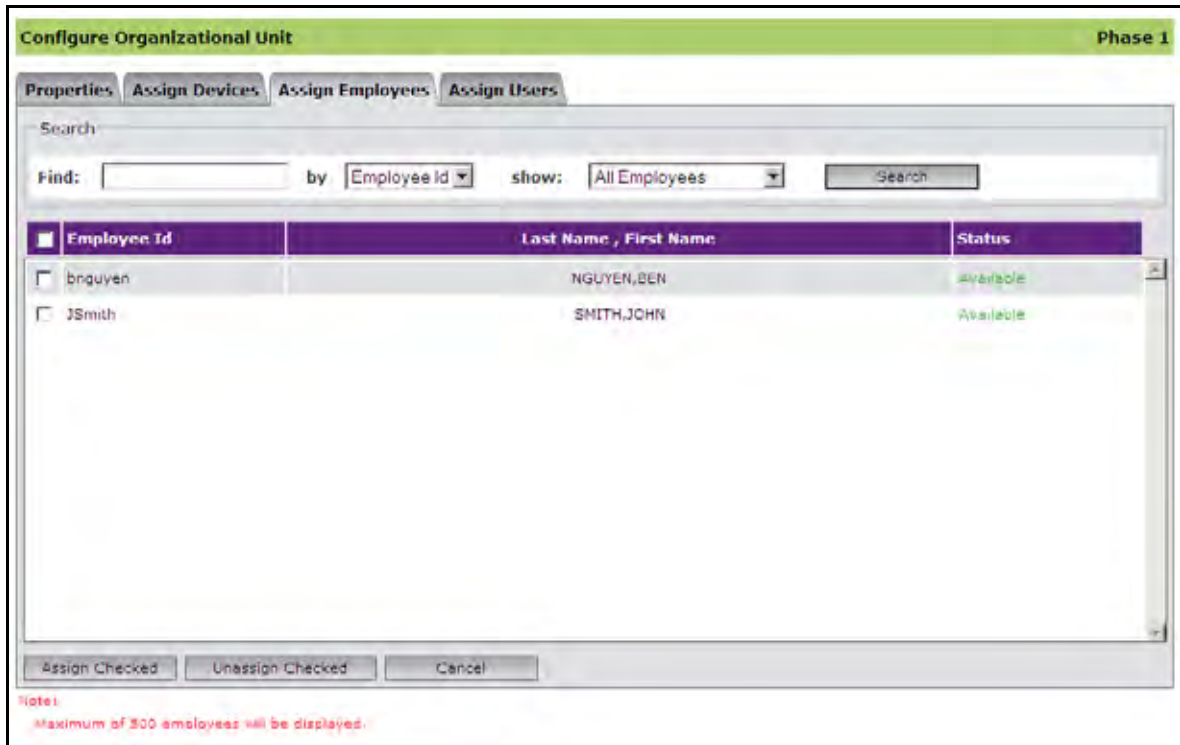


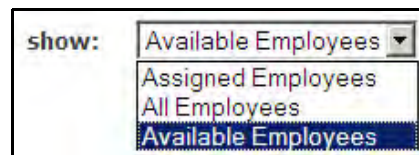
Figure 5-148: Assign Employees Tab



Note:

Employee search is case sensitive. Maximum of 500 users will be displayed. If you do not see the desired user in the Employees list, please change your search criteria.

2. In the **Search** area of the **Assign Employees** tab, click the **Show** drop-down menu.
3. Select **Available Employees**.

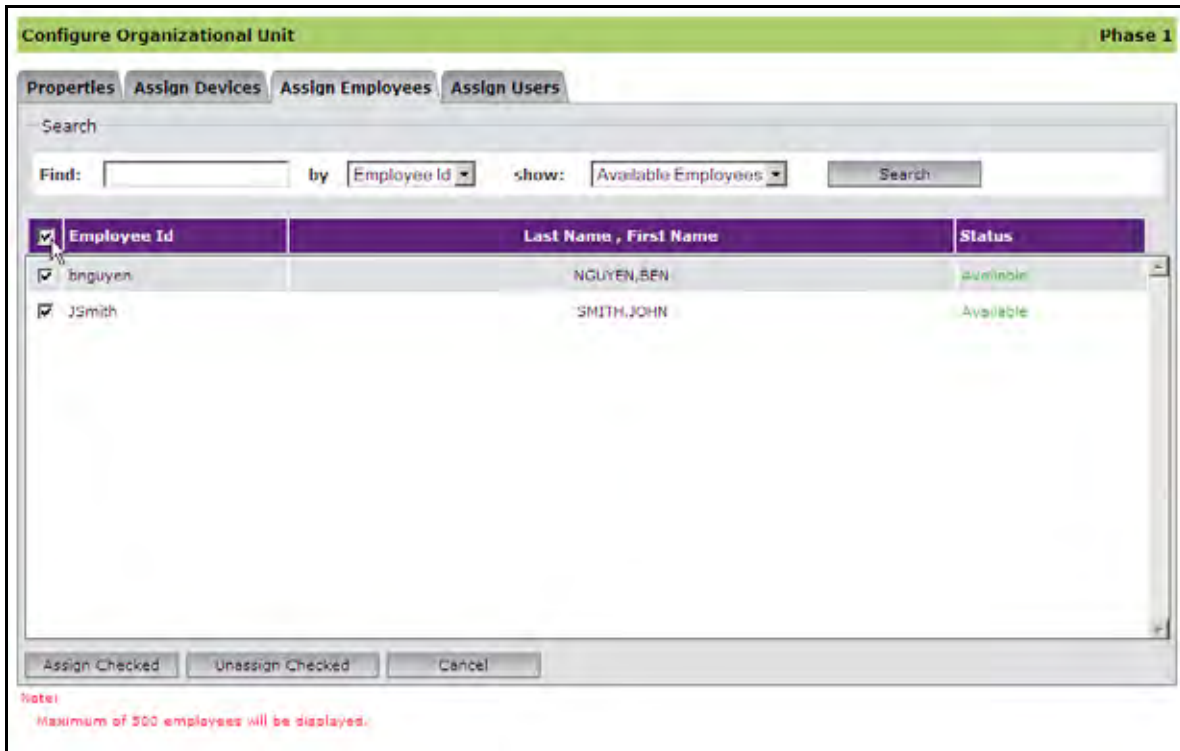


4. Click **Search**. The text box refreshes to show all devices available for assignment.

If you know the **Employee ID**, **First Name** or **Last Name** for the employee, you can enter the first few letters or numbers into the **Find** text box, select either Employee ID, First Name or Last Name from the **By** drop-down menu, then click **Search**.

5. Click the check box next to the desired **Employee(s)**.

To select all available employees, click the check box in the header of the table.



6. Click **Assign Checked**. The employees disappear from the available employees list.

To see the assigned employees, select **Assigned Employees** or **All Employees** from the **Show** drop-down menu and click **Search**.

Assign Users

Depending upon the size of your fleet and the number of people you have using Trimble GeoManager, you can assign users to the organizational unit after you are finished assigning employees. A user can be assigned to more than one organizational unit.



Note:

Users have administrative access to the Organizational Hierarchy, so they can make organizational changes. If you do not have more than one account administrator or user, you do not need to assign users to Organizational Hierarchy units.

To assign users to an Organizational Unit:

1. Click the **Assign Users** tab in the **Organizational Unit Configuration** section of the screen. The **Assign Users** tab, shown in Figure 5–149, appears.

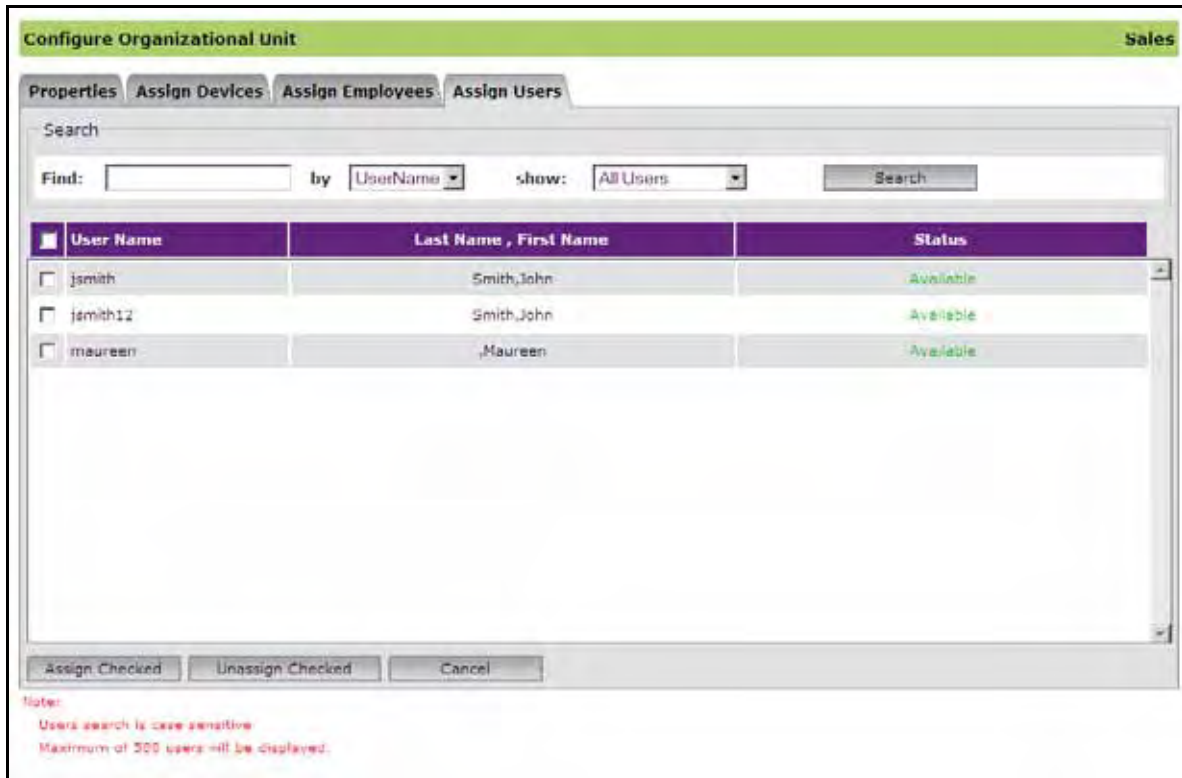


Figure 5-149: Assign Users Tab

**Note:**

User search is case sensitive. Maximum of 500 users will be displayed. If you do not see the desired user in the Users list, please change your search criteria.

- In the **Search** area of the **Assign Users** tab, click the **Show** drop-down menu.
- Select **Available Users**.



- Click **Search**. The text box refreshes to show all devices available for assignment, as shown in Figure 5-150.

If you know the **User Name**, **First Name** or **Last Name** for the employee, you can enter it into the **Find** text box, select either User Name, First Name or Last Name from the **By** drop-down menu, then click **Search**.

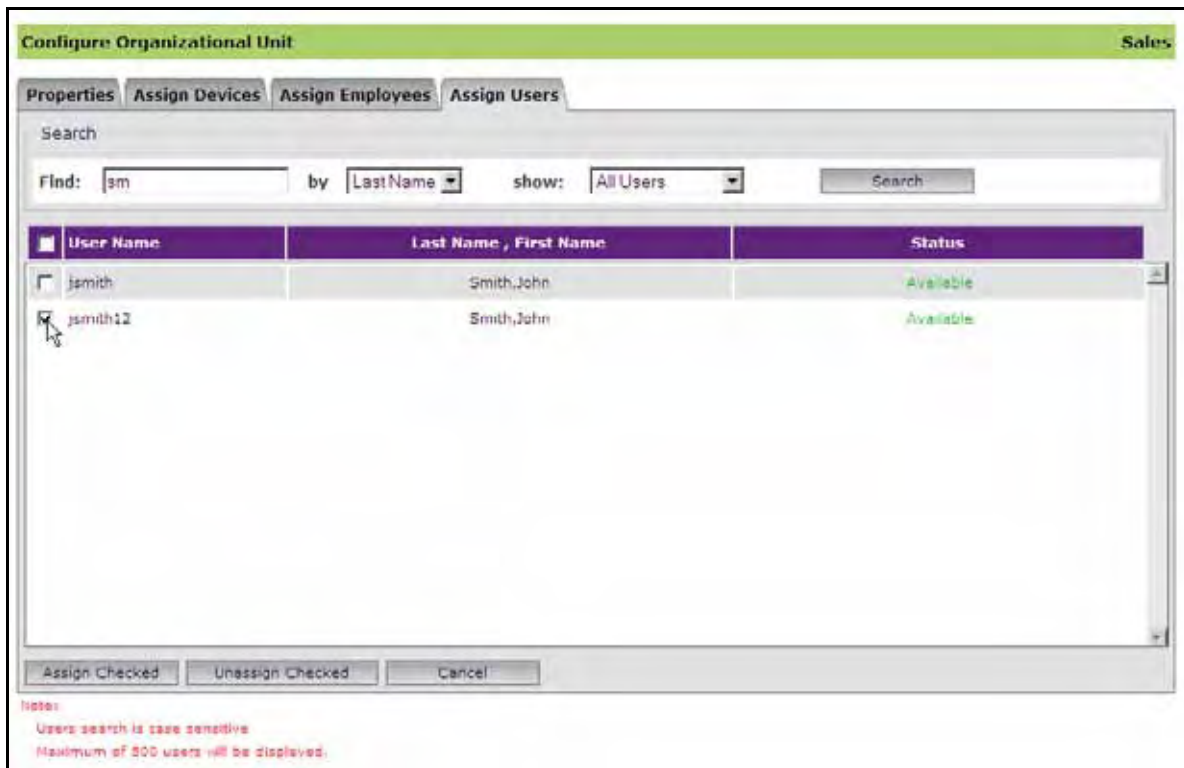


Figure 5–150: Assign Available Users Tab

5. Click the check box next to the desired **User(s)**.
 To select all available users, click the check box in the header of the table.
6. Click **Assign Checked**. The users disappear from the available users list.
 To see the assigned users, select **Assigned Users** or **All Users** from the **Show** drop-down menu and click **Search**.

Repeat assigning mobile devices, employees and users for each organizational unit.

When you are finished assigning mobile devices, employees and users, you are finished creating your organizational hierarchy.

Changing the Organizational Hierarchy

If the Organizational Hierarchy changes for some reason, you can rearrange it with some careful planning.

If a division, region or branch is being consolidated or closed, you must be sure to reassign the service managers, branches or regions to their new parents before deleting the organizational unit, as shown in Figure 5–151 through Figure 5–153.

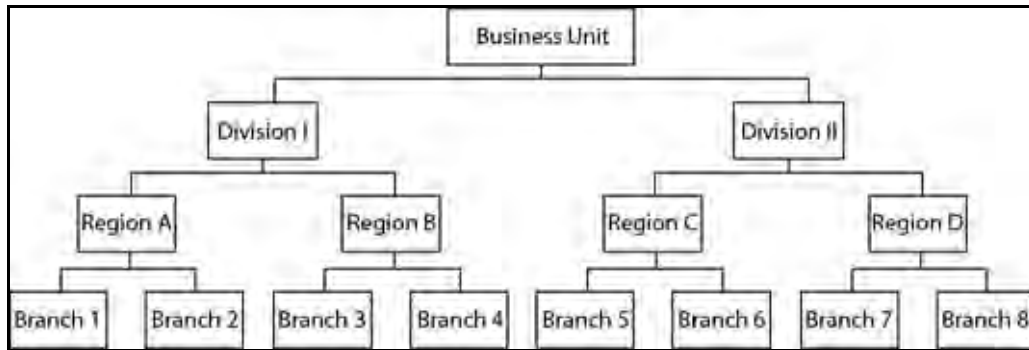


Figure 5-151: Find Organizational Unit to be Deleted

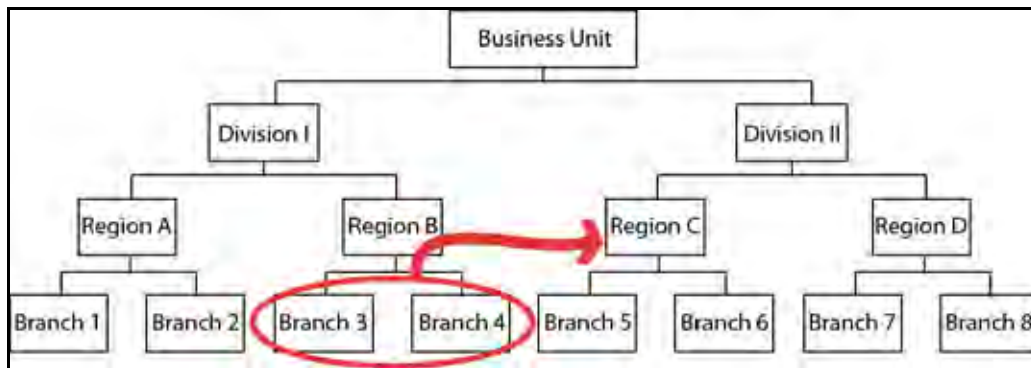


Figure 5-152: Move Subordinate Units

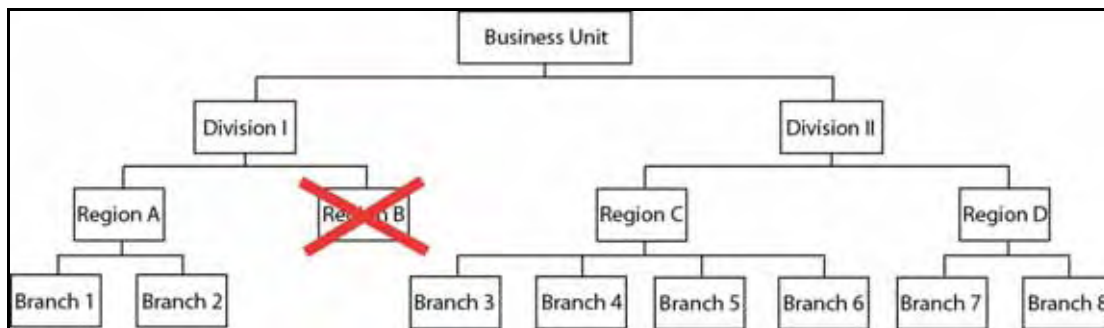


Figure 5-153: Delete Organizational Unit

When an organizational unit is reassigned to a different unit, all subordinate units move with the parent unit.



WARNING!

