



Best Practices

Getting the Most From Your @Road Solution

June 2007

Getting the Most From Your @Road Solution

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Table of Contents

Preface	iii
System Requirements	iii
Introduction	1
Administration	2
Mobile Device Labeling.....	2
Keep in Mind.....	2
Suggested Method	3
Examples	4
Creating Users	4
Keep in Mind.....	5
Suggested Method	5
Examples	5
Grouping Vehicles	6
Keep in Mind.....	6
Suggested Method	8
Examples	8
Organizational Hierarchy	8
Suggested Method	8
Creating Landmarks.....	8
Keep in Mind.....	9
Suggested Method	9
Examples	10
Setting Up Exceptions	10
Keep in Mind.....	10
Suggested Method	11
Examples	12
Scheduling Reports	13
Keep in Mind.....	13
Suggested Method	14
Examples	14
Creating Vehicle Maintenance Schedules	14
Keep in Mind.....	15
Suggested Method	15
Examples	17
Creating Custom Fields	18
Keep in Mind.....	18
Suggested Method	18
Examples.....	18
MapView.....	20
Keep in Mind	21
Suggested Method	21
Examples	21

On Demand Reports.....	23
Keep In Mind	23
Suggested Reports.....	23
Examples.....	23
Service Requests.....	25
Keep in Mind	25
Recommended Method.....	27
Example	27

Preface

System Requirements

Item	Description
Operating System	Microsoft Windows 2000 and XP Microsoft Windows 2000 Professional / XP Professional
CPU	Pentium-class processor (500 MHz or faster recommended)
Memory	64 MB minimum (128 MB or more recommended)
Display	VGA or better display (1024x768 resolution recommended)
Browser	Internet Explorer: 5.5 and above. Note: <ul style="list-style-type: none">• All pop-up blockers should be disabled when using Geo-Manager to prevent conflict with the MapView Control Panel• The Run ActiveX control option must be enabled
Plug-In	Autodesk MapGuide Viewer 5.0 plug-in (available on the @Road web site) for Internet Explorer
Internet Access	Minimum 56 Kbps (high speed access via DSL, cable or ISDN recommended)



Note:

To use the information in this manual you should have some basic computer experience, including the ability to use a mouse, navigate through files on a computer and access the Internet.

1 Introduction

Thank you for purchasing an @Road solution. @Road values its customers and hopes to be part of helping your company become more efficient and profitable.

The suggestions in this guide are geared toward helping you receive the maximum benefit from your @Road solution. By taking the initial time to set up your account correctly, you can save yourself time and obtain a better understanding of what your @Road solution can really accomplish for your business.

The sections of this guide are set up with basic information about the most commonly used features of an @Road solution. Each section has introductory text, things to keep in mind when setting up your account, suggestions about the most efficient way to create the information for your account and examples of how each feature is used by an average business owner.

By receiving @Road training for your solutions well as using the information and following the suggestions in this guide, you can use your @Road solution to its fullest potential.

2

Administration

Mobile Device Labeling

When setting up your @Road account, one of the first things you must do is label the mobile devices in your fleet. The complexity of the labeling depends upon the size of your fleet and what the most common use of your @Road solution will be.

Keep in Mind

Naming your mobile devices can be as simple or as complex as you need for your business. Several things you should keep in mind when naming your mobile devices:

- @Road solutions (GeoManager/Pathway) sort mobile devices numerically, then alphabetically as shown in the following list and shown in Figure 1.
 - 102
 - 12
 - 1A
 - 1B
 - Alvin
 - Caleb



Note:

Mobile devices with multiple numerical digits sort in order of the digit value, 102 coming before 12 since 0 is less than 2. In order to keep your mobile devices well organized, you should keep the number of digits the same, predeccesing with 0s (zeros) as place holders (e.g. 001, 002).

Mobile Device Status

Show device in

Data represents the last known location as of Tuesday, April 10, 2007 4:03:18 PM PDT
Showing 1 - 10 of 13 Mobile Devices

Pages: 1 2 Next

Mobile Device	Status	Date / Time		Location [Address]
101-JohnSmith	<input type="button" value="Update"/>	Parked: 18D:14H:11M	03/23/2007 04:51:29 AM EDT	47057 BAYSIDE PKWY / 94538
102-BenNguyen	<input type="button" value="Update"/>	Parked: 84D:2H:43M	01/16/2007 03:19:19 PM EST	3383 GATEWAY BLVD / 94538
103-SarahConnor	<input type="button" value="Update"/>	Moving: < 8 mph	03/23/2007 02:42:32 PM EDT	47050 BAYSIDE PKWY / 94538
201-JaneJones	<input type="button" value="Update"/>	Parked: 8D:3H:20M	04/04/2007 03:42:38 PM EDT	47033 BAYSIDE PKWY / 94538
202-SylviaPlath	<input type="button" value="Update"/>	Parked: 8D:7H:4M	04/04/2007 11:59:08 AM EDT	1447 REV S HOWARD V AVE, EWING, NJ 08638

Figure 1: Mobile Device Status

- Does the mobile device have single or multiple user(s)/driver(s)? If a vehicle only has one driver, then using the driver's name as part of the device name is an easy way to identify a mobile device.
- A mobile device label or number should be structured in a way that makes it easy to identify important trait(s) about the mobile device, such as device type or geographical location.
 - How many mobile devices is your company tracking? If you track less than 10 mobile devices your naming scheme may be less complicated than if you're tracking more.
 - In how many geographical areas does your company operate? If you operate from several locations, you may want your naming scheme to reflect the different regions.
 - How many types of vehicles or hand held devices do you own? If you use the same type of vehicle for all your drivers, your naming scheme may be different from a company that uses several different types of vehicles.
- Device names:
 - Must be no more than 20 characters long.
 - Cannot contain any spaces.
 - Can only use [a-z|A-Z|0-9|.|,|-] and begin with [a-z|A-Z|0-9].

