FORWARD THINKING
Stay ahead of the other guys.

Field Warrior®
ELD User Guide

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Getting Started

Introduction

Welcome to the user guide for Field Warrior® ELD.

Field Warrior® is an all-in-one field service automation app with FMCSA-compliant electronic logs, real-time GPS tracking, dispatching, 2-way messaging, commercial navigation, and more.

This guide focuses exclusively on the ELD functionality within Field Warrior®. If you have questions about the additional Field Warrior® features, please visit www.ftsgps.com or contact our sales team by email at sales@ftsgps.com or by phone at 1-866-212-1864.
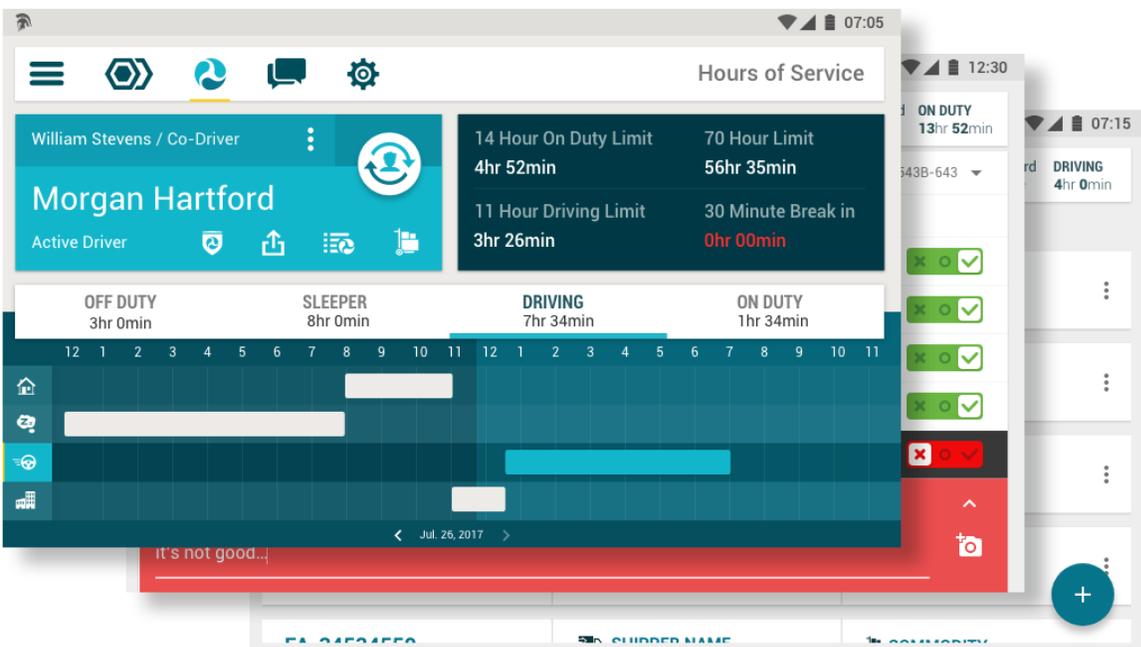
> ℹ️ Please note that some screenshots in this guide may look slightly different than what you see on your device. This is due to the differences in hardware and screen sizes of the many Android devices that Field Warrior® can be installed on.

System Requirements

The minimum system requirements for Field Warrior® are as follows:

- Android 4.2.2 or higher
- GPS hardware sensors
- 1 GHz processor
- At least 1GB of RAM (512MB will work but the app will have slow performance)
- At least 8GB of device storage

The recommended system requirements for optimal performance are as follows:

- Android 4.2.2 or higher
- Wi-Fi and/or Cellular Data (not required for ELD)
- GPS hardware sensors
- 1 GHz (or better) multi-core processor
- At least 1GB of RAM
- At least 8GB of device storage

Preparing to Drive

Logging in and Out

To login, simply open Field Warrior®, enter your *Username* and *Password,* and then tap *LOGIN*.

Your login credentials are configured and provided to you by your fleet manager. If you did not receive a *Username* and *Password*, or if you forgot either one, please contact your fleet manager for assistance.

