RoadLog™ Owner's Manual

Version 1.3

Includes Instructions on:

• Fleet Management Software

• RoadLog Installation

• RoadLog Operation

RoadLog™

VDO

Table of Contents

Continental Automotive Systems US, Inc.

CERTIFICATE OF COMPLIANCE

DEPARTMENT OF TRANSPORTATION REGULATIONS

The VDO RoadLog electronic logging system has been sufficiently tested, under the conditions in which it will be used, to meet or exceed the requirements of section 49 CFR 395.15 of the United States Federal Motor Carrier Safety Regulations in effect at the time of its manufacture. This VDO RoadLog electronic logging system can be used to record, transfer and archive all hours of service data as required by the United States Department of Transportation Federal Motor Carrier Safety Administration as of the date of its manufacture.

Authorized by

Ekkehard Kraemer
Head of Finance and Quality
Tachographs, Telematics and Services
Commercial Vehicles & Aftermarket

RoadLog

VDO

Introduction

VDO RoadLog is the simple, affordable, all-in-one solution for automated daily log book and compliance reporting. It provides cost-effective HOS monitoring that you can have up and running in minutes.

RoadLog was designed to keep Drivers in compliance with all FMSCA regulations by recording data for:

- Hours-of-Service (HOS)

- Driver Vehicle Inspection Reports (DVIR)

- International Fuel Tax Agreement (IFTA)
  (This feature will be implemented in an upcoming release)

- International Registration Plan (IRP)
  (This feature will be implemented in an upcoming release)

RoadLog Fleet Software is designed to enable Fleet Managers and Owner / Operators to collect and archive driver data to maintain compliance with FMSCA regulations and to help manage trucking operations more efficiently.

RoadLog is used in conjunction with:

RoadLog Fleet Management Software

The Fleet Management Software allows the Fleet Manager or Owner / Operator to collect and archive Driver data, make notes in the Driver data and prepare reports on Driver history.

RoadLog Fleet Key

The RoadLog Fleet Key USB flash drive is used to log in to the RoadLog Fleet Software. The Fleet Key can also be used to download and upload data to and from RoadLog. Each company must have at least one Fleet Key and the RoadLog Fleet Management Software.

Fleet Key

RoadLog Driver Key

The RoadLog Driver Key USB flash drive is used by the Driver to log in and out of RoadLog and to transfer data.

Driver Key

Getting Started

To set up your VDO RoadLog, you'll follow these steps:

1. Install the RoadLog Fleet Software.

2. Activate the RoadLog Fleet Key.

3. Set up your Company and Drivers in the RoadLog Fleet Software.

4. Install RoadLog in your Vehicle.

5. Download and upload Driver data.

Chapter 1:
VDO RoadLog™ Fleet Management Software
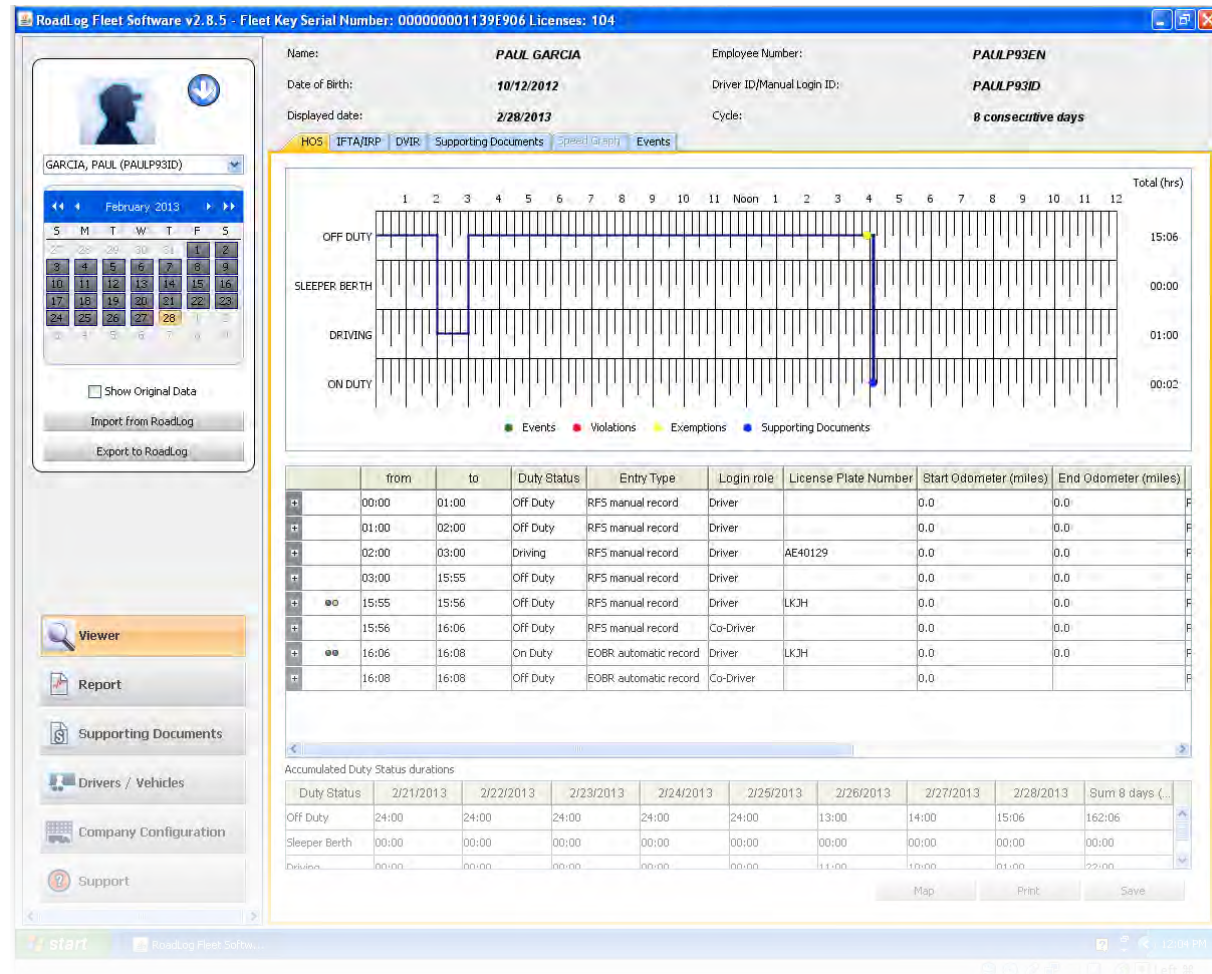
1. Managing your Fleet with the VDO RoadLog™ System

VDO RoadLog was designed to allow Drivers, Fleets and Owner Operators to record and report Hours of Service (HOS), Driver Vehicle Inspection Reports (DVIR), Fuel Tax Reporting and other data quickly and easily, and without monthly fees.

VDO RoadLog Fleet Management Software lets you collect and manage that data to ensure that your fleet complies with regulations. By having accurate data on hand, Fleet Managers and Owner Operators can see if they are operating within regulations, and where changes need to be made to improve efficiency and increase profits.

RoadLog eliminates the chance of manual logbook entry errors that can result in big fines. RoadLog printouts provide all the information that a manual log provides and more, but RoadLog is faster, easier and more accurate, for both the Driver and the Compliance Officer.

The VDO RoadLog Fleet Management Software generates accurate, up-to-date reports far quicker than paper-based methods, saving time and money. RoadLog Fleet Management Software can manage an unlimited number of Drivers and trucks. And, since the RoadLog Fleet Management Software is a one-time purchase, it represents an excellent value compared to subscription-based solutions.

RoadLog records a range of data that helps make trucking operations safer and more efficient:

- Hours-of-Service (HOS) according to US rules
- Driver Vehicle Inspection Reports (DVIR) according to US rules
- International Fuel Tax Agreement (IFTA)
- International Registration Plan (IRP)

RoadLog's software is flexible and up-dateable to meet anticipated DOT compliance requirements. Free upcoming software updates will include:

- Hours-of-Service (HOS) according to Canadian rules
- Vehicle Inspection and Repair Maintenance (DVIR) according to Canadian rules
- Compliance with Alaska and oilfield rules

Entry errors in traditional paper logbooks interfere with your asset tracking and operations planning. They can also lead to big fines! The RoadLog system is faster, easier and more accurate, for both the Driver and the fleet manager or compliance officer.

Permission to access data from RoadLog and the Fleet Management Software is possible only with the Driver Key or Fleet Key USBs, so that data is fully protected and tamper resistant, to ensure data integrity and data privacy.

VDO RoadLog Fleet Management Software is used in conjunction with:

- VDO RoadLog – the in-vehicle device that records vehicle and Driver activities.
- VDO RoadLog Driver Key – a proprietary USB drive that allows Drivers to log in to RoadLog and that is used to transfer data between RoadLog and the PC that is running the Fleet Management Software. The Driver Key can also transfer Driver data between vehicles, if the Driver uses different vehicles through out the workday/workweek. The Driver Key can also enable use of a limited feature set of the Fleet Management Software.
- VDO RoadLog Fleet Key – a proprietary USB drive that is required to log in to the Fleet Management Software, assuring the integrity and authenticity of your RoadLog data files.
- The Fleet Key and Driver Keys are also used to transfer data between the PC that is running the Fleet Management Software and the RoadLog device.

Driver Key

Fleet Key

2.   Getting Started

System Requirements

VDO RoadLog Fleet Management Software requires:

- A PC with Windows® 8, Windows® 7, Windows Vista with Service Pack 2, or Windows XP with Service Pack 3.

- Adobe® PDF Reader (or any software that allows reading of PDFs).

- An Internet connection.

- Two open USB ports.

- A CD drive.

- 400 MB of free hard drive space.

PC OPERATING SYSTEM REQUIREMENTS - 32 BIT Versions
Windows XP (SP3)
Windows Vista SP2 Enterprise
Windows Vista SP2 Ultimate
Windows Vista SP2 Home Basic
Windows Vista SP2 Home Premium
Windows Vista SP2 Business
Windows 7 Ultimate
Windows 7 Home Premium
Windows 7 Home Basic
Windows 7 Enterprise
Windows 7 Professional
Windows 8 Consumer
Windows 8 Professional
Windows 8 Enterprise

PC OPERATING SYSTEM REQUIREMENTS - 64 BIT Versions
Windows XP (SP3)
Windows 7 Ultimate
Windows 7 x64 Home Premium
Windows 7 x64 Home Basic
Windows 7 x64 Enterprise
Windows 7 x64 Professional
Windows 8 Consumer
Windows 8 Professional
Windows 8 Enterprise

NOTE: PostgreSQL 9.0 Database supported for all Operating Systems.
The installer will check to see if the PostgreSQL database is installed on the machine. If it is not installed, setup will automatically install it.

Activating the RoadLog Fleet Management Software

In order to use the RoadLog Fleet Management Software, you will need to install the Software and activate the VDO RoadLog Fleet Key. Whenever you use the Fleet Management Software, an activated VDO Fleet Key or VDO Driver Key must be inserted in the PC.

If the Fleet Key is not already activated, it can be activated by filling the data in the Company window that appears after installation of the RoadLog Fleet Software application.

The application connects to the VDO Internet portal. The company will be registered, and the PC will receive a download of the CID file for the activation of the Fleet key.

> **Note:** The activation described here requires an Internet connection. If you do not have an Internet connection, see Activating Your Fleet Key through the RoadLog Portal for how to activate the Fleet Key using Internet access from another PC.

Software Installation

1. Insert the Fleet Key into a USB port on your PC.

2. Insert the Fleet Management Software CD into the PC. When the CD appears, double click the setup.exe file. The Fleet Management Software installation will start.

3. Follow the InstallShield Wizard prompts, and make all the required user choices.

   While running the InstallShield Wizard, there is an option to choose a Client/Server installation.

   > If you select "Complete installation," all parts of the application (database, client application, etc.) will be installed on one computer. This option is selected by default.

   > If you select "Client installation," only the client portions (application, JRE, etc.) will be installed.

   > If the user selects "Server installation," only the server parts will be installed.

   > If "Client installation" is selected, you will be prompted for a database server name / address. You will also have to enter the US DOT Number for the company.

   > If there is a PostgreSQL database already installed, you will have to enter the admin password.
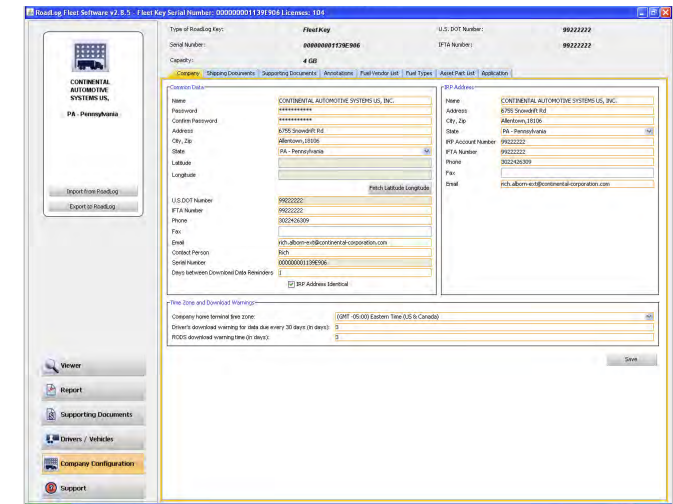
Note: The installer will check to see if PostgreSQL database is installed on the machine. If it is not installed, the setup will automatically install it. You may see a message(s) indicating that there are software updates available. Click Yes to allow installation of the updates.

When you see the Fleet Key Activation screen, enter your company information in the fields shown. Be careful to enter the information accurately – once saved, the US DOT number cannot be changed. We recommend using an email address that all users will have access to, for example: manager@your_company.com.

You'll need to know your company data, including your US DOT Number. The serial number of the Fleet Key will be read from the Key and entered into the field automatically.

When the information entry is completed, click Save. The software will automatically activate your Fleet Key (this may take several minutes - again, Internet access is required). When the activation is complete, your Fleet Key will be activated. The Fleet Manager Software will start up automatically, and a "RoadLog Fleet Management Software" shortcut icon will appear on your desktop.

To start the RoadLog Fleet Management Software, double click on this shortcut icon.

Activating your Key will create a Company account for you on the RoadLog User Portal (www.vdoroadlog.com/user). You will be able to use this account to purchase additional RoadLog Fleet Keys and Vehicle licenses when you need them.

4. At first start up, no Driver data will be present. You'll need to complete your Company and Driver profiles, create Trailers and Tractors and export the data to the Fleet Key and Driver Key(s). Then, you'll be ready to log your Company in on your RoadLog(s) with the Fleet Key and then have your Driver(s) begin using the system. When the Driver(s) return from driving with data from RoadLog, you will be able to download the data from the Driver Key(s), view Driver activities and manage Driver records.

Note: You will be notified by e-mail when software updates are available. If you do not have Internet access from the PC where you'll use the Fleet Management Software, you must make arrangements to get the software updates. Software updates may be necessary to maintain compliance with changes to the FMCSA regulations. Updates will be available on the VDO RoadLog web portal: www.vdoroadlog.com/user
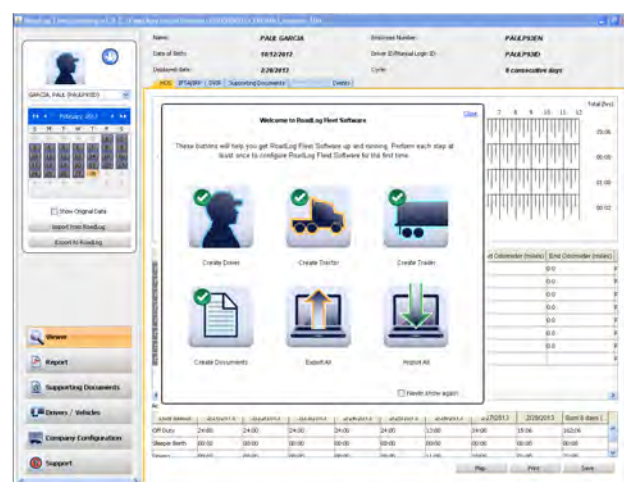
When the Fleet Management Software starts up and the Fleet Key is authenticated, you'll see the Quick Start Screen. The Quick Start Screen provides shortcuts to create Drivers, Tractors, Trailers and Supporting Documents, as well as import and export data.

Instructions on how to perform each of these steps are featured below.

Create Driver

Create Tractor

Create Trailer

Create Documents

Import to RoadLog

Export to RoadLog

> **Important note:** It is recommended to read the instructions prior to using this software. However, some users may choose to create these entries before reading this manual completely. If you are going to immediately create entries, please read "Backing Up Your RoadLog Data" and follow the guidance there to ensure that the results of your work are secure.

Activating your Fleet Key through the RoadLog Portal

If your computer is not able to connect to the Internet and the RoadLog Portal, the Fleet Management Software will not be able to download the .CID file needed to activate your Fleet Key.

If this is the case, you must use a computer that can connect to the RoadLog Portal and use the Portal to manually register your company and activate your Fleet Key. You will also need an email account that you can access from the Internet-connected computer.

To perform a manual registration and .CID file download:

- Insert the Fleet Key into a USB port on the Internet-connected PC.

- Using the PC's Internet browser, go to the RoadLog User Portal at www.vdoroadlog.com/user and click on "Register."

- Enter your company information in the fields shown. You'll need to know your company data, including your US Department of Transportation (DOT) number and the serial number of the Fleet Key. This serial number is available on the package of the Fleet Key and in the file KEY_DATA.txt on the root directory of the Fleet Key.

  Once you enter your registration information, an email with a download link will be sent to the email address that you registered with. Click on the link to begin the download. Save the download as a file in your Documents folder. The downloaded file, with the extension .CID, is your Company ID registration file.

- Copy this file to your Fleet Key's "Company" folder. You can now use your Fleet Key to launch the Fleet Management Software as described above in Software Installation.

Note: The .CID file is unique to your Fleet Key. It will not work with other Fleet Keys or with generic USB flash drives. The activated Fleet Key must be plugged into a USB port on the computer for the Fleet Management Software to run.

Adding additional Fleet Keys

You may wish to have more than one Fleet Key for your company. Additional Fleet Keys can be purchased from VDO RoadLog retailers or by contacting RoadLog Customer Support:

Customer Support

Email: roadlog-support@vdo.com

Tel.: (855) ROADLOG, or (855) 762-3564

Fax: (800) 752-7224 or (610) 366-9837

Customer service is available 8:00 am – 5:00 pm EST

IMPORTANT: All additional Fleet Keys purchased for your company must be activated using the same US DOT number and company address as the original Fleet Key, or the new Fleet Key cannot be used with your original company file.

3.   Navigating RoadLog Fleet Management Software: First Look

The RoadLog Fleet Management Software four main elements:

The Quick Start Screen:

This floating layer is seen at the first start up and it is designed to help you through your initial software configuration and to enable easy access to common tasks at start up. The Quick Start Screen includes buttons that allow you to quickly create Drivers, Tractors, Trailers, and Supporting Documents, as well as to import data from your RoadLog device and export data to RoadLog.

Note: If you don't want the Quick Start Screen to appear at start up, check the box "Don't show again" in the Screen.
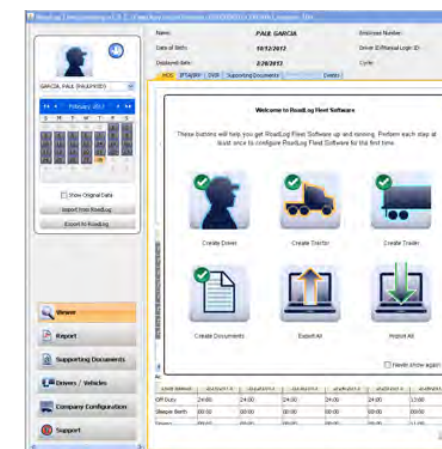
The Navigation Buttons:

Seen at the lower left, the Navigation Buttons select among the various screens designed for different activities. The Navigation Buttons include:

Viewer: For viewing tabs that show Driver logs and records associated with their activities.

Report: For viewing various reports reflecting the status of Drivers, Vehicles and IRP information.

Supporting Documents: For viewing Supporting Documents, which are records created by the Driver to document activities during trips such as meals, fueling and vehicle maintenance.

Drivers / Vehicles: For creating and viewing Driver profiles and assignments of tractors and shipments made to each Driver.

Company Configuration: For creating and viewing the company profile as well as creating Shipping Documents, Supporting Document Categories, frequently used Annotations, pre-established Fuel Vendors and Fuel Types, and Asset Part Names. In addition, the Company Configuration screen includes the Application tab for configuring the VDO Fleet Management Software user preferences.

The Action Palettes:

Seen at the upper left, the Action Palette provides access to the frequently used actions. The options shown in the Action Palette change, depending on which Navigation button is active.

Viewer Action Palette:

When the Viewer Navigation Button is active, the Action Palette shows the interactive calendar used to select dates you'll view and buttons to import or export data from or to a RoadLog Fleet Key or Driver Key. The 🔵 icon at the top of the Action Palette toggles to reveal the list of all Drivers that have been created for the company. You may also select the Driver or vehicle from the drop-down menu. The "Show Original Data" check box will cause the HOS tab screen to show original data automatically recorded by the RoadLog device rather than data that was manually edited by a RoadLog Fleet Management Software user.

Report Action Palette:

When the Report Navigation Button is active, the Action Palette is inactive and shows only the Company Icon. You may use the default Company Icon, or if you wish, you can change the Company icon to an image of your choosing, such as your logo, by clicking on it.

Supporting Documents Action Palette:

When the Supporting Documents Navigation Button is active, the Action Palette shows timeline selectors that define the time period from which you will see recorded Supporting Documents. The "Display only new entries" checkbox will cause the software to display only newly recorded entries.