Suggested Method

When you take these things into consideration, the most common and practical way of labeling mobile devices is by assigning a number to the mobile device followed by a driver name, such as:

- 101-JohnSmith
- 102-BenNguyen
- 201-JaneJones

Examples

Bob owns Daorta Plumbing with 20 vehicles (three pick-up trucks, eight cargo vans, five flat panel trucks, two flat-bed trucks and two utility trucks) that are going to be tracked by @Road GeoManager. Depending on how Bob wants to categorize his vehicles, he can name them in the following ways:

- Vehicle type number, driver name or ID
- Territory area number, driver name or ID
- Vehicle type number, territory area number, driver name or ID

If Bob has more than one type of vehicle that his drivers use. Since different types of vehicles are needed for different customer jobs, Bob decides to make his cargo vans the 100 group, the flat panel trucks the 200 group, etc.

If Bob had more vehicles and a bigger service area, he could use the matrix example shown in Figure 2 for the numeric portion of his mobile device names.

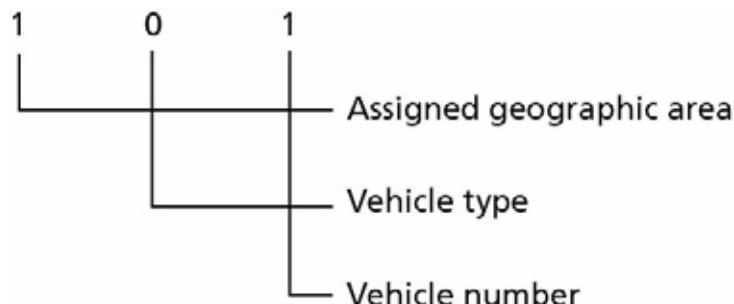


Figure 2: Numbering Matrix Example

Creating Users

@Road solutions have the ability to create multiple users within the system. Customers who have more than one person using the system should create a user account for each person who needs access to the system.



Tip:

If only one person is using the @Road Solution, you do not need to create other users.

Keep in Mind

There are several things you should keep in mind when creating user names:

- User names must be unique across the entire @Road system. This means that common user names may not be available.
- Passwords do not need to be unique, but should be kept in a separate, secure location for future reference.
- User names and passwords:
 - Must be no more than 20 characters long.
 - Cannot contain any spaces.
 - Can only use [a-z|A-Z|0-9|.(),-] and begin with [a-z|A-Z|0-9].
- Administrators and typical users are different. While many companies have only one or two users who are also administrators, some companies have more than a few administrators. If you have users who should not have administrative capabilities, you can restrict access to the administrative portion of GeoManager.



WARNING!

Do not give out your account admin name and password to anyone other than the account administrator.

Suggested Method

When creating users, @Road recommends starting with a first initial followed by last name. If the user name has already been used, an error message appears and you must create a different user name. Adding a number to the end of the user name, such as an employee number or a one or two digit number, can resolve this issue.

Examples

Bob from Daorta Plumbing has two managers, John Smith and Ben Nguyen, he wants to add as users to the system. He enters them as:

- jsmith
- bnguyen

The system accepts bnguyen, but sends an error message for jsmith, shown in Figure 3, since it has already been used.

Administration

User Administration Error

User Administration encountered an error: User 'jsmith' already exists.
Please select another username.

Please use the 'Done' button to return to User Administration page. If this is a persistent error, please contact the [Customer Support](#). We regret the inconvenience.

Figure 3: User Name Error Message

Bob decides to add a number to John Smith's user name, making it jsmith12, which is accepted by the system, shown in Figure 4.

Administration

User Added Successfully

Username:	jsmith12
First Name:	John
Last Name:	Smith
Driver Logs Edit Restriction:	Not Restricted
Department:	
Title:	
Email Address:	jsmith@road-inc.com

Figure 4: User Added Successfully Screen

Grouping Vehicles

Vehicle grouping allows you to manage your mobile workers more effectively based on what is important to your business. @Road solutions default to creating a single group for all your mobile devices, which allows you to see your devices in MapView, but not necessarily get information on specific areas of interest. Creating mobile device groups can help send the closest vehicle of the correct type or employee with the right skills to an available job, cutting down on travel time and expense and increasing customer satisfaction.

Keep in Mind

When creating mobile device groups, keep the following in mind:

- Mobile device groups can be organized in many ways, such as geographic work areas, vehicle types and employee job descriptions or functions.

- Reports can be pulled by group.
- You can create up to 10 different device groups.
- Groups can be tiered into three levels.
- Groups are only viewable to users who are assigned to them.
- Group names must be:
 - No more than 20 characters long.
 - Cannot contain any spaces.
 - Can only use [a-z|A-Z|0-9|.(),-] and begin with [a-z|A-Z|0-9].