First Login

The first time you login, Field Warrior® will ask you to enter a *Company Key*. This key is provided to you (or your fleet manager) by Forward Thinking and is required to connect Field Warrior® to your company's license of the app. When your *Company Key* is entered, you may proceed to login by entering your *Username* and *Password*. Once the company key is set, you won't need to enter it again.
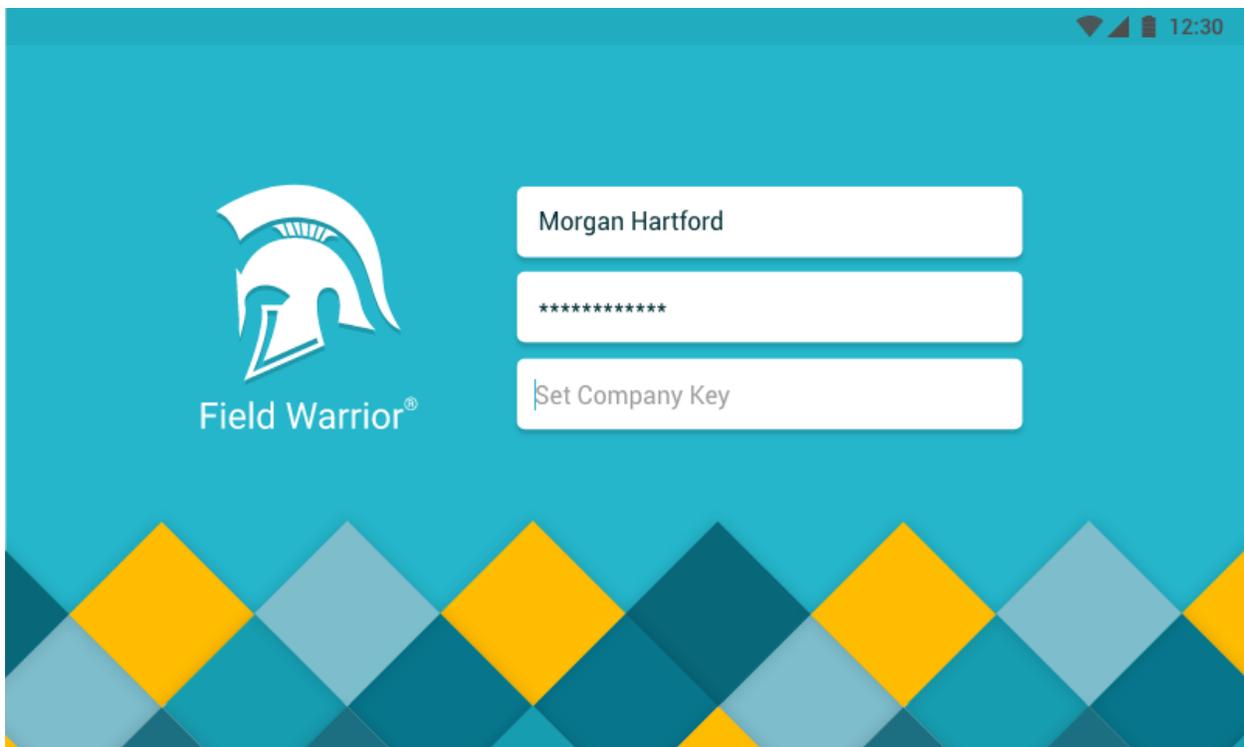
Field Warrior® login screen: Enter your company key if logging in for the first time.

Once you're logged in, Field Warrior® enters a "running service" state and will continue to run in the background – even while you use other apps. Field Warrior® will continue to run until you manually log out of the app.

Logout

When you're ready to **logout**, tap on the menu drawer icon ≡ and choose *Logout*. You may be prompted to switch to *Off-Duty* status, or to certify your logs before logging out of the app.

Adding a Co-Driver

A second member of a co-driver team can login by opening the menu drawer ≡ and selecting *Co-Driver Login*.

Once logged-in, a co-driver cannot be set as the active driver or enter *Driving* status if the vehicle is in motion. However, a co-driver who logged in before the vehicle began moving can view, edit, certify, and export his or her logs even while the vehicle is moving.

Switching to a Co-Driver

To set the co-driver as the active driver, tap the *Switch Driver* button ⟳ or open the driver's options menu ⋮ and select *Set as Active Driver*.

Performing a Driver Vehicle Inspection Report (DVIR)

A Driver Vehicle Inspection Report (DVIR) must be completed for your vehicle (and trailer) at the beginning and end of each day's work. Field Warrior® allows you to submit DVIRs electronically for both CMVs and trailers. Field Warrior® also stores your most recent DVIR for each vehicle and trailer in case they are needed for an inspection.

You can access your DVIR by choosing *New DVIR* from the Menu drawer ☰. Then, you will be prompted to choose between *Pre-Trip* and *Post-Trip* for a vehicle or trailer.