Drivers / Vehicles Action Palette:

When the Drivers / Vehicles Navigation Button is active, the Action Palette shows buttons to create Drivers, vehicles and trailers as well as buttons to import or export data from or to a RoadLog Fleet Key or Driver Key.
The 📇 icon at the top of the Action Palette toggles to reveal the list of all Drivers that have been created for the company.

Company Configuration Action Palette:

When the Company Configuration Navigation Button is active, the Action palette shows buttons to import or export data from or to a RoadLog Fleet Key or Driver Key.

Support Action Palette:

When the Support Navigation Button is active, the Action Palette is inactive, and shows only the Company icon.

The Work Area:

The Work Area displays the tabbed screens and fields you'll work in. The screens seen here change according to which of the Navigation Buttons is active and which tab you've clicked on.

> **Note:** As with the Company icon mentioned above, you can change the icons for Driver, Trailer or Vehicle, to images of your choosing. Create your icon at 75 x 75 pixels. Click on the icon you wish to replace and choose your icon from the dialog box that appears.
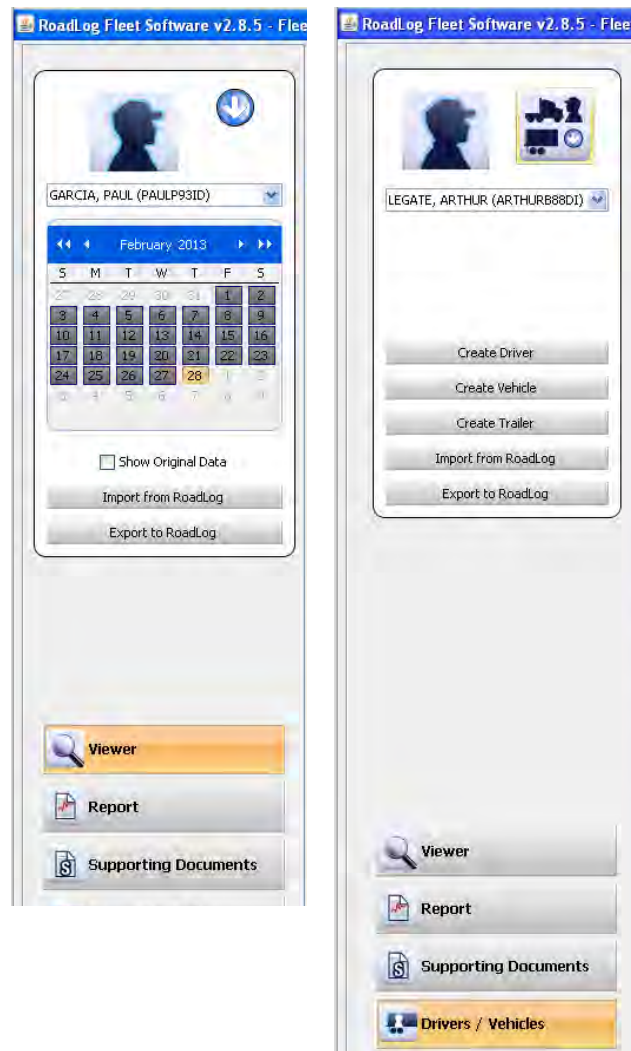
4. Navigating work area Screens and Tabs

The easiest way to understand the Fleet Software's capabilities is to review the screens and their tabs' functions. An overview of the functions of each section is described below; a detailed explanation of how to work in the screen and tabs is provided in .

Viewer Screen

HOS Tab:

- View, edit and print Driver HOS data in logbook, tabular and map form.
- View start/end times for Events, Violations, Exemptions and Supporting Documents.
- View and edit accumulated times for each Duty Status recorded; Off Duty, Sleeper Berth, Driving and On Duty
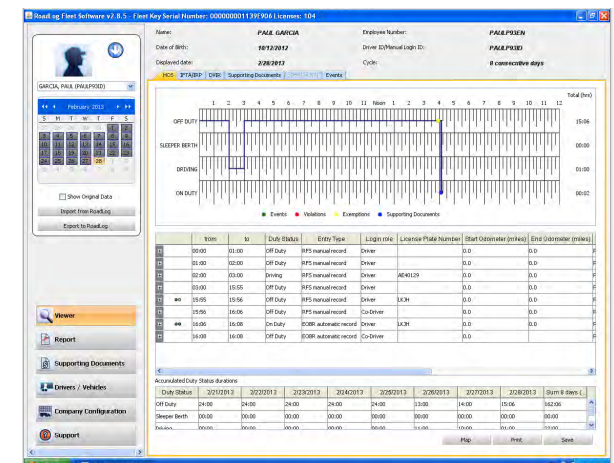
IFTA/IRP Tab:

- [This feature will be implemented in a free upcoming release]

DVIR Tab:

- View and annotate DVIR records created by the Driver.
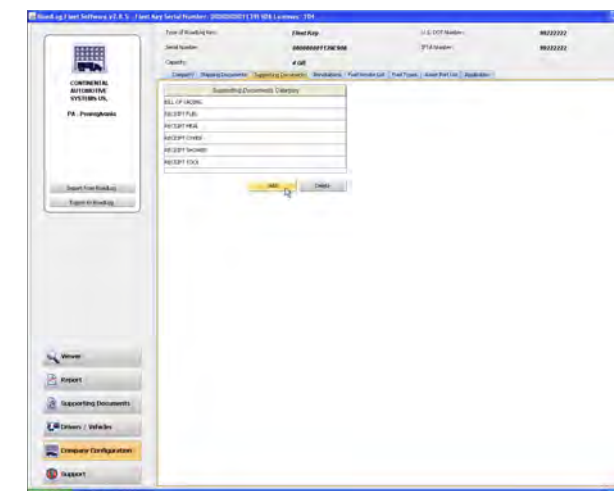
Supporting Documents Tab:

- View Supporting Documents records such as fuel and meal receipts.
- Manually create new Supporting Documents.
- Add scanned documents to the Supporting Documents records.

Speed Graph Tab:

- [This feature will be implemented in a free upcoming release]
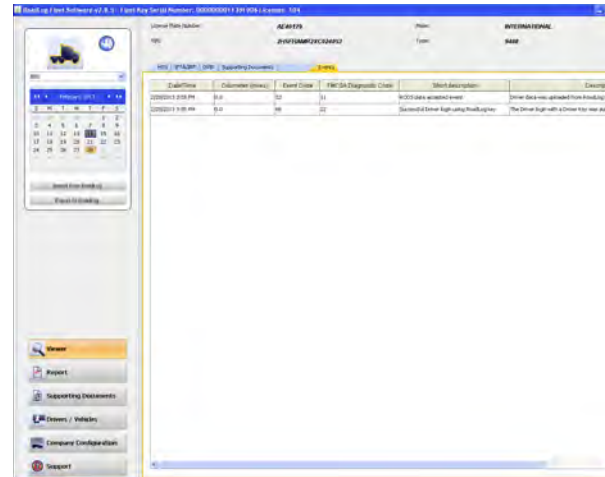
Events Tab:

- View a complete list of all events recorded automatically by RoadLog, including vehicle status changes and Driver actions.

Report Screen

Create, view, save and print reports for:

- DVIR status.
- HOS download reminders.
- IRP driven miles [This feature will be implemented in a free upcoming release].
- IRP vehicles list. [This feature will be implemented in a free upcoming release].
- Vehicle trips.
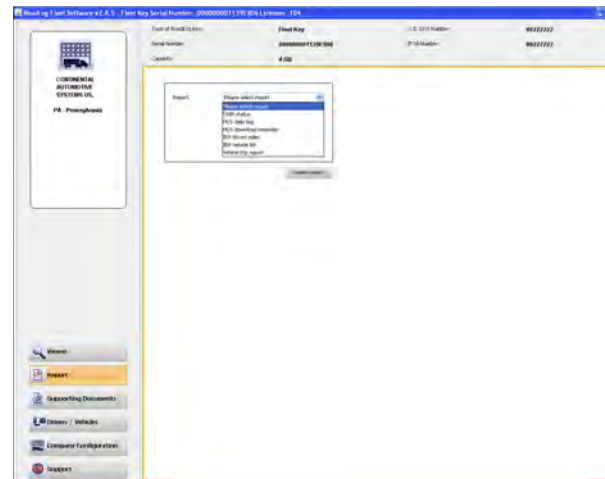
Supporting Documents Screen

- View Supporting Documents records such as fuel and meal receipts.
- Add scanned documents to the Supporting Documents records.
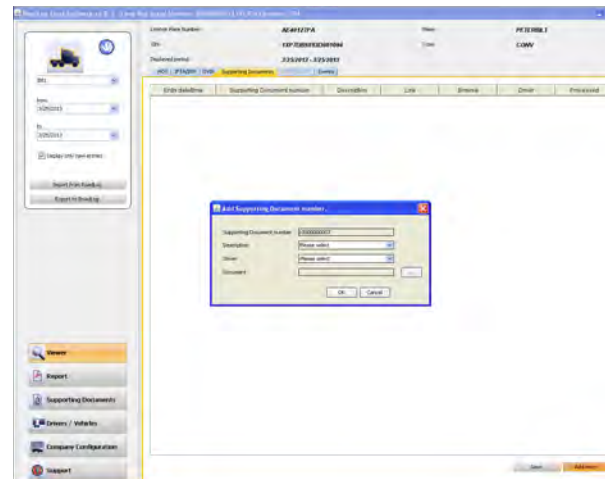
Drivers / Vehicles

Driver Profile Tab:

- Create RoadLog identities for Drivers.
- Choose from existing profiles for Drivers and vehicles (using the ⊞ icon in the actions palette).
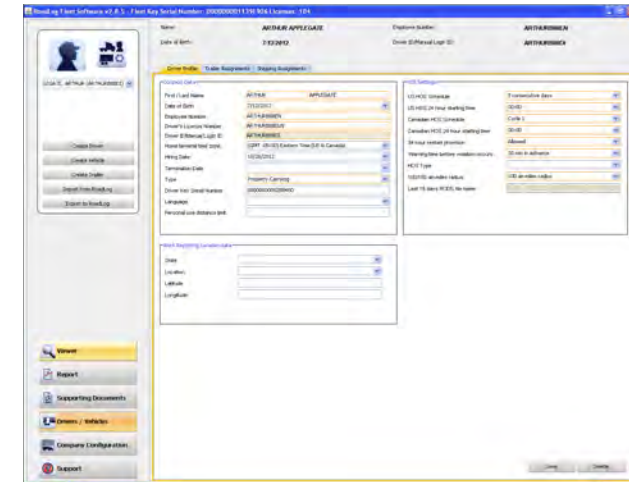
Trailer Assignments Tab:

- Assign trailers to the currently selected Driver.
- Un-assign trailers from the currently selected Driver.

Shipping Assignments Tab:

- Assign Shipping Documents to the currently selected Driver.
- Un-assign Shipping Documents from the currently selected Driver.

Company Configuration Screen

Company Tab:

- Enter and maintain Company and IRP data as well as time zone settings and download warnings.
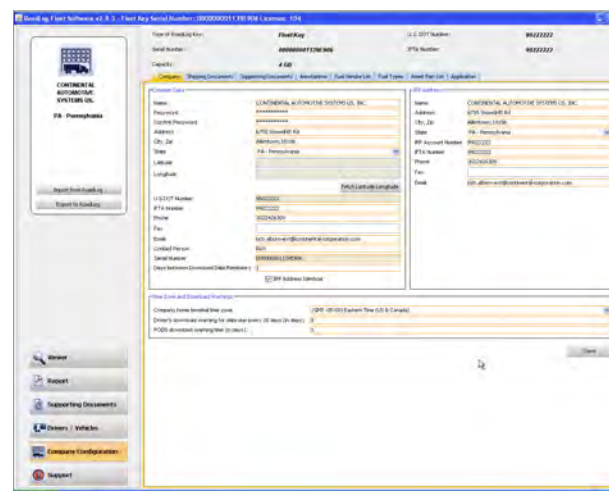
Shipping Documents Tab:

- Create new Shipping Document numbers for use in making Shipping Assignments to Drivers.
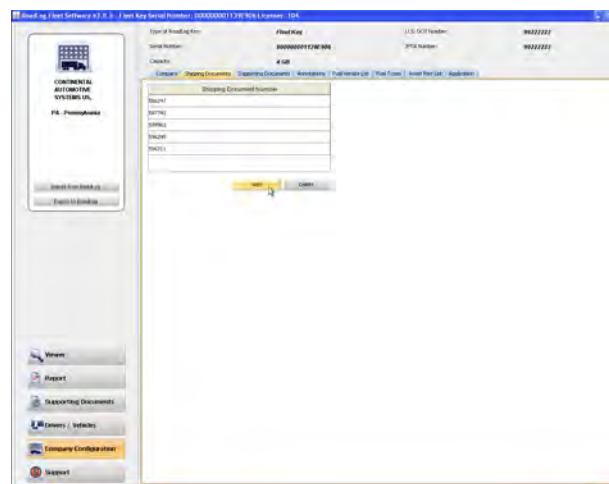
Supporting Documents Tab:

- Create a list of predefined Supporting Document types, such as "Receipt Fuel" and "Receipt Meal," to allow Drivers easy and consistent creation of Supporting Documents.
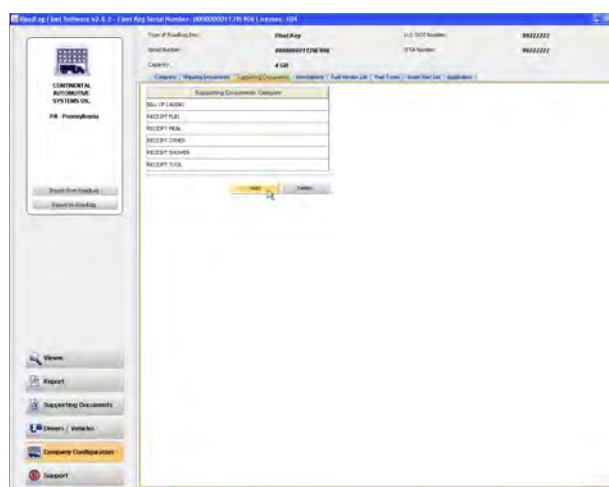
Annotations Tab:

- Create a list of predefined annotations such as "Waiting while loading."
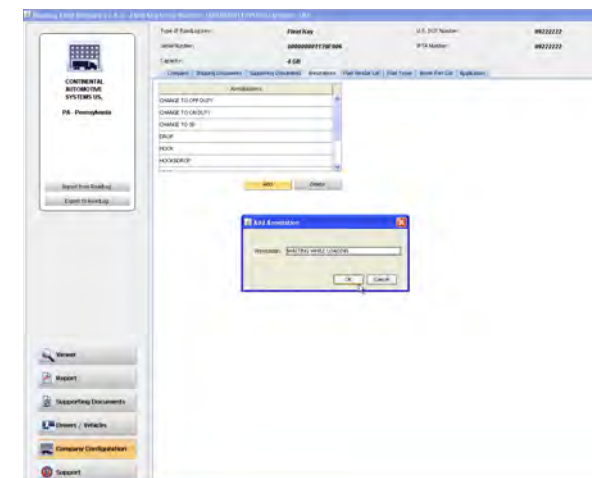
Fuel Vendor List Tab:

- Create a predefined list of fuel vendors and fueling types such as "Normal refueling" or "Bulk refueling."
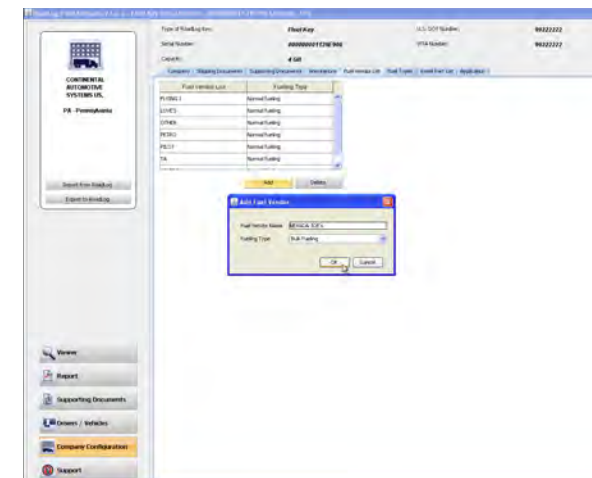
Fuel Types Tab:

- Create a predefined list of fuel types such as "Gasoline" or "Diesel" for use in creating reports on fueling events.
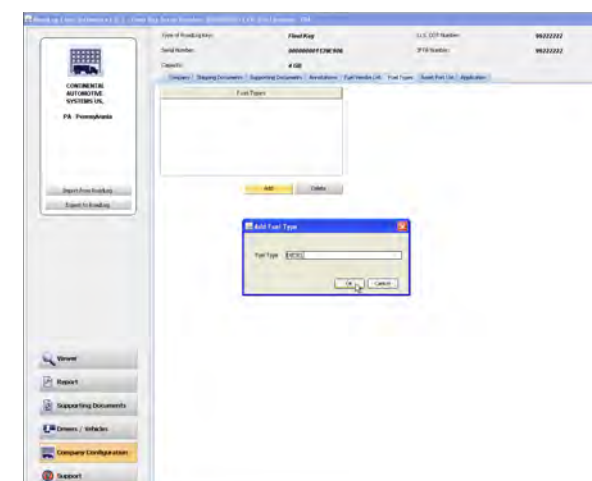
Asset Part List Tab:

- Create a predefined list of Part Names and associated Part Codes to be used in creating DVIRs for tractors and trailers.

- Create a predefined list of Types of Defects associated with each Part Name and assign each Type of Defect with a priority level and Defect Code, both for use in creating DVIRs.
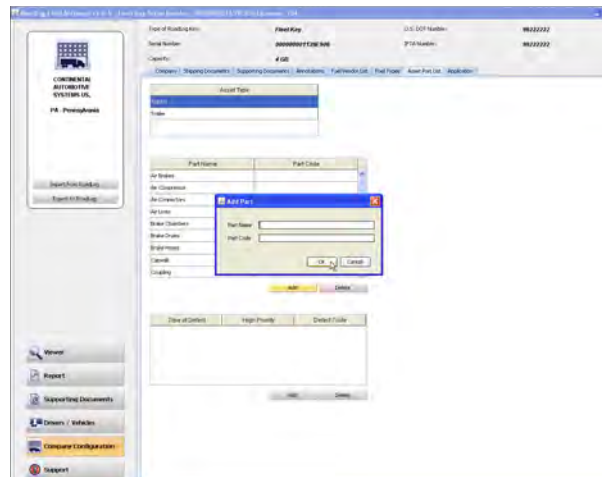
Application Tab:

- Set the language to be used.

- Set the file types that can be used for Supporting Document scans.

- Set the maximum file size for Supporting Document scans.

- Set whether or not the Quick Start Screen will appear at start up.

- Set the region whose regulations will be used to calculate HOS compliance.

- Check box to show Sold Tractors / Terminated Drivers.

- Set the distance, volume and speed units that will be used.

- Set the location where backup files will be stored and the number of days before a backup warning is given to the user.

- Check box to select whether Automatic Backup will be performed or not.
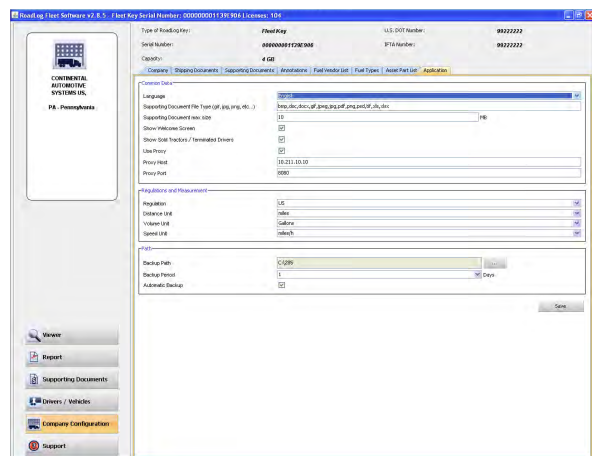
Support

- Check for updates to the RoadLog software.

- Check for updates to the RoadLog Fleet Management Software.

- Start Remote Control (FastViewer), allowing RoadLog support personnel to diagnose problems and answer questions.

- Collect and open software diagnostic data for evaluation by RoadLog support personnel.

- Enter license extension activations to enable management of additional vehicles.

- View RoadLog legal notices.

- Purge operational data that is older than the required time period.
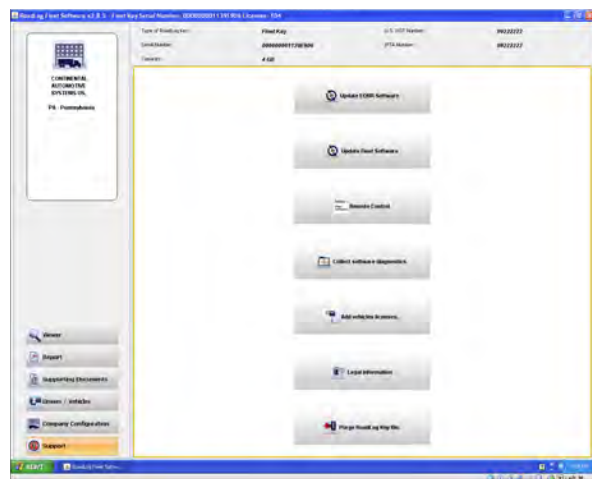
5.   Creating and working with Driver Keys

Creating Drivers

To use RoadLog, each Driver must have a profile in the Fleet Management Software and must have a personal Driver Key activated with that profile.

The RoadLog Driver Key is a proprietary USB drive that allows Drivers to log in to RoadLog and download and transfer their records to the Fleet Management Software or transfer their data between multiple vehicles equipped with RoadLog devices.

The Driver Key can also be used to transfer software updates to the RoadLog device.

Creating a Driver Profile

- To create a Driver profile, click on the Drivers/Vehicles button in the main navigation.

- Click on Create Driver from the Action Palette.

- Enter the data for the Driver – fields outlined in orange are mandatory and must be completed.