Note:

If a mobile device is not assigned to a group, it will not be shown in MapView. If you cannot find a specific vehicle, check the **Unassigned Mobile Devices and Groups** screen in the Mobile Device Grouping Administration, shown in Figure 5, before calling @Road Support at 877-428-7623.

Administration

Unassigned Mobile Devices and Groups

Mobile Device(s) Not in a Group

Mobile Devices not assigned to a Local manager

-

Local manager with no Mobile Device assignments

-

Local manager not assigned to a Area manager

CNF Demo Gang, Qa2LiveFremont, we

Area manager with no Local manager assignments

-

Area manager not assigned to a Director

-

Director with no Area manager assignments

-

Figure 5: Mobile Devices Not in a Group Screen

Suggested Method

Since each business has a different focus, @Road recommends creating groups that are easy to identify and make sense to your business and your managers.

Examples

The Daorta Towing Company has 22 tow trucks, four sling trucks, eight wheel lift trucks and ten flat bed trucks, that cover five service areas. Since fast service is important to the company, Bob, the owner, creates mobile device groups according to the type of vehicle:

- Winch
- Flatbed
- Lift

When a call comes in for assistance with a car that has engine trouble, Bob can use MapView to find the nearest wheel lift truck and send it to the car's location. If a call is for an accident site where the vehicle is unable to move due to wheel damage, Bob can find the closest flatbed truck to the accident.

Organizational Hierarchy

All customers who bought GeoManager after March 2007 received Organizational Hierarchy instead of Mobile Device Grouping. Organizational Hierarchy is similar to Mobile Device Grouping, but since all mobile devices are automatically made part of a root group, no set up is required by default.

Suggested Method

For most businesses, @Road recommends that Organizational Hierarchy is left as the single, default group.

Creating Landmarks

Landmarks are any places of interest to your company, whether it be customer locations, employee homes, company branches or yards, customer locations, non-authorized locations or intersections that are particularly dangerous. Creating a Landmark makes it easy to identify a particular address.

Keep in Mind

There are several things to keep in mind when creating Landmarks:

- If you have several Landmarks near each other, keep the Fence ranges small, shown in Figure 6.

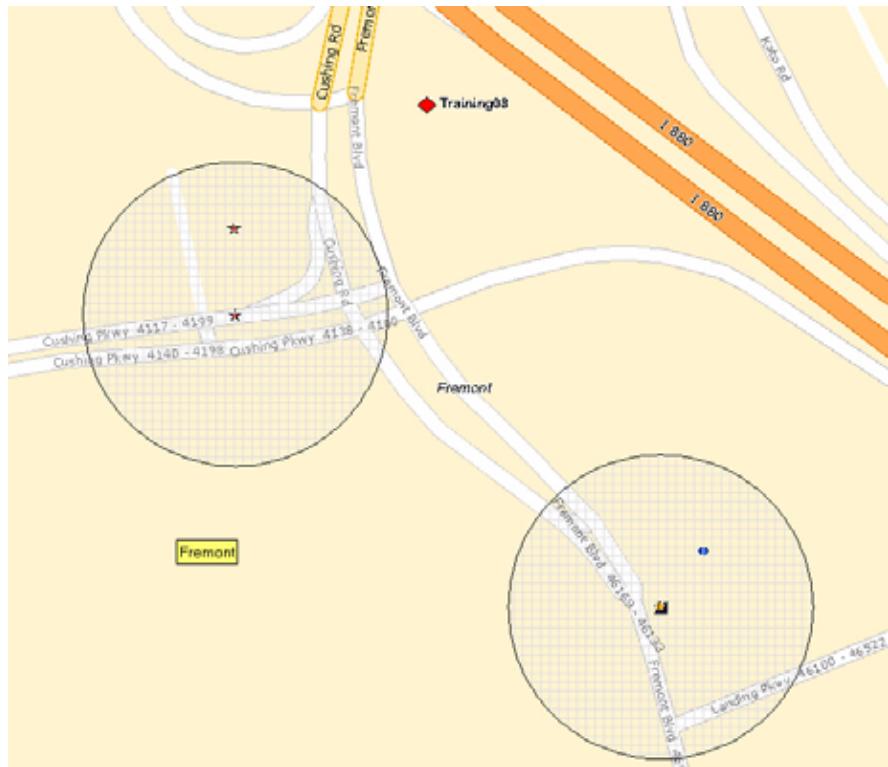


Figure 6: Landmark Small Fence Range Example

- Landmark Fences can be circular with a 250 to 52,800 foot radius or rectangular with all sides of the rectangle from 500 to 105,600 feet of the Landmark.
- Exception reports use Landmarks to help define Exception parameters. The more you filter your Landmarks, the more specific you can make your reports.
- You can create temporary Landmarks. If you give a Landmark an expiration date, it will disappear from your system on the designated date.

Suggested Method

@Road recommends first creating Landmark definitions to help you sort your Landmarks. Landmark definitions specify types of Landmarks, such as customer locations, employee homes, common employee stops and depot/headquarter locations.



Tip:

If you have a lot of Landmarks for your business that are already saved in a spreadsheet or text file, you can upload the Landmarks from that file to the @Road system. For more information about uploading Landmarks, see the Uploading Landmarks section in the *GeoManager Admin & User Guide*.