The DVIR includes a checklist for each item you must inspect. Each item can be marked as problematic or satisfactory. If the item is problematic, you can add a comment and attach a photo of the problem. To attach a photo, press the camera icon 📷 and snap a photo, or select an existing one from your gallery.
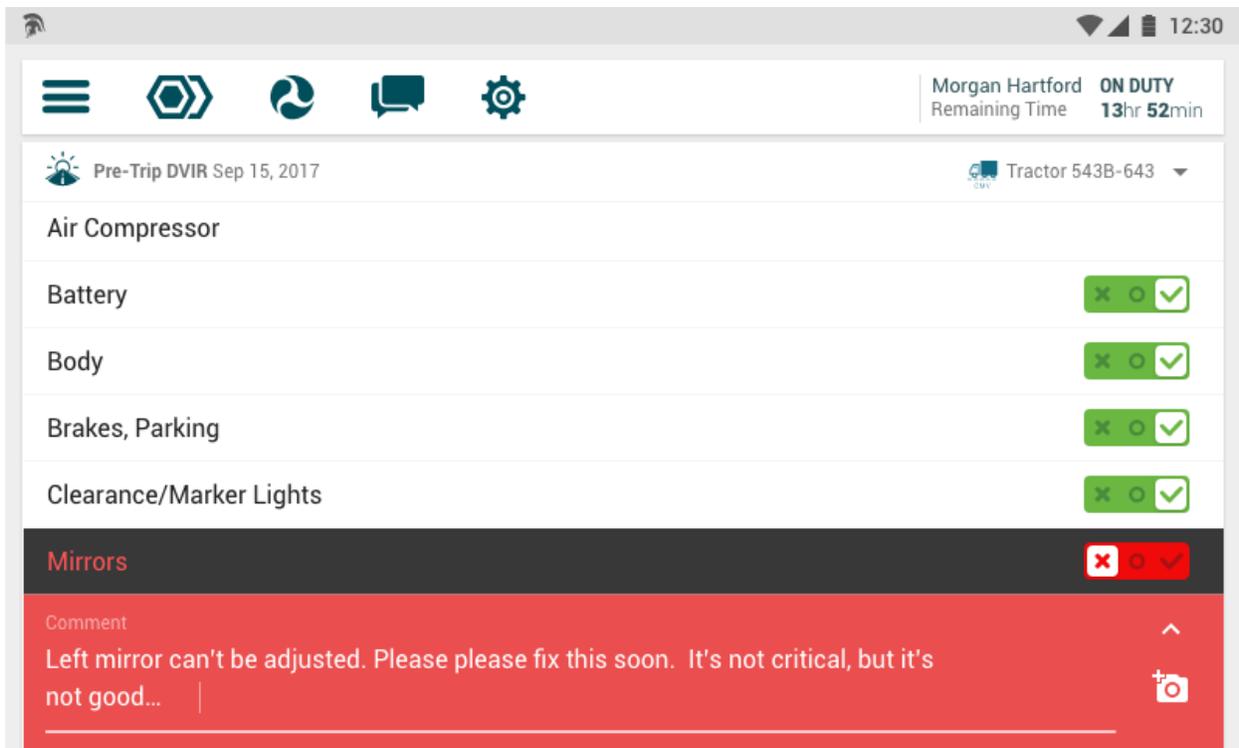
Example of a reported issue and comments.

Once you have inspected all the items and marked them properly, press *Submit Report*.

Field Warrior® keeps a copy of previously submitted DVIR forms. It will keep the last submitted DVIR of each type. If you submit a new DVIR, the previously saved form will be replaced with the new one. The old form will still be available on IntelliHub® (the FTS web portal for managers) . To view previously submitted forms, choose *View last DVIR* from the Menu drawer ☰.

Hitching or Unhitching a Trailer

To **add** a trailer, select *Add/Remove Trailer* from the menu drawer ☰. If the trailer has been added before, or if it is tracked by FTS GPS, it will appear on the list of trailers. If there is no record of this trailer, enter its name or ID and tap *Add*.

To **remove** the current trailer, simply select it and tap *Remove*.

Shipment Documents

Add Shipment Document

A driver can view and add shipment information by tapping the *Shipments* button on the Hours of Service screen.

Tap the *plus* button on the bottom-right to add a new shipment.

A shipment record must include a shipping document number and a date-range during which the shipment will apply. This shipment will be automatically assigned to duty status logs that are created during that time.

To edit an existing shipment, tap the 3-dot icon ⋮ on the desired record and select *Edit Shipment* from the options menu.

Enabling Exemptions

Personal Conveyance

To set your status as *Personal Conveyance*, go to the Hours of Service screen, select the *Off Duty* status, and choose *Personal Use* from the pop-up options pane.