Before you delete an organizational unit, you must reassign all subordinate units to a different parent unit at the same level as the previous parent. Any organizational units that are still assigned to a parent when the parent unit is deleted will

move up to the parent's level and cannot be shifted back down to a lower unit level.

If a new division, region or branch is being created, you must be sure to select the correct organizational level when you are creating the new organizational unit.

Uploading an Organizational Hierarchy

To save time and effort, you can create your organizational hierarchy information in a comma delimited .txt file or an Excel .csv file. You can upload:

- Organizational unit configurations
- Employee details
- Device to organizational unit assignments
- Users to organizational unit assignments

Uploading Organizational Unit Configurations

To upload organizational unit information:

1. From the **Organizational Hierarchy Administration** screen, shown in Figure 5–137, click the **Upload Organizational Hierarchy** link. The **Organizational Unit Configuration File Upload** screen, shown in Figure 5–154, appears.

Administration

Organizational Unit Configuration File Upload Upload Organizational Unit Configuration ▾

INSTRUCTIONS FOR ORGANIZATIONAL UNIT CONFIGURATION VIA FILE UPLOAD

1. [Download Organizational Unit Organization Template](#) - Download and use this template to define Organizational Unit Configurations. - This file will contain current configuration in the system.
2. Open file in Excel. Notice that there are 5 columns (Org Unit Name, Org Unit Code, Description, Category, Parent).
(IMPORTANT: DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS)
3. Modify the appropriate configurations.
4. Save file as csv (comma-delimited). Name the file "org_unit_configuration.csv".
5. Upload the file
6. File size is limited to 1 MB

[Show Last Upload Organizational Unit Configuration Results](#)
[Show Organizational Unit Configuration Upload History](#)

[Organizational Hierarchy](#)

Figure 5–154: Organizational Unit Configuration File Upload Screen

- Download and use the template **Organizational Unit Organization Template**, shown in Figure 5–155.

	A	B	C	D	E
1	USERNAME	FIRSTNAME	LASTNAME	ORGUNITNAME	
2	maureen@Daorta.com	Maureen	Johnson	Daorta Transport	
3	cynthia	Cynthia	Stevens	Daorta Transport	
4	robert	Robert	Cunningham	Daorta Transport	
5	admin	Admin		Daorta Transport	
6					

Figure 5–155: Organizational Unit Organization Template Sample

- Open the file in Excel. Notice that there are five columns:
 - Org Unit Name
 - Org Unit Code
 - Description
 - Category
 - Parent



WARNING!

DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS!

- Modify the appropriate definitions. Each line must have Org Unit Name, Org Unit Code, Category and Parent information filled in. Description information is optional.
- Save the file as csv (comma-delimited) without renaming it. The File size is limited to 1 MB.
- Click **Browse** to find and select the saved file.
- Click **Upload File**. A confirmation dialogue box, shown in Figure 5–156, appears.

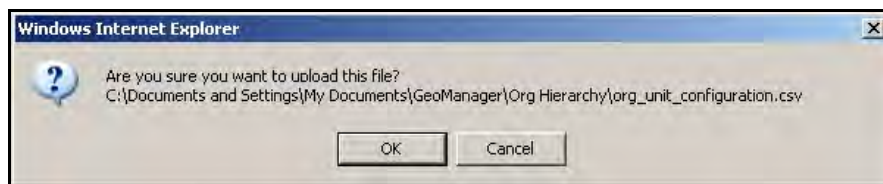


Figure 5–156: Upload File Confirmation Dialog Box

8. Click **OK**.

- If the upload is successful, the **Upload Completed** screen, shown in Figure 5–157, appears.



Figure 5–157: Upload Completed Screen

- If the upload is not successful, the Upload Failed screen, shown in Figure 5–158, appears.

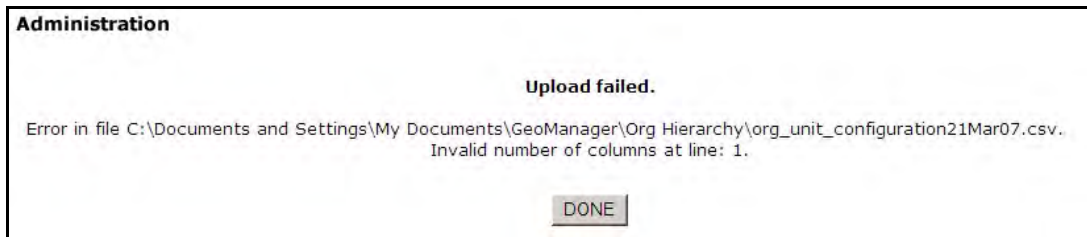


Figure 5–158: Upload Failed Screen

9. Click **Done**. The **Organizational Unit Configuration File Upload** screen appears.

After the files are uploaded, you can see the results from the last upload by clicking the **Show Last Org Unit Configuration Upload Result** link. The **Last Org Unit Configuration Upload Result** screen, shown in Figure 5–159, appears.

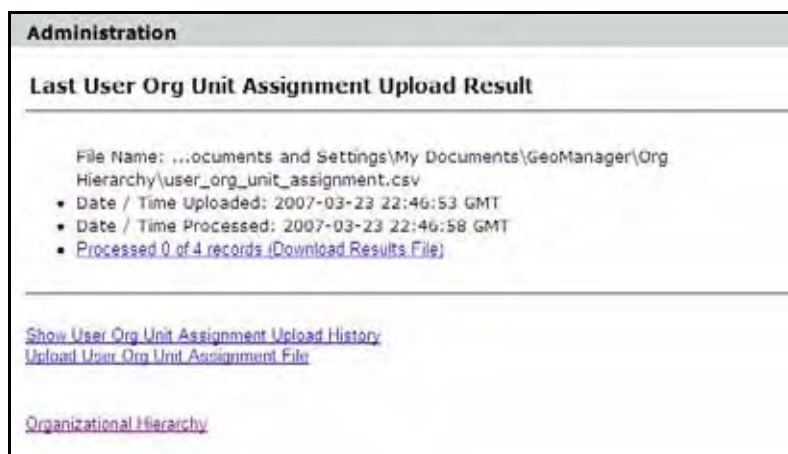


Figure 5–159: Last Org Unit Configuration Upload Result Screen

You can open the .csv file by clicking the **Processed x of x Records (Download Results File)** link to see if any errors occurred.

You can view the upload history by clicking the **Show Last Org Unit Configuration Upload Result History** link in the **Last Org Unit Configuration Upload Result** screen. The **Last Org Unit Configuration Upload History** screen, shown in Figure 5–160, appears.

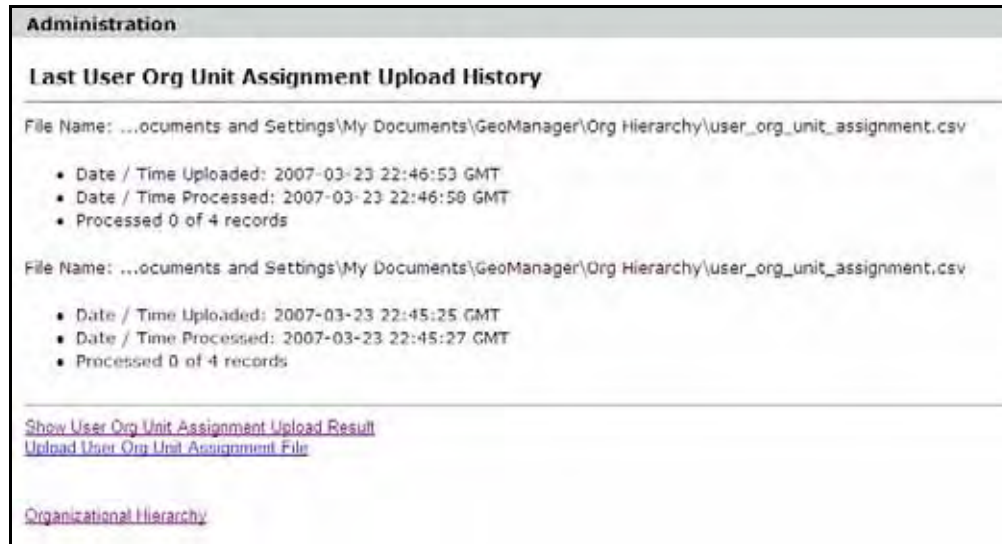


Figure 5–160: Last Org Unit Configuration Upload History Screen

To return to the **Upload Org Unit Configuration File** screen, click the **Upload Org Unit Configuration File** link.

Uploading Employee Details

To upload employee details:

1. From the **Organizational Hierarchy Administration** screen, shown in Figure 5–137, click the **Upload Organizational Hierarchy** link. The **Organizational Unit Configuration File Upload** screen, shown in Figure 5–154, appears.
2. From the drop-down menu in upper right corner, select **Upload Employee Details**. The **Employee Definition File Upload** screen, shown in Figure 5–161, appears.

Administration

Employee Definition File Upload Upload Employee Details

INSTRUCTIONS FOR DEFINING EMPLOYEES VIA FILE UPLOAD

1. [Download Employee Definition Template](#) - Download and use the template to define new employees.
2. Open file in Excel. Notice that there are 9 columns (Employee ID, Card ID, First Name, Last Name, Phone, Email, Description, Category, Org Unit Name).
(IMPORTANT: DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS)
3. Modify the appropriate definitions.
4. Save file as csv (comma-delimited), Name the file "define_employee.csv"
5. Upload the file
6. File size is limited to 1 MB

[Show Last Employee Definition Upload Result](#)
[Show Employee Definition Upload History](#)

[Organizational Hierarchy](#)

Figure 5-161: Employee Definition File Upload Screen

3. Download and use the template **Employee Definition Template**, shown in Figure 5-162.

	A	B	C	D	E	F	G	H	I	J
1	Employee ID	Card ID	First Name	Last Name	Email	Phone Number	Description	Category	Org Unit Name	
2	athreek	45678	AMANDA	THREEK		5105554455	Driver		LA Branch	
3	awilliams	456123	ANSIL	WILLIAMS		5105553654	Driver		New York Branch	
4	csmantelban	123753	CARLOS	MANTELBAN		5105552733	Driver		Miami Branch	
5	cjones	12456	CHRIS	JONES		5105557777	Branch Manager		New York Branch	
6	gpeck	456961	GREG	PECK		5105554789	Driver		New York Branch	
7	hnguyen	123589	HYE	NGUYEN		5105550099	Branch Manager		San Francisco Branch	
8	jtaylor	12356	JANE	TAYLOR		5105551213	Vice President		San Francisco Branch	
9	jsmith	1234	JOHN	SMITH		5105551212	Regional Manager		East Coast	
10	klee	907321	KIM	LEE		5105556677	Regional Manager		West Coast	
11	ljohnson	789951	LARRY	JOHNSON		5105553355	Branch Manager		Miami Branch	
12	mwinters	123895	MICHELLE	WINTERS		5105559874	Driver		San Francisco Branch	
13	psavage	123765	PETER	SAVAGE		5105559630	Driver		Miami Branch	
14	srnamamurthy	456985	SRINIVASAN	RAMAMURTHY		5105554466	Driver		LA Branch	
15	thiggins	123789	TABITHA	HIGGINS		5105557896	Branch Manager		LA Branch	
16										

Figure 5-162: Employee Definition Template Sample

4. Open the file in Excel. Notice that there are nine columns:
 - Employee ID
 - Card ID
 - First Name
 - Last Name
 - Email
 - Phone Number

- Description
- Category
- Org Unit Name

**WARNING!**

DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS!

5. Modify the appropriate definitions. Each line must have Employee ID, First Name and Last Name information filled in. Card ID, Email, Phone Number, Description, Category and Org Unit Name information is optional.
6. Save the file as csv (comma-delimited) without renaming it. The File size is limited to 1 MB.
7. Click **Browse** to find and select the saved file.
8. Click **Upload File**. A confirmation dialogue box, shown in Figure 5–156, appears.
9. Click **OK**.
 - If the upload is successful, the **Upload Completed** screen, shown in Figure 5–157, appears.
 - If the upload is not successful, the Upload Failed screen, shown in Figure 5–158, appears.
10. Click **Done**. The **Employee Definition File Upload** screen appears.

After the files are uploaded, you can see the results from the last upload by clicking the **Show Last Employee Definition Upload Result** link. The **Last Employee Definition Upload Result** screen, shown in Figure 5–163, appears.



Figure 5–163: Last Employee Definition Upload Result Screen

You can open the .csv file by clicking the **Processed x of x Records (Download Results File)** link to see if any errors occurred.

You can view the upload history by clicking the **Show Last Employee Definition Upload Result History** link in the **Last Employee Definition Upload Result** screen. The **Last Employee Definition Upload History** screen, shown in Figure 5–164, appears.

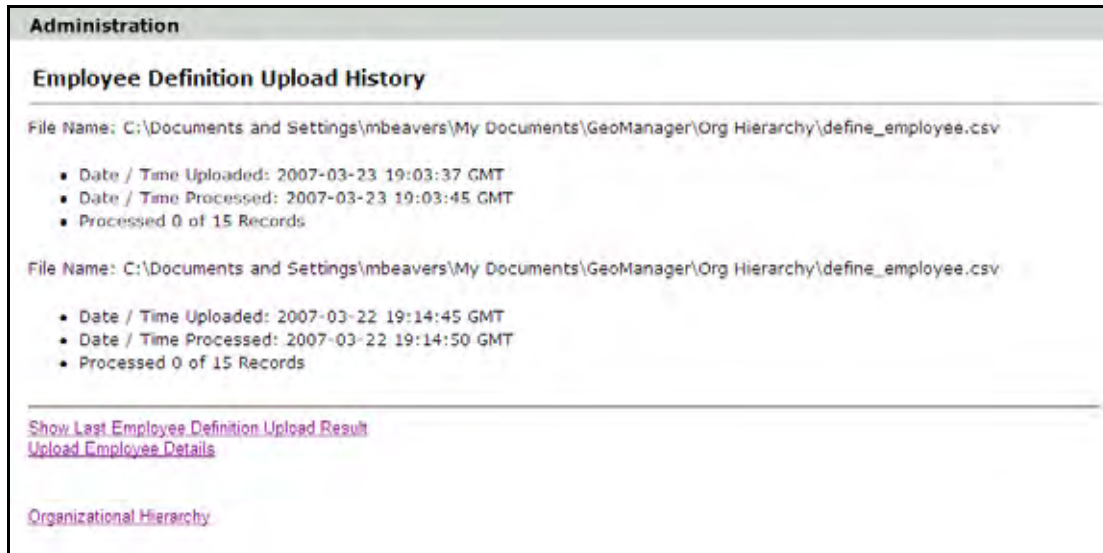


Figure 5–164: Employee Definition Upload History Screen

To return to the **Upload Employee Details** screen, click the **Upload Employee Details** link.

Uploading Devices to Organizational Units

To upload devices that are already assigned to organizational units:

1. From the **Organizational Hierarchy Administration** screen, shown in Figure 5–137, click the **Upload Organizational Hierarchy** link. The **Organizational Unit Configuration File Upload** screen, shown in Figure 5–154, appears.
2. From the drop-down menu in upper right corner, select **Upload Device to Org Unit Assignment**. The **Device to Org Unit File Upload** screen, shown in Figure 5–165, appears.

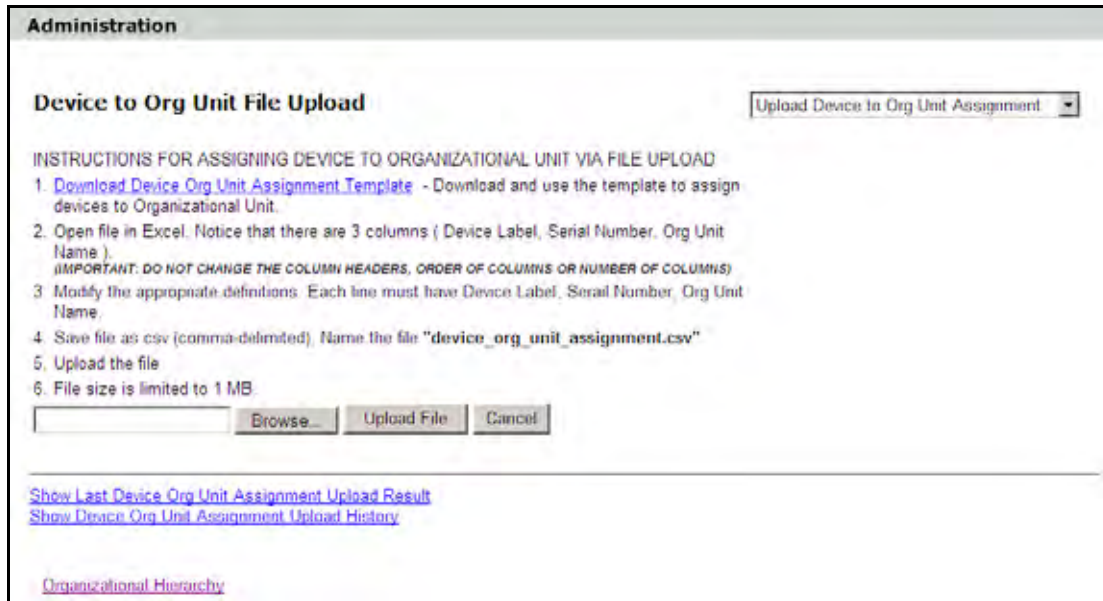


Figure 5-165: Device to Org Unit File Upload Screen

3. Download and use the template **Device Org Unit Assignment Template**, shown in Figure 5-166.

Microsoft Excel - device_org_unit_assignment.csv

	A	B	C	D
1	Device Label	Serial Number	Org Unit Name	
2	9dd01974	9DD01974	Daorta Transport	
3	FE052526	FE052526	Daorta WiFi	
4				
5				

Figure 5-166: Device Org Unit Assignment Template Sample

4. Open the file in Excel. Notice that there are three columns:
 - Device Label
 - Serial Number
 - Org Unit Name



WARNING!

DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS!

5. Modify the appropriate definitions. Each line must have all information filled in.
6. Save the file as csv (comma-delimited) without renaming it. The File size is limited to 1 MB.
7. Click **Browse** to find and select the saved file.
8. Click **Upload File**. A confirmation dialogue box, shown in Figure 5–156, appears.
9. Click **OK**.
 - If the upload is successful, the **Upload Completed** screen, shown in Figure 5–157, appears.
 - If the upload is not successful, the Upload Failed screen, shown in Figure 5–158, appears.
10. Click **Done**. The **Device to Org Unit File Upload** screen appears.