- The Driver Key serial number (S/N) can be found on the Driver Key package, or it can be read from the key_data.txt file on the Driver Key. **Enter the serial number exactly as it appears, including all zeros.**

- If you wish to enter the optional Latitude and Longitude information for the "Work Reporting Location" can be found using free websites such as http://itouchmap.com

- The Last 15 days RODS file name is set automatically for the file that contains the most recent RODS data for the selected Driver.

- When data has been entered, click Save. The Driver's profile is now part of the Fleet Management Software data.
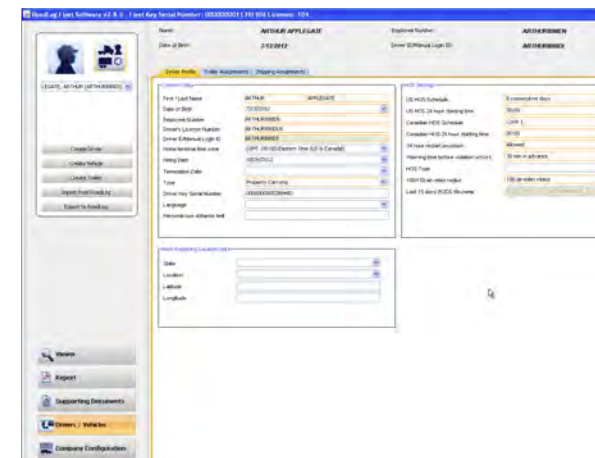
After the Driver's profile has been created in the Fleet Management Software, the profile must be transferred to a Driver Key to activate the Key.

Activating a Driver Key

- Insert the Driver Key you want to activate into an open USB port.

- Click the Drivers/Vehicles button in the main naviagtion.

- From the Action Palette click Export to RoadLog.

- A popup for selecting the Key appears. Select the drive icon for the Driver Key you wish to activate.

• Click the Driver icon in the Action palette, and select the Driver you wish to assign to the Key from the drop down box that appears.

Note: Only Drivers for whom a serial number is not already assigned will appear on the drop-down list of Drivers.

Once the Driver's profile data and relevant company information has been downloaded to the Driver Key, that Driver can now automatically log in to the RoadLog device by inserting the Key. When the Driver changes vehicles within a working day or within a working week, the data is transferred from one vehicle to another and it is recognized by each RoadLog device installed in those vehicles at log in and log out. When the Driver's workday is complete, updated records can be downloaded to the Driver Key for transfer to the Fleet Management Software.

Note: The Fleet Key can also double as a Driver Key for one Driver. To use the Fleet Key as a Driver Key, insert the Fleet Key and follow the steps listed above for activating a Driver Key.

Note: If there are two usable Keys available to the computer when you chose Export to RoadLog, you will be asked to choose which Key is the one you wish to activate.

For complete instructions on downloading data from the device, see the <u>RoadLog User Manual.</u>

Reassigning a Driver Key

A Driver Key can be reassigned to a new Driver by deleting the Driver's data from they key, deleting the Key's Serial Number from the profile of the old Driver and assigning the Key's Serial Number to the new Driver.

WARNING!!! DO NOT DELETE the BOS_ LICENSE.dat file or the driver folder as this will turn RoadLog Driver Key into a plain USB flash drive, and you will not be able to use it as a RoadLog Driver Key.
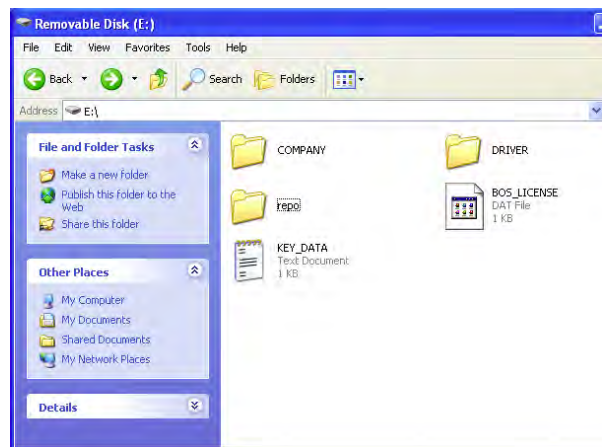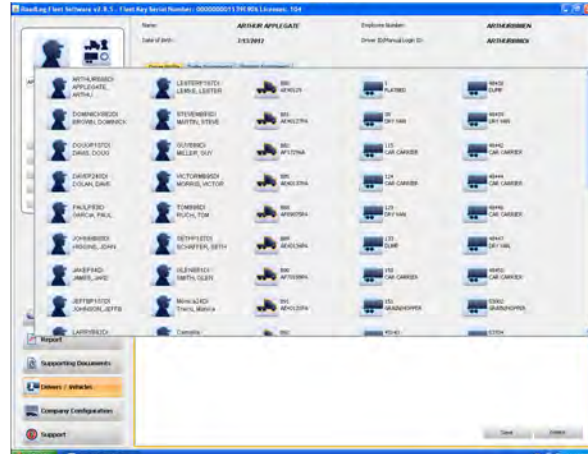
6.   Transferring data

Uploading Driver data to the Fleet Management Software

At the end of the workday, Drivers will download their data from RoadLog to their Driver Key. Once Drivers download their data from RoadLog to the Driver Key, the data can be entered into the Fleet Management Software:

• Insert the Driver Key into the PC's USB port.

• Select Drivers / Vehicles from the main navigation.

• From the Action palette click <u>Import From Roadlog</u>.

• Select the key from which you wish to import. Click <u>Yes</u> to import all, <u>No</u> to cancel, or <u>Details</u> to choose specific files to import.

The RoadLog Fleet Software will detect when a new trailer, not currently in the company data, is included in the data being imported from the Driver Key. If a new trailer is detected, a "Create Trailer" pop-up window will appear. Data for the trailer must be entered and it will be saved along with the data imported from the Driver Key.

When importing the files from the Fleet Key or Driver Key the data are archived in the installation folder (e.g. C:\Program Files\VDO\BOS\dist\Archive).

Exporting to RoadLog

In addition to downloading data from RoadLog to the Fleet Management Software, there will also be data that must be uploaded from the Fleet Management Software to RoadLog. Examples include:

• When a Driver has been assigned a new trailer or shipping document.

• When company configuration data has been updated.

• When a Driver's records have been annotated in the Fleet Manager Software.

To export data from the RoadLog Fleet Management Software to RoadLog:

• Insert the Driver Key into the PC's USB port.

• Select Drivers / Vehicles from the main navigation.

• From the Action Palette click on Export to RoadLog. Company and Driver files are automatically downloaded to the Driver Key.

Note: If there is more than one Key inserted, you will be asked to choose the one you want to download to.
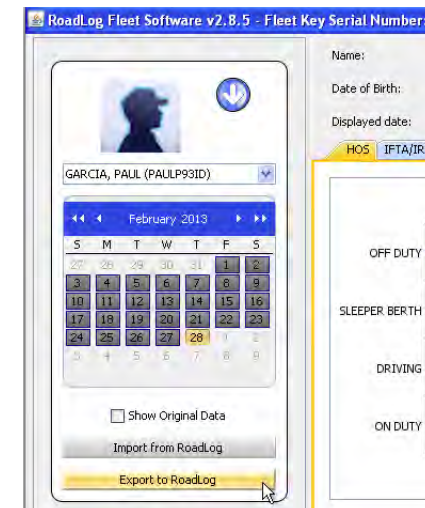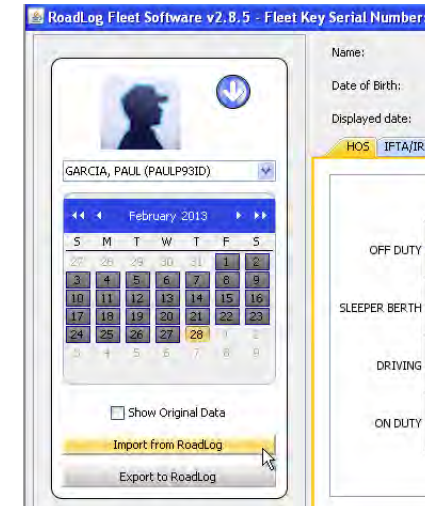
7.   Screens & Tabs: Features & Functions

Viewer Screen – HOS Tab

The HOS tab displays Driver information across the top of the work area: name, employee number, date of birth, Driver ID, the currently displayed date as selected in the action palette calendar and the cycle chosen for the HOS schedule.

> **Note:** The Driver information seen here is entered and maintained on the Driver Data Tab of the Master Data screens.

In the work area, the Driver's hours of service are shown in several formats:

Logbook Timeline

The logbook timeline displays a running line of a Driver's Duty Status (On Duty, Driving, Sleeper Berth, Off Duty) and also shows color-coded indicators for Events, Violations, Exemptions and Supporting Documents associated with times recorded in the Driver's log.

Annotating the logbook

The recorded record shown in the logbook timeline can be changed if necessary. An example would be a period of time when the Driver neglected to switch from On Duty to Off Duty.

- Click and drag on a segment of the timeline, to select it.
- Right-click on the selection to change (annotate) the status recorded. A "Create Duty Status" pop-up appears.
- Enter the revised time span and status you wish to record and click OK.

> **Note:** Segments can only be selected for editing as they were recorded. Therefore some edits will require you to individually select and edit multiple adjacent segments to create one continuous new segment. Segments can also be edited in the events grid below the logbook view.

While the logbook record displayed will reflect the changes made, the Fleet Management Software will annotate the data as having been changed and will retain the original data as well as the revised data. To view the original, unchanged data, click the "Show Original Data" checkbox in the Action Palette.

Data can also been added manually when clicking on a calendar day. If no data is available this message appears: "No HOS data for the Driver available. To create HOS data please click here." Clicking brings up a pop-up where data can be entered. This can also be used to enter activities recorded for the previous 15 days for a new Driver or when starting up a new company record.
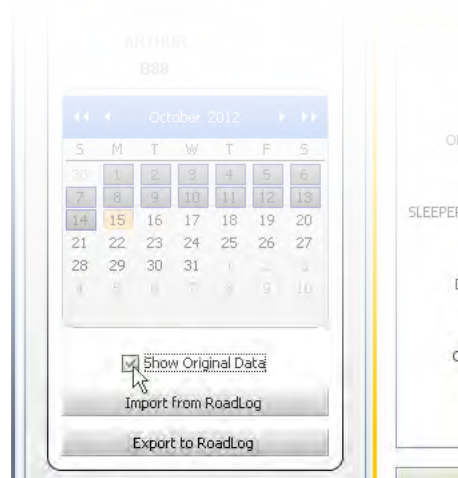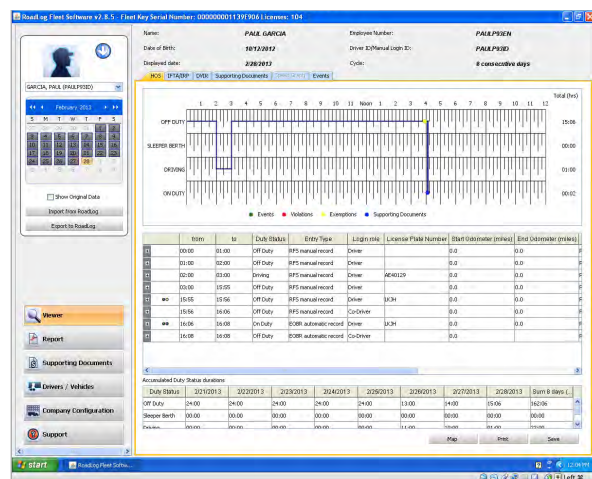
Events Grid

Below the logbook view, the events grid shows a record of the same data seen in the logbook.

Annotating the Events Grid

Clicking on some cells in a segment row allow you to edit the value in the cell, either by directly typing in a new value or by selecting a new value from a drop-down menu. While the grid and logbook record displayed will reflect the changes made, the Fleet Management Software will annotate the data as having been changed and will retain the original data as well as the revised data. To view the original, unchanged data, click the "Show Original Data" checkbox in the Action Palette.

The data points in the Events Grid include (from left to right):

- **Events:** Colored dots that coincide with the dots seen on the events timeline indicating Events (Green), Violations (Red), Exemptions (Yellow), and Supporting Documents (Blue).
- **From:** Start time for the trip segment.
- **To:** End time for the trip segment.
- **Duty Status:** Duty Status indicated by the Driver during the segment (Duty Status can be edited by clicking on the cell and selecting another status from the pull-down menu).
- **Entry Type:** Indication of whether the recorded segment was entered manually in the Fleet Management Software (RFS manual record) or recorded automatically by RoadLog (RoadLog automatic record).
- **Login Role:** Indication of whether the record was made under a Driver or Co-Driver log in (Login Role can be edited by clicking on the cell and selecting another status from the pull-down menu).
- **VLPN:** The Vehicle License Plate Number of the vehicle recorded for the segment (the VLPN can be edited by clicking in the cell choosing another VLPN from the pull-down menu).
- **Start Odometer:** The odometer reading at the beginning of the segment.
- **End Odometer:** The odometer reading at the end of the segment.

> **Note:** The odometer reading can be edited by clicking in the cell and entering another value. However, the End Odometer reading entered cannot be lower than the Start Odometer reading from the previous cell.
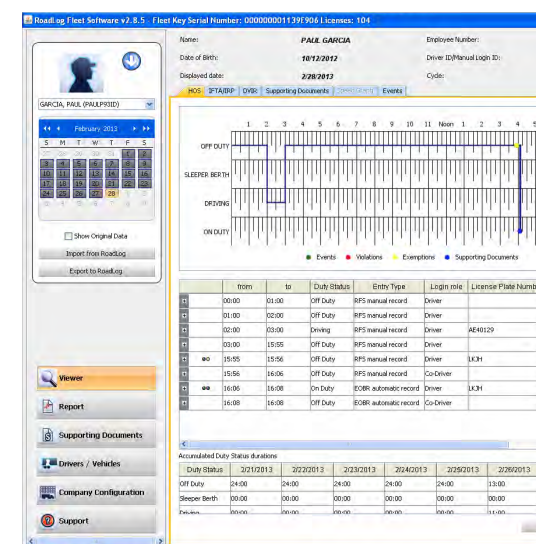
Note about Odometer readings: The RoadLog device is typically calibrated to observe the odometer reading from the engine's computer. The engine computer's odometer reading can vary significantly from the odometer reading displayed on the dashboard. These conflicting odometer readings both come from different message sources within the vehicle. Therefore, odometer readings from this device may not match the odometer reading displayed on the dashboard.

- **State:** The state traveled during the segment (the State can be edited by clicking in the cell and choosing another state from the drop-down menu).

- **Location:** The nearest populated area to the area traveled during the segment.

- **Distance to nearest populated location:** Distance to the nearest populated area as recorded by the US census.

- **Bearing Data:** Your current location relative to the closest most populated place – for example, "7 miles West of Allentown, PA."

- **Description**: Remarks recorded by the Driver regarding changes of duty status.

Additional Events Grid data

Clicking on some of the other cells in a segment row in the events grid opens an additional grid view showing additional details for the segment including:

Events

- **Date/Time:** Exact recording time for an Event.

- **Odometer:** ECM Odometer reading at the time of the event (may not match the instrument cluster odometer).

- **Event Code:** Predefined codes for diagnostic events recorded by the RoadLog device, including FMCSA type events and events related specifically to the RoadLog device.

- **FMSCA Diagnostic Code:** FMCSA codes for events that are detected and recorded in order to maintain compliance with US HOS regulation.

- **Abbreviation:** FMCSA abbreviations for events that are detected and recorded in order to maintain compliance with US HOS regulation. Examples include "ENG_ON" (Engine On) and "BATLOW" (Battery Low).

- **Short Description:** Predefined descriptions for predefined events. An example would be "Successful Driver log in using Driver Key."

- **Description:** A longer text version of the activity described in the "Short Description."

Violations / Exemptions

Violations are instances where the Driver's record of duty status has violated FMCSA regulations. Violations are highlighted by red dots on the Logbook Timeline and by red dots in the Events Grid.

Clicking on the red dot in the Events Grid reveals a second grid showing details of the Violation including Date / Time, Odometer, Event Code, Type, Short Description and Description.
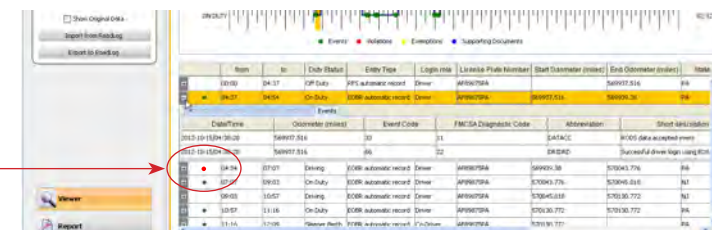
Exemptions are instances where the Driver has encountered circumstances that affected HOS compliance. Exemptions are predefined in the RoadLog device and include Emergency Conditions, Adverse driving conditions, 16 hours extension, 100- or 150-mile radius Driver, and Personal Use.

Accumulated Duty Status Durations Grid

Below the events grid view, the accumulated Duty Status view shows daily and weekly cumulative totals of each Duty Status, based on the values seen in the logbook and events grid displays.

Map View and IFTA / IRP Tabs

[These features will be implemented in a free upcoming release]

DVIR Tab

The DVIR Tab displays Driver Vehicle Inspection Reports recorded by the Driver in the RoadLog device and imported into the Fleet Management Software as well as DVIRs created in the Fleet Management Software.

To select the vehicle that you wish to view o r create a DVIR for:
- Click on Viewer form the main navigation.
- Click on the icon at the top of the Action Palette. Select the vehicle from those shown.
- Select the date that you wish to view or create a DVIR for from the interactive calendar in the Action Palette.

The drop down menu field below the calendar is self-populated with the times for all the DVIRs created on the selected date. If there is more than one DVIR for a selected date, choose the time from the drop down menu for the DVIR you want to view.

At the top of the screen, the work area data displayed reflects the vehicle and the date selected including License Plate Number, VIN, Displayed date, and Make and Model of the vehicle.
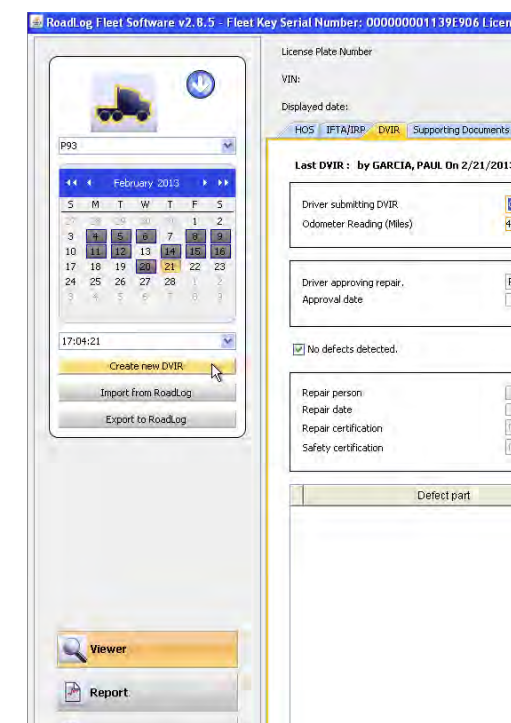
Creating a DVIR in the Fleet Management Software

The Driver in the RoadLog can create DVIRs, or they can be created in the Fleet Management Software. To create a DVIR in the Fleet Management Software:

- Click on Viewer in tha main navigation.
- Select the date you want to record the DVIR for in the calendar, and then click on Create new DVIR in the Action Palette.
- Complete the fields in the tab. Fields outlined in orange are mandatory.

The DVIR fields include:

- **Driver submitting DVIR:** The Driver who has reported the vehicle inspection details.
- **Odometer Reading (miles):** Odometer at the time the report is made.
- **State:** The state from which the DVIR was filed.
- **Location:** The location from which the DVIR was filed.
- **Driver approving repair:** Driver who has viewed the repairs made to defects reported in the DVIR and has judged them to be complete.
- **Approval Date:** Date that the Driver approving the repair reported that the repairs had been made satisfactorily.
- **Approval notes:** Comments made by the Driver or user on the repairs and approval.
- **No defects detected:** A check box to indicate that the Driver detected no defects.
- **Repair person:** The person making repairs to the reported defects.
- **Repair date:** The date the defects were repaired.
- **Repair certification:** Predefined list of repairs for annotations to the repair person's report; None, Repairs made, Repairs not necessary.
- **Safety certification:** Predefined list of safety conditions for annotations to the repair person's report; None, Safe to operate, Unsafe to operate.
- **Repair notes:** Comments made by the repair person or user on the repairs and approval.

You can add defective parts to the DVIR by clicking the Add Part button at the lower right of the screen and selecting from the list of predefined parts. Once you have entered the defective part, you may add the defect(s) you want to record for the part by clicking on the Add Defect bar, and selecting the defect(s) from the list of predefined defects.

When all fields and defect part listings are completed, click Save to record the DVIR. To print the DVIR, click on the Print button at the lower right of the screen.

> **Note:** There is a list of predefined defective parts that comes with the Fleet Management Software. You can add additional parts to the list by clicking on the Add button below the Part Name / Part code grid on the Asset Part List tab. Once uploaded to RoadLog, these parts and defects will appear in the RoadLog menus for easy creation of DVIRs.
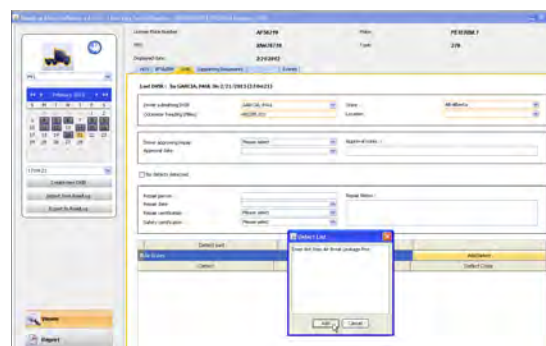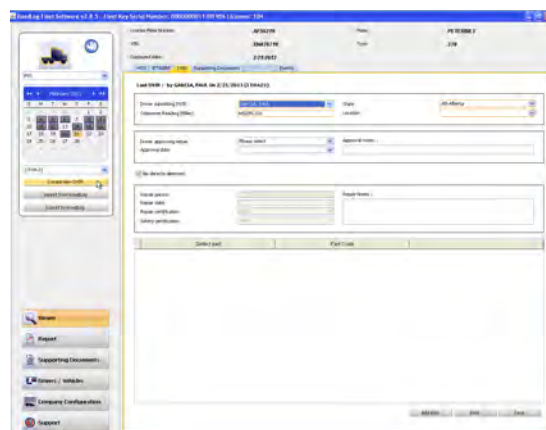
Exporting DVIRs to RoadLog

To export DVIRs to RoadLog, insert a Driver Key in the USB port.