Yard Moves

To set your status as *Yard Moves*, go to the Hours of Service screen, select the *On Duty* status, and choose *Yard Moves* from the pop-up options pane.

100 Air-Mile Exemption

To use the 100 Air-Mile exemption, open the menu drawer ☰ and select *Change Ruleset*. Then toggle the option to enable the exemption.

On the Road

Set Your Duty Status

Hours of Service Screen

The Hours of Service screen is the central screen of the ELD. From here, you can set your duty status, see elapsed and remaining time, and manage your logs.
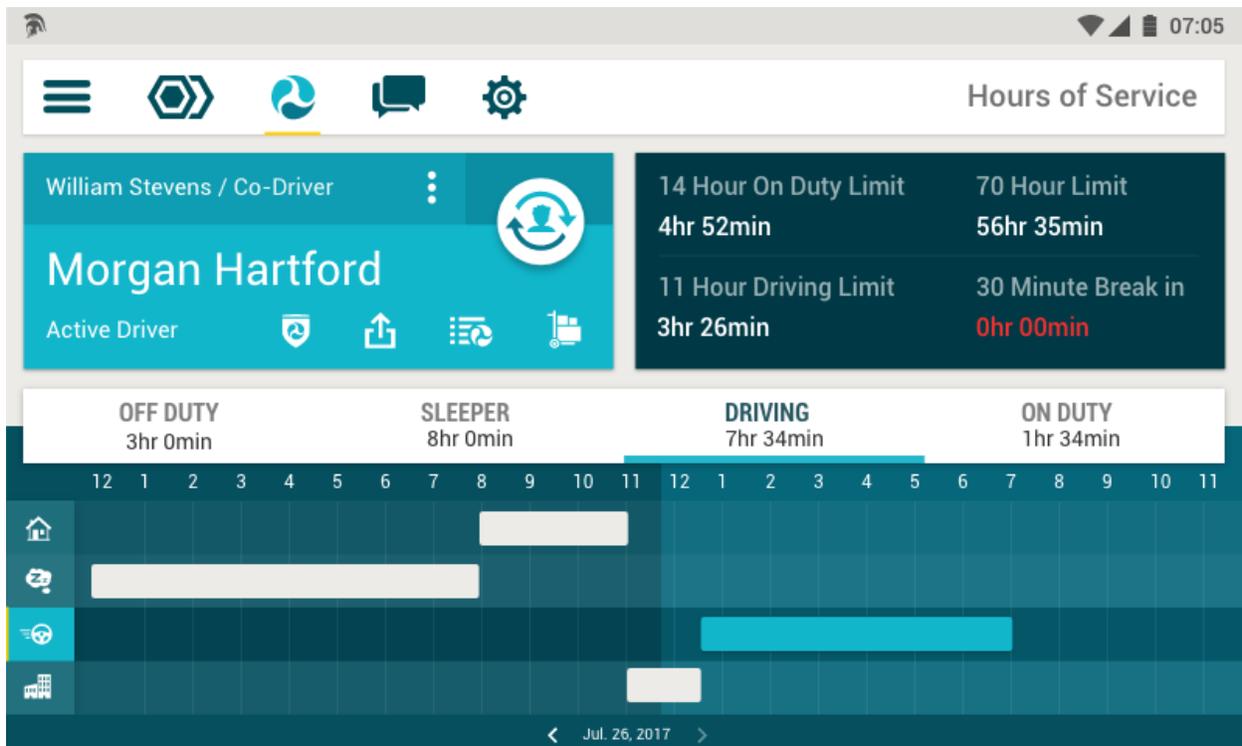
Select Duty Status

Tap one of the duty status buttons above the graph to set it as your current status. If the vehicle starts moving before you set the status to *Driving*, Field Warrior® will automatically set your status to *Driving*.

Once the vehicle has stopped moving for 5 minutes, Field Warrior® will automatically switch from *Driving* to *On Duty*, but first it will display a message allowing the driver to stay in the *Driving* status.

Active Driver & Co-Driver

Field Warrior® displays the active driver as well as the co-driver. The co-driver can view, edit, and verify his or her logs by tapping the 3-dot menu ⋮ and selecting *Manage my logs*.

> ℹ️ To login as co-driver, open the menu drawer ≡ and select *Co-Driver Login*.

Action Buttons

The driver card contains action buttons that allow the current driver to manage his or her logs:

- Switch Drivers – Set the co-driver as the active driver.
- Manage Shipments – Add or Edit Shipping Records
- Manage Logs – View, Edit, and Verify logs for the past 7/8 days.
- Export Logs – Send a copy of your logs via Email.
- Inspection Mode – Report for the inspector showing of all events for the past 7/8 days.