**Tip:**

If you don't have the address for a Landmark, you can use the Landmark by Placement tool in MapView.

Examples

Bob, the owner of Daorta Plumbing, has created a Landmark that identifies the Daorta yard so he can easily identify it in MapView and the Mobile Device Status screen, as well as create reports showing the amount of time his drivers spend in the yard.

Bob creates Landmarks for all the known employee stops for his employees, including coffee shops and lunch stops. This way he can check the number of stops his employees make at each location and the amount of time they spend at each one. While Bob doesn't mind his employees stopping at the places, he can watch to see that the privileges don't get abused and his workers aren't taking extended coffee or lunch breaks.

Bob also creates temporary Landmarks for any customers whose work requires more than a single day to complete. Using MapView and reports, the temporary Landmarks make it easy for Bob to see how much time his workers are spending at the customer's site.

Setting Up Exceptions

Exceptions give you the ability to define a normal range of limitations for events or activities, then capture any information outside this range. The limitations and range settings vary by Exception type.

Keep in Mind

When defining Exceptions for your business, you should keep several things in mind:

- For Speed, Idling, Landmark Proximity, Off Hours Use, Mileage, Low Battery and Stop Duration Exceptions, you can only set up one Exception per type per vehicle. For example,

while you can set up two Speed Exceptions with different parameters, you can only assign one Speed Exception to a selected mobile device.

- Every business is different. You may not use all the different types of Exceptions for your business.

Suggested Method

Most businesses will benefit from Speed, Idling, Landmark Proximity and Off Hours Use Exceptions, but many others can be very helpful.

@Road recommends using Exceptions for the following reasons:

- **Speed** – triggered when a mobile device exceeds a speed and maintains that speed for more than the threshold (minimum of two minutes). This helps keep mobile workers from excessive speeds, adding to safety and lowering risk of traffic tickets, fuel consumption and insurance rates.
- **Idling** – occurs when a mobile device idles for more than a specified duration. Idling is measured when the ignition is in the **on** position and the mobile device is not moving for more than 2 minutes. Use of the Idling Exception helps companies increase productivity and save on fuel and maintenance costs.



Note:

Idling Exceptions are triggered when a Mobile Device is stopped for more than a specified duration while the vehicle ignition is in the **on** position unless the customer uses the @Road Vehicle Diagnostics option.

- **Landmark** – triggered when a mobile device stops at user-defined landmarks. @Road runs a nightly process to identify Landmark Exceptions from the previous day. This can help track pickups and deliveries, monitoring unauthorized (e.g. personal) usage of company vehicles either during or after work hours or flagging unscheduled customer stops.
- **Landmark Proximity** – triggered when a mobile worker arrives at or departs from a user-defined landmark and has been there for at least one minute plus a 10 second sampling rate. This helps managers monitor pickups and deliveries in real-time.
- **Zone** – allows the user to monitor the arrival at and/or departure of a mobile device from a specified zone, such as a State, City, County or Zip code. This can help monitor unauthorized (e.g. personal) use of company vehicles either during or after work hours, or flag possible security breaches when vehicles were not expected to move from a specific location.
- **Stop** – triggered when the total daily stop time at a landmark is greater than a predefined threshold. Noting Stop Exceptions can help drive productivity by capturing less-than-usual numbers of expected deliveries, or potentially assist with security breaches if higher-than-usual numbers of expected stops are noted.

- **Stop Count** – triggered when the total number of stops at a landmark is greater than a predefined threshold; zero to 50 stops. Minimum stop time is three minutes. This can help a company determine which mobile workers are performing too many or too few stops during a shift.
- **Handset Usage** – triggered when a hand-held mobile device has not accessed the @Road application by the time expected, or if there is mobile activity beyond expected work hours. These Exceptions can help a company determine when hand-held devices are being used outside of company time or turned off during work hours. Only available with GeoManager PE.
- **Low Battery** – triggered when the vehicle battery level or hand-held mobile device battery level (for PE applications) falls to the point at which no location data may be transmitted. This Exception helps remind mobile workers to charge their equipment.
- **Off Hours Use** – triggered when a mobile device registers vehicle movement outside designated working hours, which are defined by the administrator. This Exception helps a company discover whether company resources are being used when mobile workers are not on shift.
- **Mileage** – triggered when a mobile device exceeds a predefined number of miles within a day. By monitoring mobile worker mileage, companies can save money by determining which mobile workers consistently exceed mileage parameters and determining more efficient routes.
- **Stop Duration** – triggered when a mobile device at a landmark or any location exceeds a stop time longer than the predefined threshold, within a defined workday. This helps companies identify workers who spend too much or too little time stopped at any location.

Examples

Bob from Daorta Plumbing wants to lower his company's fuel expenses. Since speeding, idling and unauthorized vehicle use are the most common factors for excess fuel costs, he decides to set up Speed, Idling, Zone and Off Hours Use Exceptions for all his mobile devices.

Since 90 percent of their work requires highway driving, Bob sets the speed maximum to 65 mph. When one of his employees exceeds this limit for more than two minutes, he gets a real-time notification sent to his email and cell phone, so no matter where he is, he can contact the driver and tell them to slow down.

Bob realizes that sometimes his mobile workers need to leave the engine running on their trucks, but knows that some of his workers leave the engines on more than is required. He sets up an Idling Exception for idling more than 10 minutes to help curb this behavior.