After the files are uploaded, you can see the results from the last upload by clicking the **Show Last Device to Org Unit Assignment Upload Result** link. The **Last Device to Org Unit Assignment Upload Result** screen, shown in Figure 5–167, appears.



Figure 5–167: Last Device to Org Unit Assignment Upload Result Screen

You can open the .csv file by clicking the **Processed x of x Records (Download Results File)** link to see if any errors occurred.

You can view the upload history by clicking the **Show Last Device to Org Unit Assignment Upload Result History** link in the **Last Device to Org Unit Assignment Upload Result** screen. The **Last Device to Org Unit Assignment Upload History** screen, shown in Figure 5–168, appears.

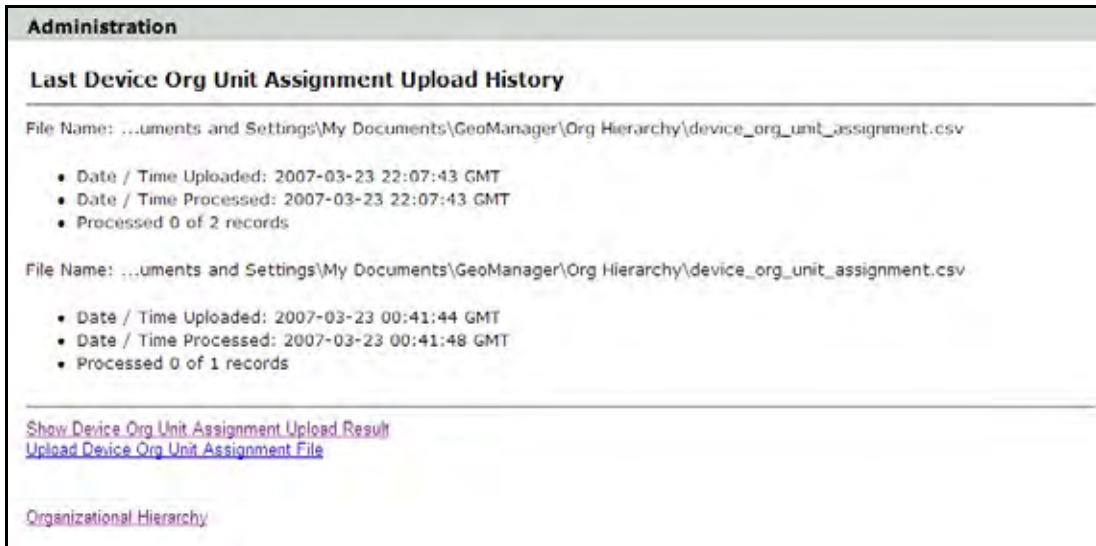


Figure 5–168: Device to Org Unit Assignment History Screen

To return to the **Device to Org Unit Assignment Details** screen, click the **Upload Device to Org Unit Assignment** link.

Uploading Users to Organizational Units

To upload devices that are already assigned to organizational units:

1. From the **Organizational Hierarchy Administration** screen, shown in Figure 5–137, click the **Upload Organizational Hierarchy** link. The **Organizational Unit Configuration File Upload** screen, shown in Figure 5–154, appears.
2. From the drop-down menu in upper right corner, select **Upload Users to Org Unit Assignment**. The **User to Org Unit Assignment Upload** screen, shown in Figure 5–169, appears.

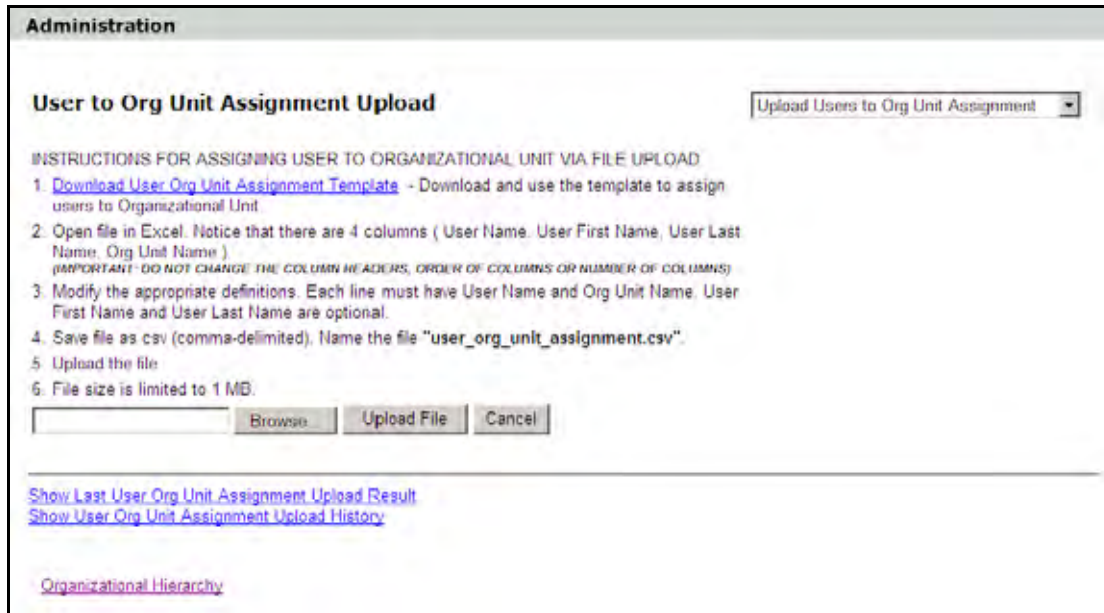


Figure 5-169: User to Org Unit File Upload Screen

3. Download and use the template **User Org Unit Assignment Template**, shown in Figure 5-170.

	A	B	C	D	E
1	USERNAME	FIRSTNAME	LASTNAME	ORGUNITNAME	
2	maureen@Daorta.com	Maureen	Johnson	Daorta Transport	
3	cynthia	Cynthia	Stevens	Daorta Transport	
4	robert	Rober	Cunningham	Daorta Transport	
5	admin	Admin		Daorta Transport	
6					

Figure 5-170: User Org Unit Assignment Template Sample

4. Open the file in Excel. Notice that there are four columns:
 - Username
 - Firstname
 - Lastname
 - Orgunitname

**WARNING!**

DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS!

5. Modify the appropriate definitions. Username and Orgunitname must have all information filled in. Firstname and Lastname are optional fields.
6. Save the file as csv (comma-delimited) without renaming it. The File size is limited to 1 MB.
7. Click **Browse** to find and select the saved file.
8. Click **Upload File**. A confirmation dialogue box, shown in Figure 5–156, appears.
9. Click **OK**.
 - If the upload is successful, the **Upload Completed** screen, shown in Figure 5–157, appears.
 - If the upload is not successful, the **Upload Failed** screen, shown in Figure 5–158, appears.
10. Click **Done**. The **Device to Org Unit File Upload** screen appears.

After the files are uploaded, you can see the results from the last upload by clicking the **Show Last User to Org Unit Assignment Upload Result** link. The **Last User to Org Unit Assignment Upload Result** screen, shown in Figure 5–171, appears.

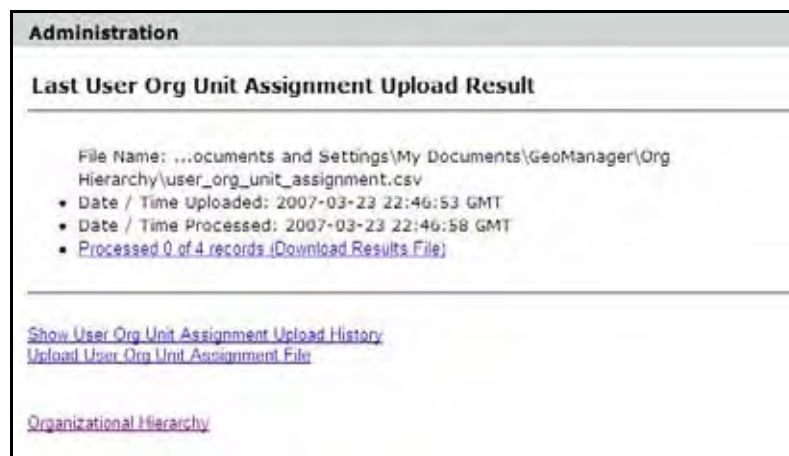


Figure 5–171: Last User to Org Unit Assignment Upload Result Screen

You can open the .csv file by clicking the **Processed x of x Records (Download Results File)** link to see if any errors occurred.

You can view the upload history by clicking the **Show Last User to Org Unit Assignment Upload Result History** link in the **Last User to Org Unit Assignment Upload Result** screen. The **Last User to Org Unit Assignment Upload History** screen, shown in Figure 5–172, appears.

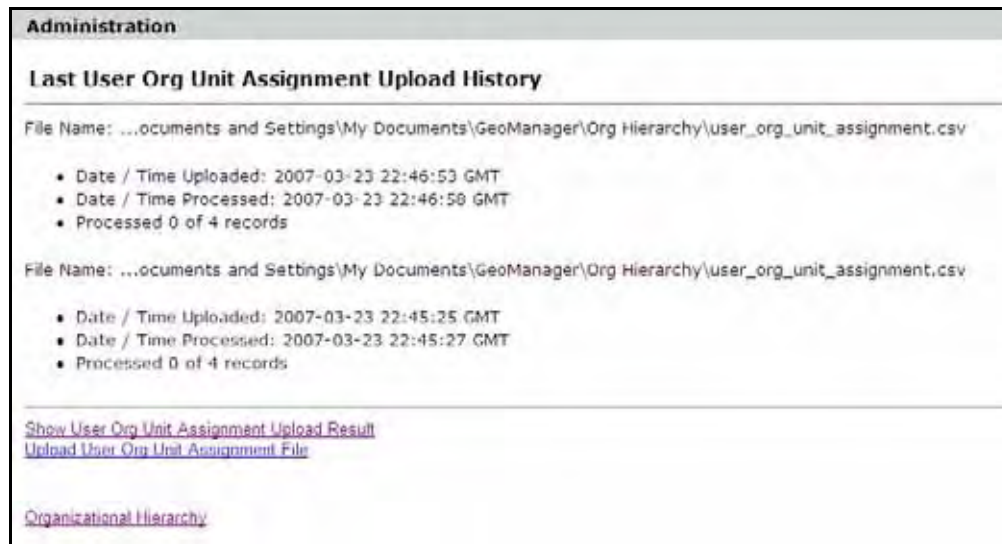


Figure 5–172: User to Org Unit Assignment History Screen

To return to the **User to Org Unit Assignment Details** screen, click the **Upload User to Org Unit Assignment** link.

Reports Administration

You can access the Reports Administration links by clicking the down-arrow next to Reports under the Administration Navigation links, as shown in Figure 5–173.

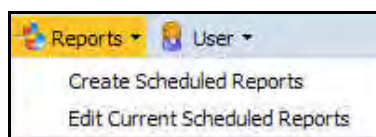


Figure 5–173: Reports Administration Drop Down Menu

Creating Scheduled Reports

Scheduled Reporting is a function you will use to establish the type, format, time, recipient and frequency of all end-user reports you wish to generate.

Scheduling reports enables you to generate a specific report using a set of parameters you define. The Trimble MRM system generates reports after peak hours using the frequency you determine such as daily, weekly or monthly.

Scheduled Reporting also enables you to edit parameters for existing reports, including adding or deleting recipients.

Choosing Report Formats

You may generate reports using any of these formats:

- PDF – Adobe® Acrobat page layout format
- HTML – Internet standard format
- Microsoft Excel – enables additional file manipulation, such as sorting, grouping, and other data management capabilities
- Comma-delimited – for export into standard applications or databases



Note:

- To access downloaded Excel files, you need the Microsoft Excel application. The format is compatible with Microsoft Excel version 97 or above.
- To view HTML reports, use Microsoft Internet Explorer version 6.0.

Scheduling a New Report

To create a new Scheduled report:

1. From the **Reports** drop down menu, shown in Figure 5–173, click **Create Scheduled Report**. The **Schedule a Standard Report** screen, shown in Figure 5–174, appears.

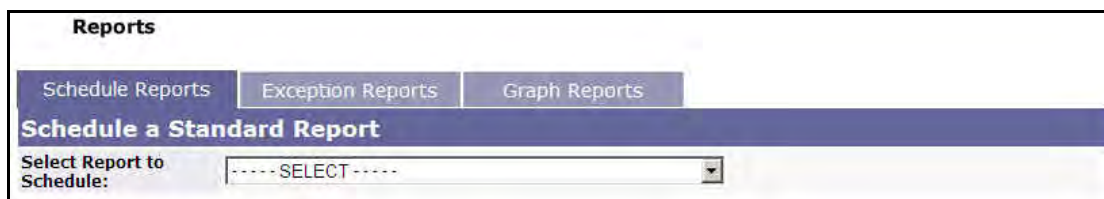


Figure 5–174: Schedule a Standard Report Screen

2. Select the type of report you would like to generate from the **Select Report to Schedule** drop-down menu. For this example, an Activity - Detail report is selected.
3. Enter a unique name for this report
4. Select **Mobile Devices/Groups**, or a selected set of devices from a **Group**.
5. Schedule the frequency:
 - **Daily** – Generates a report every day or every weekday, using data from the previous day – up to 23:59.
 - **Weekly** – Generates a report once a week on a day you select – Monday through Sunday – using data accumulated for the seven days prior to the selected date.

- **Monthly** – Generates a report once a month on a day you select—using data accumulated from the same day the previous month through the day prior to the selected date.
 - **One Time Only** – Generates a report once with a start date for the report to begin retrieving data, up to one month prior to the current date. If your company subscribes to the Trimble MRM Extended Storage service, you may receive reports on data starting from the beginning of your subscription period, or up to one year prior, based on your subscription. The end date can be any date up to and including the day on which you schedule the report.
6. Click the drop-down box next to **Deliver By**.
 7. Select a delivery time for your report.
 8. Select a time zone.
 9. Select the local time zone to receive the report by the local time zone in which you are present.
 10. Select the **Deliver To** recipient (s). You can choose:
 - Email – enter the email address for the recipients. You can enter up to four main recipients.
 - FTP – enter the FTP site information where report will be uploaded.
 11. Enter any **Email CC** information. You can enter up to four CC recipients.
 12. Click **Save** to save and schedule the report. The **Scheduled Report Successfully Created** screen, shown in Figure 5–175, appears.

Click **Cancel** to return to the **Administration** screen.

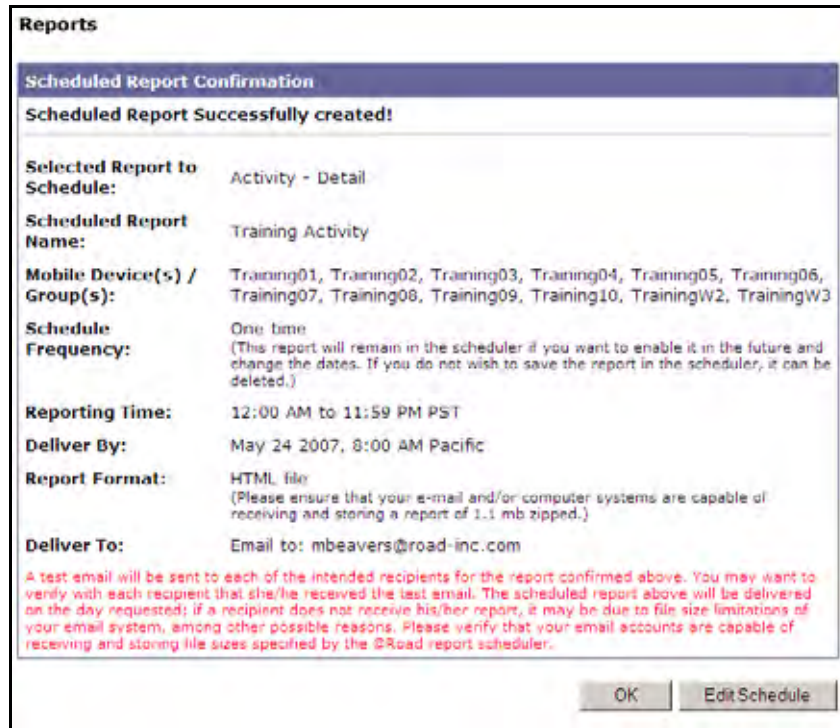


Figure 5–175: Scheduled Report Successfully Created Screen

If the information is correct, click **OK**. The **Currently Scheduled Reports** screen, shown in Figure 5–176, appears.

If the information is incorrect, click **Edit Schedule** to change the scheduled report.

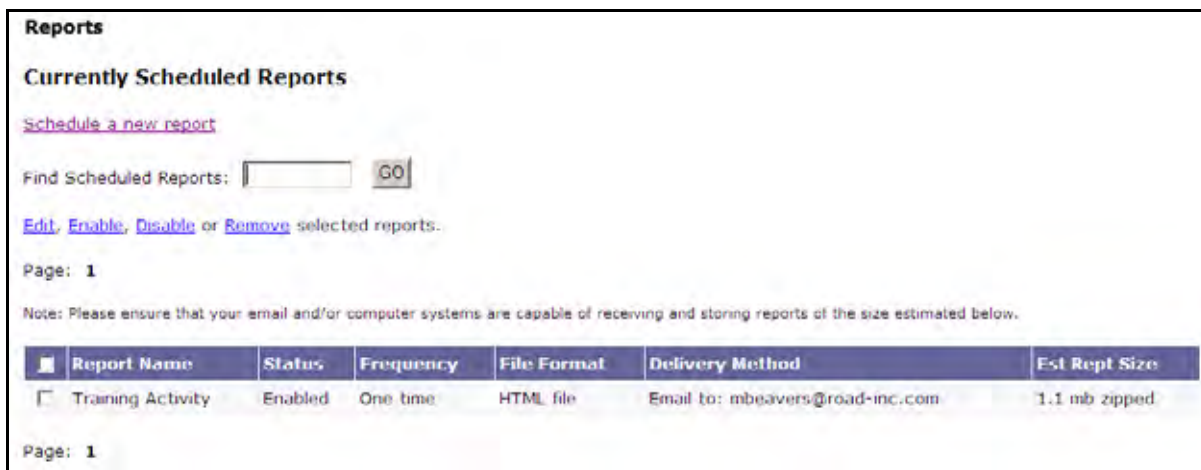


Figure 5–176: Currently Scheduled Reports Screen

Edit Current Scheduled Reports

After creating a scheduled report, you can edit, enable, disable or remove the schedule report.