Countdown Timers

Countdown timers show you how much time is left in *Driving* and *On-Duty*. The timers will turn red when you get close to their limits.

Hours of Service Graph

The Hours of Service graph displays your logs visually for the current 24-hour period. You can select a different day by tapping the arrows at the bottom of the graph.

> ℹ️ To see your official RODS report with all event logs and graphs for the past 7/8 days, select *Inspection Mode* from the menu drawer, or tap the DOT shield 🛡 on the main Hours of Service screen.

HOS Violation Warnings

A pop-up alert will notify drivers of any Hours of Service violations or any other malfunction with ELD compliance.

Roadside Inspections

Field Warrior® has an *Inspection Mode* that displays all Hours of Service events for the past 7/8 days in a single report. To view this screen, open the menu drawer ☰ and select *Inspection Mode*, or tap the *Inspection Mode* button ⬥ on the Hours of Service screen.

The *Inspection Mode* screen displays a complete report for each 24-hour period. If there is unclaimed driving time (movement for which no driver has taken responsibility), an additional report will be displayed as *Unidentified Driver*.

Each report contains:

- Overview data − Name, license, carrier info, shipping document, and other general info
- Hours of Service Graph − A visual depiction of driver logs for the selected 24-hour period.
- Events Log − A complete list of all log events, including duty status changes, logins/logouts, ELD malfunctions, and more. Each event is accompanied by time, location, and engine data.

Inspection Mode: Overview data section displays general information for the entire day.
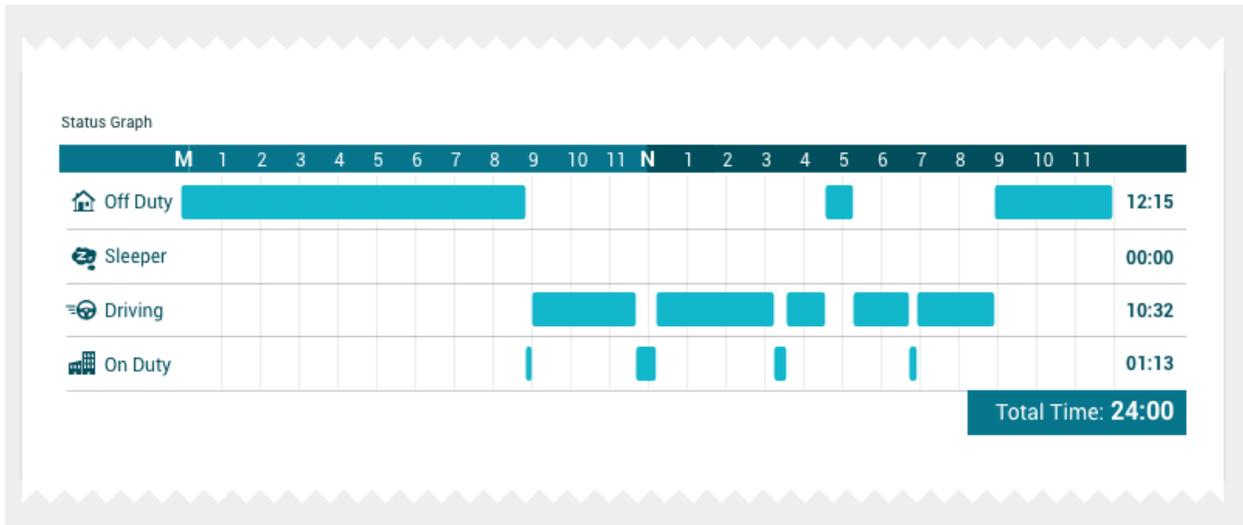
Inspection Mode: Hours of Service visual graph.