Note:

If you do not use the Vehicle Diagnostics option, the ignition “on” position can trigger an Idling Exception even when the engine is off. This still notifies you about excess wear on the vehicle battery.

Knowing that 90 percent of the work is within city limits, Bob sets the Zone parameters to the city limits, so that he is notified whenever one of his vehicles leaves the city.

Because Bob’s mobile workers drive their company trucks home after their shift, he sets the Off Hours Use parameters to the times when his workers aren’t on shift. He creates one for his typical daytime workers and one for his two evening and weekend employees. This helps him determine if any of his work groups are using the vehicles when they shouldn’t be.

Scheduling Reports

Scheduled reports are generated the next business day based on customer defined parameters and delivered via email to a maximum of eight recipients. Scheduled reports help you keep tabs on specifically chosen parts of your business on a regular basis, giving you the information you need without the worry of remembering.

Keep in Mind

There are several things you should keep in mind when scheduling reports:

- What information do you need to make good business decisions?
 - When do you want the report delivered to your email? 6 a.m.?
 - How often do you want to see the report? Daily? Weekly? Monthly? Just once?
 - Which vehicles do you want included in the report? Certain types? Certain drivers?
- You can keep reports in an electronic format more easily than in paper format. This makes it a convenient way to back up worker data.
- Up to eight separate email addresses can receive the same report.



Tip:

You can enter email distribution lists if you need to send the report to more than eight recipients.

- The report can be delivered in several formats, depending upon your preference:
 - PDF

- Excel (spreadsheet)
- HTML (web)
- Tab or comma delimited

You can also send reports to an FTP site for later downloading.

Suggested Method

@Road recommends that all customers schedule the Activity Detail report on a weekly basis. You can have this delivered at 6 a.m., 8 a.m. or 4 p.m., whichever time works best for your business.

If you are going to manipulate the report data after you receive it, @Road recommends using the Excel format for your reports. If you are just keeping the reports for archive purposes, you can use the PDF format.

Examples

Bob from Daorta Plumbing has twelve mobile workers in his fleet who work in three different areas. Since they are constantly on the move, he needs a way to track their activities for the week, but since he works on projects during the day, he can't always monitor them using MapView or Mobile Device Status.

Bob decides to schedule an Activity Detail report in Excel format to be delivered to his email every Monday at 6 a.m. This way, he can review the report, talk with his workers about their performances and store the reports for future reference. By storing the reports, Bob can see patterns in his mobile workers' behavior and correct anything before it become too big of a problem.

Creating Vehicle Maintenance Schedules

By using @Road Vehicle Maintenance, you can designate which maintenance items to track, access valuable reports showing maintenance status and set up automatic reminder notifications for maintenance that is due. Using these features, you can see a clear picture of each vehicle's maintenance history and benefit from automated system assistance when tracking required maintenance actions and keeping each vehicle up-to-date.

Such maintenance tracking and follow-through can improve overall vehicle performance, which may lower the risk of costly vehicle breakdowns that result in service interruptions. As an added benefit, using this feature to track ongoing maintenance may help retain vehicle resale value and extend vehicle life, reducing capital costs.

Keep in Mind

There are a few things to keep in mind when using Vehicle Maintenance:

- Vehicle Maintenance items can be customized. You can create up to 20 items.
- The 10 most common maintenance items are already entered, but can be changed to suit your company's needs.
- Lead times must be entered in both days and miles. You can set lead time notification up to 90-days and 3,000 miles in advance.
- Vehicle Maintenance tracking starts when you enter the mileage from the vehicle and the maintenance schedule is saved.
- You can adjust the mileage at any time through the GeoManager Administration screen.
- You can enter up to four email addresses for maintenance notification.
- You can pick certain vehicles to monitor, not just all vehicles.



Note:

Vehicle Maintenance is not for tracking vehicle mileage, but approximate timeframes for when maintenance should be done.

- There is some odometer differentiation from the vehicle and the iLM. This is minor and can be mitigated by re-entering the mileage after the service has been performed on the vehicle.

Suggested Method

@Road recommends setting up Vehicle Maintenance for each of your vehicles with at least the 10 pre-populated default items and a 30-day/1,500 mile lead notification time, shown in Figure 7.

Vehicle Maintenance

Add/Update/Delete Vehicle Maintenance Items

Maintenance Item	Maintenance Notification Lead Time (days)	Maintenance Notification Lead Mileage (Miles)	Select to Update <input type="checkbox"/>
Registration/Smog Check	30	1500	<input type="checkbox"/>
Replace Rear Axle Lubricant	30	1500	<input type="checkbox"/>
Replace Accessory Drive Belt(s)	30	1500	<input type="checkbox"/>
Replace Manual Transmission Fluid	30	1500	<input type="checkbox"/>
Replace Fuel Filter	30	1500	<input type="checkbox"/>
Replace Spark Plugs	30	1500	<input type="checkbox"/>
Change Engine Coolant	30	1500	<input type="checkbox"/>
Replace Auto Trans Fluid And Filter	30	1500	<input type="checkbox"/>
Replace Air Filter	30	1500	<input type="checkbox"/>
Repack Front Wheel Bearings	30	1500	<input type="checkbox"/>
Lubricate Suspension/Steering	30	1500	<input type="checkbox"/>
Rotate Tires	30	1500	<input type="checkbox"/>
Change Oil and Filter	30	1500	<input type="checkbox"/>
			<input type="checkbox"/>

Notes:

- Maintenance items configured above are common to all of the mobile devices/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 7: Vehicle Maintenance Default Items

In addition to the default items, you should enter dates for intermediate and major services at regular intervals. Consult your vehicle's owner's manual for specific lead time and mileage.