1. From the **Administration** screen, click the **Edit Currently Scheduled Reports** link. The **Currently Scheduled Reports** screen, shown in Figure 5–177, appears.



Figure 5–177: Editing Currently Scheduled Reports Screen

You will see a table displaying all the pre configured, scheduled reports.

Select the check box in column 1 and click **Edit**, **Enable**, **Disable** or **Remove** to change any of the reports.

After making your selections, the screen will refresh and the **Status** column will display the updated status of the report.

User Administration

You can access the User Administration links by clicking the down-arrow next to User under the Administration Navigation links, as shown in Figure 5–178.

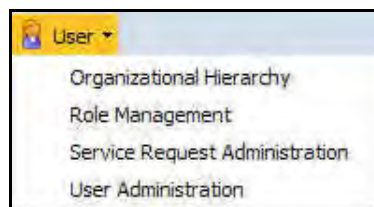


Figure 5–178: User Drop Down Menu

Organizational Hierarchy

Organizational Hierarchy administration is an optional feature that gives you the ability to organize your business in a multi-tier configuration within GeoManager.

For more information on Organizational Hierarchy, see “Organizational Hierarchy Administration” on page 216.

Role Based Management

Role Based Management allows organizations to manage users based on their business function. Administrators can create roles and users as well as set up different levels of role based access reflecting the organizational structure and responsibilities given to each user. Administrative users will no longer require a password to access administrative capabilities. Each user will have an assigned username and password to improve security. Based upon the roles assigned, users will have read only, read/write or customized access to a specific set of capabilities. Multiple languages are supported. There are four default role types in addition to unlimited customer definable roles. Examples of default roles and their assigned capabilities are displayed below.

- **Administrative User** - Accesses all administrative capabilities which can include the following.
 - Create Users
 - Create Roles
 - Setup Groups
 - Configure devices
 - Access Reports
 - Access Maps
- **Standard User** - Accesses primarily view only capabilities unless otherwise specified.
 - MapView
 - Mobile Device Status
 - Standard Reports
 - Exceptions
 - Vehicle Maintenance
 - Service Request
- **Driver Logs Restricted Role** - Provides read only access to Driver Logs capability.
- **WLAN Restricted Administrative Role** - Provides access to all administrative capabilities except for WLAN.

Administrators may either assign default roles to users, customize existing roles or create new roles based on business need. Administrators for example, may want to give standard users the ability to set up exceptions or schedule reports. Existing customers with users assigned default roles will have features the customer currently subscribes to.

When creating new roles, first determine what kind of role you want to create and what permissions and capabilities you want users assigned that role to be able to access.

Administration Capability

The administration capability allows you to set up administrative access for different roles. Administrative users will generally receive access to all capabilities unless specifically restricted from performing certain actions (e.g. WLAN Restricted Admin).



Figure 5-179: Administration Capabilities Screen

Administration Capability	Description
Configure Custom Fields	Allows administrators to create custom fields for report information and mobile device location in MapView.
Configure Mobile Device Details	Allows the user to configure labels and color icons in MapView and several different reports for each mobile device or vehicle.
Edit Mobile Device Details	Allows the user to edit labels and color icons in MapView and several different reports for each mobile device or vehicle.
View Mobile Device Details	Allows the user to view labels and color icons in MapView and several different reports for each mobile device or vehicle.
Role Administration	Allows the administrator to create, edit and assign capabilities to roles and users.
Edit Role	Allows the administrator to create, edit and assign capabilities to roles as necessary.
View Role	Allows the user read only access to existing roles and users.

Administration Capability	Description
User Administration	Allows the administrator to create, edit and view users.
Edit Users	Allows the administrator to create and edit users as necessary.
View Users	Allows the user read only access to existing users.

Change User Password Capability

The Change User Password capability enables the user access to change user passwords as necessary.

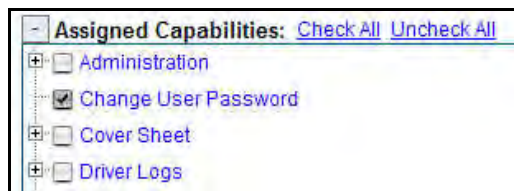


Figure 5-180: Change User Password Capabilities Screen

Change User Password Capability	Description
Change User Password	Allows the user to change user passwords should they need to be reset.

Cover Sheet Password Capability

The Cover Sheet capability enables the user access to create, edit and generate cover sheets.



Figure 5-181: Cover Sheet Capabilities Screen

Cover Sheet Capability	Description
Cover Sheet Administration	Allows the user to create, edit and generate cover sheets.
Edit Cover Sheet	Allows the user to create and edit cover sheets as needed.
Generate Cover Sheet	Allows the user to generate existing cover sheets.

Driver Logs Capability

The Driver Logs capability provides the user access to set up and/or view driver logs.



Figure 5-182: Driver Logs Capabilities Screen

Driver Logs Capability	Description
Driver Profile Management	Allows the user to create, edit and delete driver profiles.
Create/Update/Delete Driver	Allows the user to create, update and delete driver profiles.
View Drivers	Allows the user to view driver profiles.
Launch Terminal Logon	Allows the user to initiate and launch terminal logons.
Log Details and Daily Log Management	Allows the user to create, edit and delete log details and daily logs.
Create/Update/Delete Log Details and Daily Log	Allows the user to create, update and delete log details and daily logs.
View Log Details and Daily Log	Allows the user to view log detail and daily logs.

Driver Logs Capability	Description
Mobile Device Settings Management	Allows the admin user to set up and edit mobile device settings.
Update Mobile Device Settings	Allows the user to create, update and delete mobile device settings.
View Mobile Device Settings	Allows the user to view mobile device settings.
Reports	Please refer to both the Exception and Reports capabilities sections for more information.
Rule Exception Management	Allows the admin user to set up and edit rules that govern exception reports.
Update Rule Exception	Allows the user to create, update and delete rules that govern exception reports.
View Rule Exception	Allows the user to view rules that govern exception reports.
Terminals Management	Allows the user to create, edit and delete terminals.
Create/Update/Delete Terminals	Allows the user to create, update and delete terminals.
View Terminals	Allows the user to view terminals.
Warnings/Errors Management	Allows the user to create, edit warnings and errors.
Update/Delete Warnings/Errors	Allows the user to create, update and delete warnings and errors.
View Warnings/Errors	Allows the user to view warnings and errors.

Employee Management Capability

The Employee Management capability enables you to set up employees and the features they can access or view.



Figure 5-183: Employee Management Capabilities Screen

Employee Management Capability	Description
Employee Definitions	Allows the user to manage information about employees who use mobile devices.
Create/Edit Employee Details	Allows the user to create, edit and delete employee general profiles.
Upload Employee Details	Allows the user to upload CSV files pre-populated with employee information.
View Employee Details	Allows the user to view employee details.
Employee to Device Associations	Allows the user to manage and assign employees to mobile devices.
Create/Edit Any Associations	<p>Allows the user create, edit and delete employee associations.</p> <hr/> <p>Note: If selected, the user will be able to view, edit and/or correct historical employee associations.</p> <hr/>
Create/Edit Future Associations	Allows the user to create, edit and delete employee associations.
Upload Future Associations	Allows the admin user to upload CSV files pre-populated with employee information to associate mobile devices.
View Associations	Allows the user to view mobile devices and which users are assigned to those devices.

Exceptions Capability

The Exceptions capability enables you to set up exceptions, and give employees permission to view and/or edit and the features they can access or view.



Figure 5-184: Exceptions Capabilities Screen

Exceptions Capability	Description
Consolidated Exceptions	Lists all exceptions triggered during a selected time frame for each vehicle or mobile worker in one combined report.
Handset Usage (if Pocket Edition)	Tracks and displays handset usage in excess of a specified duration.
Idling	Displays when a Mobile Device is stopped for more than a specified duration while the vehicle engine is running.
Landmark	Displays stops at a specific Landmark type or address. This can track pickups and deliveries or flag unscheduled customer stops.
Landmark Proximity	Displays arrivals to and departures from a specific Landmark type or address.
Low Battery	Sends warnings when handset or vehicle battery levels fall to a point at which no location data can be transmitted.
Mileage	Displays when a mobile device exceeds a predefined number of miles within a specified work day.
Mobile Device Vicinity (congregation of vehicles)	Monitors the occurrences of multiple mobile devices stopping within a defined distance from each other for a period of time common to both or all.
Off Hours Use	Displays when a mobile device is used outside of designated work hours, an Off Hours Use Exception occurs.
Speed	Displays when vehicles drive above a maximum speed for a specific block of time.
Stop (anywhere)	Monitors total daily stop time accumulated at specific locations (Landmarks).
Stop Count	Monitors the total number of stops a vehicle makes.
Stop Duration (by Landmark)	Displays when the total amount of time a mobile worker spends at a stop exceeds a set threshold during a defined workday.

Exceptions Capability	Description
Switch Status Report	Displays non-drive time fuel use (e.g. dome light, PTO, Lift up/down) including switch location duration, start and end times.
Zone	Displays arrivals to and departures from multiple specified zones defined as Zip Code, City, County, State or Country.
Summary - Time in Yard Before First Departure	Summarizes the actual vehicle departure time and compares the expected departure time with the work shift information.
Detail - Travel Time and Mileage	Displays the amount of time each selected mobile device travelled during the selected time frame.
Summary - Time Travel and Mileage	Summarizes the amount of time each selected mobile device travelled during the selected time frame.
Time in Work Center, C.O., or Remote	Displays the total time spent by a mobile worker at work centers, excluding the time before the first departure.
Detail - Time in Yard - End of Day	Displays the actual vehicle arrival time in yard and compares the expected shift end time with the work shift information.
Summary - Time in Yard - End of Day	Summarizes the actual vehicle arrival time in yard and compares the expected shift end time with the work shift information.
Detail - Mileage	Displays the total mileage and average mileage per vehicle for the selected period.
Summary - Mileage	Summarizes the total mileage and average mileage per vehicle for the selected period.
Exception - Time in Work Center, C.O., or Remote	Displays instances where Time in Work Centers is more than the Exception threshold. The threshold is calculated in minutes and is based on the average of the selected vehicles.
Exception - Travel Time	Generates the total travel time (drive time) and total mileage for the specified reporting period. Travel time is defined as time when the vehicle is moving. The mileage is a total for a 24-hour period.

Maintenance Capability

The Maintenance capability provides the user access to set up and/or view scheduled maintenance.



Figure 5–185: Maintenance Capabilities Screen

Maintenance Capability	Description
Maintenance	Displays the vehicle maintenance status details for a selected mobile device group.
Maintenance Admin	Allows the admin user to set up and edit maintenance status details.

MapView Capability

The MapView capability provides the user access to set up and/or view Landmarks and additional MapView functionality.



Figure 5-186: MapView Capabilities Screen

MapView Capability	Description
Edit MapView	Allows the user to view and create Landmarks by placement within MapView. Landmarks can also be created in Landmark Administration if the address is not known.
View MapView	Allows read only access to MapView.

Messaging Capability

The Messaging capability provides the user access to view, create, send and/or set up Messaging functionality.



Figure 5-187: Messaging Capabilities Screen

Messaging Capability	Description
Configure Messaging Details	Allows the user to configure and edit messaging details and forms. Administrative users can also provide instructions as necessary
View/ Create/ Send Messages	Allows the user to view, create and send messages or forms.

Mobile Device Status Capability

The Mobile Device Status capability provides the user access to view Mobile Device Status.



Figure 5-188: Mobile Device Status Capabilities Screen

Mobile Device Status Capability	Description
View Mobile Device Status	Displays device status, type, name and the last reported location of each mobile device or vehicle.

Reports Capability

The Reports capability enables the administrative user to set up and select which reports users are able to view, download and/or schedule.



Figure 5-189: Reports Capabilities Screen

Reports Capability	Description
Standard Reports	
Account Grouping Reconciliation Detail	Displays the details about which devices belong to which groups, as well as the details and relationships among all groups, users and devices.
Account Grouping Reconciliation Summary	Displays the summary of which devices belong to which groups for quick reference.
Activity – Detail	Displays the driving activity for a mobile device as far back as 95 days from the current date.
Activity – Summary	Displays the totals for distance, stops and stop times for each mobile device.
Asset Snapshot	Displays an inventory of all devices and hardware installed on a customer's account, such as the number and type of iLMs installed, the type of peripheral devices connected (iDTs, barcode wands, etc.) and the data plan carrier associated with each iLM.
Data Usage	Displays cellular and satellite data usage to and from the iLM and Trimble MRM server systems.
Inactivity	Displays all mobile devices or groups of mobile devices that have not shown any communication within the last number of designated days.
Mileage Totals	Displays the mileage for each mobile device during the selected reporting period.
RBAC Audit Trail	Displays all actions having to do with roles created, edited or deleted.
Parameterized Stop	Displays the mileage for each mobile device during the selected reporting period.
Stop	Displays the date range selected, mobile device name, Summary table and all the stops each selected mobile device(s) have made during the report timeframe.
Stop Summary at Landmark Type by Device	Displays the number of stops a mobile device made at a particular Landmark. It also shows a summary of average and total time spent at the Landmark.
Stop Summary at Landmark Type by Landmark	Displays the summary for all stops made by mobile device(s) at a particular Landmark Type. It also shows the average stop duration and the number of stops made at the Landmark Type.
User Logon	Allows GeoManager administrators to capture logon/logout session time, enabling frequency and duration tracking of the users that are logging into the system.

Reports Capability	Description
Vehicle Maintenance History	Highlights vehicles with maintenance items that were addressed in the selected date range. The customer has the provision to define the maintenance items that are of concern for them; the maintenance schedule is configurable as well.
Vehicle Maintenance Overdue	Summarizes the items that are overdue for service for the selected vehicle. The customer has the provision to define the maintenance items that are of concern for them and the maintenance schedule is configurable as well.
Work flow Status	Provides status changes based upon messages received from the driver.
Add-On Module Reports	
Forms & Messaging	
Form	Provides detailed information from all forms filled out during the report period including Date/Time/Location information.
Form Sent	Displays all forms sent during the selected reporting period.
Message	Displays the messages sent to and received from the mobile device during the selected reporting period.
Driver Logs	
Audit History	Allows users to see what changes were made to the Driver Logs and by whom.
Combined Report	Provides summarized information for a reporting period.
Grid/Graph	Displays the total number of stops or speeding incidents over a period of time in a line graph format.
Hours Worked and Available	Provides information about the hours worked and available during the reporting period.
Log Hours (Detail)	Provides detailed log information for a reporting period.
Log Hours (Summary)	Provides summarized log information for a reporting period.
Missing Logs	Provides summarized missing log information for the reporting period.
Violations (Detail)	Provides detailed driver violation information for a reporting period.
Violations (Summary)	Provides summarized driver violation information for the reporting period.
Engine Diagnostics	
Trip Details Report	Provides diagnostic information for each trip (defined as ignition on to ignition off).
Trip Day Summary Report	Summarizes all trip detail reports for a specified period of time.

Reports Capability	Description
Pocket Edition	
TimeConnect Detail Report	<p>Allows the user to record and edit the start and end of numerous items including:</p> <ul style="list-style-type: none"> • Workdays • Jobs • Tasks within a job • Task detail during a job <p>Compares workday times with scheduled work shifts. Reports summary and detail information related to workday reported activities.</p>
TimeConnect Summary Report	Summarizes tasks for a selected group of people during a specified time period.
TimeConnect Edit History Report	Shows what tasks have been added by the administrator for the captured time and tasks.

Routing Capability

The Routing capability provides the user access to set up and/or view routing functionality.



Figure 5-190: Routing Capabilities Screen

Routing Capability	Description
Routing Administration	Allows the user to configure and edit routing details.
Routing Console	Allows the user to view the routing console.

Service Request Capability

The Service Request capability provides the user access to view and/or set up Service Request functionality.



Figure 5-191: Service Request Capabilities Screen

Service Request	Description
Service Request Administration	Allows the admin user control of where copies of a service request are sent, so more than one person can be notified when a service request is sent.
View Service Requests	Allows the user to view service requests.

Creating a New Role

To create a new role:

1. From the **Users** drop down menu, shown in Figure 5-178, click **Role Management**. The **Role Management** screen, shown in Figure 5-192, appears.

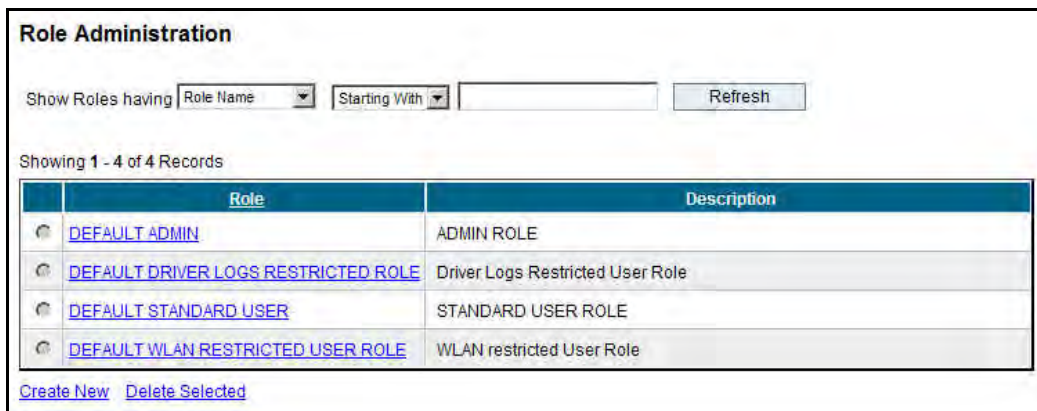


Figure 5-192: Role Administration Screen

2. Click **Create New**. The **Role Creation** screen appears as shown in Figure 5-193.

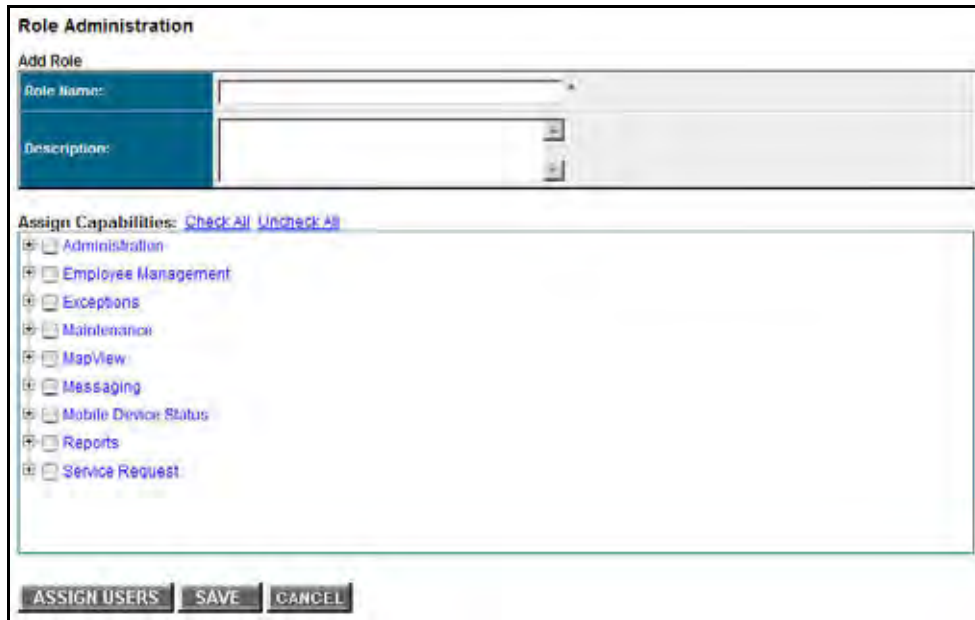


Figure 5-193: Role Creation Screen

3. Enter the name of the new role in the **Role Name** field.
4. Enter a description of the role in the **Description** field.
5. In the **Assign Capabilities** field, click the **Plus** sign next to **Exceptions**. This will expand the **Exceptions** menu.