- Click on Drivers / Vehicles in the main navigation.
- Click on Export to RoadLog in the Action Palette.
- Click on the Key you wish to export to. If more than one Key is inserted, select the correct drive. All Driver files are automatically transferred to the Driver Key.
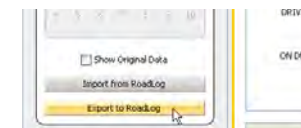
Importing DVIRs from RoadLog

To import DVIRs from RoadLog, insert a Driver Key in the USB port.

- Click on Drivers / Vehicles in the main navigation.
- Click on Import from RoadLog in the Action Palette.
- Click on the Key you wish to export to. If more than one Key is inserted, select the correct drive. All Driver files are automatically transferred from the Driver Key to the Fleet Management Software.
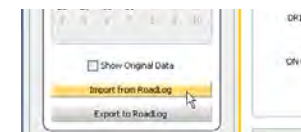
Supporting Documents Tab

Supporting Documents are electronic records of costs incurred by the Driver during the trip. Examples include "Fuel Receipt" and "Meal Receipt." The Supporting Document records are created by the Driver on the RoadLog device and transferred to the Fleet Management Software when data is exported from RoadLog and imported into the RoadLog Fleet Management Software.

To allow Drivers easy and consistent creation of Supporting Documents, predefined Supporting Document Categories can be created in the Fleet Management Software, in the Company Configuration screen's Supporting Documents tab *(not to be confused with the Supporting Documents tab in the Viewer screen)*. Supporting Document Categories that are created here will appear as choices for the Driver in the RoadLog device, once data has been exported from the Fleet Management Software to the RoadLog device.

A paper receipt for each Supporting Document can be printed from the RoadLog device, using the RoadLog's built-in thermal printer. In addition, physical documents such as paper receipts can be scanned, and the scanned file can be "attached" to the Supporting Document's electronic record.

The Supporting Documents tab displays vehicle information across the top of screen in the work area: Vehicle License Plate Number, VIN, Make and Model, and the currently displayed date period as selected in the action palette.

The work area shows a table of Supporting Documents associated with the currently selected vehicle, listed in order by entry date and time.
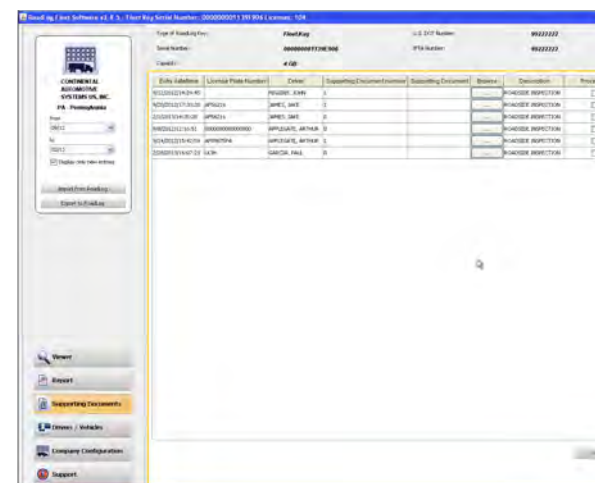
Each Supporting Document record shows:

- **Entry date/time:** Entered automatically when the record is created.

- **Supporting Document Number:** The number assigned automatically by the software when the supporting Document is created.

- **Description:** The description is selected from the list of predefined Supporting Document types established in the Company Configuration / Supporting Documents tab.

- **Link:** A scan of a physical document that is added to the Supporting Document record.

- **Browse:** Click the Browse button to navigate to and select the scan file you wish to make a Link.

    Note: File types accepted and the maximum file size that can be used as a link is set in the Company Configuration / Application tab.

- **Driver:** The Driver who created or is associated with the Supporting Document.

- **Processed:** A check box that indicates that the user has finished working with this record. Once clicked, the record is processed and the Supporting Document will no longer be displayed in the list.
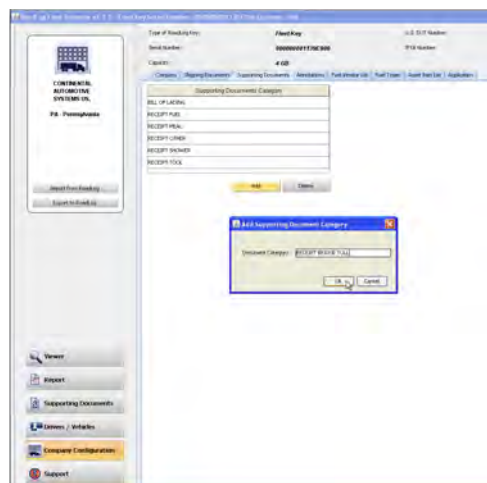
To create a new Supporting Document in the Viewer / Supporting Documents tab:

- Click on the Viewer in the main navigation.

- Click on the Supporting Documents tab.

- Click the Add Entry button. The Add Supporting Document Number dialog is displayed.

- Select a description from the drop-down menu.

- Select a Driver from the drop-down menu.

- If appropriate, select a scanned document to add to the record by clicking the ••• button. Navigate to the file and click on Open to select the file and add it to the record.
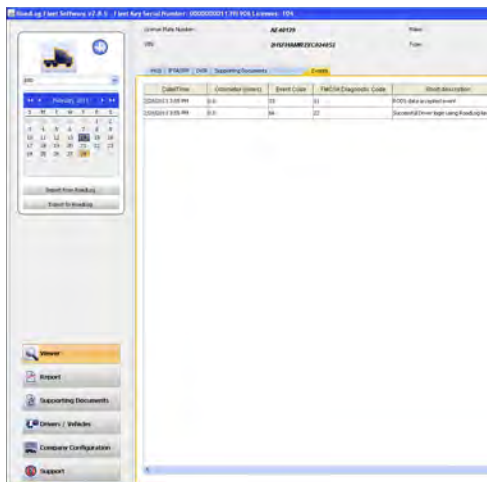
Speed Graph Tab

This functionality will be introduced in 2013.

Events Tab

The events tab displays vehicle information across the top of the work area and a table of events automatically logged by the RoadLog device, listed in order by date and time.

Select the date to be displayed from the interactive calendar in the Action Palette.

For each event, the table shows the odometer reading, the event code, Federal Motor Carrier Safety Administration (FMCSA) diagnostic code (if applicable), a short description and a longer description.

- Clicking and dragging on the column divider allows you to view the full contents of any cell.

Report Screen

The report screen displays information about the Fleet Key currently in use across the top of the work area, including its DOT number, serial number, IFTA number and memory capacity.

In the work area, a drop-down menu allows you to select the type of report you wish to view:

- DVIR Status.

- HOS Download Reminder.

- IRP Miles Driven. *(Future feature.)*

- IRP Vehicle List. *(Future feature.)*

- Vehicle Trip. *(Future feature.)*

Reports can be printed directly from the Fleet Management Software or saved in a variety of formats, including PDF, RTF, ODT, DOCX, HTML, XLS and CSV.

DVIR Status Report

The DVIR Status Report data includes:

- Vehicle number

- Most Recent Pre-Trip Date

- Most Recent Post-Trip Date

- Most Recent Pre-Trip Driver

- Most Recent Post-Trip Driver

- Repair Certification

- Safety Certification
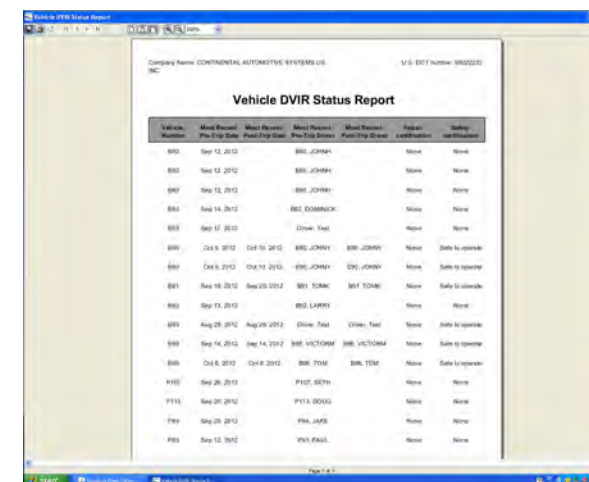
To view the DVIR Status Report click on the Report button.

- Select DVIR Status Report from the drop-down menu.

- Click on the Create Report button. The Fleet Management Software generates the report and shows an on-screen view. From the on-screen view you can print or save the report.
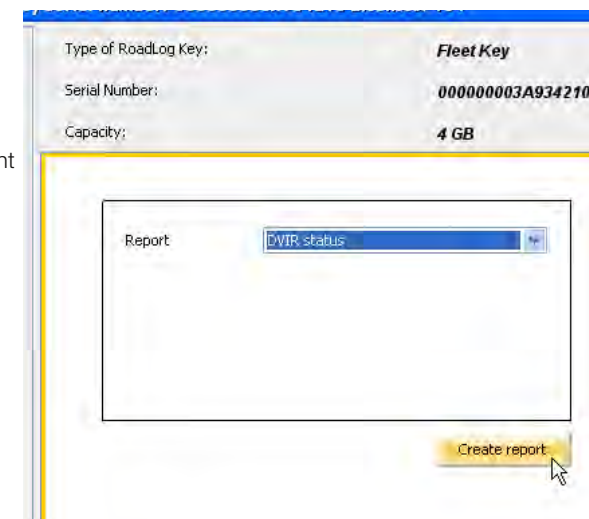
HOS Download Reminder Report

The HOS Download Reminder Report shows a list of Drivers and their IDs along with:

- Last Downloaded Date
- Next Download Due Date
- Days until Next Download

To view the HOS Download Reminder Report, click on the Report button.

- Select HOS Download Reminder Report from the drop-down menu.
- Click on the Create Report button. The Fleet Management Software generates the report and shows an on-screen view. From the on-screen view you can print or save the report.
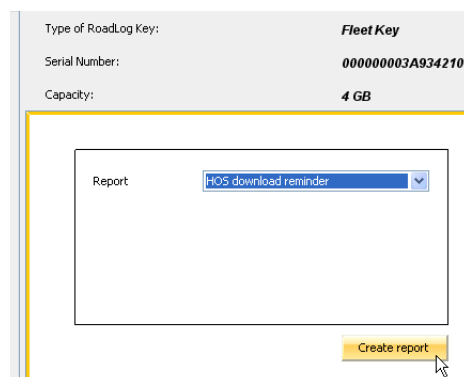
IRP Driven Miles and IRP Vehicle List Reports

[These features will be implemented in a free upcoming release]

Vehicle Trip Report

The Vehicle Trip Report shows the selected vehicle's trip data, including state traveled, route used, odometer reading at border crossing(s), distance driven in each state, date of the trip/segment, fuel type used, gallons refueled and fuel price per gallon.

- To view the Vehicle Trip Report, click on the Report button.
- Select Vehicle Trip Report from the drop-down menu.
- Select the vehicle you wish to view from the drop-down menu.
- Select a start date and end date from the interactive calendar.
- Click in the date field to display the interactive calendar.
- Use the double arrows to select the year.
- Use the single arrows to select the month.
- On the interactive calendar, select your desired date.

    Note: The Today button provides a shortcut to enter today's date.

- Click on the Create Report button. The Fleet Management Software generates the report and shows an on-screen view. From the on-screen view you can print or save the report.

Supporting Documents Screen

The work area shows a table of Supporting Documents by entry date and time. The range of entry dates shown is selected with the interactive calendar in the action palette.

This Supporting Document Screen also displays the company's Fleet Key information across the top of the work area.

The table shows the Entry date / time, Vehicle License Plate Number, Driver, Supporting Document number, Supporting Document (linked scan file), a Browse button to locate and open scanned document files, a document Description and a checkbox indicating whether the document has been processed.

- To add a scanned file to a Supporting Document record, click the Browse button to find and select the file.

    Note: File types accepted and the maximum file size that can be used as a link is set in the Company Configuration / Application tab.
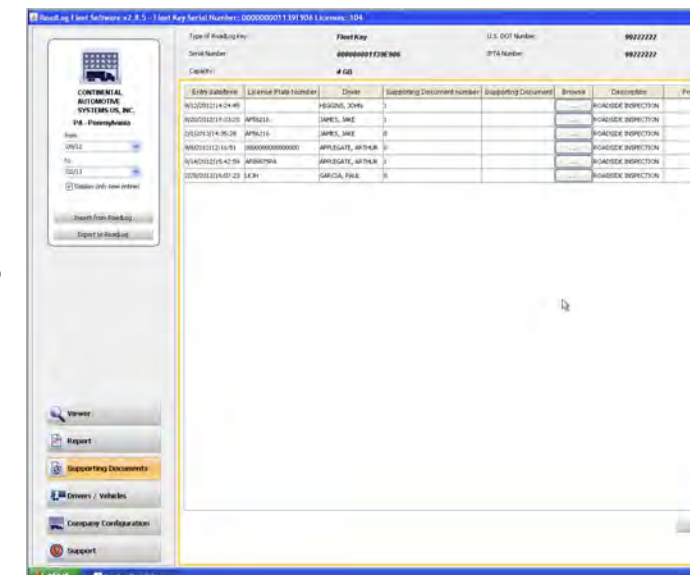
Drivers / Vehicles Screen

The Drivers / Vehicles screen shows the Driver Profile tab as well as tabs for Trailer Assignments and Shipping Document Assignments.

When the Drivers / Vehicles screen is chosen, the icon in the Action Palette allows you to view and make selections from the lists of existing Drivers, vehicles and trailers.

When Drivers / Vehicles is seleted from the main naviagtion, the Action Palette will also allow you to:

- Create new Driver.
- Create new vehicle.
- Create new trailer.
- Import data from a RoadLog device via a Fleet or Driver Key.
- Export data to a RoadLog device via a Fleet or Driver Key.
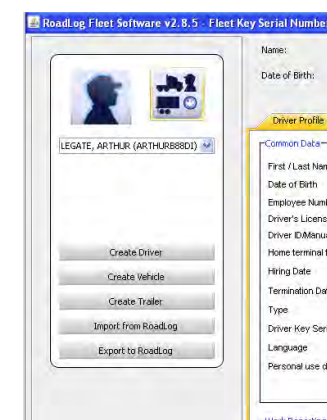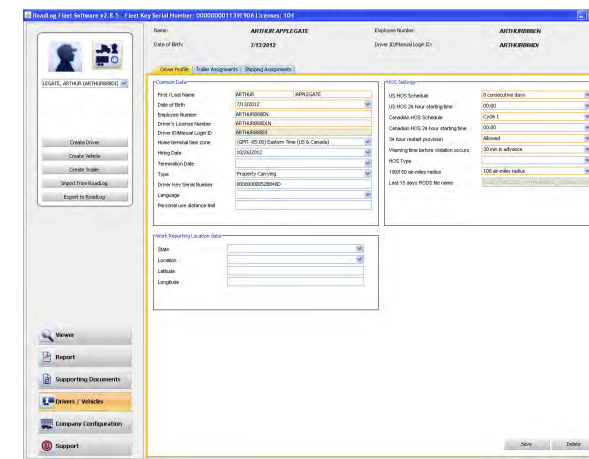
Driver Tab

The Driver tab shows three types of data: Common Data about the Driver, Hours of Service (HOS) settings and data on the Driver's work reporting location. Many of the fields provide drop-down menus for quick selections from a list.

To create a new Driver Profile see Creating and Working With Driver Keys.

Driver data includes:

Common Data:
- First / Last name.
- Date of birth.
- Employee Number (assigned by the Fleet Manager).
- Driver's License Number.
- Driver ID (this is a unique identifier assigned when the Driver entry is created and cannot be edited once set).
- Home terminal time zone.
- Date hired.
- Termination date.
- Type (type of vehicle driven by this Driver, Property Carrying (Truck) or Passenger Carrying (Bus)).
- Driver Key Serial Number.
- Language.
- Personal use distance limit.

HOS Settings:
- US HOS schedule (7 days or 8 days).
- US HOS starting time (in 24-hour format).
- Canadian HOS schedule (Cycle 1 or Cycle 2).
- Canadian HOS starting time (in 24-hour format).
- 34 hours restart function (Allowed or Not Allowed).
- Warning time before violation occurs (No warning or 30, 60 or 90 minutes in advance).
- HOS type.
- 100/150 air-miles radius (Not assigned, 100 miles or 150 miles).
- Last 15 days RODS file name. File name for RODS (Record of Duty Status) file covering the last 15 days (file and file name is created automatically by the Fleet Management Software).

Work Reporting Location:
- State (or Canadian province).
- Location.
- Latitude.
- Longitude.

> **Note:** If you wish to enter the optional Latitude and Longitude information for the "Work Reporting Location" it can be found using free websites such as http://itouchmap.com

Vehicle Screen

The Vehicle Screen can be seen by clicking on the icon in the Action Palette and selecting the Vehicle that you want to view. If no vehicles exist, you must first create one to see the Vehicle screen.

The vehicle screen shows the Vehicle Profile including: Common Data about the vehicle, Calibration Data to ensure accurate speed and mileage records, IRP/IFTA data and GSM/GPRS network registration data. Many of the fields provide drop-down menus for quick selection from a list.

> **Note:** IRP/IFTA and GSM/GPRS functionality will be implemented in an upcoming release.

Creating a Vehicle

Vehicles must have a profile created before they can be assigned to a Driver.

To create a new Vehicle profile from the Drivers / Vehicles screen:
- Click on Drivers / Vehicles in the main navigation.
- Click on Create Vehicle in the Action Palette.
- Enter the Vehicle's data. Fields with orange borders are mandatory and must be completed.
- Click Save. The Vehicle record is created.
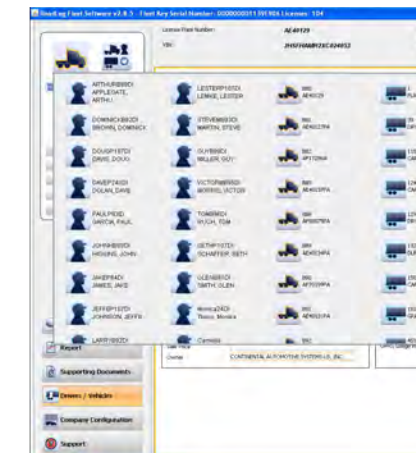
Vehicle data includes:

Common Data
- License Plate Number.
- VIN.
- Make.
- Model.
- Type.
- Seats.
- Axle.
- Weight.
- Fuel Type.
- Tire Size.
- Vehicle Number (this is a unique identifier assigned when the vehicle entry is created, and cannot be edited).
- Manufacturing Date.
- Can Pull Trailer (checkbox to indicate whether or not the vehicle can pull a trailer).
- Is Active (checkbox to indicate whether or not the vehicle is active in the fleet).

Configuration and Calibration Data
- RoadLog serial number (The RoadLog device serial number can be found on the sticker on the RoadLog's underside. It is the number on the right side of the sticker).
- W (a calibration factor). See Setting **Configuration Parameters).**
- Synchronization type: The type of cable connection used to connect RoadLog to the vehicle (see **Setting the Vehicle Synchronization Parameter).**
- Total vehicle odometer: The odometer reading at the time you create the vehicle profile.
- Wake up condition: The event that triggers the device to begin recording data (see **Setting the Wake up condition).**

  Important note: Improper calibration of the WakeUp Condition may result in the RoadLog device screen failing to turn off after the engine has been shut off. This can lead to failure of the vehicle's battery.

- Low pressure: The lower tire-pressure threshold that generates a warning to the Driver and records a RoadLog device event in vehicles with a Tire Pressure Management System (TPMS).
- High pressure: The upper tire-pressure threshold that generates a warning to the Driver. *(This feature is not yet implemented)*
- Printing speed (for instructions on selecting the printing speed see **Setting the Printing Speed)**.

Additional fields are included that will not be used until GSM/GPRS functionality is made available in a future release:
- Automatic update server query.
- Update server query period.
- Update server IP address.
- Update server URL.

IRP/IFTA data

IRP/IFTA data fields are included but will not be used until IRP/IFTA functionality is made available in a future release:
- Purchase date.
- IRP Registration Date.
- Date of Sale.
- Apportional Vehicle (checkbox).
- List Price.
- Purchase price.
- Sale price
- Owner.

GSM/GPRS network registration data

GSM/GPRS data fields are included but will be optional in future GSM RoadLog enabled devices:
- ICCID (Integrated Circuit Card ID).
- PIN (Personal Identification Number).
- PUK (Pin Unlocked Key).
- APN (Access Point Name).

- Username.
- Password.
- GPRS (General Packet Radio Service) usage in roaming.

Calibration Data

"W" and "N" factors are utilized in RoadLog calibration on trucks that feature a non-computerized interface with RoadLog. These trucks are uncommon, and are usually older models. Installation on these trucks is done with the RoadLog Open-end cable.

The vehicle's W factor is the number of pulses that are generated by the vehicle speed sensor when the vehicle travels a distance of 1 kilometer. By default, the W factor parameter is set to 8,000 pulses / km. If the vehicle's W factor is not known, it can be set by direct measurement through the RoadLog device while driving. See **Setting the W Factor.**

If the W factor setting is changed in the vehicle, the value in the Fleet Management Software will be overwritten. This will happen when the data from the vehicle is downloaded to the Fleet Management Software from the Driver Key.