Tip:

You can also use Vehicle Maintenance as a reminder for vehicle registration and insurance payments.

The mileage should be entered as close to the actual vehicle mileage as possible. Email notification should be sent to you and your managers.

After you have set up Vehicle Maintenance, you should pull the Vehicle Maintenance History and Vehicle Maintenance Overdue reports once a month to stay in touch with the current state of

your vehicles' maintenance. You can also see Vehicle Maintenance Status Detail at-a-glance, as shown in Figure 8, by clicking the Maintenance button in the GeoManager Control Panel.

Vehicle Maintenance														
Vehicle Maintenance Status Details														
Show Comments: <input type="checkbox"/>														
● Service not required ● Due for Service ● Overdue for Service														
DeviceName	Oil	Remove Tires	Lubricate	Rearpack Front Wheel Bearings	Air Filter	Replace Auto Trans fluid and filter	Change Engine Coolant	Spark Plugs	Fuel Filter	manual transmission fluid	belt (-)	rear axle lubricant	Smog Check	test tailpipe
Lauren	●	●	●	●	●	●	●							
Training01	●	●	●	●	●									
Training02	●	●	●	●	●	●								
Training03	●	●	●	●	●									
Training04	●	●	●											
Training05	●	●	●											
Training06	●	●	●											

Pages : 1 2

Figure 8: Vehicle Maintenance Status Details Screen

When vehicles are serviced, you can add any additional information about the vehicle to the comments area, such as dents, scratches, broken fixtures, etc.

Examples

Bob, the owner of Daorta Plumbing, has 20 vehicles and 19 employees. Most of the employees take the vehicles home at the end of the day and get their assignments using an IDT, so Bob doesn't see the vehicles on a daily basis.

Bob has the capacity for one vehicle to be out of service at a time, whether it's out for service or repair. If more than one truck or van is out of service at any time, he has to juggle appointments with clients and emergency cases to make sure they all get done. Knowing that regular vehicle maintenance means fewer vehicle break downs, Bob enters all his vehicles into Vehicle Maintenance with a 30-day/3,000 mile notification request using the default maintenance items and adding vehicle registration and insurance premium due dates. He sets up email so that both he and his managers will get advance notification.

When Bob pulls a monthly Vehicle Maintenance Overdue report, he notices that one of his trucks is overdue for service. Bob calls the employee, who is one of his most experienced workers, and finds out that he's been delayed due to emergency plumbing calls. They talk and set up a time to trade vehicles so the overdue truck can be serviced without the employee missing any client appointments or emergency calls.

Creating Custom Fields

If you are constantly viewing your mobile devices in MapView, Custom Fields are a quick and easy way to see more information about each mobile device, especially when trying to dispatch the closest and correct type of vehicle or mobile worker to the customer's location. Custom Fields are optional with GeoManager SMB (Small/Medium Business).

Keep in Mind

When creating Custom Fields, it's important to keep in mind:

- What kind of information is important to your business:
 - Driver related information
 - Vehicle related information
- You can add up to eight Custom Fields with any type of information to which you need quick visual reference.

Suggested Method

@Road recommends the following Custom Fields for driver information:

- Driver name
- Cell phone number
- Driver's skill level

@Road recommends the following Custom Fields for vehicle information:

- Type of vehicle
- Insurance carrier and policy number
- Equipment in vehicle
- VIN

Examples

Bob from Daorta Plumbing uses MapView to track his mobile workers throughout their day. When he gets an emergency call, he needs a quick and easy way to choose the closest mobile worker with the right type of skills and vehicle to handle the emergency. He enters the following Custom Fields into GeoManager:

- Name
- Cell Number

- Type of vehicle
- Skill level
- Equipment in truck

Using these fields, he can use MapView to find the closest devices to the emergency calls, then by scrolling over the vehicle locations with his mouse, he can find the worker with the correct skill level and tools to do the job right the first time, saving his company travel time and increasing customer satisfaction.

3 MapView

The mobile devices shown in MapView are the same as the mobile devices shown on the Mobile Device Status screen, but in a graphic display rather than as a list.

MapView can be used by dispatchers to continually monitor your mobile workers. A layer control panel, as shown in the red area in Figure 4, allows you to choose the level of detail shown in MapView.