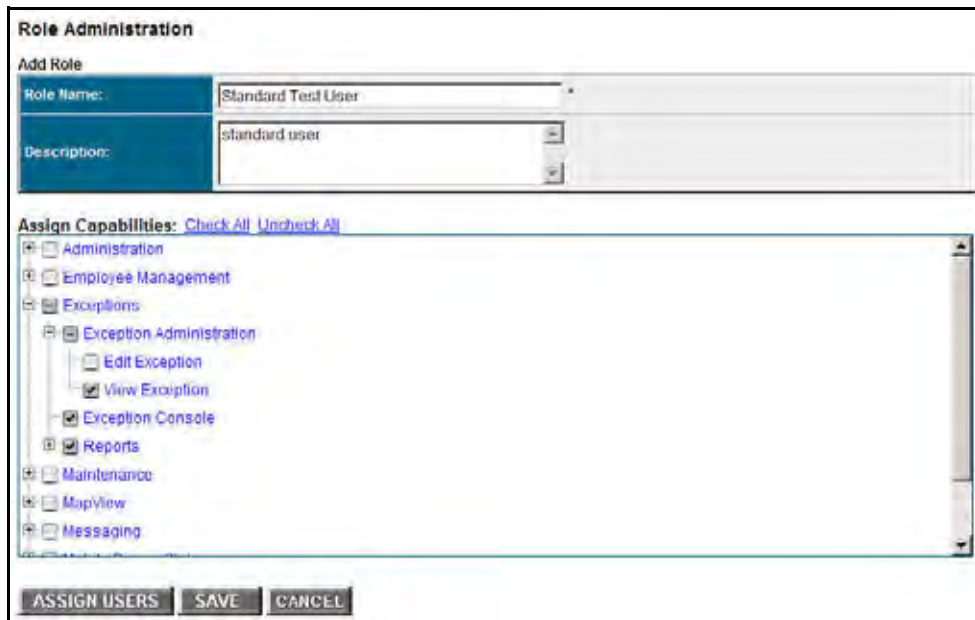


Figure 5-194: Exception Capabilities Screen

6. Click the **Plus** sign next to **Exception Administration**. This will expand the **Exception Administration** menu.
7. Check the following selections in the **Exceptions** menu.
 - View Exception
 - Exception Console
 - Reports



Note:

Click the **Minus** sign next to an expanded capability to minimize it. The parent capability check box will appear grey with a minus sign indicating selections have been made within that capability as shown in Figure 5–195.



Note:

Click the **Check All** link to select all capabilities. This can be helpful if you wish to assign all but a few capabilities to a user.

Select **Uncheck All** to deselect all previously checked capabilities.

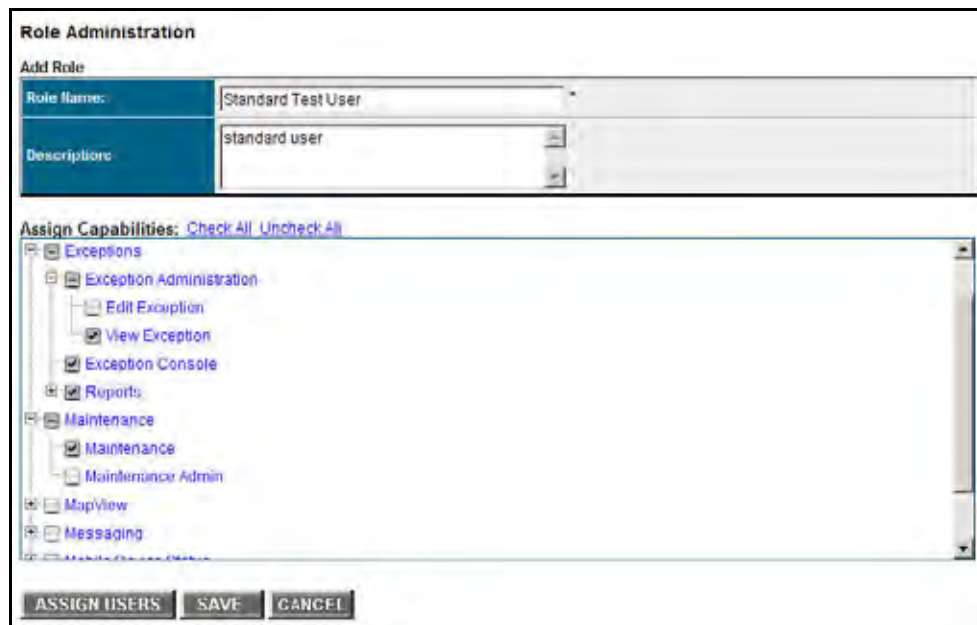


Figure 5–195: Maintenance Capability Screen

8. In the **Assign Capabilities** field, click the **Plus** button next to **Maintenance**. This will expand the **Maintenance** menu.
9. Check the **Maintenance** check box.

- Repeat steps 5 - 8 selecting additional capabilities and sub-capabilities you want to assign to a role.

To assign users to a role:

- Click the **Assign Users** button. The **Assign User To Role** screen appears.



Figure 5–196: Assign User To Role Screen

- Click the user in the **Available Users** field that you would like to assign to this role.
- Click the > button to move the user to the **Assigned Users** field.

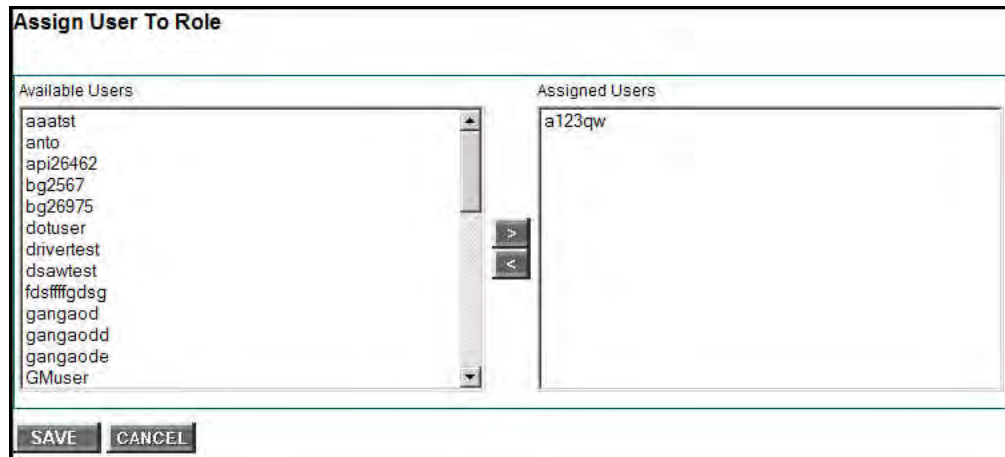


Figure 5–197: Assigned Users Screen

- Click **Save**. The **View Role** screen shown in Figure 5–195 appears.
- Click **Save**.

Editing Roles

As your business grows and changes, you may need to change roles and the users assigned to them.

To edit information about a user:

1. From the **Role Administration** screen, click the Role you would like to edit. If you have a large number of roles, you can search for a specific role:
 - a. In the **Refresh** text box, enter the first few letters of the search criteria.
 - b. Select the search criteria from the drop-down menu. Available criteria are:
 - Role Name
 - Capability
 - User Name
 - First Name
 - Last Name
 - c. Select **Starting With**, **Ending With**, or **Containing** from the drop-down menu to further narrow down the search.
 - d. Click **Refresh**. The **Role Administration** screen refreshes to show only the results that match your criteria.
2. Click the **role** you want to edit. The **Edit Role** screen appears as shown in Figure 5–198.

Role Administration

Edit Role

Role Name: Standard Test User

Description:

Assigned Capabilities: [Check All](#) [Uncheck All](#)

- Administration
 - Change User Password
- Driver Logs
- Exceptions
- Maintenance
- MapView
- Messaging
- Mobile Device Status

Assigned Users

Showing 1 - 1 of 1 Records

Select	User Name	Last Name, First Name	Roles Assigned
<input type="checkbox"/>	a123qw	a123qw.	CHECK ALL ROLE: Gege - DL Reps Tab Only; Standard Test User; aaabbb; assign4

UNASSIGN USERS ASSIGN USERS SAVE CANCEL

Figure 5–198: Edit Role Screen

3. Change the desired information.
 4. Click **Save**. The **Role Administration** screen re-appears.
- Click **Cancel** to return to the **Role Administration** screen without saving the changes.

**Note:**

The **Save** button saves changes made to the capabilities, not to assigned users. Changes made to assigned users are automatically saved.

Deleting Roles

If you want to delete a user role:

1. From the **Role Administration** screen, click the radio button next to the Role you would like to delete.
2. Click **Delete Selected**. A confirmation dialogue box, shown in Figure 5–199, appears.

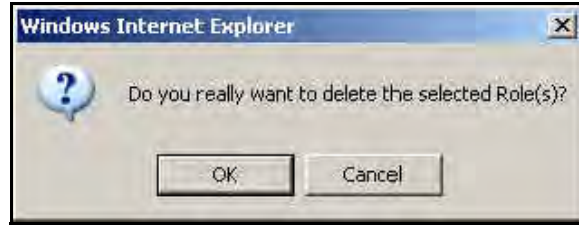


Figure 5-199: Delete Selected Roles Confirmation Dialogue Box

3. Click **OK**. The **Role Administration** screen re-appears.

Click **Cancel** to return to the **Role Administration** screen without saving the changes.



Note:

You will need to un-assign any users associated with a role prior to deleting it.

If there are no users assigned to a role you can also delete it from the **Edit Role** screen by clicking **Delete Role**.

User Administration setup enables you to assign users' unique sign in and password information for users to access GeoManager administration web pages. The user information requested includes the user name, login name, password, department and title and email information.



Note:

Users created in User Administration will not have access to Administration capabilities. To create users with administration capabilities, you must call Trimble Customer Support

Service Request Administration

GeoManager allows you to make Service Requests using an online form located in the Control Panel. Service Request administration allows you to control where copies of that request are sent, so more than one person can be notified when a service request is sent.

To administer Service Requests:

1. From the **Users** drop down menu, shown in Figure 5-178, click **Service Request Administration**. The **Online Service Request Administration** screen, shown in Figure 5-200, appears.

Figure 5–200: Service Request Administration Screen

2. Enter the **Service Request Notification Email(s)**. These are all email addresses you want notified when a Service Request is sent.
3. Enter the **Service Request Escalation Email(s)**. These are all email addresses you want notified when a Service Request is escalated.
4. Click **Save**. The Online Service Request Administration screen changes, as shown in Figure 5–201.

Click **Reset** to clear all but the default email address from the form.

Figure 5–201: Saved Online Service Request Administration

User Administration

Creating a User

To create a new user or edit an existing user:

1. From the **Users** drop down menu, shown in Figure 5–178, click **User Administration**. The **User Administration** screen, shown in Figure 5–202, appears.



Figure 5-202: User Administration Screen

2. Click **Create Users** to create a new user. The **User Page**, shown in Figure 5-203, appears.

The image shows a web form titled "User Administration" with a sub-header "Create User". The form contains several input fields and buttons:

- User Name:** Text input field with an asterisk and "(at least 4 characters)".
- Password:** Text input field with an asterisk and "(at least 4 characters)".
- Confirm Password:** Text input field with an asterisk and "(at least 4 characters)".
- First Name:** Text input field.
- Last Name:** Text input field with an asterisk.
- Title:** Text input field.
- Department:** Text input field.
- Email:** Text input field with an asterisk.
- Organization:** A section with a "Select Organization" link and an asterisk, a text input field, and a "Remove" button.
- Roles:** A section with an "Assign Role(s)" link and an asterisk, a text input field, and a "Remove" button.
- Locale:** A dropdown menu currently showing "English (United State)".

At the bottom of the form, there is a note: "Note * means a required field". Below the note are "Save" and "Reset" buttons. At the very bottom, there is a "User Administration" link.

Figure 5-203: Enter User Information Screen

3. Enter a **Username**. This must be unique through out the Trimble MRM system. Suggested user names are first initial followed by last name: jsmith; or first initial, last name followed by a number: jsmith123. This is a required field.

4. Enter a **Password**. The password must be at least four characters long. This is a required field.
5. Enter the password again to **Confirm** it. This is a required field.
6. Select the **Driver Logs Edit Restriction** box if you do not want this user to have editing capabilities for Driver Logs.
7. Enter the user's **First Name**. This is optional.
8. Enter the user's **Last Name**. This is optional.
9. Enter the user's **Title**. This is optional.
10. Enter the user's **Department**. This is optional.
11. Enter a valid **Email** address for the user. This is a required field.
12. Click **Select Organization**. The **Organizational Hierarchy** screen, shown in Figure 5–204, appears.

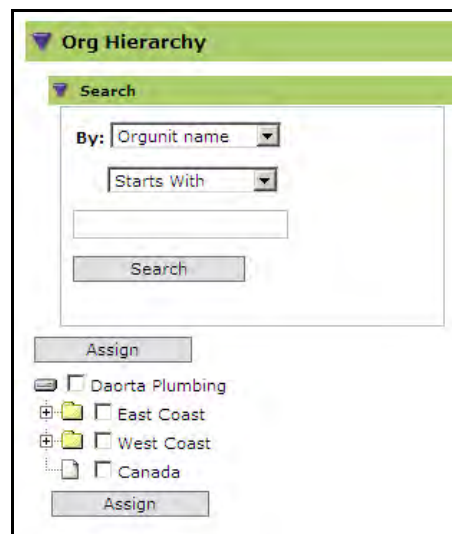


Figure 5–204: Select User Hierarchy Unit Screen

This is an optional feature allowing you to assign the user to an Organizational Hierarchy unit when they are created. Once a user is assigned to a particular unit, only they and employees assigned to units

To assign a user to an Organizational Hierarchy unit:

- a. Find the organizational unit to which you want the user assigned. To search for an organizational unit, use the Organizational Hierarchy search feature, shown in the **Searching Organizational Hierarchy** section on page 221.
- b. Click the check box next to the unit name.

- c. Click **Assign**. The Organizational Unit name appears in the **Selected Organization** text box in the **User Page**.

13. Click **Assign Role(s)**. The **Assign Roles** screen, shown in Figure 5–205 appears.

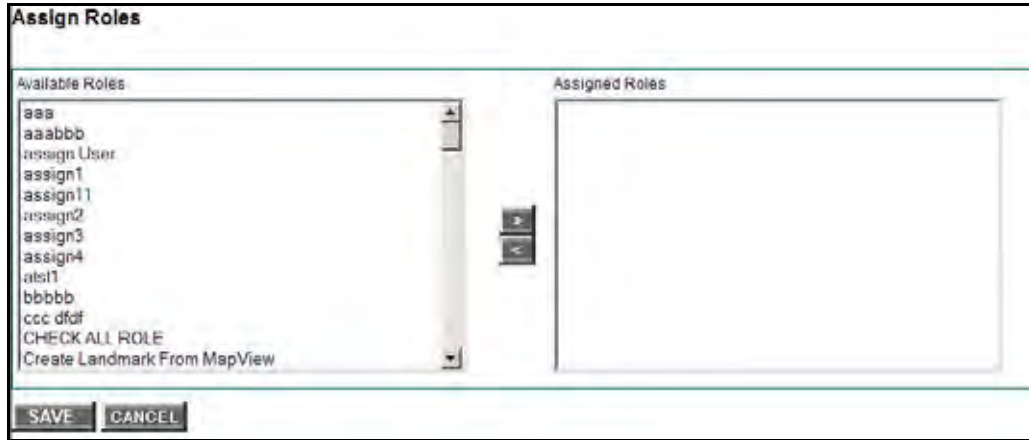


Figure 5–205: Assign Roles to User Screen

- a. Select the role(s) from the **Available Roles** field you want to assign the user.
- b. Click the > button to move the role(s) to the **Assigned Roles** field.
- c. Click **Save**. The assigned role appears in the **Assign Role(s)** text box in the **User Page**. The **View Capabilities** link appears shown in Figure 5–206.

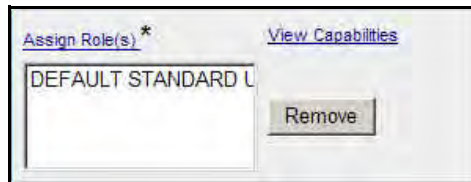


Figure 5–206: View Capabilities Link Screen

- d. Click the **View Capabilities** link. The **User Administration View Capabilities** screen appears shown in Figure 5–207.



Figure 5-207: User Administration View Capabilities Screen

- e. Click **Cancel** to exit the User Administration View Capabilities screen.
14. Click **Save** in the **User Page**.