Creating Trailers

To create a new Trailer profile from the Drivers / Vehicles screen:
- Click on Drivers / Vehicles in the main navigation.
- Click on Create Trailer in the Action Palette.
- Enter the Trailer's data. Fields with orange borders are mandatory and must be completed.
- Click Save. The Trailer record is created.

Trailer Screen

To view the Trailer screen:

- Click Drivers / Vehicles in the main navigation.

- Click the [icon] Icon in the Action Palette and select the trailer that you want to view. If no trailers exist, you must first create one to see the Trailer screen.

When a Trailer is selected in the Action Palette, the Trailer Profile screen in shown. Data includes:

- Trailer number (this is a unique identifier assigned when the trailer entry is first created and cannot be edited).

- Make.

- Type.

- Axle.

- Weight.

Trailer Assignments Tab

To view the Trailer Assignments tab:

- Click Drivers / Vehicles in the main navigation.

- Click the [icon] Icon in the Action Palette and select the Driver that you want to assign trailers to or from. The Trailer tab shows two columns used to assign trailers to a Driver and to remove trailer assignments from a Driver.

    Note: Trailer numbers shown in the columns are assigned in the Create Trailer tab.

To assign a trailer to a Driver from the Trailer Assignments tab:

- From the Action Palette, click on the Driver icon and select the Driver that you want to assign the trailer to.

- Click on a trailer number in the left column to highlight it.

- Clicking on the right-pointing and left-pointing arrow buttons will move Trailer numbers from the "Not assigned" column to the "Assigned" column for the selected Driver.

    Note: The double arrow buttons will move all entries in the column.

- To remove a trailer assignment from a Driver, use the left-facing arrows to move trailer assignments from the "Assigned" column to the "Not assigned" column.

- When completed, click Save.

Shipping Assignments Tab

When a Driver is selected using the [icon] icon in the Action Palette, the Shipping Assignments tab shows two columns used to assign Shipping Documents to a Driver and to remove Shipping Documents assignments from a Driver. The Shipping Documents shown in the columns are created in the Shipping Documents tab in the Company Configuration screen.

To assign a Shipping Document to a Driver from the Shipping Assignments tab:

- Click Drivers / Vehicles in the main navigation.

- Click on the Shipping Assignments tab.

- From the Action Palette, click on the Driver icon and select the Driver that you want to assign Shipping Documents to.

- Click on a Shipment number in the left column to highlight it.

- Click on the right-facing arrow buttons to move a Shipment number from the "Not assigned" column to the "Assigned" column. You can move all Shipments at once by clicking on the double arrow buttons.

- When you have completed your Shipment assignments, click Save.

- To remove a Shipping Document assignment from a Driver, use the left-facing arrows to move document numbers from the "Assigned" column to the "Not assigned" column.

- When completed, click Save.
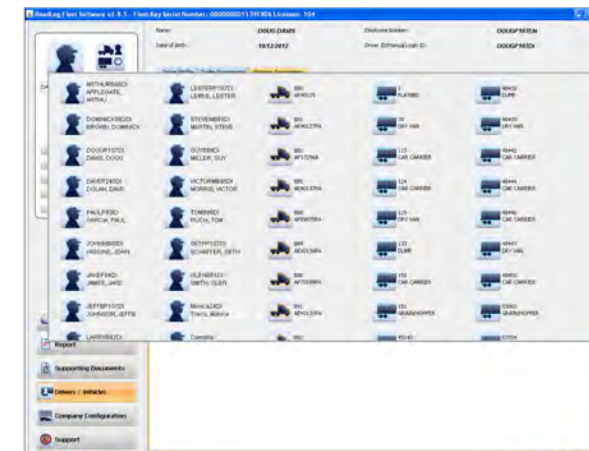
Company Configuration Screen

The Company Configuration screen contains tabs for the company's profile as well as information that supports other aspects of the RoadLog Fleet Management Software. Some of this information is used to automatically complete on-screen fields and reports. It also provides the settings that control how the software operates.

Company Tab

When you used the Fleet Management Software for the first time, you entered your company information to activate the software. Some of the information seen in the Company tab will have been entered automatically during your activation. Complete any empty fields, and correct any fields with incorrect or incomplete information.

> **Note:** The fields with orange borders are mandatory and must be completed.

Company data fields include:

Common Data
- Name (company name).
- Password.
- Confirm Password (must match Password).
- Address (address of the company's headquarters or the field office that the fleet is deployed from).
- City, ZIP.
- State.
- US DOT Number.
- Latitude.
- Longitude. *(The button for "Fetch Latitude Longitude" provides the entry for the coordinates automatically. An Internet connection is required.)*
- IFTA Number (International Fuel Tax Agreement).
- Phone.
- Fax.
- Email.
- Contact Person.
- Serial Number (for the Fleet Key).
- Days between Download Data Reminders (lets you select the number of days that will pass before you receive a reminder to back up your data).
- IRP Address Identical (If checked, the software automatically fills out the appropriate IRP data fields with entries identical to those in the Common Data).

IRP Address
- Name (company name).
- Address (address used for IRP reporting for the fleet).
- City, ZIP.
- State.
- IRP Account Number.
- IFTA Number.
- Phone.
- Fax.
- Email.

Time Zone and Download Warnings

The Company's home terminal time zone is the time zone from which the Fleet being managed is deployed.

Some types of data must be downloaded from RoadLog more frequently than other types. The Fleet Management Software provides warnings to remind you to perform downloads regularly. Download Warnings are displayed to the Driver three days before the oldest data is overwritten by default. The default download warnings can be modified to your preference.

The download warnings are as follows:

<u>Drivers download warning for data due every 30 days:</u>
30-day data must be downloaded before the end of the 30th day, or the oldest data will be lost. The "Drivers download warning for data due every 30 days" sets the number of days before the end of the 30th day that the Driver receives a reminder to download data before it is lost.

<u>The RODS download warning time:</u>
RODS data must be periodically downloaded or the oldest data will be lost. The "RODS download warning time" sets how far in advance the Driver receives a warning before it is lost.

Shipping Documents Tab

Shipping Documents are records relating to Bills of Lading or Pro Numbers.

> **Note:** Shipping Documents are assigned to Drivers in the Shipping Documents tab in the Drivers / Vehicles screen.

Creating Shipping Documents

To create a new Shipping Document:
- Click on Company Configuration in the main navigation.
- Click on the Shipping Documents tab. An Add Shipping Document pop-up window appears.
- Add the Shipping Document number and click OK. The number is added to the list.
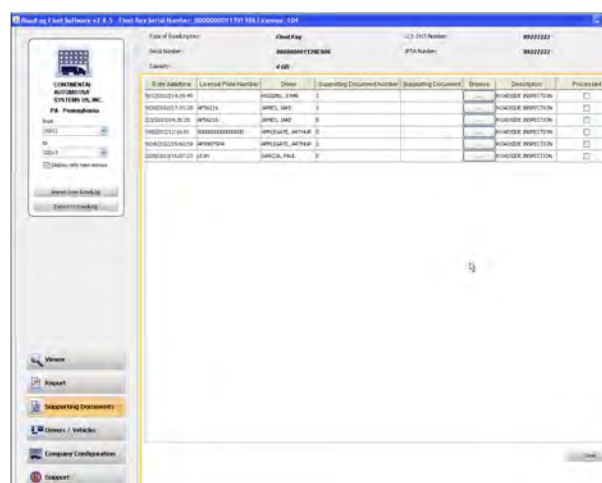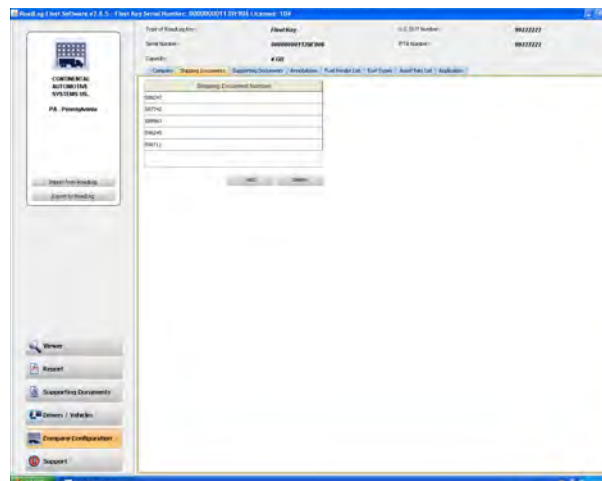
Supporting Documents Tab

Supporting Documents are records of transactions that Drivers collect on a trip such as fuel bills, food bills, Bills of Lading, or, and Shipping Documents. Supporting Documents can be created by the Driver in the RoadLog device or in the Fleet Management Software. In addition, physical documents can be scanned and added to a Supporting Document record in the Fleet Management Software.

Having predefined Document types makes creating Supporting Documents in the RoadLog device faster and more consistent. The Supporting Documents tab in the Company Configuration screen is where you can add to the list of predefined Supporting Document types.

To add a Supporting Document Category:
- Click on Supporting Documents in the main navigation.
- Click on the Supporting Documents tab.
- Add Supporting Documents categories you wish to track. After each entry, click OK.

To learn how to create a Supporting Document in the RoadLog device, see RoadLog Supporting Documents.

To learn how to create a Supporting Document in the RoadLog Fleet Management Software, see Supporting Documents Tab.

Annotations Tab

Annotations are comments or corrections made to Duty Status records submitted by Drivers on their Driver Keys.

In the Annotations tab, you can create predefined Annotations to explain changes made in Duty Status records, such as "waiting while loading" or "traffic stopped." Having predefined Annotations makes creating reports from the RoadLog device faster and more consistent.

To create a predefined Annotation from the Annotations tab:
- Click on Company Configuration in the main navigation.
- Click the Annotations tab. An Add Annotation pop-up appears.
- Add text explaining each Annotation you'll want to use. After each entry, click OK.

> **Note:** Annotations are shown on the daily logs as required by FMCSA regulations.

Fuel Vendor List Tab

The Fuel Vendor List tab allows you to create a predefined list of fuel suppliers and the Fuel Types purchased from them. The Fuel Vendor names are recalled when creating Supporting Documents.

To add a Fuel Vendor from the Fuel Vendor List tab:
- Click on Company Configuration in the main navigation.
- Click the Fuel Vendor List tab.
- Click Add. An Add Fuel Vendor pop-up is displayed.
- Enter the Fuel Vendor Name and select the Fueling Type from the pull-down menu.
- Click OK. The vendor and type are added to the list.
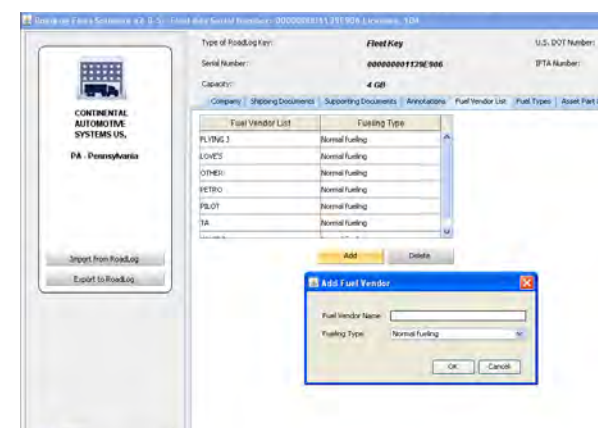
Fuel Types Tab

The Fuel Types tab allows you to create predefined Fuel Types. The Fuel Types are used in your Fuel Vendor list records.

To add a Fuel Type from the Fuel Types tab:
- Click on Company Configuration in the main navigation.
- Click the Fuel Type tab.
- Click Add. An Add Fuel Type pop-up is displayed.
- Enter the Fuel Type.
- Click OK. The Fuel Type is added to the list.
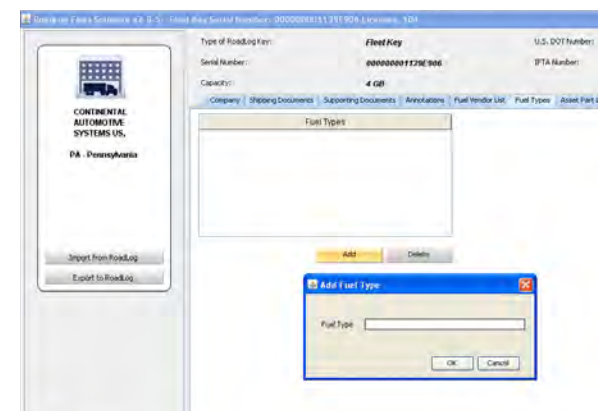
Asset Part List Tab

The Asset Part List allows you to create predefined lists of Part Names and Part Codes for the Part Names. It also allows you to create predefined lists of Defects for each of the Part Names. Each Defect Name is assigned to a specific Part Name. Defect Codes are assigned to each Defect name and Defects can be flagged as being "High Priority."

The Part Names and Codes and Defect Names and Codes are used by the Driver when creating DVIRs in the RoadLog device. All Part Names are established as either a Trailer part or a Tractor part.

To add Part Name and Part Code to the Asset Part List:
- Click on Company Configuration in the main navigation.
- Click the Asset Part List tab.
- Select Tractor or Trailer from the Asset Type list.
- Click the Add button below the Part Name / Part Code grid to add a Part Name for the vehicle type selected. An Add Part pop-up appears.
- Enter the Asset Part Name and Part Code and click OK. The Asset Part Name and Code are entered.

For each Asset Part, you can establish a list of predefined Defects and Defect Codes associated with that part.

To create a Defect Name and Defect Code for a specific asset:
- Click on Company Configuration in the main navigation.
- Click on the asset in the Part Name list.
- Click the Add button below the Defective Name grid.
- Enter the Defect Name and a Defect Code. Check High Priority, if appropriate and click OK. The Defect Name and Code are entered.
- After each Defect is entered, click OK.
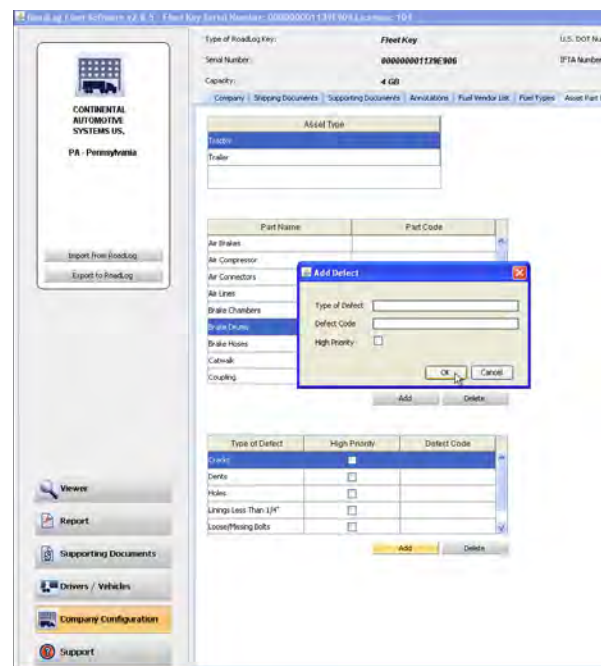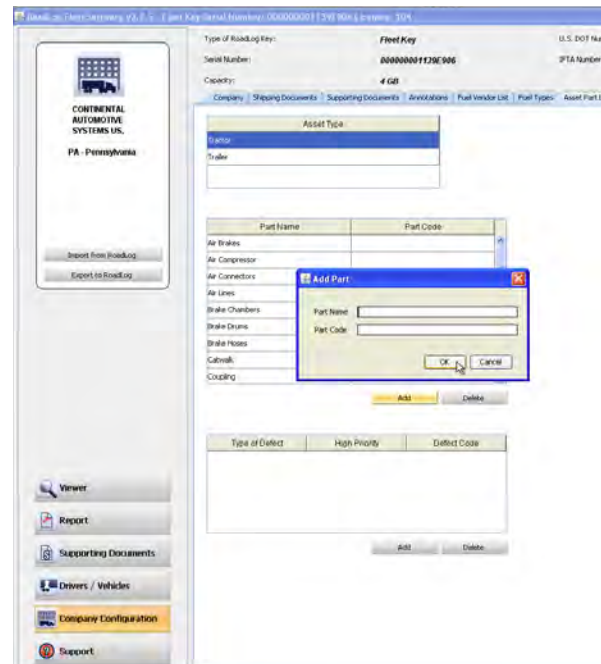
Application Tab

The Application Tab allows you to set the parameters for the Fleet Management Software itself. The application settings are established during first start up, but they can be edited at any time.

To edit the application parameters:
- Click on Company Configuration in the main navigation.
- Click the Application tab.
- Click in the appropriate field to edit settings for Common Data, Regulations and Measurement and Path.

Application Tab fields include:

Common Data
- **Language:** Choose the language to be used from the pull-down menu.
- **SD Type:** A list of the file types that can be used for Supporting Document scanned file links. Only image files (jpeg, png, gif), .pdf and .txt files can be linked as Supporting Documents. The .doc, .exe and .cmd files cannot be used.

- **SD Max Size:** Set the maximum file size for scans associated with Supporting Documents.

  Note: Limiting the scan file size will help maintain lower times required for transfers and back ups.

Regulations and Measurements
- **Regulation:** Select the region whose regulations will be used to calculate HOS compliance.
- **Distance:** Choose miles or kilometers as unit for distance.
- **Volume Unit:** Choose gallons or liters as the unit for volume.
- **Speed Unit:** Choose either miles/hr or km/hr as the unit for speed.

Path
- **Database Backup Path:** Sets the location where backup files will be stored.
- **Database Backup Period:** The number of days before a backup reminder is given to the user.
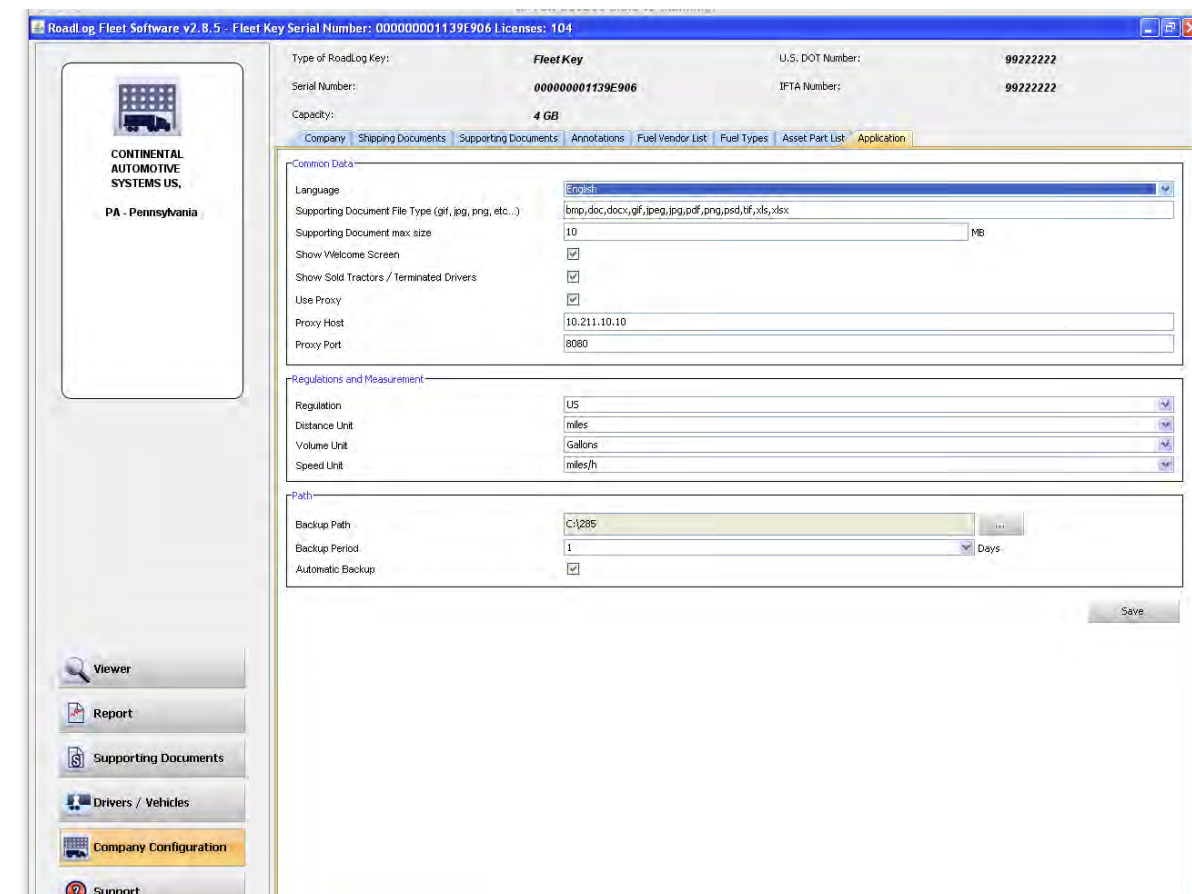
Support Screen

The Support page allows you to download updates for the Fleet Management Software and the RoadLog device and to work with VDO RoadLog technical and customer support. Your PC must be connected to the Internet to use most of these functions.

Update RoadLog Device Software

To check for updates available for the RoadLog device from the Support screen:
- Click Support in the main navigation.
- Click Update EOBR Software. The RoadLog Fleet Management Software will automatically check the RoadLog User Portal for software updates. Note, the check may take a few minutes, and you will not see a new window or progress bar as the check is made.
- If a newer version of RoadLog software is available, you will be asked whether you wish to download the new version. Click Yes to begin the download.
- The file will automatically be downloaded to your computer and onto the Fleet Key or Driver Key connected to the PC. The next time that Key is inserted into the RoaLog, you will be able to upload the newer software.

