



MARCUS[®] GPS FLEET MANAGEMENT WEB APPLICATION

GETTING STARTED WITH MARCUS[®] Pulse
Beta Test for MARCUS[®] v8.8.1

DRAFT - Rev. 1.3

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Getting Started with MARCUS® Pulse

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GETTING STARTED WITH MARCUS® Pulse

Overview

This document is intended for Beta Test users of **MARCUS® Pulse**, a new feature within the **MARCUS® GPS Fleet Management Application**. Both new and experienced **MARCUS®** users will find this guide a useful reference for the Pulse options and functions.

Pulse is a dashboard module designed to enable Fleet Managers to track high-level performance metrics and to identify trends and patterns in driver workflow over a given timeframe. These metrics include: **Idle Time, Miles (or Kilometers) Driven, Engine On Time, Stopped Time, Moving Time and Speed Alerts**.

NOTE: The current implementation of **MARCUS® Pulse** represents the second phase of the Beta Test program and, therefore, should be considered a work-in-progress. We have chosen these six metrics as the ones most likely to be useful to the widest audience. Additional metrics are under consideration for inclusion in a future release. We are also considering other design features based on feedback from the previous phase of the Beta Test.

Your feedback is important to us. Please share your input with us by email addressed to: pulsebeta@discretewireless.com.

NOTE: A nightly process consolidates track and alert data from the previous day's activity and stores it in a data warehouse. The data warehouse is then used as the basis for queries that result in the displayed charts and graphs. The most recent data presented in **Pulse** will be from the previous day. A weekend process refreshes the data warehouse with consolidated changes for the previous week.

NOTE: **Pulse** presents snapshots of the data as of the date it was captured. Depending on when they are communicated to our network, some late-arriving tracks (e.g., tracks captured while a mobile is out of radio coverage and sent upon resuming coverage) may not appear until the next day's processing.

System Requirements

Discrete Wireless recommends using either Microsoft's Internet Explorer or Mozilla Firefox as the browser. To ensure your system can accommodate the graphic images presented, please be sure to confirm that your system meets the updated configuration requirements outlined below.

Monitor Resolution

Recommended minimum setting is 1280 x 1024

Internet Browser

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Microsoft® Internet Explorer 7.x or 8.x
Mozilla Firefox 3.x or higher
JavaScript and Cookies enabled for all browsers
Adobe Flash Player 10.x installed

Computer/Processor:

IBM Compatible Pentium 4 or higher processor

Operating System:

Windows 2000, Windows XP SP2, Windows Vista SP1 or Windows 7
Mac OS X
Fedora 8

RAM:

Minimum RAM 2 GB; recommended RAM 4 GB

Accessing the Pulse Tab

Your user profile must be granted access to **Pulse** by either by a Discrete Wireless Administrator or an Account Administrator who already has access to it. When you login to **MARCUS®** you'll see the new tab in the application tab bar.

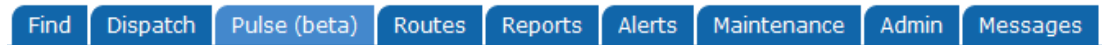


Figure 1 MARCUS Application Tab Bar

Using The Pulse Dashboard

The following is a brief description of the **Pulse** tab's features.