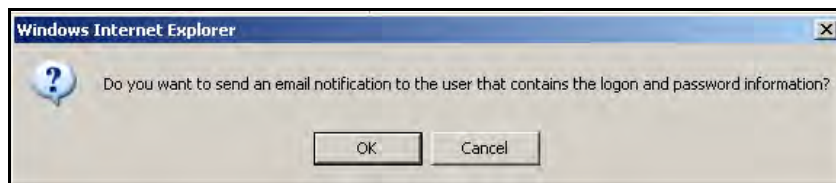


Figure 5-208: Create User Email Notification Dialog Box

15. A dialogue box, shown in Figure 5-208, appears asking if you would like to send an email to the newly created user.

Click **OK** to send an email. The Email the Logon Details to the User window appears



Figure 5-209: Email the Logon Details to the User Dialog Box

Click **Cancel** to close the dialog box without sending an email.

16. The **User Added Successfully** screen, shown in Figure 5-210, appears.

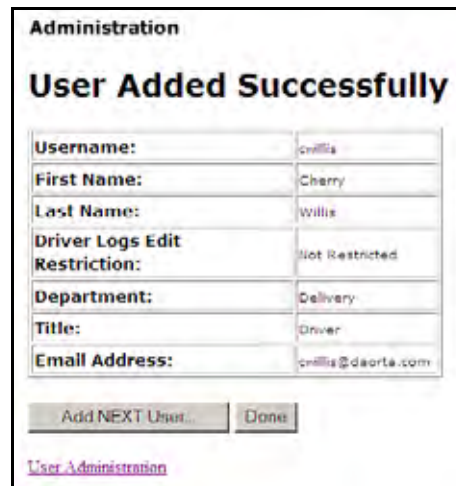


Figure 5-210: User Added Successfully Screen

17. Click **Add Next User** if you need to add more users.

Click **Done** if you are finished creating users.

Editing and Deleting Users

As your business grows and changes, you may need to change information about some of your users or delete them from the system.

To edit information about a user:

1. From the **Edit/Delete Users** screen, shown in Figure 5–211, put a check mark next to the name of the user you want to edit. You can only edit one user at a time.

If you have a large number of users, you can search for a specific user:

- a. In the **Search** text box, enter the first few letters of the search criteria.
- b. Select the search criteria from the drop-down menu. Available criteria are:
 - Username
 - First Name
 - Last Name
 - Department
 - Title
 - Role Name
 - Role Capability Name
- c. Click **Search**. The **Edit/Delete Users** screen refreshes to show the search results.

To show all users, click **Show All**.

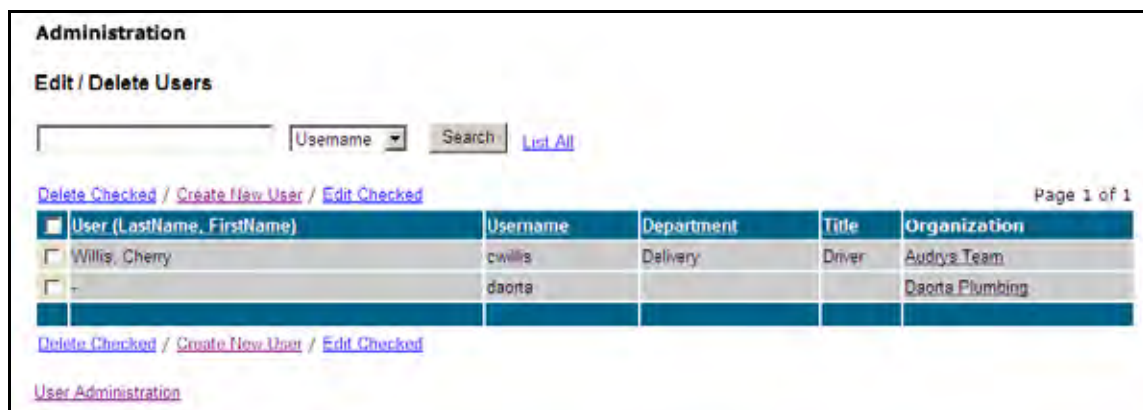


Figure 5–211: Edit/Delete Users Screen

2. Click **Edit Checked**. The User Page, shown in Figure 5–203, appears.
3. Make the required changes.
4. Click **Save**.

To return to the Edit/Delete Users screen without saving changes, click **Cancel**.

To delete a user:

1. From the **Edit/Delete Users** screen, shown in Figure 5–211, put a check mark next to the name(s) of the user(s) you want to delete.
2. Click Delete Checked. A confirmation dialogue box, shown in Figure 5–212, appears.

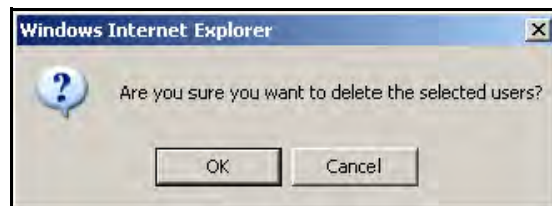


Figure 5–212: Delete User(s) Confirmation Dialog Box

3. Click **OK**. The **Edit/Delete Users** screen refreshes, deleting the selected user(s).
Click **Cancel** to close the dialogue box without deleting the user.

Uploading User Information

If you have a spreadsheet or text file with all your user information contained within it, you can upload that information rather than enter each user individually.

To upload user information:

1. From the **User Administration** screen, shown in Figure 5–202, click the **Upload Users** link. The **User Definition File Upload** screen, shown in Figure 5–213, appears.

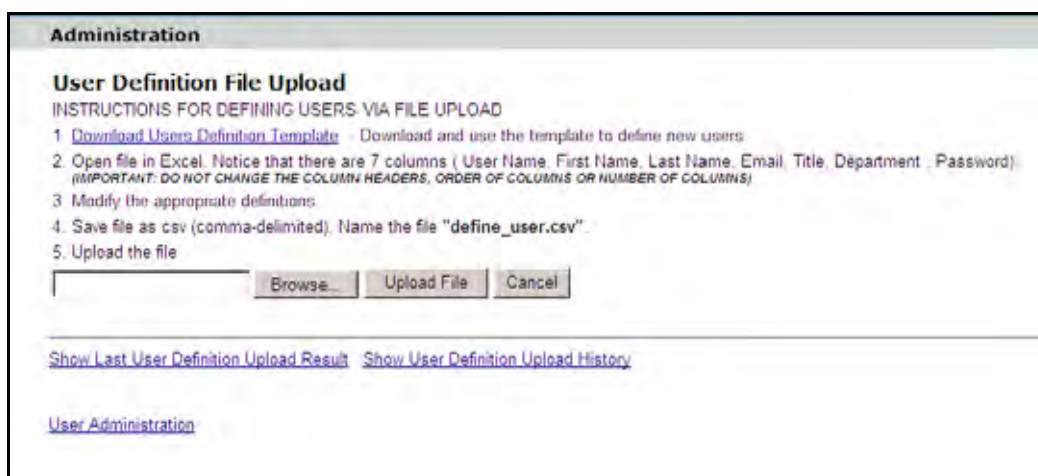


Figure 5–213: User Definition File Upload Screen

2. Download and use the template **Users Definition Template**, shown in Figure 5–170.

	A	B	C	D	E	F	G
1	User Name	First Name	Last Name	Email	Title	Department	Password
2	testtempreport1			psachithanandam@road-inc.com			****
3	testtempreport2		abcd	psachithanandam@road-inc.com			****
4	testtempreport4		ghij	psachithanandam@road-inc.com			****
5	testtempreport5		ABC	psachithanandam@road-inc.com			****
6	testtempreport10		ABC	psachithanandam@road-inc.com			****
7	testtempreport11		ABC	psachithanandam@road-inc.com			****
8	testtempreport12		ABC	psachithanandam@road-inc.com			****
9	testtempreport13		ABC	psachithanandam@road-inc.com			****
10	testtempreport14		ABC	psachithanandam@road-inc.com			****
11	testtempreport100		ijkl	psachithanandam@road-inc.com			****

Figure 5-214: Users Definition Template Sample

3. Open the file in Excel. Notice that there are four columns:

- Username
- Firstname
- Lastname
- Email
- Title
- Department
- Password



WARNING!

DO NOT CHANGE THE COLUMN HEADERS, ORDER OF COLUMNS OR NUMBER OF COLUMNS!

4. Modify the appropriate definitions.
5. Save the file as csv (comma-delimited) without renaming it. The File size is limited to 1 MB.
6. Click **Browse** to find and select the saved file.
7. Click **Upload File**. A confirmation dialogue box, shown in Figure 5-156, appears.
8. Click **OK**.
 - If the upload is successful, the **Upload Completed** screen, shown in Figure 5-157, appears.
 - If the upload is not successful, the **Upload Failed** screen, shown in Figure 5-158, appears.
9. Click **Done**. The **Device to Org Unit File Upload** screen appears.

After the files are uploaded, you can see the results from the last upload by clicking the **Show Last User Definition Upload Result** link. The **Last User Definition Upload Result** screen, shown in Figure 5-215, appears.

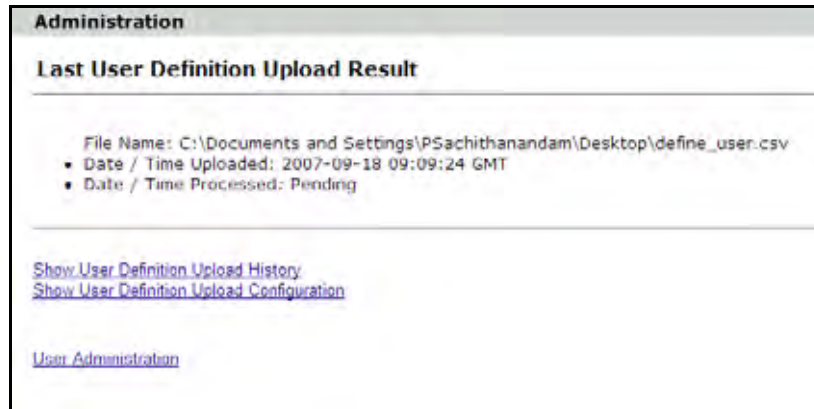


Figure 5–215: Last User Definition Upload Result Screen

You can open the .csv file by clicking the **Processed x of x Records (Download Results File)** link to see if any errors occurred.

You can view the upload history by clicking the **Show Last User Definition Upload Result History** link in the **Last User Definition Upload Result** screen. The **Last User Definition Upload History** screen, shown in Figure 5–216, appears.

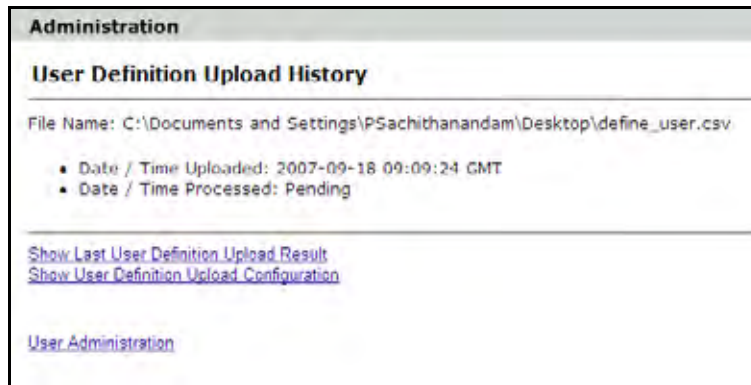


Figure 5–216: User Definition History Screen

To return to the **User Definition Details** screen, click the **Upload User Definition** link.

6 Service Requests

GeoManager allows you to create and view the status of Service Requests online.

Creating New Service Requests

To create a new service request:

1. In the **GeoManager** home page under the Control Panel, click **Service Request**. The **Service Request** screen, shown in Figure 6–1, appears.

Service Request

New Service Requests
[Create New Service Request](#)
Create New Service Request based on Service Request Number:

Status of Service Request
Service Request Number:

View Service Request
By Mobile Device:
By Mobile Device Label:
By Email Address:

[New Service Requests](#)
[Open Service Requests](#)
[Closed Service Requests](#)

Figure 6–1: Service Request Screen

2. Click **Create New Service Request**. The first of three **New Service Request** screens, shown in Figure 6–2, appears.

Service Request	
New Service Request (1 of 3)	
General Information	Date : 01/17/2008 09:51 AM PST
User Name	maureen
Name of the person Submitting Request	Daorta Medical Supplies
Email	<input type="text"/>
Contact Number	<input type="text"/>
City & State	<input type="text"/>
District	<input type="text"/>
Division	<input type="text"/>
Service Request Type	<input type="text" value="Mobile Device not reporting"/> = Non-Mobile Device issue - An Issue that is not related to a Specific Mobile Device Mobile Device not reporting - An issue that is related to a Specific Mobile Device New install - Installation of a new unit (if purchase is required, you must be an administrator) Deinstall - Demallation of a unit
Service Request Description	<input type="text"/>
* required	<input type="button" value="Cancel"/> <input type="button" value="Next->"/>

Note: Please use Previous and Next buttons for navigation.

Figure 6-2: New Service Request (1 of 3)

3. Enter the **Email** address where you want to send the request.
4. Enter the **Contact Number** of the person who requested service. This is a required field.
5. Enter the **City and State**.
6. Enter the **District**.
7. Enter the **Division**.
8. Select the **Service Request Type** from the drop-down menu.
9. Enter the **Service Request Description** in the text box. The description must be an adequate description of the problem the mobile device has. This is a required field.
10. Click **Next**. An email confirmation dialogue box, shown in Figure 6-3, appears.

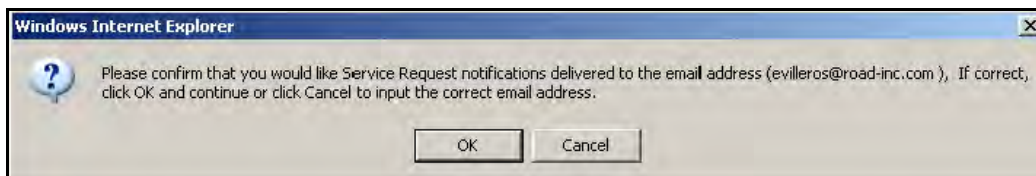


Figure 6-3: Email Confirmation dialogue Box

11. Click **OK** if the email address is correct.

Click Cancel if you need to change the email address.

12. Screen two for the New Service Request, shown in Figure 6–4, appears.

Service Request	
New Service Request (2 of 3)- Mobile Device Not Reporting	
Mobile Device Information	
Mobile Device Number	None
Make/Model of Mobile Device	None
Additional Description (Optional)	
Driver's Name	
Driver's Contact	Mobile: <input type="text"/> Pager: <input type="text"/>
Mobile Device Location	Address: <input type="text"/> Stall No: <input type="text"/>
	City: <input type="text"/> State/Province, Zip/Postal Code: <input type="text"/> United States: <input type="text"/>
Supervisor Name	
Supervisor Contact	Mobile: <input type="text"/> Pager: <input type="text"/> Office: <input type="text"/>
2nd Line Manager Name	
2nd Line Manager Contact	Mobile: <input type="text"/> Office: <input type="text"/>
* required	<input type="text"/>
<< Previous Next >>	
Note: Please use Previous and Next buttons for navigation.	

Figure 6–4: New Service Request Screen (2 of 3)

13. Select the **Mobile Device Number** from the drop-down list.
14. Select the **Make/Model of Mobile Device** from the drop-down list.
15. Enter any **Additional Description** for the service request. This is an optional field.
16. Enter the **Driver's Name**.
17. Enter the **Driver's Contact** information.
18. Enter the **Mobile Device Location**.
19. Enter the **Supervisor Name**.
20. Enter the **Supervisor Contact** information.
21. Enter the **2nd Line Manager Name**.
22. Enter the **2nd Line Manager Contact** information.
23. Click **Next**. Screen three for the New Service Request, shown in Figure 6–5, appears.

Service Request	
New Service Request (3 of 3)- Mobile Device Not Reporting	
Mobile Device Information (Mobile Device Availability and Appointment information)	
Mobile Device Availability (Person to provide keys at the specified time and location)	
Name	<input type="text"/>
Contact	Mobile <input type="text"/> Pager <input type="text"/>
Appointment Information	
Requested Appointment Date/Time	Date: <input type="text"/> Time: <input type="text"/>
Additional Location Information (Directions,if in rural area)	<input type="text"/>
Contact Who will be At Appointment Date/Time	<input type="text"/>
Contact	Mobile <input type="text"/> Pager <input type="text"/>
* required	<input type="button" value=" <<- Previous"/> <input type="button" value=" Submit"/>

Note: Please use Previous and Next buttons for navigation.

Figure 6-5: New Service Request Screen (3 of 3)

24. Enter the **Name** of the person who will provide keys at the time of service.
25. Enter the **Contact** information for the person.
26. Enter the **Requested Appointment Date and Time**. The date is a required field.
27. Enter any **Additional Location Information**, such as directions to the mobile device location. This is a required field.
28. Enter the name of the **Contact Who will be At the Appointment Date and Time**. This may be the same person who provided the keys.
29. Enter the **Contact** information for the person who will be at the appointment.
30. Click **Submit**. The final screen for the New Service Request, shown in Figure 6-6, appears.

New Service Request(Mobile Device Not Reporting) Submitted

Note: You will receive an email shortly to confirm that your service request has been submitted and accepted. Please contact your administrator if you do not receive a New Service Request notification.

Please print for your records.

Service Request No: 271117	<input type="button" value="Done"/>
General Information	Date : 06/06/2006 01:40 PM PDT
User Name	qalrg01
Name of the person Submitting Request	QA - Large Account 01 (4000 - 5000)
Email	ml@ayers@road-inc.com (if incorrect, please check with your administrator)
Contact Number	408-668-1638
City & State	Fremont, CA
District	N/A
Division	N/A
Service Request Type	Vehicle not reporting
Service Request Description	Mobile device not on MapView
Mobile Device Information	
Not Reporting Mobile Device Number	2084_101889_Surplus(s/N: PE104002)
Make/Model of Mobile Device	N/A
Additional Description	N/A
Driver's Name	N/A
Driver's Contact	Mobile: N/A Pager: N/A
Mobile Device Location	Address: United States: Stall No: N/A
Supervisor Name	N/A
Supervisor contact	Mobile: N/A Pager: N/A Office: N/A
2nd Line Manager Name	N/A
2nd Line Manager Contact	Office: N/A Mobile: N/A
Mobile Device Information (Mobile Device Availability and Appointment information)	
Mobile Device Availability (Person to provide keys at the specified time and location)	
Name	N/A
Contact	Mobile: N/A Pager: N/A
Appointment Information	
Requested Appointment Date/Time	Date: 06/06/06 Time: N/A
Additional Location Information (Directions, if in rural area)	This is a test.
Contact Who will be At Appointment Date/Time	N/A
Contact	Mobile: N/A Pager: N/A
Resolution Code	N/A
Resolution Description	N/A
<input type="button" value="Print"/> <input type="button" value="Done"/>	

Figure 6-6: New Service Request Submitted

31. Click **Print** to print a copy of the service request for your files.

Click **Done** when finished viewing the service request. The **Service Request** screen appears.