Update RoadLog Fleet Management Software

To check for updates available for the RoadLog Fleet Management Software from the Support screen:
- Click Support in the main navigation.
- From the Support screen click Update Fleet Management Software. The software will automatically check the RoadLog User Portal for software updates. The check may take a few minutes, and you will not see a new window or progress bar as the check is made.
- If there is a Fleet Management Software version available that is newer than what you are using, you will be asked whether you wish to download the new version. Click Yes to begin the download.
- When the download is complete, the update will load automatically and restart the Fleet Management Software automatically. No action is required.
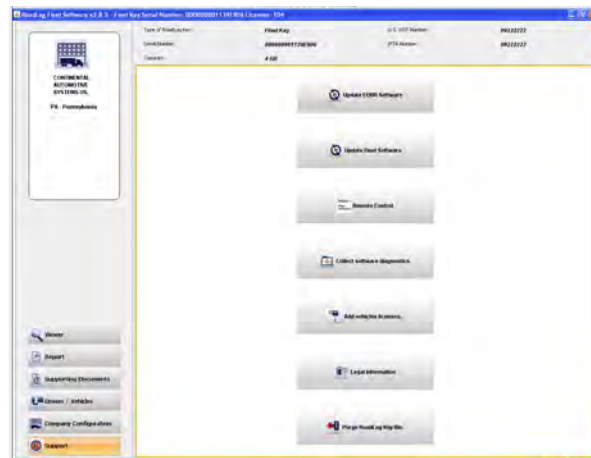
Start Remote Control (FastViewer)

FastViewer is an internet-enabled program that allows RoadLog technical support personnel to share your screen and controls in order to diagnose problems and answer questions.

To use this feature, contact RoadLog Technical Support to schedule a FastViewer Session. Technical Support is available from 8:00 am to 5:00 pm EST.

Technical Support

Email: roadlog-support@vdo.com
Tel.: (855) ROADLOG, or (855) 762-3564
Fax: (800) 752-7224 or (610) 366-9837

To start a FastViewer session:
- Click Support in the main navigation.
- Click Start FastViewer. A Connection pop-up appears.
- Choose the method you'll use to connect to the Internet and click Connect.
- Enter the session number received from Technical Support and confirm the transfer of screen control by clicking "On" on the remote control.

   Note: By participating in a FastViewer session, you are agreeing to let VDO Technical Support personnel take temporary control of your PC.

Technical support personnel will assist you in the FastViewer procedure. They may ask you to use the Collect Software Diagnostics function to collect diagnostic files for the Net Viewer Session.

Collect Software Diagnostics

The Collect Software Diagnostics function creates an archive of data and diagnostic files that will help technical support personnel deal with your issues.

To perform a Collect Software Diagnostics:
- Click Support in the main navigation.
- Click Collect Software Diagnostics.

Adding Vehicle Licenses

The RoadLog Fleet Management Software includes built-in licenses to track two RoadLog devicess. In order to track additional vehicles, you must purchase additional licenses.

VDO RoadLog™ Fleet Management Software License Extension Cards will enable you to add additional Vehicles to your list of tracked Vehicles. License cards can be purchased from RoadLog retailers. If a RoadLog retailer is not available in your area, licenses can be ordered by phone through VDO RoadLog Customer Support by calling (855) ROADLOG, or (855) 762-3564.

Adding Vehicle Licenses through the RoadLog Fleet Management Software

   Note: The procedure described here requires Internet access to complete the license addition process. If you do not have Internet access, see the instructions for Adding Vehicle Licenses through the VDO Portal.

To add Vehicle licenses from the VDO RoadLog™ Fleet Management Software License Extension you've purchased:
- Click Support in the main navigation.
- Click Add vehicle licenses.
- Enter the License Key number from the License card you've purchased. Click OK. The Fleet Management Software communicates with the RoadLog portal to activate the licenses.
  Note: This communication may take several minutes.
- When communication is completed, the Fleet Management Software will display a confirmation message confirming the number of licenses that have been added. The number of licenses is shown in the Windows bar on the RoadLog Fleet Software application.

Adding Vehicle Licenses through the VDO Portal

If you do not have Internet access on the PC that you use to run the Fleet Management Software, you will have to use a different PC that has Internet access to add licenses. Purchase the RoadLog Fleet Management Software License Extension card(s) you need. Take the extension card(s) and your RoadLog Fleet Portal User Name and Password to the Internet-connected PC (your User Name is the email address that you entered when you created your RoadLog Fleet Management Software account).

Go to http://www.vdoroadlog.com/software-downloads. Log in with your User Name (email) and Password.
- Click on Update Fleet Manager licenses.
- Enter the license code from one License card into the field Add Device Licenses.
- Click Add License.
- Click on View Licenses. The portal will display your License Card Number(s) and Activation Code(s).
- Write down the Activation Code for each newly entered License Card number(s).
- **Note:** Copy carefully! All numbers must be exactly correct for the Activation Code to work.
- Take your Activation Code(s) back to your PC and launch the Fleet Management Software.
- Click Support in the main navigtion.
- Click Add vehicle licenses.
- In the field seen on the Add vehicle licenses screen, enter NOT AVAILABLE. Click OK.
- You'll see the Extend License Error screen with the message "Error occurred while getting Activation key from web service." Click OK. You'll see the Activation Key screen.
- Enter the Activation Code you copied from the RoadLog Portal. Click OK.
- The RoadLog Fleet Management Software will update your license record to reflect the additional licenses you purchased. The number of licenses is shown in the Windows bar on the RoadLog Fleet Software application.

If you need assistance, call **VDO RoadLog support personnel are available at:**
Technical Support & Customer Service
Email: RoadLog-support@vdo.com
Tel.: (855)-ROADLOG, or (855) 762-3564
Fax: (800) 752-7224 or (610) 366-9837
Customer service is available 8:00 am – 5:00 pm EST
Email: RoadLog-sales@vdo.com
www.vdoRoadLog.com

Purging old data

Whenever you import files, the Fleet Management Software will automatically purge data from the Driver Key and Fleet Key that is older than you are legally required to keep. Backup files are not affected; the Fleet Management Software keeps a copy of those files in the backup folder.

> **Note:** The backup folder location is defined in the Company Configuration / Application tab in the Backup Path field.

To choose the backup location:
- Click Company Configuraton in the main navigation.
- Click the Application tab.
- Click on the ••• button and navigate to the directory/folder you want to use.
- When you've selected the directory/folder, click Open.

You may want to periodically purge old data from the Driver or Fleet Key, manually.

As it is used, the Driver Key will continue to accumulate data. The Key will eventually fill up and need to be purged of old data.

To manually purge older data from the the Driver or Fleet Key:

- Click Support in the main navigation.
- Click Purge RoadLog Key file. The default choice is to purge all records shown with a checkmark.
- If you want to purge only selected files, unclick the Purge All checkbox and select those you want to purge in the check box column. If you want to purge all, leave the box checked.
- Click OK. The selected records are purged from the RoadLog Key.

Replacing Lost or Damaged RoadLog Keys

If your Fleet Key or Driver Keys are ever lost or damaged, VDO Technical Support can replace them. They will assist you in restoring the data on the keys and enabling the new keys to work with your existing Fleet Management Software.

> **Note:** Buying a new key to replace a lost or damaged one is only one part of what you'll need to do to restore your operations. Your Fleet Management Software records are tied to the specific serial numbers of your Fleet Key and Driver Keys. To enable your Fleet Management Software to work with new serial numbers, you'll need assistance from VDO Technical Support.

If you need to replace lost or damaged keys, contact VDO Technical Support:

VDO RoadLog support personnel are available at:
Technical Support & Customer Service
Email: RoadLog-support@vdo.com
Tel.: (855)-ROADLOG, or (855) 762-3564
Fax: (800) 752-7224 or (610) 366-9837
Customer service is available 8:00 am – 5:00 pm EST
Email: RoadLog-sales@vdo.com
www.vdoRoadLog.com

8.   Resolving Conflict Files

Using the Fleet Key and Driver Keys, data can be imported from the RoadLog Fleet Management Software to the RoadLog device, and from the RoadLog device to the Fleet Management Software.

As a result of such data transfers, there may be instances of conflicting files, where data from the Fleet Management Software does not match the data from the RoadLog device. When the Fleet Management Software detects conflicting data, it will prompt you to resolve "Conflict Files." You will need to choose which file to retain – the file generated at the RoadLog device or the File generated in the Fleet Management Software.

Often, the newer file will be the correct one to retain, but there may be instances where the opposite is true. Check with the Driver who created the records in the RoadLog device to help determine where the conflict occurred and which record is the correct record to retain.

IMPORTANT: When you choose the conflicting file to retain, it will overwrite the other record! Be sure to choose carefully before proceeding.

9.   Backing up your RoadLog Data

Moving from paper logbooks to electronic fleet data does not change the regulatory requirements for maintaining compliance records. The US and Canada require that operators maintain HOS and other records for specific periods of time – in the US, for six months.

You are legally responsible for maintaining that data. That means establishing a data backup routine and following it without exception. A daily backup is the best way to avoid falling out of legal compliance. Do not back up data to the same computer that holds your active Fleet Management Software. If it fails, you'll lose your data and your backup.

RoadLog Fleet Management Software supports easy backup with automatic reminders at intervals you select. You can backup RoadLog data to any storage location your PC can access – a USB memory stick, a CD or DVD, an external hard drive, a networked server or online "cloud" storage.

In the Application settings tab, you can set in the back-up location, whether you want the back-up to take place automatically and how frequently.

Any one Key, hard drive, or computer can fail, or be lost or stolen. So always back up to multiple storage devices.

To guard against fire or other natural disasters, never keep all your backups in one location. We strongly recommend daily transport or copying of backups to an off-site location.

Driver back up reminders at startup

When you've used the Fleet Management Software for a period of time, you'll see Driver backup reminders at startup. You'll see a grid that lists Drivers along with the date of their last download, the date their next download is scheduled for and the number of days until the next download will be overdue.
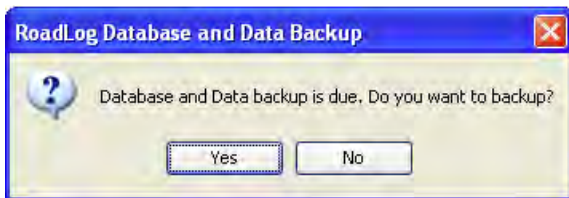
Chapter 2: VDO RoadLog™ Installation

This chapter of the Owner's Manual is intended to help you get your RoadLog device installed, up and running quickly and easily.

BEFORE STARTING:

- To avoid damage to the vehicle or risk of electric shock, always confirm the location of electric wires and air lines by consulting the vehicle's owner's manual or your local vehicle repair facility. If there is any uncertainty about the location of electric wires, disconnect the vehicle battery before drilling.

- Be careful when installing cable or wires to avoid kinks, knots or twisting in the line.

- Be certain cable/wires are not rubbing on sharp edges.

RECOMMENDED TOOLS:

- Drill
- Pen or pencil
- 5mm Hex Key
- Tape measure
- Phillips & Flathead Screwdrivers
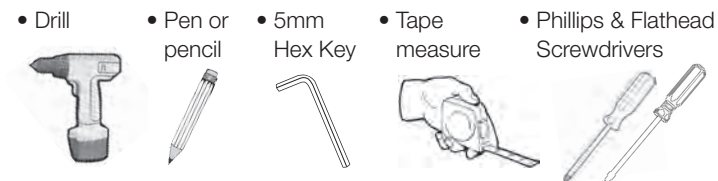
1. Make sure you have the correct Installation Kit!

- RoadLog can be connected with 6-pin, 9-pin, 16-pin OBDII or open-end "basic" cable. Only one cable is required. Choose the one that fits your connector or choose the open-end if you have no connector and will connect individual wires to the vehicle. (For basic cable, installation by a professional shop is recommended. When using the basic cable the ignition line should be connected.)

- Each cable is supplied with the basic installation bracket. Y-Cables are an optional upgrade that retain an open cable connector in the cab.

6 pin Y

6 pin direct

9 pin direct

9 pin Y with flange

9 pin Y with flange w/plastic nut

16 pin direct OBDII

16 pin Y OBDII

Open end

2. Choose your Mounting Option.

- The "basic" bracket is included with each installation kit. The optional omni-directional mount (Part #3290-90110100) allows for more mounting location options and greater control of the viewing angle.

SUGGESTIONS FOR BRACKET MOUNTING

BASIC BRACKET (included)

INSTALL BRACKET WITH DOUBLE-SIDED ADHESIVE...

...OR INSTALL BRACKET WITH SCREWS AND WELL-NUTS.
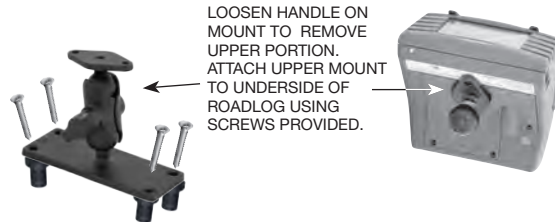
SCREEN VIEW ANGLE IS ADJUSTABLE USING BRACKET KNOBS.
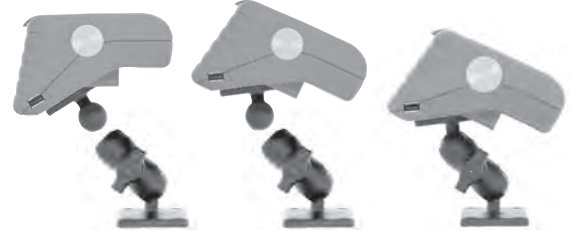
OMNI-DIRECTIONAL MOUNT (optional)

INSTALL OMNI-DIRECTIONAL MOUNT WITH DOUBLE-SIDED ADHESIVE OR WITH SCREWS AND WELL-NUTS.

LOOSEN HANDLE ON MOUNT TO REMOVE UPPER PORTION. ATTACH UPPER MOUNT TO UNDERSIDE OF ROADLOG USING SCREWS PROVIDED.

PLACE THE ROADLOG AND UPPER MOUNT BACK INTO THE CLAMP AND RETIGHTEN WHILE ADJUSTING THE SCREEN VIEW ANGLE AS REQUIRED.

3. Choose your Mounting Location.

*Recommended locations

A. Top of the dash driver's left side*

B. Top of the dash driver's center*

C. Instrument panel driver's right side

D. Overhead console driver's left side

E. Overhead console driver's center side

F. Overhead console driver's right side
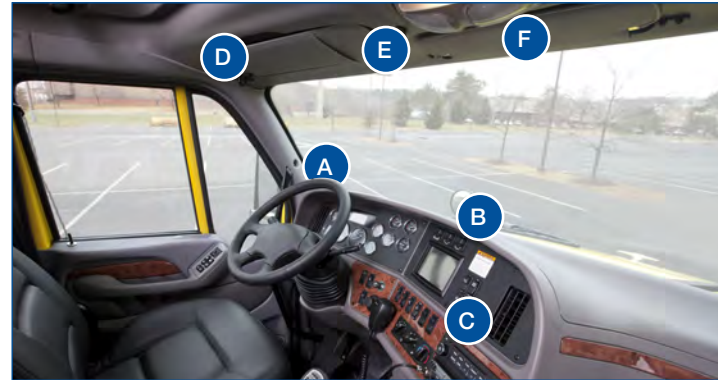
IMPORTANT: Choose a location that will allow easy operation, but will not block your view of the road.

NOTE: The unit must be placed a minimum of 10 inches (20cm) away from the driver.

4. Attach your Bracket or Mount.

- The bracket or omni-directional mount can be attached with the adhesive foam pads or with screws and well-nut inserts supplied. When using the adhesive foam pads be sure to clean the surface with a single direction swipes by using an alcohol prep pad supplied in the installation kit. Let it dry and apply the tape. The tape will cure in 24-48 hours. The best results are achieved when the surface is warm, so you may want to warm up the cab if the ambient temperature is low.

- Screws and well-nut inserts will require drilling into the cab's interior. If using screws, first mark the mounting holes using the bracket or omni-mount base plate as a guide. Make sure to avoid drilling into any electrical cables and air supply lines underneath the surface.

- If using well-nuts, use a 3/8" drill bit to create a hole in which to insert the well-nut shaft. Again, make sure to avoid drilling into the electrical cables and air supply lines underneath the surface.

5. Prepare the RoadLog.

- Unpack the device.
- Remove the service panel on the underside.
- Insert the Battery.
- Connect the cable.
- Close the service panel.
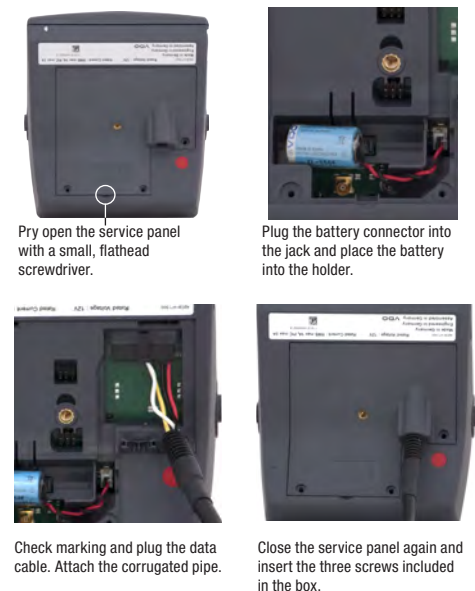
Pry open the service panel with a small, flathead screwdriver.

Plug the battery connector into the jack and place the battery into the holder.

Check marking and plug the data cable. Attach the corrugated pipe.

Close the service panel again and insert the three screws included in the box.

6. Connect Cable.

- Run the cable from the RoadLog to the vehicle data port. The cable can be run behind the interior dash panels via gaps between them or by their removal where necessary.

- Secure the cable out of the driver's range of motion and moving parts – coil up and secure the excess cable by using zip ties provided.

- Connect the cable to the vehicle data port. The device will power up and be ready for the initial on screen setup.

- NOTE: If using the Open End Cable, follow the wiring indications shown on Page 6.

Cable ports are usually located in the dash (1) or on the floor to the left of the driver's seat (2).

7. Install RoadLog into Mount.

Basic bracket:
Place the RoadLog device into the basic bracket and install the knobs. Adjust the screen view angle and then tighten the knobs.

Omni-directional mount *(optional)***:**
Loosen the handle until the upper portion of the mount can be removed. Attach the upper mount to the underside of the RoadLog device using screws provided. Place the RoadLog device and upper mount back into the clamp and retighten while adjusting the screen view angle as required.
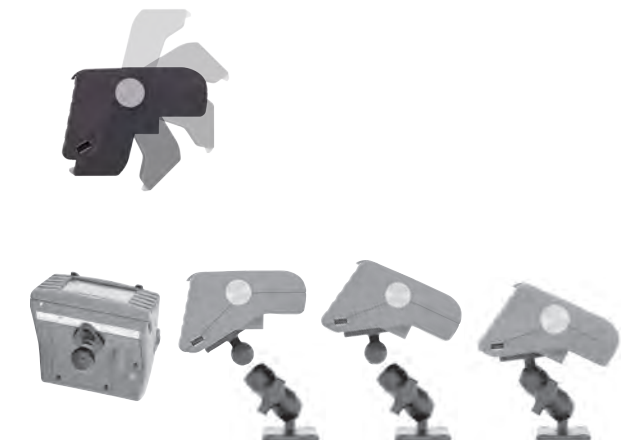
8. Load Paper Roll.

To load the paper roll (Part # 3290-90010100), lift the access panel at the top of the RoadLog, lay the paper roll into the cavity and pull the leading edge of the paper forward, towards the screen. The roll should be inserted so that when the paper comes out, it curls towards the back of the unit.

Correct roll orientation   Incorrect roll orientation

9. Compliance Sticker.

Applying the included sticker to the window of your cab is optional, but doing so will ensure that anyone who sees it knows your vehicle is complying with FMCSA regulations. (Clean surface before applying.)

Instructions for Open End "Basic" Cable

If using the Open End "Basic" Cable, follow the pin / wire color assignments from the table:

Note: If the vehicle ignition line is accessible during RoadLog installation, it's recommended that the ignition line be connected with the device (see vehicle connector). If the ignition line is connected, it's recommended that the **Wake up** condition configuration parameter be set to the ignition only setting.

For the vehicles in which the ignition line is not accessible, RoadLog can detect the vehicle ignition **on/off** status based on the vehicle synchronization data received. Therefore, if the ignition line is not connected, the **Wake up** condition configuration parameter should be set to the ignition or vehicle data setting. See

If the ignition or vehicle configuration setting is chosen, the installer must verify that RoadLog is in fact receiving the ignition **on/off** status based on the received vehicle synchronization data. If the status is not being received, RoadLog cannot function properly.

(front view)
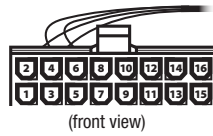
The basic cable has a total of 8 wires and only Pins 1, 2 and 4 are connected: ignition, battery (+) and ground (−), respectively. The rest of the wires have to be connected according to the table below depending on the type of the vehicle.