Event Logs

Event	Time	Location	Odometer	Engine Hours	Origin
Off Duty	12:00 AM	East Brunswick, NJ	110,301	1811.1	Driver
Login	08:36 AM	East Brunswick, NJ	110,301	1811.1	Auto
On Duty	08:36 AM	East Brunswick, NJ	110,301	1811.1	Driver
Vehicle Ignition	08:56 AM	East Brunswick, NJ	110,301	1811.1	Auto
Driving	08:56 AM	East Brunswick, NJ	110,301	1811.1	Auto
Intermediate Log	09:56 AM	Maplewood, NJ	110,329.7	1811.7	Auto
Intermediate Log	10:56 AM	Rye Brook, NY	110,379.6	1812.0	Auto
On Duty	11:40 AM	New Haven, CT	110,437.8	1813.1	Auto
Driving	12:09 PM	New Haven, CT	110,437.8	1813.1	Auto
Intermediate Log	01:09 PM	Danbury, CT	110,470.8	1814.1	Auto
Intermediate Log	02:09 PM	Pawling, NY	110,523.2	1815.1	Auto
Intermediate Log	03:09 PM	Hillsdale, NY	110,566	1816.1	Auto
On Duty	03:14 PM	Tivoli, NY	110,716	1819.2	Driver
Driving	03:26 PM	Tivoli, NY	110,716	1819.2	Auto
Intermediate Log	04:26 PM	Peru, MA	110,754.8	1820.2	Auto
Off Duty	04:36 PM	Worthington, MA	110,762.2	1820.3	Driver
Driving	05:12 PM	Worthington, MA	110,762.2	1820.3	Auto
Intermediate Log	06:12 PM	Bernardston, MA	110,807.2	1821.3	Auto
On Duty	06:42 PM	Keene, NH	110,834.1	1821.8	Auto
Driving	06:54 PM	Keene, NH	110,834.1	1821.8	Auto
Intermediate Log	07:54 PM	Weare, NH	110,885.7	1822.8	Auto

Inspection Mode: Events log containing all duty status changes, malfunctions, Login/logout, etc.

Managing Logs

Viewing Logs

Drivers can view, edit, certify and annotate their logs by opening the menu drawer ≡ and selecting *Manage my Logs*, or by tapping the *Manage my Logs* button ▤⟳ on the Hours of Service screen. This will display all logs for the past 7/8 days.
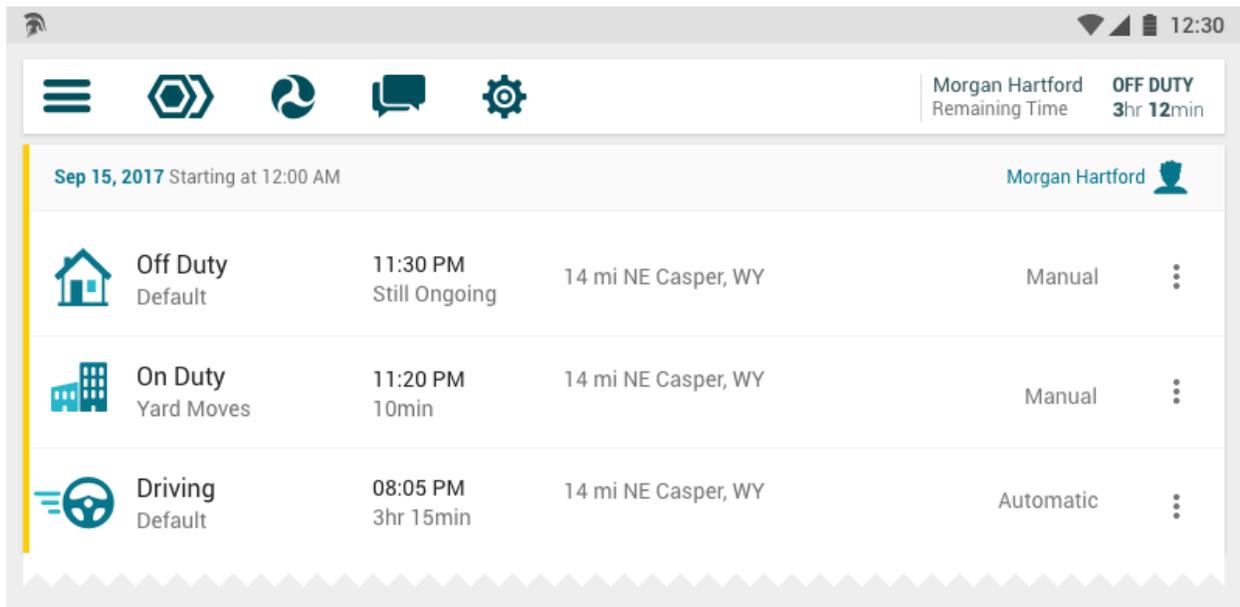
Editing Logs

To edit a log, tap the 3-dot menu icon ⋮ on the right edge of the log, and select *Edit Log…*. Here you can correct the start time, add missing information, or assign the log to a co-driver if the log was assigned to you by mistake. The co-driver must confirm the change before ownership is transferred.

> ⓘ Please note that due to FMCSA regulations, you cannot edit the start time of an automatically-generated duty status log (auto-switch between *On-Duty* and *Driving*). However, you can add missing information and annotations.