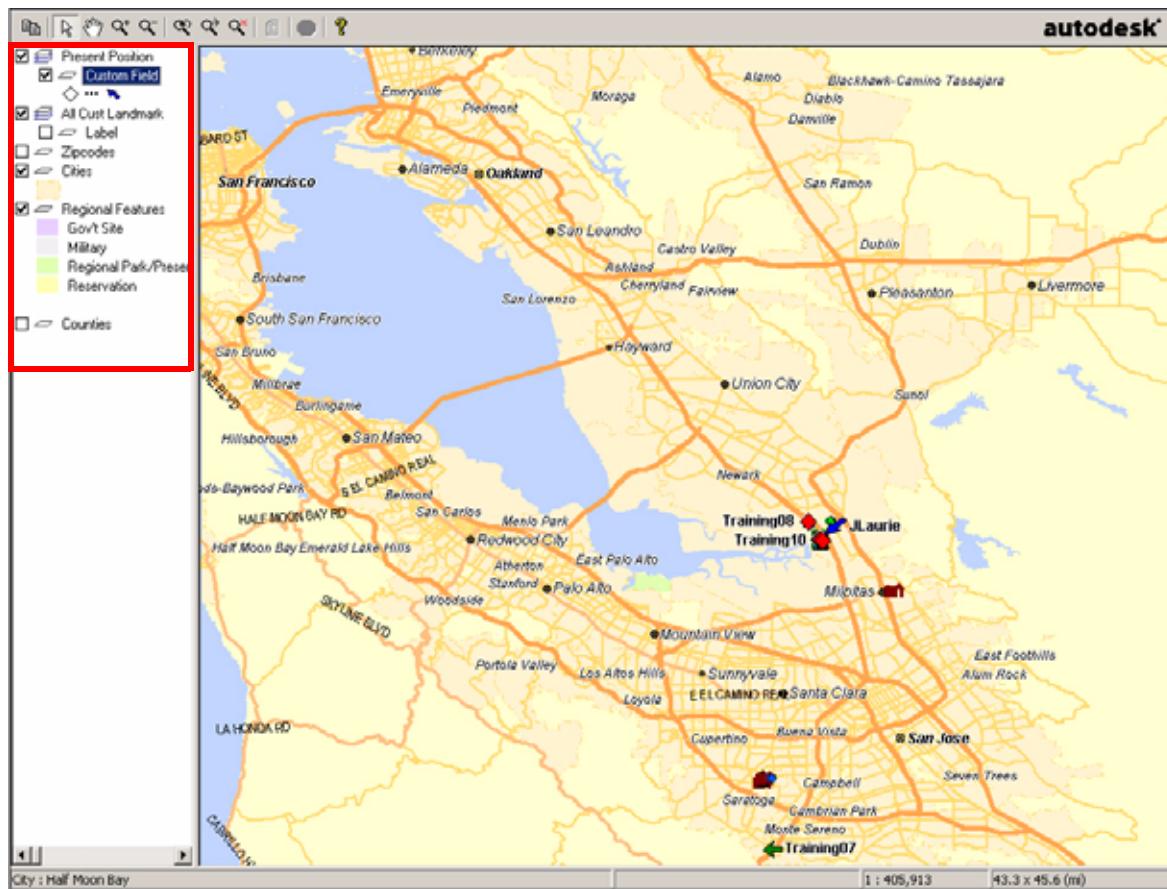


Figure 4: MapView Layer Control Panel



Note:

MapView does not save layers after you close the screen. If you have increased or decreased the shown layers in MapView, you cannot save the view when you close the screen. You will have to re-establish the shown layers.

Keep in Mind

There are a few things to keep in mind when using MapView:

- The maps used in MapView get updated twice a year. If there is a lot of construction going on in certain areas, detours and changes may not be reflected in MapView.
- You can create as many custom views as you need.
- MapView refreshes every 10 minutes and LMs refresh at either 15, 10 or 5 minute rates. Mobile devices do not move in real time.
- MapView requires a Java plug-in.

Suggested Method

If you use MapView on a regular basis, @Road recommends the following actions:

- Create a default custom view for the most commonly traveled area of your mobile workers.
- Place a checkmark next to the Landmark feature box. This shows your Landmarks in MapView so you can see where your mobile workers are in conjunction with them.
- Place a checkmark in the Custom Fields box. This shows the information from your custom fields when you mouse-over any mobile device.
- Use MapView to find the closest vehicles to a particular Landmark or address when new assignments come in. This helps minimize vehicle mileage as well as facilitating faster service for customers.

Examples

Bob, the owner of Daorta Plumbing, has 19 mobile workers. Each mobile worker has his own schedule, most during typical business hours, but some with weekend and evening schedules. He has entered schedule information, skill sets, type of vehicle and tool kit information into GeoManager custom fields.

Since jobs for his mobile workers vary from day to day, he keeps MapView open during normal business hours so that he can see where his employees are when new jobs come in. By using the combination of custom fields and MapView, he can send the closest mobile worker with the correct skill set and tools to the job site, saving mileage and time while improving customer satisfaction.

At the end of the day, Bob views the mobile device paths to see if any routes can be made more efficient. By taking note of the workers who continually cross paths, Bob can establish better geographic territories for his workers, saving time, mileage and fuel costs.

4 On Demand Reports

@Road On Demand reports are designed to get you the information you need about your mobile workers, their work and your assets when you need it.

Keep In Mind

There are a few things to keep in mind when using On Demand reports:

- Reports can be created for up to 30 days worth of data. GeoManager data is kept for 95 days by default.
- Reports can be viewed online or downloaded as comma-delimited, tab-delimited or in an Excel spreadsheet.
- You need to set up Exceptions before you can pull On Demand Exception reports.
- Report needs vary from company to company. Not all reports will provide the same benefit to every company.