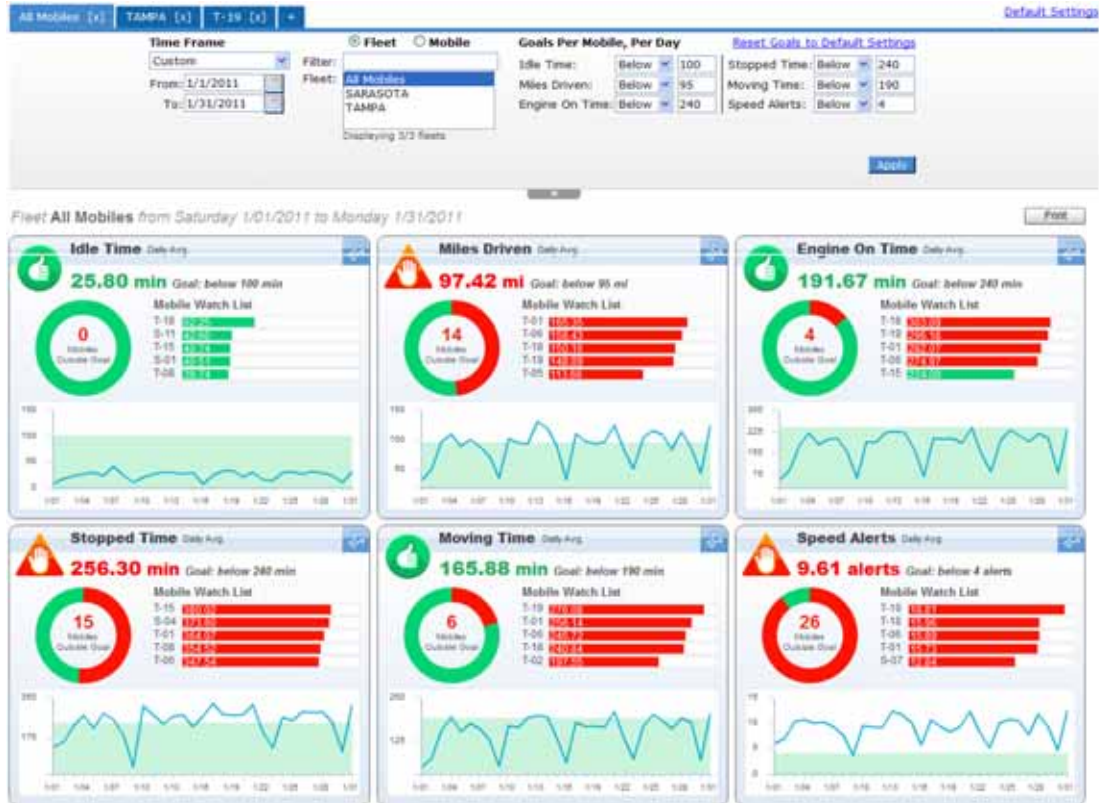


Figure 2 Pulse with Summary View

Pulse Tab Options

The first time you open the **Pulse** tab, a message will prompt you to select a **Time Frame**, select a **Fleet** or **Mobile**, adjust **Goals** and click the **Apply** button.

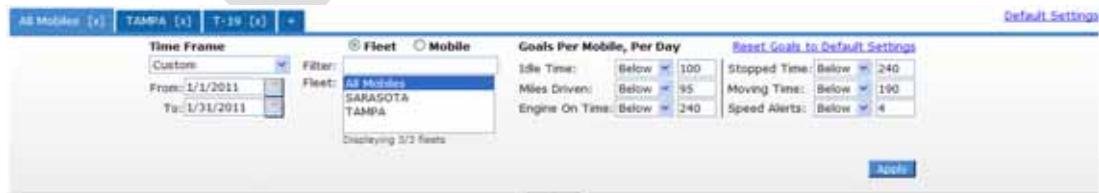


Figure 3 Pulse Tab Options

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Time Frame

The following **Time Frame** options are available:

- Yesterday
- Week To Date
- Month To Date
- Last Week
- Last Month,
- Previous X Days
- Custom

If **Previous X Days** is selected, a field is displayed for entering the number of days from yesterday. Selecting **Custom** opens boxes for entering 'From' and 'To' dates. The default Time Frame is **Last Week**.

NOTE: Fleet and Mobile data will be available in Pulse back through July 2010.

Fleet or Mobile

Choose the **Fleet** or **Mobile** that you wish to review.

Goals

The thresholds for each metric are referred as **Goals**. The goals entered reflect the desired maximum or minimum value per mobile per day for the relevant metric. For example, an **Idle Time** goal of 100 indicates that you prefer that drivers limit the time when their vehicles are stopped with ignition on to less than 100 minutes per day. You may also choose to express a minimum value, such as Above 75 miles per day for the **Miles Driven** goal.

[Default Settings](#)

Goals Per Mobile, Per Day		Reset Goals to Default Settings
Idle Time:	Below ▾ 100	Stopped Time: Below ▾ 240
Miles Driven:	Below ▾ 95	Moving Time: Below ▾ 190
Engine On Time:	Below ▾ 240	Speed Alerts: Below ▾ 4

Figure 4 Tab Goals

You may establish separate goals for each tab displayed within Pulse. A default set of goals has been provided. To view or edit the default goals, click the link for **Default Settings**. You may choose to accept the default goals as displayed or change them and click Save. The default goals will be applied to any new Pulse tabs that you add. If you want to switch a tab's goals back to the default values, click on **Reset Goals to Default Settings**.

Default Settings			
Idle Time:	Below	100	min
Miles Driven:	Above	75	mi
Engine On Time:	Below	240	min
Stopped Time:	Below	240	min
Moving Time:	Below	190	min
Speed Alerts:	Below	4	alerts

Figure 5 Default Goals

After selecting options and entering goals, click **Apply** to view the resulting metrics on the **Summary View**. You can expand or collapse the tab Options box with the chevron control that appears at the bottom center of the box.