Annotating Logs

Drivers can annotate a duty status log whenever they switch from one duty status to another. When the new status is selected, a dialogue box appears with an option for adding an annotation.

You can also add annotations after the fact in the *Manage my Logs* screen. To do so, tap the 3-dot menu icon ⋮ on the right edge of the log, and select *Add Annotation*.

Certifying Your Logs

Drivers must certify their logs each 24-hour period. To certify your logs, open the menu drawer ≡ and select *Manage my Logs*.

Your logs are sorted by day, and each day has a certification status indicator on its footer. To certify all logs for a specific day, press the *Certify* button on the footer of that day, and choose *Agree* when prompted to confirm your choice. This will certify all logs within that day. Note that you cannot certify logs individually, only by groups of 24-hours.
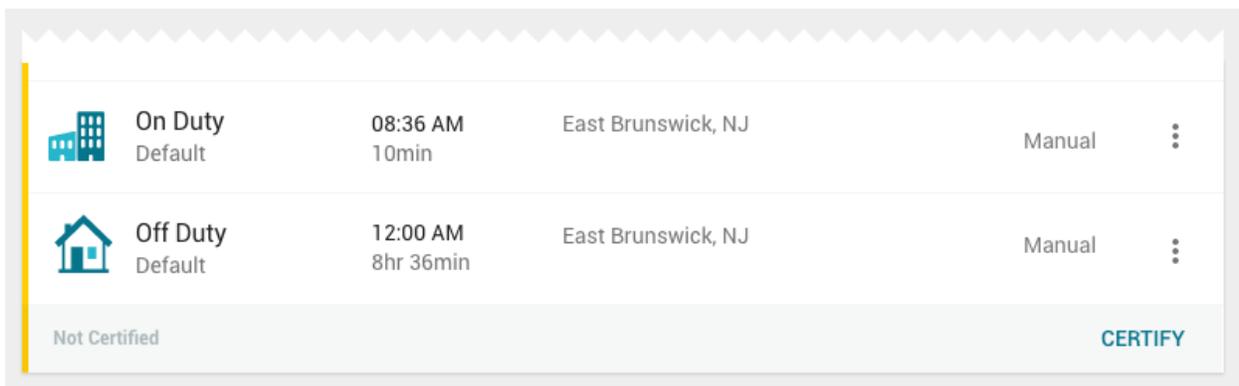
Upon logout, if you didn't certify your logs yet, you will be prompted to do so. If you choose not to certify them at this time, you will be logged out of Field Warrior® and your logs will remain uncertified. You may certify them later.

Editing a Certified Log

You may edit a log that has already been verified, but the log will need to be re-verified after the edits.

Claiming Unaccounted Driving

If vehicle movement is detected while no driver is logged-in to Field Warrior®, or a malfunction prevents the driver from being identified, the unidentified movement will be captured and presented to the driver upon login. The driver must then claim or reject a duty status log of *Driving* for the driving time in question.

This unidentified movement will remain visible in the *Manage my Logs* screen and the *Inspection Mode* screen (labelled as unidentified driver) until it is claimed or rejected.

Intermediate Log	08:54 PM	Lebanon, NY	110,932.6	1823.8	Auto
On Duty	08:57 PM	Lebanon, NY	110,938.6	1823.9	Auto
Certify Logs	08:57 PM	Lebanon, NH	110,932.6	1823.9	Driver
Off Duty	08:57 PM	Lebanon, NH	110,932.6	1823.9	Driver
Logout	08:57 PM	Lebanon, NH	110,932.6	1823.9	Driver

Sep 6, 2017 12:00 AM - Sep 7, 2017 12:00 AM	Morgan Hartford ⌄
Sep 5, 2017 12:00 AM - Sep 6, 2017 12:00 AM	Morgan Hartford ⌄
Sep 5, 2017 12:00 AM - Sep 6, 2017 12:00 AM	Unidentified Driver ⌄

Inspection Mode: The last row shows unidentified vehicle movement. It will be removed once claimed or rejected.

Accept/Reject Manager's Log Edits

A properly credentialed manager can edit your logs using IntelliHub® (web portal for managers), but those edits will **not** affect your logs unless you choose to accept them. If you disagree with the manager's suggested changes, you may reject them. If you accept the changes, your logs will be altered, but a copy of the original log will be kept for reference.