Viewing a Service Request

After a service request has been created, you can view its status online.

7 Troubleshooting

Trimble Customer Technical Support

24x7 Online Customer Service

The most effective way to report a service issue is through our 24x7 on-line service request system (webSR). Simply log in to your Trimble account and click on the Service Request button in the left-hand Control Panel. A service representative will respond as quickly as possible.

Other Options for Contacting Trimble Technical Support

Email: mrmsupport@trimble.com

Phone: 1-877-428-7623 (5 a.m. to 5 p.m. PST/PDT Monday through Friday)

Frequently Asked Questions

General

What is new in the GeoManager Pericles Release?

The GeoManager Pericles Release is the next major release after the GeoManager 9.0.

The following features are new:

- Improved User Interface
- Improved Geocoding
- Logical grouping of related functions
- Cluster functionality to improve identification of closely located devices and Landmarks on the map
- Improved system performance
- Improved user navigation
- Improved Driving Directions

- Improved Device Path functionality, with playback option
- Traffic information on the map for certain geography
- Realistic alert management with improved Driver Alerts
- Online chat support

Which browser(s) may I use with the latest version of GeoManager?

The GeoManager can be best accessed using Internet Explorer 7.0. Explorer 8.0 will be supported shortly after release.

What are the recommended system requirements to use the latest version of GeoManager?

Trimble MRM recommends the following system requirements for a best in class experience of GeoManager.

Item	Description
Operating System	Microsoft Windows 2000, XP, Vista Microsoft Windows 2000 Professional, XP Professional
CPU	Pentium-class processor (Pentium IV CPU, 2.5 GHz or faster recommended)
Memory	1 GB minimum (2 GB or more recommended)
Display	VGA or better display (1024x768 resolution recommended)
Browser	Internet Explorer: 7.0 and above (IE 8.0 recommended). Note: <ul style="list-style-type: none"> • All pop-up blockers should be disabled when using GeoManager to prevent conflict with the MapView Control Panel • The Run ActiveX control option must be enabled
Internet Access	High speed access via DSL, Cable or ISDN

Will I notice performance difference between the GeoManager 9.0 and the GeoManager Pericles?

Mobile device status table and landmark information will load faster after the initial system load.

Will I notice differences when I am using Citrix?

Citrix offers high security at the cost of some performance degradation.

What is the bandwidth required for me to run the latest GeoManager Release?

Trimble recommends using High speed access via DSL, cable or equivalent broadband speeds. Why are the navigation controls moved?

The latest version of GeoManager introduces a concept called work areas.

The top level tabs such as Home, Reports, and Administration et al are functionally classified, and each tab has its own work area.

The Home tab includes work areas such as Map, Messaging, Work Flow Status, Maintenance, and Exceptions.

The rationale is to offer a more logical approach to managing your GeoManager account.

Will the Latest version of GeoManager offer Role Management?

Yes! The latest version of GeoManager will continue to facilitate Role Management.

Logging In

Where is my Mobile Device Status Page?

The latest version of GeoManager introduces a concept called work areas. The location information for devices can be found in the Map work area under the Home tab.

Will I also see Landmarks on the map when I log in?

Yes! With the latest version, you will be able to see both devices and Landmarks that are within the map borders.

Where is the Customer News section?

The Customer News section is now located on the Service Center tab.

From where do I create Service Requests?

You create Service Requests from the Service Request work area under the Service Center tab.

How do I access the Training section?

The Training section is now available under Service Center >> News.

Do all users see my username at the top?

No! Each user will see their username at the top panel.

Why do I see the world map when I log in?

The world map is the default map. It is displayed until you have set a custom view as default.

Custom Views

How do I setup a new custom view?

To set up a new custom view:

1. Set the map geography to the desired view on the map.
2. Select Map Actions >> Manage Custom Views.
3. Click the Add New View button.
4. Enter a new name for the view.

How do I share a custom view?

To share a custom view:

1. Select Map Actions >> Manage Custom Views.
2. Enable the check box under the Share column next to the custom view you want to share.

How many custom views can I setup?

There is no limit for custom views. You may set-up as many custom views as you need.

Which custom view do I see when I login to the solution?

You can select any Custom View you would like use as the default view. If you have not selected a default custom view, the world map is displayed.

How do I switch to a different custom view?

Select different custom views by choosing the desired view from the drop-down list located at the right hand top corner of the map.

Devices

How do I see desired device(s) on the map?

To view desired devices on the map:

1. From the list of devices in the **Devices** list, click the desired device(s). To select more than one device, hold down the Control key.
2. The map will pan and zoom automatically and highlight the selected devices.

How do I get a device's latest location information?

To get latest device status:

1. Select the device(s) from the **Devices** list, hover the mouse over the desired device icon on the map. A small yellow icon displays above the device.
2. Hover the mouse over the small yellow icon to bring up the action tool tips.
3. Click **Update** from the action tool tips.
4. GeoManager sends a request to the device to get its latest location.

How do I find the closest Landmarks to a device?

To see closest Landmarks to a device:

1. From the list of devices in the **Devices** list, hover the mouse over the desired device icon.
2. Hover the mouse over the small yellow icon to bring up the action tool tips.
3. Click **Closest Landmarks** from the action tool tips.
4. GeoManager lists the closest Landmarks, within 25-mile radius, in the **Dynamic Results** list below the Devices list.

How do I find a device with partial name?

To find a device with partial name:

1. Enter the partial name in the **Filter** box.
2. Click the **search** lens.
3. The **Devices** list will display the devices that match the search criteria.

How do I find or filter devices that belong to a particular device group?

To find or filter devices that belong to a particular group:

1. Click the **down arrow** next to the Filter area. Group filter criteria display.
2. Select the desired group from the drop down list next to the Group list.
3. Click **Apply**. The **Devices** list shows the devices that belong to the selected group.

How do I find a device associated with a particular Employee?

To find a device that is associated with an Employee:

1. Click the **down arrow** next to the Filter area.
2. Select **First Name**, **Last Name** or **ID** from the filter options. You may select a combination by clicking the + button on the right.
3. Enter employee first name, last name and/or id depending on the selected filters.
4. Click **Apply**.

5. The device associated with the employee is listed.

Where do I see custom information for a device?

To view custom information for a device:

1. From the list of devices in the **Devices** list, hover the mouse over the desired device icon. A small yellow icon appears.
2. Hover the mouse over the small yellow icon to open the action tool tips.
3. The action tool tips display the device's custom information.

How do I sort devices by Status?

To sort devices based on status:

1. Click the **Status** header once in the **Devices** list. The Device list is sorted.
2. Click the Status header again to sort the device list in the opposite way.

I only see 20 devices in the Devices list. How do I view more devices?

To view more devices into the Devices list:

Click the **Next 20** link in the Devices list, on the left hand bottom corner of the table to load more devices.

From the Devices list, how do I zoom to the closest device?

To zoom to the closest device:

1. From the list of devices in the **Devices** list, hover the mouse over the desired device icon. A small yellow icon appears.
2. Hover the mouse over the small yellow icon to open the action tool tips.
3. Click **Zoom**.
4. Select **Zoom To Closest Device**. GeoManager displays the closest device on the map.

From the Devices list, how do I generate Activity Detail report?

To generate an Activity Detail report:

1. From the list of devices in the **Devices** list, hover the mouse over the desired device icon. A small yellow icon appears.
2. Hover the mouse over the small yellow icon to open the action tool tips.
3. Click **Reports**.
4. Select **Activities**. The Activity Detail report for the day is generated.

From the Devices list, how do I send messages to a device?

To send messages to a device:

1. From the list of devices in the **Devices** list, hover the mouse over the desired device icon. A small yellow icon appears.
2. Hover the mouse over the small yellow icon to open the action tool tips.
3. Click **Send Message**. This opens the Messaging page.
4. Type a message on the Messaging page.
5. Click the **Send** button.

How many devices will be displayed on the map at a given time?

The latest version of GeoManager is capable of displaying all devices on the map.

What do the reddish circular icons (with a plus sign) on the map represent?

The latest version of GeoManager introduces a new concept called **clustering**. The map automatically replaces groups of device icons with cluster icons to avoid cluttering. Hovering the mouse over these cluster icons will display a list of all devices that form the cluster.

Landmarks

How do I see desired Landmarks on the map?

To view desired Landmarks on the map:

1. Click the **Landmarks** tab.
2. From the list of Landmarks in the **Landmarks** list, click the desired Landmarks (hold-down the Control key to select multiple Landmarks). The map will pan and zoom automatically to display the selected Landmarks.

How do I find the closest devices from a Landmark?

To get closest devices from a Landmark:

1. Click the **Landmarks** tab.
2. From the list of devices in the **Devices** list, hover the mouse over the desired device icon. A small yellow icon appears.
3. Hover the mouse over the small yellow icon to open the action tool tips.
4. Click **Closest Devices** from the action tool tips. GeoManager lists the closest devices, within 25-mile radius, in the Dynamic Results list below the Landmarks list.

How do I find a Landmark with partial name?

To find a Landmark with partial name:

1. Click the **Landmarks** tab.
2. Enter the partial name in the **Filter** box.
3. Click the **search lens**. **Landmarks** list shows the Landmarks that match the search criteria.

How do I find or filter Landmarks that belong to a particular group?

To find or filter Landmarks that belong a particular group:

1. Click the **Landmarks** tab.
2. Click the **down arrow** next to the **Filter** area. The group filter criteria displays.
3. Select the desired group from the drop down list, next to the Group list.
4. Click **Apply**. The Landmarks list shows the Landmarks that belong to the selected group.

How do I find Landmarks that are located in a particular city?

To find Landmarks that is located in a particular city:

1. Click the **Landmarks** tab.
2. Click the **down arrow** next to the Filter area.
3. From the filter options, select **City**.
4. Enter the city name.
5. Click **Apply**. Landmarks that are located in the input city are listed.

How do I sort Landmarks based on their Type?

To sort Landmarks based on Type:

1. Click the **Landmarks** tab.
2. Click the **Type** header in the Landmarks list. The **Landmark** list is sorted.
3. Click the **Type** header again to sort the **Landmark** list in the other way.

I see just 20 Landmarks in the Landmarks list? How do I load more Landmarks?

To load more Landmarks into the Landmarks list:

1. Click the **Landmarks** tab.
2. From the Landmarks list, click the **Next 20** link on the left hand bottom corner of the table to load more Landmarks.

From the Landmarks list, how do I zoom to the closest device?

To zoom to the closest device:

1. Click the **Landmarks** tab.

2. From the list of devices in the **Devices** list, hover the mouse over the desired device icon. A small yellow icon appears.
3. Move the mouse over the small yellow icon to open the action tool tips.
4. Click **Zoom** and then on **Zoom to Closest Device**. GeoManager displays the closest device on the map.

From the Landmarks list, how do I edit a Landmark?

To edit a Landmark:

1. Click the **Landmarks** tab.
2. From the list of devices in the **Devices** list, hover the mouse over the desired device icon. A small yellow icon appears.
3. Hover the mouse over the small yellow icon to open the action tool tips.
4. Click **Edit** >> this will bring up the **Landmark Update** tab on the right.
5. Change desired parameters.
6. Click **Save**.

From the Landmarks list, how do I delete a Landmark?

To delete a Landmark:

1. Click the **Landmarks** tab.
2. From the list of devices in the **Devices** list, hover the mouse over the desired device icon. A small yellow icon appears.
3. Hover the mouse over the small yellow icon to open the action tool tips.
4. Click **Delete**.
5. Click **OK**.



Note:

Note: A Landmark cannot be deleted if it is associated with an Exception. The Exception association has to be terminated prior to deleting the Landmark.

How many Landmarks will be displayed on the map at a given time?

The latest version of GeoManager is capable of displaying all Landmarks on the map.

What do the green square icons (with a plus sign) on the map represent?

The Latest version of GeoManager introduces a new concept called clustering. The map automatically replaces groups of Landmark icons with cluster icons to avoid cluttering. Hovering the mouse over these cluster icons will display the Landmark list that forms the cluster.

Dynamic Results

How do I see Dynamic Result items on the map?

To view Dynamic Result items on the map:

1. Perform any Closest Device or Landmark operation. The results for the Closest Device or Landmark operation will be listed under Dynamic Results.
2. From the list of devices/Landmarks, click the desired devices (hold-down the Control key to select multiple items). The map will pan and zoom automatically and highlight the selected items.

The Map View

What Map View options do I have?

The available Map View options are: Road View, Aerial View, and Bird's eye with 2D and 3D view.

Is there a way to increase the size of the map?

Yes, with the latest version, you can maximize the map to get a bigger view of it.

To maximize the map window:

1. Click the **Maximize Window** button next to the custom view list, shown below, the map changes to display the maximized view.

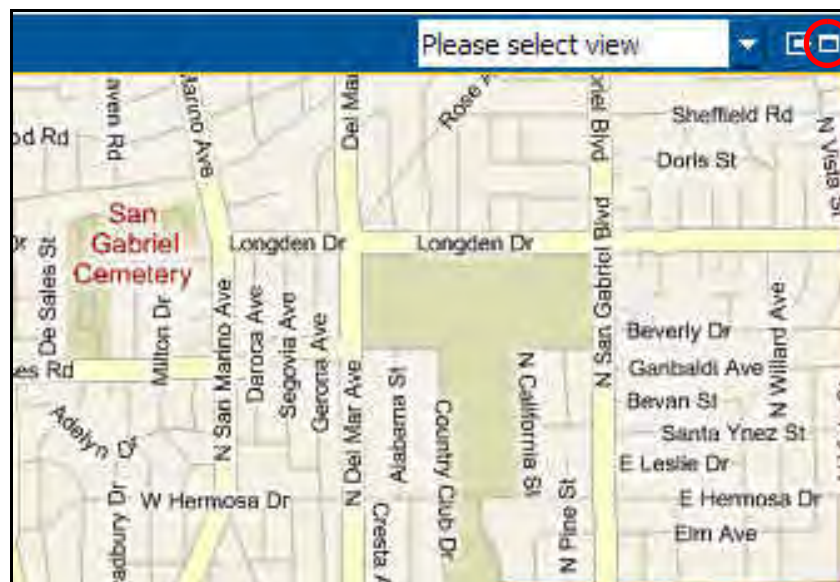


Figure 7-1: Increase Map Size Icon

2. Click the **Maximize Window** button to restore the map to the previous view.

How do I view the map at all times, even when I'm accessing other functions in GeoManager? Is this possible?

Yes, with the latest release, you could open the map in a new window and access other GeoManager functions in the main window.

To detach the map window:

Click the **Open in New Window** button, shown below. The map opens in a new window.

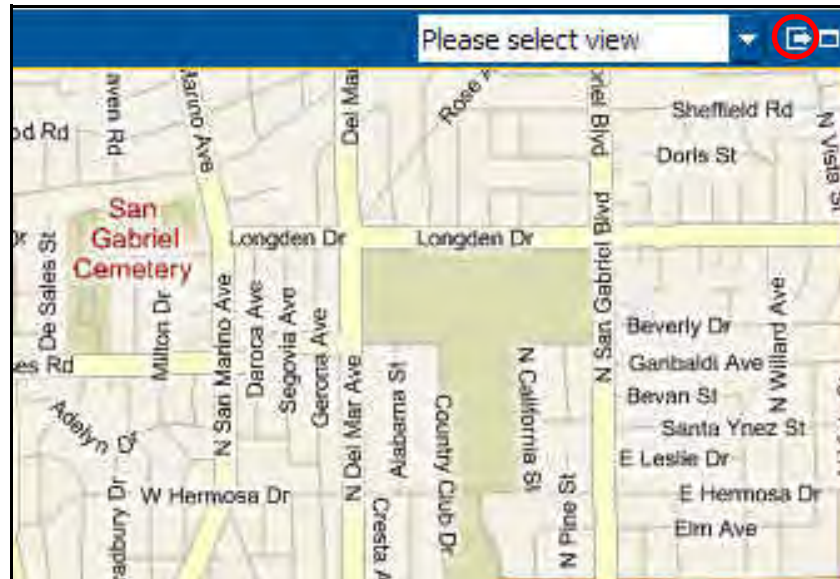


Figure 7-2: Detach Map Icon

How I get the latest location information of a device?

To update a device from the map:

1. Click a device in the **Devices** list. The device is highlighted on the map.
2. Hover the mouse over the device icon. A small yellow icon appears.
3. Hover the mouse over the small yellow icon to open the action tool tips.
4. Click **Update**. GeoManager sends a request to the device to get its latest location.

How do I generate reports from map? Which reports may I generate?

To generate reports from Map:

1. Click a device in the **Devices** list. The device is highlighted on the map.
2. Hover the mouse over the device icon. A small yellow icon appears.
3. Move the mouse over the small yellow icon to open the action tool tips.
4. Click **Reports** and select the report that you want to generate.

The following reports can be generated from the map:

- Activity Report
- Message Report
- Forms Report
- Exceptions Report

How do I add Landmarks from the map?

To add Landmarks from Map:

1. Select an area on the map where you want to add the Landmark.
2. Right click and select **Create Landmark**. The **Create Landmark** tab will appear to the right of the map.
3. Fill all required fields.
4. Click **Save**.

How do I move a Landmark on the map?

To move Landmarks on the Map:

1. Click the **Landmarks** tab.
2. Click the Landmark that you want to move. The Landmark will appear highlighted on the map.
3. Hover the mouse over the Landmark icon. A small yellow icon appears.
4. Move the mouse over the small yellow icon to open the action tool tips.
5. Click **Edit**. Edit Landmark tab appears to the right of the map.
6. From the Edit Landmark tab, click **Select from Map** button.
7. Place the mouse pointer on the new location for the Landmark.
8. Select a **Fence Type**.
9. Click **Draw on Map**.
10. Draw the Landmark fence.
11. Click **Save**.