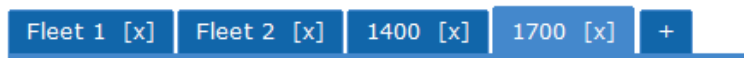


Figure 6 Multiple Pulse Tabs

Note the tab row above the tab options box. **Pulse** tabs are labeled with the name of the selected fleet or mobile from the options in the displayed on that tab. You can open multiple tabs to view metrics for different combinations of Fleet or Mobile and Time Frame.

To add a new tab, click the add tab symbol **+** at the end of the tab row.

To close a tab, click the close tab symbol **[x]** at the end of the tab name.

NOTE: Your tabs and option selections will be saved for up to 8 hours after you logout.

Pulse Summary View

The Summary View displays six different performance measures for the selected Fleet or Mobile within the specified time frame. These measurements include: **Idle Time, Miles (or Kilometer) Driven, Engine On Time, Stopped Time, Moving Time and Speed Alerts.**

After selecting options and entering goals, click **Apply** to load the **Summary View**.

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Figure 7 Summary View

A header row, summarizing your selected fleet/mobile and time frame, appears above the summary charts.

Idle Time

The **Idle Time** metric shows the amount of time your vehicles were stopped with ignition on during the selected time frame. This measure is important because lowering Idle Time reduces fuel costs.

Miles (or Kilometers) Driven

The **Miles (or Kilometers) Driven** metric illustrates the daily average distance driven for the selected Fleet or Mobile during the designated time frame. Consider whether your objective is to maximize or minimize driving distance. The unit of measure – miles or kilometers, depends on your selected **User Preference** for distance and speed.

NOTE: **User Preferences** may be view or changed in the upper right corner of the screen.

Engine On Time

The application provides information on the average time per day your vehicle engines were on.

Stopped Time

Examine the average number of minutes per day that the mobile or fleet was stopped on days of mobile activity within the time frame.

Moving Time

Examine the average number of minutes per day that the mobile or fleet was moving during the time frame. Consider whether your objective is to maximize or minimize vehicle moving time.

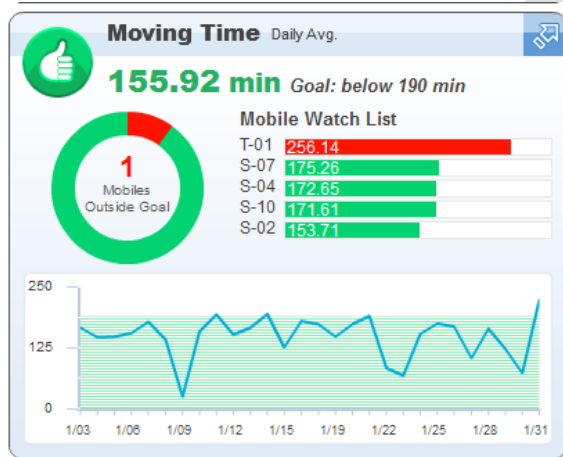
Speed Alerts

The **Speed Alerts** metric provides information on the combined average of Speed Alerts and Posted Speed Alerts events applicable to your selected fleet or mobile. If any user within your account has defined either Speed Alerts or Posted Speed Alerts on the **MARCUS®** Alerts tab, and, if there were alert messages generated during the selected time frame, the average number of these incidents per day will appear in the **Speed Alerts** section of **Pulse**.

Summary View Elements

The **Pulse Summary View** is designed to provide at-a-glance information concerning the overall Daily Average performance for each of the six performance measures.

Sample Fleet Summary



Sample Mobile Summary

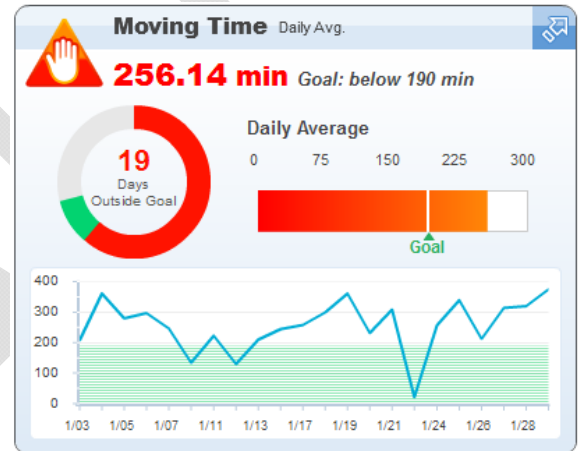




Figure 8 Fleet vs. Mobile Summary View

The **Okay** (Thumbs Up) symbol  indicates that the Daily Average for the selected time frame was at or within the desired goal.