Pin No	Signal Name	Description	Wire Color	Purpose	Notes / Connection
1	TERM15	Terminal 15 ignition signal	Brown	Input of vehicle ignition line	
2	TERM30	Terminal 30 power supply voltage	Red	Supply line from vehicle battery (+)	
3	CAN1_H	CAN1 High Line		CAN_H connection to vehicle CAN bus (J1939-11/15)	Must be twisted together with CAN1-L wire
4	TERM31	Terminal 31power supply ground	Black	Ground line, GND	
5	CAN1_L	CAN1 Low Line		CAN_L connection to vehicle CAN bus (J1939-11/15)	Must be twisted together with CAN1-H wire
6	CAN1_GND	CAN 1 ground		CAN_GND connection to vehicle CAN bus (J1939-11/15)	
7	J1708 (+)	RS484 line A		J1708 (+) connection to vehicle SAE J1708 bus	
8	J1708 (-)	RS484 line B		J1708 (-) connection to vehicle SAE J1708 bus	
9	SPEED_IN			Speed pulse signal input Vehicle speed pulse input from vehicle speed sensor (ISO16844)	
10	RPM_IN			Revolution pulse signal input RPM pulse input from vehicle engine controller ECU	
11	CAN2_H	CAN2 HighLine		CAN_H connection to proprietary CAN bus (third party device connection)	Must be twisted together with CAN2-L wire
12	CAN2_L	CAN2 Low Line		CAN_L connection to proprietary CAN bus (third party device connection)	Must be twisted together with CAN2-H wire
13	CAN2_GND	CAN2 ground		CAN_GND connection to proprietary CAN bus (third party device connection)	
14	DIGITAL_IN1	Digital input 1		Digital input (tri-state: not used (high-Z)/ high-level active input/ low-level active input)	
15	DIGITAL_IN2	Digital input 2		Digital input (tri-state: not used (high-Z)/ high-level active input/ low-level active input)	
16	RFU	Not used		Reserved for future use	

6-pin and 9-pin Wiring Configurations

The 6-pin and 9-pin cables are configured as shown:
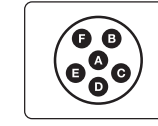
6-Pin Connector (front view)

9-Pin Connector (front view)

6-Pin Description	Pin Location
J1708 (+) Data	A
J1708 (−) Data	B
Battery (+)	C
Battery (−)	E
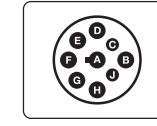
9-Pin Description	Pin Location
Battery (+)	A
Battery (−)	B
J1939/CAN Data HIGH	C
J1939/CAN Data LOW	D
CAN Shield	E
J1708 (+) Data	F
J1708 (−) Data	G
OEM	H
OEM	J

OBDII Vehicle Connector

If using the OBDII Vehicle Connector, follow the pin assignments from the OBDII connector pin assignments table:

OBDII connector pin assignments (front view)

OBDII-Pin Description	Pin Location
Chassis ground	4
CAN_H line of ISO 15765-4	6
CAN_L line of ISO 15765-4	14
Permanent positive voltage	16

Chapter 3: VDO RoadLog™ Operation

1.   VDO RoadLog Fundamentals

RoadLog is designed to eliminate the need for paper logs, while keeping Drivers in compliance with all FMCSA Hours of Service (HOS) and Driver Vehicle Inspection Report (DVIR) regulations.

Free upcoming software updates will include reporting on IFTA mileage and IRP miles and compliance with rules for Canada, Alaska and oil field.

With RoadLog, a Driver can:
- Automatically calculate and display HOS daily driving availability, HOS daily duty availability and HOS weekly duty availability based on the limits imposed by FMCSA regulations.
- Record Off Duty Status activities (RODS data). RoadLog will store the RODS data for the current day and the previous 14 calendar days.
- Receive audio and visual warnings before exceeding the driving and HOS duty limits and receive warnings again after exceeding the driving and HOS duty limits.
- Take exemptions from HOS rules when required (personal use, emergency conditions, adverse driving conditions, 16-hour extension and 100 and 150 air-miles radius Driver).

- View and print the HOS daily log for the current day as well as each of the past 14 days.
- Assign up to three trailers to the trip.
- Assign up to five shipping documents to the trip.
- Create, view and print pre-trip and post-trip DVIRs by entering data for the vehicle and the current trailers.
- Comply with roadside inspections by proving HOS logs and DVIRs via data transfer on USB or by printing them directly from RoadLog's built-in thermal printer.
- Record various trip activities such as meals, fueling and vehicle wash and print out Supporting Documents for these activities directly from the RoadLog's built-in thermal printer.
- Download vehicle data and DVIR data recorded by RoadLog over the course of the past 30 calendar days to any Fleet Key or Driver Key belonging to the logged-in company.
- Carry data from one vehicle to another if he/she changes vehicles in a fleet.
- At the end of each day's work, log out and download RODS data to the Driver Key and submit that data to the company.

Operating RoadLog:

The key functions required to operate RoadLog include:

Company Log In:

Before any Driver can log in to RoadLog, the company must be logged in so that all the data can be recorded under a company account. Company log in can be done automatically with an activated Fleet Key.

> **Note:** More than one company can share a single RoadLog, but only one company can be logged in at a time.

RoadLog Configuration:

RoadLog configuration requires setting vehicle and company parameters such as VIN, language preference and vehicle license plate number. Configuration data can be entered directly through the RoadLog touch screen, or data can be entered into the Fleet Software and transferred to the RoadLog via the Fleet Key.

> **Note:** Company data cannot be transferred to RoadLog via the Driver Key.

> **Important:** Serial number of the RoadLog vehicle unit needs to match the serial number provided during the tractor creation process in the Fleet Software.
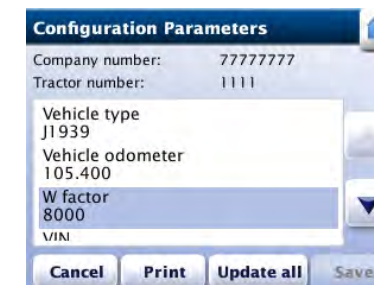
Driver Log In / Log Out:

Drivers must log in on their RoadLog at the beginning of the work period, whether they're about to begin Driving or going On Duty. Drivers can log in and log out automatically, with their personalized Driver Key, or manually through the RoadLog Touch Screen, provided they were logged in with their Driver Key at an earlier time, or their Driver Profile has been uploaded to RoadLog via the Fleet Key.
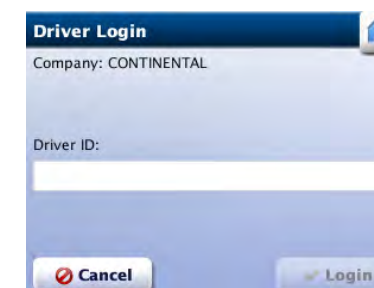
Data Download / Upload:

Data recorded by RoadLog is downloaded to the Driver Key for transfer to the Fleet Software. Once entered in the Fleet Software, the data can be analyzed and archived to maintain compliance with FMSCA regulations.

Data can be transferred using a personalized Driver Key or the Fleet Key.

When a Driver logs in with a Driver Key, RoadLog automatically uploads status data (RODS data) recorded during past work sessions. When a driver downloads or uploads data, both Driver and company-related data is transferred.

The RoadLog Hardware

1. Touch Screen Display

2. On/Off Button and Operation Mode

3. Standard Mount

4. Printer paper output

5. Positionable Dial

6. USB Connector

On/Off Button and Operation Modes

When power is applied to RoadLog, it starts automatically. The splash screen is displayed during device initialization. After initialization, RoadLog enters the active mode and is fully operational.

As long as RoadLog is connected to the vehicle and has power, it monitors the vehicle's engine status. When the vehicle engine is on, RoadLog stays in active mode. It is not possible to turn off the device, except by disconnecting the power supply.

When RoadLog is in active mode and the vehicle engine is off, pressing the On/Off button switches RoadLog to sleep mode.

When RoadLog is in sleep mode, pressing the On/Off button switches RoadLog to active mode.

When RoadLog is in active mode, holding the On/Off button continuously for 10 seconds causes RoadLog to reboot. The device will restart with a software startup sequence.

When the engine is turned off and no USB data transfer, printing or touch screen activity occurs for five minutes, RoadLog enters sleep mode and the display automatically darkens. During sleep mode, RoadLog consumes minimal current from the vehicle battery.

USB Connector

A "type A" USB port is used to connect the RoadLog with Driver Keys, the Fleet Key or any USB flash drive formatted in FAT32 file system.

CAUTION! USB devices can only be plugged into RoadLog when the vehicle is stopped!

Driving while a USB device is plugged into RoadLog may cause permanent damage to both RoadLog and the USB device.

Printer

RoadLog has a built-in thermal printer to print roadside reports. Since it's a thermal printer, no ink is ever required. VDO RoadLog brand paper is fade-resistant.

To load the paper roll, lift the access panel at the top of the RoadLog, lay the paper roll into the cavity and pull the leading edge of the paper forward, towards the screen. The roll should be inserted so that when the paper comes out, it curls towards the back of the unit, not forward towards the screen. If the paper curls forward, take the roll out and reverse the orientation. Close the lid and tear the leading edge flush with a downward motion.

> **Note:** when a red line appears on the printout, it indicates the end of the paper roll. The roll needs to be replaced.

> **Note:** The head of the printer may get hot! Do not touch the printer head as this may cause burns!

> **Note:** Use only VDO RoadLog brand paper rolls! Using non-approved paper can damage the unit and void the warranty.

CORRECT Roll Orientation   *INCORRECT Roll Orientation*

GPS Antenna / Connector

RoadLog has a built-in GPS receiver and antenna, allowing it to acquire and record position data along with RODS data. When a strong GPS signal is received, the bar below the on-screen GPS icon turns green. If the signal is not strong enough to compute location, a red bar is displayed below the on-screen GPS icon.

To improve the signal reception, an external GPS antenna is available as an optional accessory.

> **Note: Use only the VDO RoadLog external GPS antenna. Non-approved antenna may not provide correct performance.**

Connector Cables

A variety of cable options are offered. See VDO RoadLog Installation for details.

Learn more about connector cables

Battery

RoadLog has a built-in battery that's used to maintain the date and time if power becomes unavailable. The battery is capable of maintaining the device date and time continuously for at least 2 years. When the battery level becomes critically low, a warning screen with a low-battery icon is displayed. For information on replacing the battery, see VDO RoadLog Installation.

Touch Screen Display

RoadLog is operated by tapping the touch screen with your fingers. The touch screen allows you to choose actions and type into the on-screen keyboard. When RoadLog is in the active mode the display is on. When RoadLog is in sleep mode the display is off.

System Icons

Depending on the screen selected, one or more of the following RoadLog icons will appear:

Icon	Description
	Home
	GPS signal: Green = Good signal
	GPS signal: Red = Low/no signal
	USB device: Red = Remove Driver/Fleet Key When no USB device is plugged in, no icon is shown.
	Vehicle data: Red = No ECM. No communication with the vehicle engine module. When vehicle data is available, no icon is shown.
	Trailer: Red = No trailer(s) assigned for the trip When trailer(s) are assigned for the trip, no icon is shown.
	Shipment documents: Red = No document(s) assigned for the trip When document(s) are assigned for the trip, no icon is shown.

2. First Device Start Up After Installation Into Vehicle

After all of the installation steps as described in VDO RoadLog Device Installation are completed, RoadLog starts automatically. The splash screen is displayed during device initialization.

RoadLog searches for a GPS signal while displaying the **GPS Synchronization** screen.
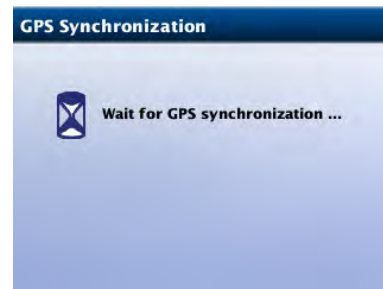
Once RoadLog acquires a GPS signal, it synchronizes its system time with GPS time and displays the GPS **Synchronization Successful** screen.

RoadLog then restarts while displaying the **Logo** screen.

Notes: If RoadLog cannot receive a valid GPS signal, it remains in the **GPS Synchronization** screen. When a signal is acquired, RoadLog is able to synchronize the system only with the time, not with the vehicle location.

> **Note:** At first start-up RoadLog needs to acquire a valid GPS signal in order to initialize and set the internal clock of the system. RoadLog will remain in the **GPS Synchronization** screen until a valid signal is acquired and the clock has been set to the current time.

During the initialization process, RoadLog performs a self-test. If the self-test fails, it displays the **Self-Test Failed** screen. In this case, the device is not operational and will need to be serviced by a factory certified service provider.
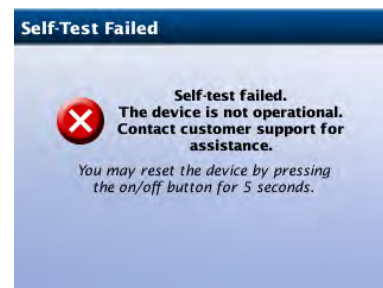
During the initialization process, RoadLog verifies the internal battery energy level. If RoadLog detects a low battery, it displays the **Battery Replacement** screen. You can tap the OK button to continue normal operation, but the battery must be replaced soon. For instructions on battery replacement, see "VDO RoadLog Installation."

If RoadLog is disconnected from the power supply, it will go through the same initial sequence seen at first device start up, including displaying the **Settings** screen for no company log in.

GPS Synchronization

Synchronization Successful

Self-Test

Self-Test Failed

Battery Replacement

3. Company Log In

To enable all RoadLog functions, a company must be logged into the device. To log in your company:

Insert your activated RoadLog Fleet Key into the RoadLog USB port.

RoadLog performs the company log in and, when complete, displays the **Login Completion** screen.

Remove the Fleet Key from the connector. RoadLog displays the **View Configuration Parameters** screen.

Tap <u>Yes</u> to view the **Configuration Parameters** screen.

IMPORTANT: If the RoadLog says 'This fleet key cannot be used to login the company" it means that the serial number of the device is not entered in the Fleet Software under the vehicle for which that unit is intended.

Login Completion
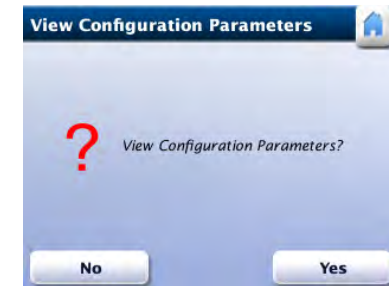
Configuration Parameters

4. Configuration Parameters

In order for RoadLog to perform its functions, the Configuration Parameters must be set to the correct values for your vehicle.

Go to the **Configuration Parameters** screen from the **View Configuration Parameters** screen during first start up, or by going to the **Menu** screen and tapping Settings.

From the **Settings** screen, tap <u>Configuration</u>.

> **Note:** In order to be able to edit the configuration parameters, the Fleet Key must be inserted and a company must be logged in.

> **Note:** If you go to the **Configuration Parameters** screen from the **Settings** screen, RoadLog displays the **Insert the Fleet Key** screen to indicate that a Fleet Key is required to configure the device. If the Fleet Key is not available, tap <u>Continue</u> to view the current parameters. RoadLog displays the **Configuration Parameters** screen with the editing controls disabled.
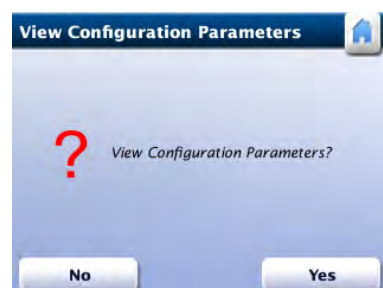
Configuration Parameters

Menu

Settings

Setting Configuration Parameters

At first device start up, RoadLog has default values for the configuration parameters.

To change the default values, insert the Fleet Key. RoadLog displays the **Fleet Key Options** screen.

Tap <u>Configuration</u>. RoadLog displays the **Configuration Parameters** screen.

Use the up and down arrows to scroll through the parameters list. Tap <u>Print</u> to print the configuration parameters.

Fleet Key Options
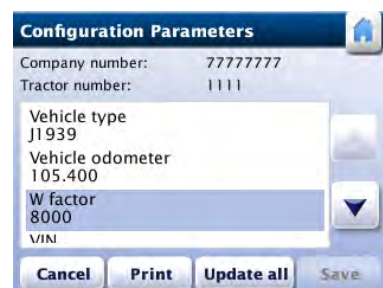
Configuration Parameters

Setting the Vehicle Synchronization Parameter

The vehicle synchronization parameter defines which interface will be used to transfer the synchronization data from the vehicle to RoadLog. The following values can be chosen:

J1939: RoadLog device obtains vehicle data from vehicle J1939 data bus (the RoadLog cable connects to lines 3, 5 and 6 for communication).

J1708: RoadLog obtains vehicle data from vehicle J1708 data bus (the RoadLog cable connects to lines 7 and 8 for communication).

Pulse inputs: RoadLog device obtains speed pulses from the vehicle speed sensor (the RoadLog cable connects to line 9 for communication).

By default, the vehicle synchronization parameter is set to J1939.

To change the parameter from the **Configuration Parameters** screen tap <u>Vehicle Type</u>. RoadLog displays the **Configuration Type** screen.

Tap <u>Vehicle Synchronization</u>. RoadLog displays the **Configuration Type** screen.

> Notes: If your Vehicle uses a 6-pin connector, RoadLog will synchronize with J1708.

> If your Vehicle uses a 9-pin connector, RoadLog will synchronize with either J1708 or J1939 connection. Generally, for Vehicles built before 2007, the 9-pin connector uses J1708. For the 2007 and newer vehicles, the 9-pin connector uses J1939.

> Different manufacturers transitioned between J1708 and J1939 at different times, so it is important to carry out the synchronization procedure and wait for the **"Communication established successfully"** screen to appear.

Vehicle Syncronization

No Communication Established

Communication established successfully

Setting the Vehicle Synchronization Parameter Automatically

From the **Configuration Type** screen tap <u>Automatic</u>. RoadLog uploads the parameter setting from the Fleet Key and displays the **Fleet Key Configuration Value** screen containing the uploaded value.

Tap <u>Accept</u>. RoadLog displays the **Configuration Type** screen showing the new setting for the vehicle synchronization parameter.

Configuration Type

Setting the Vehicle Synchronization Parameter Manually

To set the configuration type manually, tap <u>Manual</u> from the **Configuration Type** screen. RoadLog displays the **Vehicle Synchronization** screen. Select the interface to be set.

Bus Synchronization Method

If you select J1939 or J1708, RoadLog displays the **Checking Messages Presence** screen while checking that it's receiving the correct data from the vehicle.
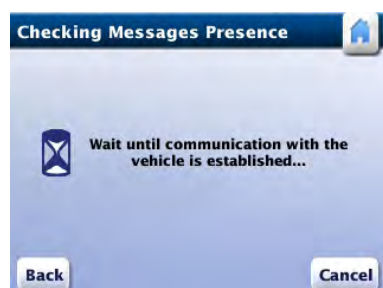
RoadLog detects the relevant messages along with their source and displays the **Source Selection Method** screen.

Automatic Message Source Method

From the **Source Selection Method** screen, tap <u>Automatic</u>. RoadLog will detect and choose the preferred sources for the relevant messages and then display the **Vehicle Synchronization** screen.

Setting the Automatic Message Source

To select the sources for the relevant messages manually from the **Source Selection Method** screen, tap <u>Manual</u> and then tap <u>Next</u>. RoadLog displays the **J1939 Messages Manual Selection** or J1708 Messages **Manual Selection** screen, according to your selection.

Vehicle odometer and vehicle speed data can come in from multiple sources.

Tap the preferred source for each and tap <u>Next</u> when you've made the selection. RoadLog returns to the **Vehicle Synchronization** screen.

Vehicle Synchronization

Checking Messages Presence

Source Selection

Tap <u>Done</u>. RoadLog displays the **Configuration Type** screen showing the new setting for the vehicle synchronization parameter.

Pulse Inputs Synchronization Method

If you select <u>Pulse Inputs</u> from the **Vehicle Synchronization** screen, RoadLog displays the **Configuration Parameters** screen showing the new setting for the vehicle synchronization parameter.
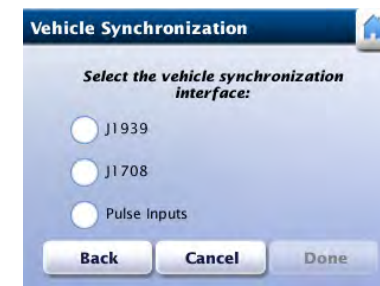
Vehicle Synchronization

Setting the Vehicle Odometer Parameter

The vehicle odometer parameter is used only when RoadLog is synchronized using the pulse inputs interface. When using pulse inputs, the odometer reading is based on the mileage entered into the Fleet Software when the vehicle record was created. Starting from this value, RoadLog automatically adds mileage based on the pulse inputs from vehicle.
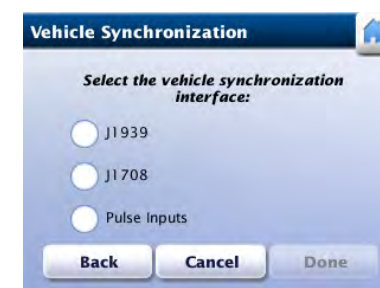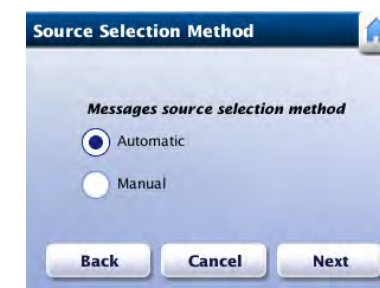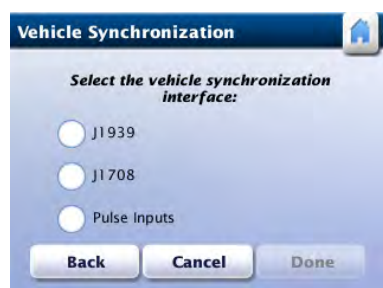
To set the odometer reading from the **Configuration Parameters** screen, tap <u>Vehicle odometer</u>. RoadLog displays the **Configuration Type** screen.

Setting the Odometer Parameter Automatically

From the **Configuration Type** screen tap <u>Automatically</u>. RoadLog uploads the parameter setting from the Fleet Key and displays the **Fleet Key Configuration Value** screen containing the uploaded value.

Tap <u>Accept</u>. RoadLog displays the **Configuration Parameters** screen showing the new setting for the vehicle odometer parameter.

Setting the Odometer Reading Manually

From the **Fleet Key Configuration Value** screen Tap <u>Manual</u>. RoadLog displays the **Edit Parameter Value** screen.

Select <u>Miles</u> or <u>Kilometers</u> and tap the editable field to enter the odometer value. RoadLog displays the popup keyboard.