How do I edit a Landmark from the map?

To add Landmarks from Map:

1. Click the **Landmarks** tab.
2. Click the Landmark that you want to edit. The Landmark will appear highlighted on the map.
3. Hover the mouse over the Landmark icon. A small yellow icon appears.

4. Move the mouse over the small yellow icon to open the action tool tips.
5. Click **Edit**. Edit Landmark tab will appear to the right of the map.
6. From the **Edit Landmark** tab, edit all required field values.
7. Click **Save**.

How do I add a Landmark of a particular dimension?

To add Landmarks from Map:

1. Select an area on the map where you want to add the Landmark.
2. Right Click and select **Create Landmark**.
3. **Create Landmark** tab will appear to the right of the map.
4. Select Fence Type (Circle or Rectangle).
5. Enter radius value for circular or height & width for rectangular fence type.
6. Fill all other required fields.
7. Click **Save**.

How do I add a Landmark that exactly captures a building's dimension?

To add a Landmark that exactly captures a building's dimension:

1. Switch to Aerial view by clicking the **Aerial** button on the map.
2. Select an area on the map where you want to add the Landmark.
3. Zoom-in to get a clear view of the building.
4. Right Click and select **Create Landmark**. Landmark Update tab will appear to the right of the map.
5. Select **Polygon** Fence Type.
6. Draw the fence exactly surrounding the building.
7. Fill all other required fields.
8. Click **Save**.

When I pan or zoom out, will I see more devices and Landmarks getting displayed on the map?

Yes, panning and zooming operations will display devices and Landmarks that were outside the original map frame.

Can I copy-paste device and Landmark action icon tool tip information?

Yes, the latest version of GeoManager allows you to copy-paste the information in the Device and Landmark action tool tips.

How do I get driving directions between two locations?

To get driving directions:

1. On the map, identify the start and finish locations for the driving directions.
2. Place the mouse on the start point, right click, and select **Drive from here**. The Driving Directions tab appears to the right of map. It automatically populates the address of the Drive from here location.
3. Place the mouse on the finish point, right click and select **Drive to here**. The address of the Drive to here location automatically populates in the Driving Directions tab. The map displays the driving directions. The Driving Directions tab displays the turn-by-turn navigation in text format.

Can I copy driving directions information into another application?

Yes, the latest version of GeoManager allows you to copy-paste the driving directions information to other applications.

Device Actions

How do I view device path?

To view device path on the map:

1. From the list of devices in the **Devices** list, click the desired devices (hold down the **Control** key to select multiple devices). The map will pan and zoom automatically and highlight the selected devices.
2. Select **Device Path** from the **Device Actions** drop down list. The **Device Path** tab will appear to the right of the map.
3. Select a date.
4. Click **Show**. The map will adjust it's zoom level automatically to display device path of all selected devices.

How do I view stop sequence?

To view stop sequence on the map:

1. From the list of devices in the **Devices** list, click the desired devices (hold down the **Control** key to select multiple devices). The map will pan and zoom automatically and highlight the selected devices.
2. Select **Device Path** from the **Device Actions** drop down list. A **Device Path** tab will appear to the right of the map.
3. Select a date and enable the check box for **Show Stop Sequence Only**.
4. Click **Show**. The map will adjust its zoom level automatically to display stop sequence of all selected devices.

Map Actions

How do I show traffic information on the map?

To view stop sequence on the map:

From the **Map Actions** drop-down list, select **Show Traffic**. The map displays traffic information in available areas.

A legend (just beneath the 2D and 3D buttons) indicates the color coding for the traffic flow.

How do I calculate distance between two or more locations from the map?

To calculate distance between two or more locations from the map:

1. From the **Map Actions** drop-down list, select **View Distance**.
2. Click desired points on the map. The map keeps connecting each point and displays the length of each segment.
3. Perform a right click the mouse to terminate the operation.
4. Hover the mouse over the red colored push pin icon to get the total length of all segments.

How do I zoom to a latitude/longitude on the map?

To zoom to a latitude-longitude point on the map:

1. From the **Map Actions** drop-down list,
2. Select **Zoom to Location**. A small box appears with Latitude and Longitude labels.
3. Enter the latitude and longitude values.
4. Click **OK**. The map will zoom to the entered latitude-longitude point.

How do I zoom to an address on the map?

To zoom to an address on the map:

1. From the **Map Actions** drop-down list, select **Zoom to Address**. A small box appears with an Address label.
2. Enter the desired address.
3. Click **OK**. The map will zoom to the entered address location.

Can I hide device or Landmark icons or their labels from being displayed on the map?

Yes! Latest version of GeoManager allows you to hide device icons, device labels, Landmark icons, Landmark labels, and Landmark fences from the map.

To hide or show Device or Landmark icons in the map, check or uncheck the various options from the Map Actions drop-down list:

- Show Device Layer
- Show Device Labels
- Show Landmark Layer
- Show Landmark Fences
- Show Landmark Labels

How do I print a map view?

To print the map view:

1. From the **Map Actions** drop-down list, select **Print Map**.
2. From the **Print** pop-up, select the desired printer name.
3. Click **OK**. The map view is printed.



Note:

Please consider our environment before printing the map. Creating a PDF allows you to save an electronic version of the desired map view.

Status View

How many Key Performance Indicators are available?

There are four Key Performance Indicators:

- Device Status
- Maintenance Status
- Rule Exceptions
- Driver Alerts

Does the Status View include show all the devices in the account?

No! The devices displayed in the Status View are the ones that you have access to.

Alerts

How many Exceptions are listed in the Alerts list?

Alerts will list the ten most recent Exceptions in the 24 hour period.

Consoles

How do I launch the Messaging window?

There are several ways to launch the Messaging window:

- Under the **Home** tab, click on **Messaging** next to **Map**.
- Select **Messaging** from the Device Actions drop-down list.
- Select **Send Message** from the action icon tool tip for a device (from the Devices list or from the map).

How do I launch the Exceptions Console?

There are two ways to launch the Exceptions Console.

- Under the **Home** tab, click the **Exceptions** option.
- Click **Alerts** in the right hand top corner.

Where do I see Vehicle Maintenance status details?

Vehicle Maintenance status details can be viewed by clicking **Maintenance** under the Home tab.

Reports

Where to I generate On-demand reports?

On-demand reports can be generated from the **Reports** tab.

Administration

Where do I create driver and dispatcher canned messages?

To create driver and dispatcher canned messages:

1. Click the **Administration** tab.
2. From the **Devices** drop-down list, select **Configure Messaging Details**. Messaging Administration page displays.
3. You can create driver and dispatcher canned messages from this section.

Where do I input custom information for devices?

To input custom information for devices:

1. Click the **Administration** tab.

2. From the **Devices** drop-down list, select **Configure Mobile Device Details**. Configure Mobile Device Details page displays.
3. Click **Configure Mobile Device**.
4. Enter custom information for desired devices.

Where do I create new Organization Hierarchy nodes?

To create new Organizational Hierarchy nodes:

1. Click the **Administration** tab.
2. From the **Devices** drop-down list, select **Organizational Hierarchy**.
3. Click **View/Create/Edit Organizational Hierarchy. Configure Organizational Unit** window is displayed.
4. Enter and edit Organizational information.

Where do I perform Landmark batch uploads?

To perform Landmark batch uploads:

1. Click the **Administration** tab.
2. From the **Landmarks** drop-down list, select **Landmarks Administration**. Landmark Administration page is displayed.
3. Click **Batch Upload Landmarks**.
4. Perform desired Landmark uploads.

Where do I create a new employee?

To create new employees:

1. Click the **Administration** tab.
2. From the **Employees** drop-down list, select **Employee Administration**. Administration page is displayed.
3. Click **View/Create/Edit Employee Details**. Employee Administration page is displayed.
4. Create new employees.

Where do I assign devices to employees?

To assign devices to employees:

1. Click the **Administration** tab.
2. From the **Employees** drop-down list, select **Employee Management. Employee Management** page is displayed.
3. Click **Associate Device to Employee. Associate Employee(s) to Devices** page is displayed.
4. Associate employees to devices.

Where do I schedule reports?

To create scheduled reports:

1. Click the **Administration** tab.
2. From the **Reports** drop-down list, select **Create Scheduled Reports**. Reports page is displayed.
3. Schedule new reports.

Where do I assign users to Organizational Hierarchy nodes?

To assign users to Organizational Hierarchy nodes:

1. Click the **Administration** tab.
2. From the **User** drop-down list, select **Organizational Hierarchy**.
3. Click **View/Create/Edit Organizational Hierarchy. Configure Organizational Unit** window is displayed.
4. Assign users to Organizational Hierarchy.

Where do I create new users?

To create new users:

1. Click the **Administration** tab.
2. From the **User** drop-down list, select **User Administration**. **User Administration** page is displayed.
3. Click **Create User**.
4. Create new users.

Where do I create new roles and assign them to users?

To create new roles and assign them to users:

1. Click the **Administration** tab.
2. From the **User** drop-down list, select **Role Management**. **Role Administration** page is displayed.
3. Create new roles and assign them to different users.

8 Associated Hardware

The *i*LM Features and Benefits

Trimble GeoManager combines the easily installed in-vehicle *i*LM device with Trimble online services to deliver vehicle location information and reports to the customer's back office.

- Acquire location information between update intervals by employing the **Mobile Device Status** and **MapView** features to manually update individual *i*LMs.
- The *i*LM shifts into energy conservation mode if the vehicle is parked or is inactive for a period of time.
- While the unit is in energy conservation mode, the location cannot be updated until the vehicle moves again.
- The *i*LM emerges from energy conservation mode once the vehicle moves.
- The *i*LM has several key features including four status LEDs indicating:
 - **GPS** (Global Positioning System) - indicates that the *i*LM is actively locating.
 - **COM** - indicates wireless connectivity.
 - **ACTIVE** (when flashing) - indicates that the *i*LM is operating.
 - **DATA** - indicates that location points are stored in the *i*LM memory.
- The ability to report **speed**, **distance** and **position** to the Trimble MRM Web server. Reports vehicle location at 15 minutes intervals.
- Determines whether the vehicle is moving or parked using a combination of ignition input and **GPS speed information**.
- Location accuracy within 300 feet 90% of the time.
- Stores up to five days of data when out of coverage area.

The *i*DT™ Internet Data Terminal (Optional Feature)

The *i*DT in-vehicle messaging unit, shown in Figure 8–1, works in conjunction with the *i*LM, using **Wireless Technology** and the Internet to facilitate 2-way communication between a dispatcher and drivers.



Figure 8-1: iDT 3000 In-Vehicle Unit



Note:

You may add the optional iDT for an additional fee by calling Trimble Inside Sales at 877-728-7623 8 a.m. to 5 p.m. PST Monday-Friday.

The Trimble iDT 3000 integrates valuable functions that can help optimize planning efficiency, reduce operational costs, determine and optimize asset performance, increase business productivity and deliver improved customer service.



Note:

The Trimble iDT 2500 and iDT 3000 messaging devices are designed for use in vehicles operating under a wide range of field conditions. The operating temperature range is -4° to 158° F (-20° to 70° C). Temperatures outside of the specified operating range can have a negative impact on the readability of the LCD (Liquid Crystal Display).

Driver Features

- Choose from up to 30 predefined text messages
- Add up to 20 characters to any predefined message
- Assign two frequently used messages to two specially designated soft keys (SPCL 1 & SPCL 2)
- Store up to 20 inbound and 40 outbound messages
- Choose from 10 user-defined forms with 10 fields each
- Automatically chart duty status for Hours of Service, using the Driver Logs add-on feature
- Enjoy a high-resolution display with the ability to chart Hours of Service graphs

- *i*LM stores messages in memory queue when vehicle travels outside wireless coverage areas
- Create messages even when outside wireless coverage areas — the *i*LM will store messages in memory queue and automatically send when coverage is available
- Receive instant confirmation of package delivery using form-fill capabilities and optional barcode wand

Dispatcher Features

- Predefine and program up to 30 defined messages of 20 alphanumeric characters each
- Deliver messages of up to 480 characters
- Send to one, multiple or all drivers
- Receive messages and prioritize responses more efficiently than with phone dispatching
- Generate professional reports on all inbound and outbound messages
- View location details on all reports
- Enjoy OTAP compatibility
- Enable support of future two-way communications applications

Satellite Modem

Trimble Satellite Modem is an advanced communications device that gives companies complete 24x7 coverage when cellular connections are unavailable. Satellite Modem, with hardware from EMS Technologies, is an optional feature of the Trimble GeoManager *i*LM solution that offers dual-mode wireless capabilities, combining L-band satellite technology with standard Trimble wireless data transmission and messaging capabilities.

Companies that operate in remote locations, such as nationwide, long-distance transportation and distribution operations, require the additional connectivity capabilities that the Satellite Modem offers.

Troubleshooting Hardware

From the table below, choose the problem that is closest to yours. The row identifies possible causes, explanations and “What To Do” for a solution.

Problem	Possible Causes	Why This Occurs	What To Do
Mobile device doesn't update location, even when the Update button is clicked.	Out of wireless coverage area.	If your mobile device travels outside the wireless coverage area, it cannot receive an update request nor can it send information back to our server.	Check with your wireless carrier for coverage maps.
	Wireless carrier/network problems.	Occasionally the carriers that provide the wireless network experience outages that prevent communication to or from vehicles. Additionally, there may be times when random Internet nodes are temporarily down and data will not transmit.	Check with your Internet Service Provider if you suspect disabled Internet nodes.
The location doesn't seem to change when a new update is requested.	Mobile device is stopped.	The mobile device must be moving to update the location information. All updates while the mobile device is parked will update the duration of parked time.	Start the application and change location. To ensure that the application recognizes the change of location, the device should exceed 15 mph.
Wrong location in vehicle status or reports.	Variance in GPS accuracy.	GPS location data is accurate to within 300 feet, 90% of the time.	Check that the location being reported is within the variance of the actual location.
Can't see the maps.	Missing one or more components necessary for full functionality.	Minimum system requirements have not been met.	See "Minimum System Requirements" at the beginning of this manual.

Problem	Possible Causes	Why This Occurs	What To Do
Can't see a roadway on the map.	Not viewing at a close enough Zoom level.	You may be "Zoomed out" too far, in which case you would not see less-major roads.	Zoom in to the appropriate level.
General map errors.	Stale data is stored in the browser cache.	Often stale data stored in the browser cache will become corrupt and needs to be deleted.	Delete the cache in your browser. If you need assistance completing this task, please consult the help system from your browser or your PC support group.

Trimble Customer Technical Support

24x7 Online Customer Service

If your problem is not explained in the troubleshooting tips, the most effective way to report a service issue is through our 24x7 on-line service request system (webSR). Simply log in to your Trimble account and click on the Service Request button in the left-hand Control Panel. A service representative will respond as quickly as possible.

Other Options for Contacting Trimble Technical Support

Email: mrmsupport@trimble.com

Phone: 1-877-428-7623 (5 a.m. to 5 p.m. PST/PDT Monday through Friday)

Glossary

affiliate

Companies who work with larger carriers to build a nationwide network. Affiliates may use the larger carrier's brand name, network operations, customer service or other resources.

antenna

A device for transmitting and receiving signals. Often camouflaged on existing buildings, trees, water towers or other tall structures, the size and shape of antennas are generally determined by the frequency of the signal they manage.

AP

Access point is a WLAN transceiver or "base station" that can connect a network to one or many wireless devices. APs can also bridge to one another.

carrier

Also known as service provider or operator, a carrier is the communications company that provides customers with air time and other services for their wireless phones.

channel

A path along which a communications signal is transmitted.

FSM

Field Service Management is the process of managing mobile resources to improve the performance of tasks in the field. FSM includes scheduling, dispatching and Intelligent Appointing, as reflected in the Trimble Taskforce solution.

GPS

Global Positioning System is a worldwide satellite navigational system, made up of 24 satellites orbiting the earth and their receivers on the earth's surface. The GPS satellites continuously transmit digital radio signals so that up-to-the-minute information may be used in location tracking, navigation and other location or mapping technologies.

iLMTM

Internet Location Manager is a patented Trimble in-vehicle mobile resource management device using GPS and wireless network communications technologies. The Trimble iLM captures location-based information in the field and securely transmits it over high-speed wireless

networks to Trimble subscribers. This data shows up in the form of on-demand, exception or scheduled web-based reports that reflect information such as mobile worker location, vehicle speed, starts and stops on customizable maps.

IP

Internet Protocol sends data packets, called data-grams, across multiple networks, but does not ensure that they arrive at their destination reliably (TCP ensures reliable delivery). Each IP datagram has a header containing source and destination information, allowing each datagram to travel independently to its destination directly or through gateways, with each datagram perhaps traveling a different route to reach its destination.

IP address

Also called "Internet address." The 32-bit address assigned to hosts using TCP/IP. Most Internet addresses consist of a network portion and a node portion. The address for each device must be unique on the network.

LAN

Local Area Network is a small data network covering a limited area, such as a building or group of buildings. Most LANs connect workstations or personal computers, allowing many users to share devices such as laser printers, as well as data. A LAN also allows easy communication by facilitating e-mail or supporting chat sessions.

Landmarks

The GeoManager Landmarks feature—available with all Trimble MRM Field Productivity & Management solutions—is an enhanced scheduling and reporting tool that enables you to define and post special destinations and locations in the GeoManager customized mapping database, then view them conveniently on a map in relation to current field asset locations. Landmarks feature option is an excellent tool for administrators looking to streamline their vehicle routing process while reducing wasted time, fuel costs and other expenses.

MRM

Mobile Resource Management is a category of business solutions designed to maximize the productivity of mobile workforces. The most effective MRM solutions—such as those offered by Trimble—combine Internet services with applications that leverage on-demand GPS, wireless capabilities and transaction processes to help companies reduce operating costs and raise the quality of customer experience.

Wi-Fi

Wireless fidelity is the generic term for 802.11 technology.

WLAN

Wireless Local Area Networks use radio waves instead of a cable to connect a user device, such as a laptop computer, to a LAN. They provide Ethernet connections over the air and operate under the 802.11 family of specifications developed by the IEEE.

wireless

General term for using radio-frequency spectrum for transmitting and receiving voice, data and video communications.

wireless Internet

A general term for using wireless services to access the Internet, e-mail and/or the web.

wireless IT

Wireless Information Technology is the monitoring, managing and troubleshooting of computer equipment throughout a wireless network.