A **Warning** (Open Hand) symbol  indicates the Daily Average was outside the desired maximum. The Daily Average percentage relative to goal is also shown.

For a selected fleet, the **Summary View** contains the following elements:

- The value representing the fleet's overall Daily Average compared to the goal.
- An interactive donut chart with the total number of:
 - Mobiles that performed within the desired goal.
 - Mobiles with daily averages outside the desired goal.
 - Mobiles that have no activity during the selected time frame, if applicable.

To see the count for each group, roll your mouse pointer over the chart.

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- A **Mobile Watch List** highlighting the top five mobile units with values that are the furthest from being within goal. The list is presented in order of greatest deviation from goal. If there are less than five mobiles outside of goal, the list will show the top five of all mobiles.
- A historical line chart depicting the trend of the fleet's daily averages over the selected time frame.


For a selected mobile, the **Pulse Summary View** contains:

- The value representing the mobile's overall daily average for the selected time frame compared to the goal
- An interactive donut chart depicting:
 - The number days the mobile performed within the desired goal
 - The number of days the mobile performed outside the desired goal
 - The number of days of the mobile had no activity during the selected time frame, if applicable.

To see the count for each group, roll your mouse pointer over the chart.

- A bar chart comparing the mobile's daily average to the stated goal
- A historical line chart depicting the mobile's averages for each active day within the selected time frame

Pulse Detail View

The **Detail View** provides a more granular evaluation of mobile performance during the specified time frame. For any of the six metrics, you can navigate to the **Detail View** by clicking anywhere on the title bar of that metric's Summary View – look for the arrow in the upper right corner. 

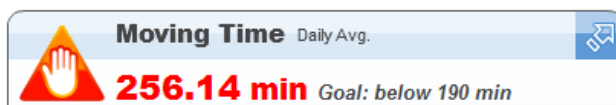


Figure 9 Summary View Title Bar

Detail View Elements

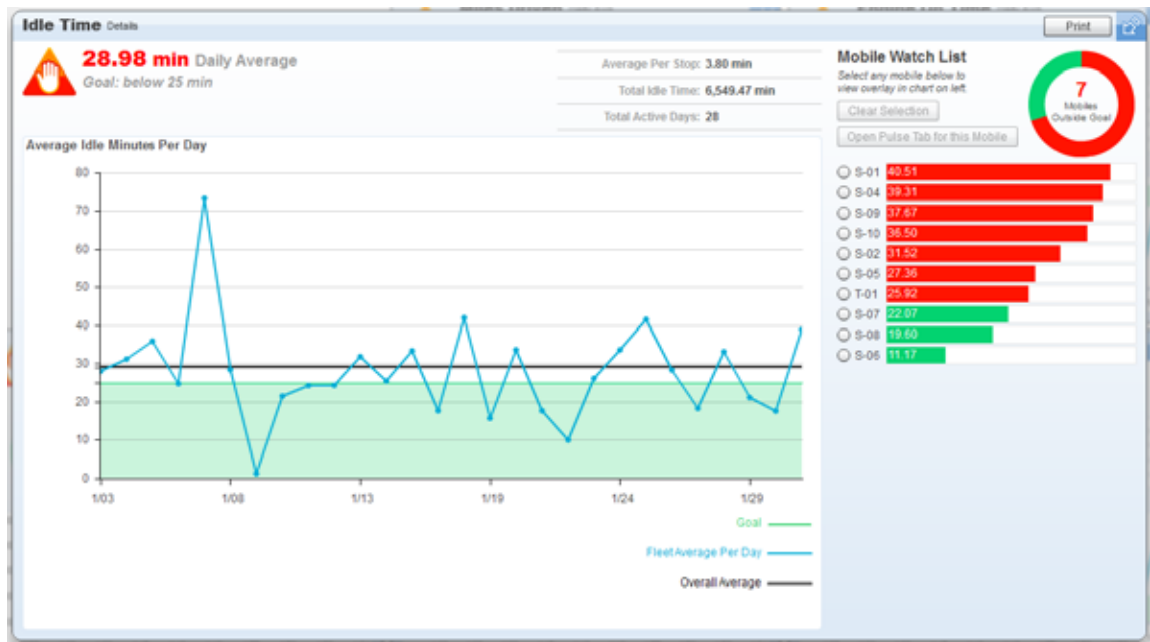


Figure 10 Fleet Detail View

For a selected fleet, the **Pulse Detail View** includes the following:

- The value representing the fleet's overall daily average for the selected time frame compared to the goal, accompanied by either an **Okay** or **Warning** symbol.
- Statistics representing the average number of measurement units per stop, total measurement units and the total number of days with mobile activity for the selected time frame.