To accept or reject the manager's changes, select *Manage my Logs* 📋 from the menu drawer, and tap the log in question. Logs containing suggested edits are marked by the label *Suggested Edits* next to the 3-dot menu icon. Tapping this log will expand it and show all of the original data alongside the suggested changes. You can select to accept changes individually, then press *Accept Selected Edits.*

	Driving	08:36 AM		Suggested Edits	⋮
	Default	9min	14 mi NE Casper, WY		

Original Log		Suggested Changes		
Status	Driving	Status	Driving	
Substatus	None	Substatus	Yard Moves	☑
Start Time	08:36 AM Sep 14, 2017	Start Time	08:36 AM Sep 14, 2017	
Location	14 mi NE Casper, WY	Location	14 mi NE Casper, WY	
Annotation	None	Annotation	Relocating dock 2	☐
Vehicle	Tractor 543B-643	Vehicle	Tractor 543B-643	
Shipping Doc.	123-1445-D4	Shipping Doc.	123-1445-D4	
Odometer	110,301	Odometer	110,301	
Engine Hours	1811.1	Engine Hours	1811.1	
Event Type	1	Event Type	1	
Event ID	1234567	Event ID	1234567	
Origin	Automatic	Origin	Automatic	

Edits by Peter Smith (smithP)   REJECT ALL   ACCEPT SELECTED EDITS

ELD Malfunctions

Field Warrior® monitors its own compliance with ELD regulations. If a malfunction is detected, the app will notify the user by displaying an alert. The malfunction will also be logged in the ELD Malfunction Log that will be visible upon inspection.

To see any malfunctions, open the menu drawer ≡ and select *Alerts & Notifications*. Malfunctions are also visible in *Inspection Mode*, which displays all event logs including malfunction events.

Here are a few examples of potential malfunctions that Field Warrior® monitors to make sure you stay in compliance:

Power Malfunction

If Field Warrior® loses power or is disconnected from the vehicle, a warning message is displayed noting that the ELD is no longer being powered by the vehicle, and a malfunction event is logged.

Engine Synchronization Malfunction

If Field Warrior® detects a problem retrieving information from the vehicle's ECU or detects a loss in ECU connectivity, a warning message is displayed and the event is logged.

Timing Malfunction

Field Warrior® periodically checks an external source for the current time to keep accurate logs. If the ELD is unable to get the current time from an outside source, a timing compliance malfunction is logged.

Positioning Malfunction

If Field Warrior® detects a problem acquiring a valid position measurement, a position malfunction is logged. The driver will also be prompted to make a manual location entry at the time of a duty status change if the ELD has not been able to acquire an accurate position measurement. The ELD will also log a position malfunction if the cumulative time between valid position measurements (within 5 miles) exceeds 60 minutes over a 24-hour period.

Data Recording Malfunction

Field Warrior® stores data locally and also sends driver data to be stored remotely. A data recording malfunction event is logged and a warning is displayed if a data malfunction is detected, a local database error occurs, or the device is unable to download the remotely stored logs.

Data Transfer Malfunction

If Field Warrior® detects an issue with the data transfer mechanism or is unable to verify functionality within seven days, it will attempt to verify functionality every 24 hours for 72 hours. If it is unable to successfully verify data transfer through web services and email, a data transfer malfunction is logged.

Other Malfunctions

If Field Warrior® detects some other malfunction such as a hardware/software error, malfunction, or crash, it will log the event as *Other Malfunction*.

Fleet of the Future

Make your fleet more profitable with innovative technology that tracks vehicle activity, driver performance, fuel, maintenance, and much more.

Forward Thinking is a group of people who build tools to help reclaim wasted time, so you can be more productive and stay ahead of the other guys.

IntelliHub® Field Warrior® Monarch® Route Matrix™ Road Angel™ FleetCam™

GPS Tracking
Real-time vehicle and asset tracking.

Digital DVIR
Paperless DVIR for a seamless workflow.

Electronic LogBook
Compliant driver logs on Android and Garmin.

Advanced Data & IoT
Track and monitor anything, anywhere.

Dispatching
A digital bond between dispatcher and driver.

Maintenance
Automated maintenance logs and reminders.

Vehicle Cameras
See what the driver sees.

Alerts & Notifications
Real-time fleet activity notifications.

Route Optimization
Build efficient, cost-effective routes.

Fuel Card Integration
One system for all your fuel data.

Roadside Assistance
24/7 peace of mind for drivers and managers.

Fleet Reports
Data to improve your fleet's performance.

Commercial Navigation
Navigation for vehicles with road restrictions.

IFTA Reporting
Consolidate data for quicker IFTA reports.

Digital Forms
Custom forms without the messy paperwork.

Driver Behavior
Incentivize drivers to maximize safety.