Suggested Reports

@Road recommends creating the following reports:

- Activity Detail report - View mobile device activity on an as needed basis.
- Consolidated Exceptions report - See what types of Exceptions occurred during your chosen timeframe and pull more specific Exception reports or use the Consolidated Exceptions report to establish a pattern of mobile device behavior.
- Stop report - View the stops for each mobile device.
- Stop Summary by Landmark Type - Track customer service by different types of customers or different service levels.

Examples

Bob, owner of Daorta Plumbing, creates a Activity Detail report during the afternoon to see where his mobile workers have been during the work day and compares it with their planned schedules. Then he asks them about any large variations.

At the end of a day when Bob has received several Exception notifications, he creates a Consolidated Exceptions report. This shows him which Exceptions were triggered, by whom

and when, allowing him to create the specific Exception reports without needing to create all of them for each mobile worker. The Exception reports help him establish a pattern of behavior for some of his mobile workers, such as speeding. By discussing the behavior with his employees, he reduces speeding incidences and tickets, saving his company money on insurance premiums.

5

Service Requests

When something goes wrong with your @Road solution, you want it back up and running as soon as possible. @Road Service Requests are designed to quickly deliver the right help.

Keep in Mind

When creating a service request, there are several things you should keep in mind:

- You must create a separate Service Request for each vehicle that requires service.
- You can check open Service Request status in the GeoManager **Service Request** screen, shown in Figure 6.

The screenshot shows the 'Service Request' interface. At the top, there's a header 'Service Request'. Below it, under 'New Service Requests', there's a link 'Create New Service Request' and a search bar 'Create New Service Request based on Service Request Number:' followed by a 'GO' button. Under 'Status of Service Request', there's a search bar 'Service Request Number:' followed by a 'GO' button. Under 'View Service Request', there are two dropdown menus: 'By Mobile Device' set to 'None' and 'By Mobile Device Label', followed by a 'GO' button. Further down, there's a search bar 'By Email Address' followed by a 'GO' button. At the bottom of the interface, there are three links: 'New Service Requests', 'Open Service Requests', and 'Closed Service Requests'.

Figure 6: Service Request Screen

- You will hear from an @Road Customer Support representative within two hours of your request.
- You can use previously created Service Requests to create new ones, saving you the time of filling in the same information.

If you use the Create Similar function, remember to change the mobile device number and delete any Additional Description information.

- If you enter an email address into a Service Request, as shown in Figure 7, you will be notified of any status changes to the request. This also allows Customer Support Representatives to contact you via email if they need more information. I

If you prefer phone only contact, do not enter an email address.

Service Request

New Service Request (1 of 3)

General Information	Date : 06/07/2007 03:58 PM PDT
User Name	P3Ni2o
Name of the person Submitting Request	@Road - Training Dept
Email	cjohnston@road-inc.co
Contact Number	
City & State	
Service Request Type	<input type="checkbox"/> Mobile Device not reporting <small>Mobile Device not reporting - An issue that is related to a specific Mobile Device. Non- Mobile Device Issue - An issue that is not related to a specific Mobile Device.</small>
Service Request Description	2548-97 is not reporting
* required	<input type="button" value="Cancel"/> <input type="button" value="Next>>"/>

Note: Please use Previous and Next buttons for navigation.

Figure 7: New Service Request Screen

- Fields with the * (asterisk) are **required** information. Any additional information may help the field technician identify the problem more quickly.
- The **Mobile Device Location** field, shown in Figure 8, is where the vehicle will be for servicing, not where it is currently.

Service Request

New Service Request (2 of 3)- Mobile Device Not Reporting

Mobile Device Information	
Mobile Device Number	<input type="text"/> None
Make/Model of Mobile Device	<input type="text"/> None
Additional Description (Optional)	<input type="text"/>
Driver's Name	<input type="text"/>
Driver's Contact	Mobile <input type="text"/> <input type="text"/> Pager <input type="text"/>
Mobile Device Location	Address <input type="text"/> City <input type="text"/> State/Province, Zip/Postal Code <input type="text"/> United States: <input type="text"/>
* required	<input type="button" value="<- Previous"/> <input type="button" value="Next->"/>

Note: Please use Previous and Next buttons for navigation.

Figure 8: New Service Request Screen 2 of 3

Recommended Method

@Road recommends creating your service request online (WebSR). This puts you in control of what information gets sent to the customer support team.



Note:

Making the vehicle readily available for service helps both you and @Road. If the vehicle is not where the field technician expects it to be, expected wait times increase and missed appointment charges may apply.

Example

Bob from Daorta plumbing has a truck that last updated in GeoManager three weeks ago. He knows the truck was driven every day since its last update, but no data is being transferred. He logs into his GeoManager account and creates a new WebSR so that @Road can help resolve the problem.

Since this is the first truck that has encountered a problem, Bob mistakenly enters the depot address into the WebSR form for the vehicle's location. When the @Road Field Service Technician arrives at the depot to troubleshoot and fix the device, the vehicle is not at the depot. The field technician has to travel to a different location, causing Bob a longer down-time and the technician less availability.

Several months later, Bob has another truck that stops sending data, but he knows it is being driven. He logs into his GeoManager account and decides to use the previous service request to create the new one by changing the vehicle ID and other information, then saves and sends the new request to @Road customer support.

When the @Road Field Service Technician arrives this time, the truck is waiting at the correct address, eliminating the extended down-time and extra travel.