NOTE: Since the Speed Alert metric is based on alert notifications, the Average per Stop statistic is not applicable.

- The **Average per Day** history chart depicting the Fleet Average value for each day during the selected time frame. The chart displays a solid straight line indicating the overall average for the Fleet per day across the time frame. Values in the green-shaded area fall within the stated goal. Roll your mouse over the chart to see callouts with the value for the Fleet Average for a given day compared to the goal.

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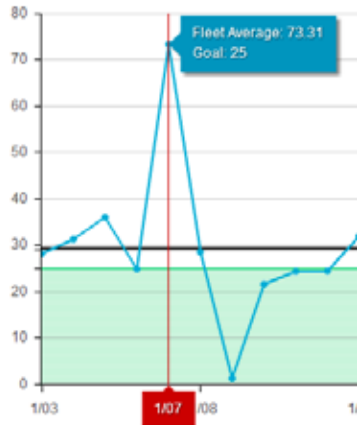


Figure 11 Fleet Detail View History Chart Callouts

- An interactive donut chart with the total number of :
 - Mobiles that performed within the desired goal
 - Mobiles that were outside the desired goal
 - If applicable, mobiles excluded due to inactivity within the selected time frame

Roll your mouse pointer over the chart to see the count for each group,

- An expanded **Mobile Watch List** of up to 20 mobile units, sorted to highlight the units with performance that fell the furthest from the goal. To compare a mobile's performance to the fleet's performance, click the button beside the mobile name in the **Mobile Watch List**. The **Average per Day** history chart will be updated with an additional line representing the mobile's performance.
- Click on [Open Pulse Tab for this Mobile](#) and a new tab will open for the mobile selected in the **Mobile Watch List**.



Figure 12 Fleet Detail View with History Chart Callouts and Mobile Overlay

If you selected a mobile in the **Pulse** tab options, the **Detail View** includes the following elements:

- A section labeled **Mobile Measurements** containing:
 - The value representing the mobile's overall daily average for the selected time frame compared to the goal, accompanied by either an **Okay** or **Warning** symbol.
 - Statistics representing the maximum and minimum values and the days they occurred, as well as the total activity days, measurement total, average value per stop (where applicable) and average value per day. The mobile's **Rank in Fleet** value is also displayed in this area.
- The **Average per Day** history chart which displays the mobile's average value for each day during the selected time frame. Values in the green-shaded area fall within the stated goal. Roll your mouse over the chart to see callouts with the value for the mobile for a given day compared to the goal.



Figure 13 Mobile Detail View with History Chart Callouts

- A bar chart showing the largest average values for the selected mobile. Each bar represents an active day. The days with the highest values appear at the top.
- The **Detail View for Miles (or Kilometers) Driven** includes an additional bar chart – **Most Miles (or Kilometers) Driven By State**. The chart depicts the top five states where the vehicle drove the most during the selected time frame.

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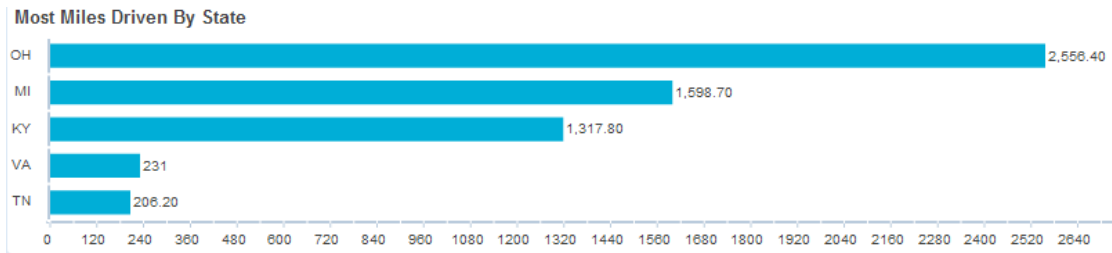


Figure 14 Mobile Detail View Miles Driven By State Chart

To return to the **Summary View** from the **Detail View**, click anywhere on the title bar of the **Detail View** window.

Printing the Pulse Charts

Click the **Print** button to send the current view to your printer. The header specifying the selected Fleet or Mobile and Time Frame will be included on the printed output.

NOTE: Pulse does not perform any special formatting for printed output. The current view will be sent to your printer as displayed.

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