Type in the vehicle odometer reading and tap <u>Go</u>. RoadLog displays the **Edit Parameter Value** screen with the user-defined value.

Tap <u>Done</u> to confirm the newly added value. RoadLog displays the **Configuration Type** screen showing the new setting for the vehicle odometer parameter.

Configuration Parameters

Configuration Type

Setting the Odometer Parameter Automatically

Setting the Odometer Reading Manually

Setting the Vehicle Identification Number (VIN)

By default, the VIN parameter is set to 00000000000000000.

To enter the actual VIN from the *Configuration Parameters* screen, use the arrows to scroll to the VIN line and tap the VIN. RoadLog displays the *Configuration Type* screen.

Setting the VIN Automatically

From the *Configuration Type* screen, tap Automatic. RoadLog displays the *Fleet Key Configuration Value* screen showing the uploaded value.

Setting the VIN Manually

From the *Configuration Type* screen, tap Manual. RoadLog displays the *Edit Parameter Value* screen. Tap the editable field to enter VIN. RoadLog displays the popup keyboard.

Type in the vehicle odometer reading and tap Go. RoadLog displays the *Edit Parameter Value* screen with the value that was typed in. Tap Done. RoadLog displays the *Configuration Parameters* screen showing the new setting for the VIN.

Setting the VIN Automatically

Configuration Type

Setting the Wake up condition

The Wake up condition is the event that triggers the device to begin recording data. If the ignition line is connected during installation, it's recommended that the **Wake up** condition configuration parameter be set to the ignition only setting.

If the ignition line was notconnected during installation, the **Wake up** condition configuration parameter should be set to the ignition or vehicle data setting.

Setting the Wake up condition Automatically

From the *Configuration Type* screen, tap Automatic. RoadLog displays the *Fleet Key Configuration Value* screen showing the uploaded value.

Setting the Wake up condition Manually

From the *Configuration Type* screen, tap Manual. RoadLog displays the *Wake up condition* screen. Chose the desired wake up source using the radio buttons. Tap Done.

Setting the Vehicle License Plate Number (VLPN)

From the *Configuration Parameters* screen, use the arrows to scroll to the VLPN line and tap the VLPN line. RoadLog displays the *Configuration Type* screen.

Setting the Vehicle License Plate Number (VLPN) Automatically

From the *Configuration Type* screen, tap Automatic. RoadLog displays the *Fleet Key Configuration Value* screen showing the uploaded value.

Setting the Vehicle License Plate Number (VLPN) Manually

From the *Configuration Type* screen, tap Manual. RoadLog displays the *Edit Parameter Value* screen. Tap the editable field to enter the VLPN. RoadLog displays the popup keyboard.

Type in the vehicle VLPN and tap Go. RoadLog displays the *Edit Parameter Value* screen with the value that was typed in. Tap Done. RoadLog displays the *Configuration Parameters* screen showing the new setting for the VLPN.

Setting the VLPN Manually

Setting the Vehicle Type

The Vehicle Type parameter must be set based on the vehicle type in which RoadLog is installed. There are three Vehicle Types:

1. **Property-carrying Vehicle with Trailer –** If this is the selection made, RoadLog performs the HOS availability calculation for any logged in Driver according to the HOS rules for property-carrying vehicles. The Driver is required to inspect the trailer if equipped and enter a record for trailers attached to the vehicle. The vehicle type selection must be property-carrying vehicle with trailer.

2. **Property-carrying vehicle without trailer** – If this is the selection made, RoadLog performs the HOS availability calculation for any logged in Driver according to the HOS rules for property-carrying vehicles.

3. **Passenger-carrying vehicle –** If this is the selection made, RoadLog performs the HOS availability calculation for any logged in Driver according to the HOS rules for passenger-carrying vehicles.

Vehicle Type

By default, the vehicle type is set to property-carrying vehicle with trailer.

To change the setting from the *Configuration Parameters* screen, use the arrows to scroll to the Property with trailer line. Tap the line. RoadLog displays the *Configuration Type* screen.

Setting the Vehicle Type Automatically

From the *Configuration Type* screen, select Automatic. RoadLog displays the *Fleet Key Configuration Value* screen showing the Vehicle Type that was entered in the Fleet Software for the vehicle.

Setting the Vehicle Type Manually

From the *Configuration Type* screen, select Manual. RoadLog displays the *Vehicle Type* screen. Tap the selection you want and tap Done to confirm the selection.

Tap the selection you want and tap Done to confirm the selection. RoadLog returns to the *Configuration Parameters* screen.

Setting the Printing Speed

RoadLog's built-in printer can be set to print at low speed or high speed. At low speed, the RMS current consumption is approximately 1A. At high speed the RMS current consumption is approximately 3A.

CAUTION: Before choosing high printing speed, be certain your line can supply the 3A necessary. Insufficient power can cause the unit to shut down, data loss and other unpredictable behavior. If uncertain of your power supply, consult the vehicle manufacturer.

By default, the printing speed is set to low speed.

To change the printing speed from the *Configuration Parameters* screen, use the arrows to scroll to the Printing speed line. Tap the line. RoadLog displays the *Configuration Type* screen.

Setting the Printing Speed Automatically

From the *Configuration Type* screen, select Automatic. RoadLog displays the *Fleet Key Configuration Value* screen showing the printing speed for the vehicle that was entered in the Fleet Software.

Vehicle Details

Vehicle Type

Setting the Printing Speed Manually

From the *Configuration Type* screen, select Manual. RoadLog displays the *Printing Speed* screen. Tap the selection you want and tap Done to confirm the selection. RoadLog returns to the *Configuration Parameters* screen.
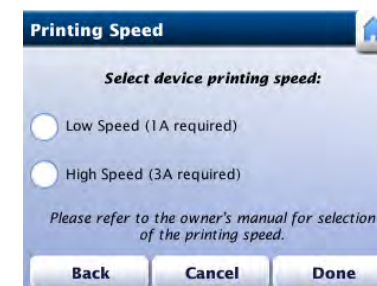
Setting the W Factor

The vehicle's W factor is the number of pulses that are generated by the vehicle speed sensor when the vehicle travels a distance of 1 kilometer. The vehicle W factor is used only when RoadLog is synchronized with the vehicle using the pulse inputs interface, which is uncommon. In this case, the W factor is used by RoadLog to calculate the vehicle distance travelled.

By default, the W factor parameter is set to 8,000 pulses/km. There are three ways to change the W factor value. To change the W factor from the *Configuration Parameters* screen, use the arrows to scroll to the W factor line. Tap the line. RoadLog displays the *Configuration Type* screen.

Setting the W Factor Manually

From the *Configuration Type* screen, select Manual. RoadLog display the *Edit Parameters Value* screen. Tap the editable field to enter the W factor. RoadLog displays the popup keyboard. Type in the W factor and tap Go. RoadLog returns to the *Configuration Parameters* screen.
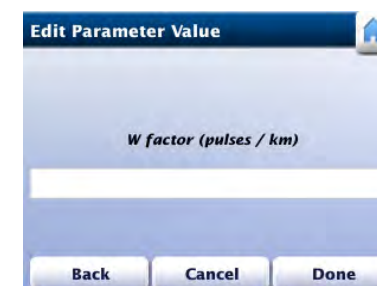
Setting the W Factor Automatically

From the *Configuration Type* screen, select Automatic. RoadLog displays the *Fleet Key Configuration Value* screen showing the W factor that was entered in the Fleet Software for the vehicle. Tap Accept. RoadLog returns to the *Configuration Parameters* screen.

Setting the W Factor by Measurement

If you are not certain of the vehicle's W factor, you can determine it by driving and entering the initial and final odometer values.

From the *Configuration Parameters* screen, use the arrows to scroll to the W factor line. Tap the line. RoadLog displays the *Configuration Type* screen.

Tap Measure. RoadLog displays the *Odometer Initial Value* screen. Select miles or kilometers and tap the editable field

Set Printing Speed Manually

Enter W Factor Manually

to enter the odometer value at the start of the test trip. RoadLog displays the *Keyboard* screen.Type in the vehicle odometer reading and tap Go. RoadLog displays the *Odometer Initial Value* screen with the value for odometer entered. Tap Done. RoadLog displays the *Odometer Final Value* screen.

Drive the vehicle at least 5 miles.

> **Note:** The longer the trip distance, the more accurate the W factor measurement is.

At the end of the test trip, when the vehicle is stopped, tap the editable field in the *Odometer Final Value* screen. RoadLog displays the *Keyboard* screen.

Type in the vehicle odometer reading and tap Go. RoadLog displays the *Odometer Final Value* screen with the value for odometer entered.

Tap Calculate W factor. RoadLog calculates the W factor and displays the *W Factor Value* screen.

Tap Accept. RoadLog displays the *W Factor Value* screen showing the new setting for the W factor parameter.

> **Note:** As the Vehicle is driven, RoadLog will compare distance measured by GPS against distance calculated using the W factor. If there is a significant discrepancy between the distance calculated by the use of W factor and the GPS coordinates, the system will go into the "no ECM" mode, and calibration will need to be repeated.
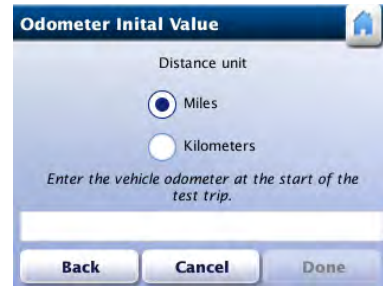
Odometer Initial Value
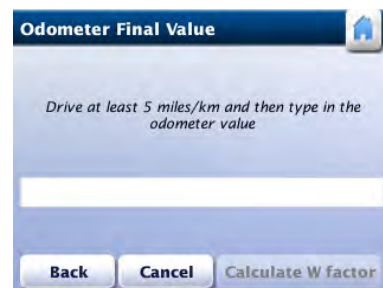
Odometer Final Value

Saving new Configuration Parameters to the Fleet Key

Whenever vehicle parameters are entered into RoadLog in the vehicle, you'll want to transfer those parameters to the RoadLog Fleet Software.

To save new configuration parameters to the Fleet Key, insert the Fleet Key into RoadLog.

From the *Configuration Parameters* screen, tap Update all. Then tap Save. RoadLog displays the *Configuration Person Name* screen.

Tap the first name field to enter the first name of the person updating the Configuration Parameters. RoadLog displays the *Keyboard* screen.

Type in the first name and tap Go. RoadLog displays the *Configuration Person Name* screen with the first name entered. Enter the last name and tap Go.

Tap Done. RoadLog displays the *Fleet Key Update* screen.

Tap Yes to update the values saved on the Fleet Key, or tap No to save the changes to RoadLog, but leave the values unchanged on the Fleet Key.

RoadLog displays the *Transfer in Progress* screen during data transfer and the *Configuration Update Completed* screen when data transfer is completed.

Tap OK. RoadLog displays the *Configuration Completed* screen to indicate that the Configuration process has been completed successfully.

Unplug the Fleet Key. RoadLog displays the *Menu* screen.

> **Note:** The *Menu* screen serves as the home screen when a company is logged in but no Drivers are logged in. The *Menu* screen can also be reached by tapping Menu on the Driver *Overview* screen.

Configuration Person Name
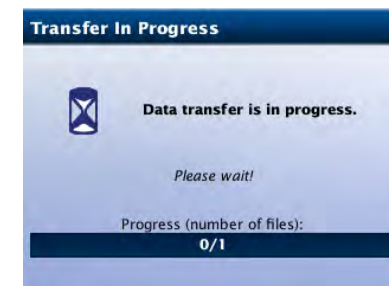
Transfer in progress
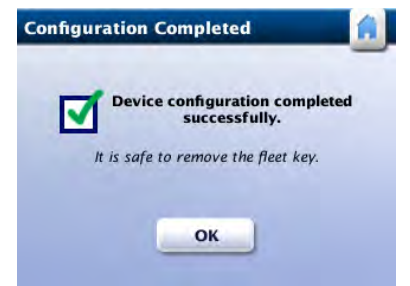
Configuration Completed

5. The User Settings Menu

In addition to Configuration, the *Settings* menu screen choices include Illumination and Language buttons that allow the user to customize the display settings.

The Diagnostic button allows users to see the diagnostic events, check on the diagnostic status and run the memory self test.

The About button takes you to a display of the Serial Number, Hardware Version (HW) and Software Version (SW) number of your RoadLog. The *About* screen also provides a link to legal information about the RoadLog system.

Settings

Adjusting Illumination

At first power up, the screen illumination is set to maximum brightness.

To adjust the screen brightness from the *Settings* screen tap Illumination. RoadLog displays the *Display Illumination* screen.

Use the up and down arrows to adjust screen illumination to the desired level. Tap Save to save the current illumination level. Tap Back to go to the *Settings* screen.
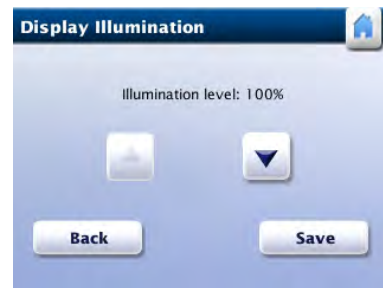
Note: If the RoadLog vehicle synchronization calibration parameter is configured to J1939, and it receives illumination level data from the vehicle, RoadLog will use the vehicle illumination setting instead of the RoadLog user setting.

Display Illumination

Change Language

RoadLog uses English as the default language at first start up.

To change the language from the *Settings* screen, tap Language. RoadLog displays the *Language* screen.

Select the new language by tapping the corresponding button. RoadLog sets the selected language and returns to the *Settings* screen.

Language

Diagnostic Functions

You can view RoadLog's diagnostic status, view historical diagnostic events or perform a device self-test.

To perform a diagnostic function from the *Settings* screen tap Diagnostic. RoadLog displays the *Diagnostics* screen.

Tap Diagnostic Status to display the *Diagnostic Status* screen showing the status of Vehicle synchronization, ignition, GPS, position and time.

Tap Diagnostic Events to display the *Diagnostic Events* screen showing the history of diagnostic events.

> **Note:** See Diagnostic events list for explanation of the diagnostic codes.

Tap Print to print the diagnostic events list.

Tap Back to return to the *Diagnostics* screen.

Tap Self-Test to start a self-test. RoadLog displays the *Self-Test in Progress* screen.

When the self-test is successfully completed, RoadLog displays the *Self-Test Passed* screen. Tap OK to return to the *Diagnostics* screen.

> **Note:** If the self-test fails, RoadLog displays the *Self-Test Failed* screen. In this case, the device is not operational and will need to be serviced by a factory certified service provider.

Diagnostics

Diagnostic Status

Diagnostic Events

Self-Test in Progress

About – RoadLog Device Information

You can view the Serial Number, Hardware Version (HW) and Software Version (SW) number of your RoadLog.

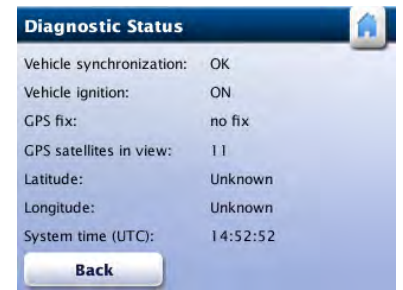From the *Settings* screen tap About to display the *About* screen. Tap Back to return to the *Settings* screen. You can also view legal information from the *About* screen by tapping Legal Information.
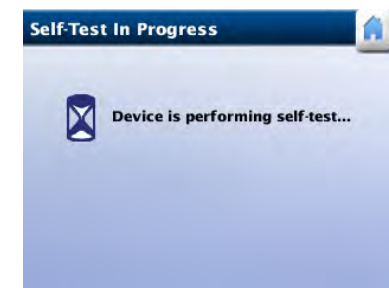

About

6.   Daily Operations

Once RoadLog has been installed, the Company has been logged in and first start up procedures have been completed, RoadLog is ready for daily operational use. When you start the engine, RoadLog will automatically go from sleep mode to active mode.

> **Note:** If no Driver is logged in at start up, you'll see the *Menu* screen. From here you can log in, review the DVIR or view the RoadLog settings.

Driver Log In

At the start of each workday, Drivers must log in to RoadLog in order to record their duty status and activities for that day. Drivers can log in automatically with their Driver Key or manually.

Automatic Log In with the Driver Key

To log in to RoadLog automatically, insert your Driver Key into the USB port. RoadLog displays the *Preview Availability* screen. Data displayed includes:
- **Driver:** Name of the Driver logging in.

- **Last status:** Last duty status recorded for the Driver and the date and time when the duty status was set.

- **Driving time left:** Remaining driving time allowed for the Driver.

- **Availability reset:** Time of the day when the HOS calculations will be reset.

  > **Note:** If it's your first log in, or RoadLog detects there is not sufficient historical data for HOS availability calculation, RoadLog will not be able to calculate "Driving time left," and it displays the *Not Sufficient RODS Data* screen. It will take a 24 hour period from the first Driver log in for the system to be able to calculate "Driving time left" and "Daily Availability." It will take 34 consecutive hours of "off duty" time to show "Weekly duty availability."

Tap <u>Continue</u> to continue. RoadLog displays the *Initial Status* screen.
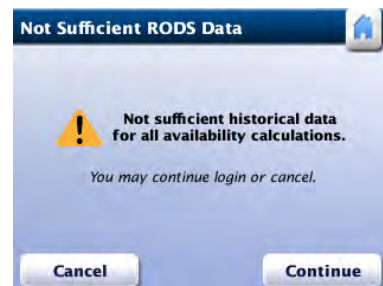
Not Sufficient RODS Data

Enter your Status

Tap the appropriate button for your current status to let the system know if you're coming on as a <u>Driver</u>, going <u>On Duty</u>, going in the <u>Sleeper Berth</u>, or driving for <u>Personal Use</u>.

> **Note:** If you're logging in as a team, one person must select <u>Driver</u> and the other person(s) <u>On Duty</u>. RoadLog will record HOS data for each person based on your duty status selections.

Your next step will depend on whether you are the first Driver to log in and whether there are Trailers and/or Shipping Documents assigned to the vehicle. In either case, you'll need to perform all necessary DVIR procedures when starting your trip.

If you are the first driver to log in as "Driving," and current resources are assigned in RoadLog, you must choose whether to keep or discard the Trailers and/or Shipping Documents that have been assigned as current resources. After making your choices, you'll perform a DVIR.

If Trailers and/or Shipping Documents are already confirmed by a previous Driver, you'll be asked to "Keep the current resources," to confirm that resources have not changed. After confirming the resources, you'll perform a DVIR.

Automatic status updates

Once you've logged in, RoadLog will update your status automatically – there's no need to select a status change from the *Driver Overview* options menu.

When you travel over 2 miles, RoadLog will automatically put you in "Driving" (D) status.

When the vehicle is stationary for five minutes, RoadLog will automatically put you in "On Duty" status (ON).

> **Note:** You can manually select "Sleeper Berth" (SB) or "Personal Use" (PS) from the *Driver Overview* options menu, whenever the vehicle is not traveling.
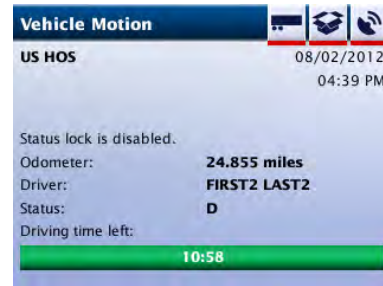

Initial Status

Driver Overview Options

Vehicle motion screen

When vehicle motion is detected, the *Vehicle Motion* screen is displayed regardless of whether or not a Driver is logged in.
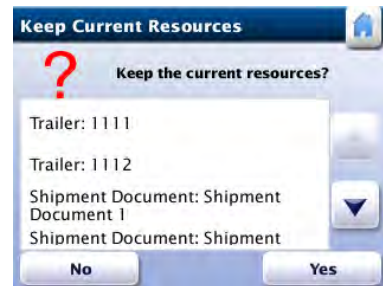
Managing Resources

If current resources are assigned in RoadLog, and you are the first Driver to log in, RoadLog displays *Keep Current Resources* screen that lists the trailers or Shipping Documents as current resources.

If you want to keep current resources, tap Yes. Tap No if you want to discard them.

If you are not the first Driver to Log In:

From the *Driver Overview Options* menu screen, tap Resources. Confirm your **Resources**, including **Assets** (tractor and trailers), **Shipping Documents** (Bills of Lading or Manifest Numbers, Pro, etc.) and **Supporting Documents** (fuel receipts, meal receipts and vehicle wash receipts, etc.), RoadLog displays *Confirm DVIR Data* screen. Confirm your Data, then tap Next.

RoadLog will ask you to perform a DVIR inspection and enter your findings.

If resources such as trailers or Shipping Documents do not exist, you first need to add them.

From the *Driver Overview* options menu screen, choose Resources > Trailers > Add. In the *Add Trailer* screen, tap the Trailer ID field to bring up the Keyboard. Type in your Trailer information and tap Go. Tap Add to save Trailer info.

Follow the same procedure if no Shipment Documents exist. From the *Driver Overview* options menu screen, choose Resources > Shipping Documents > Add. In the *Add Shipping Document* screen, tap the Shipping Document Number field to bring up the Keyboard. Type in your document information and tap Go. Tap Add to save Shipping Document info.

Vehicle Motion

Keep Current Resources

Confirm DVIR Data

Driver Overview options
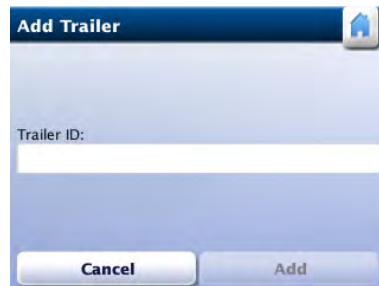
Add Trailer

Add Shipment Document

Manual Log In

If the Driver Key is not available, Drivers can log in manually.

> **Note:** This is the EMERGENCY procedure in case the Driver Key is lost or damaged.

To log in manually, Drivers must have already been entered into the Fleet Software, and their identity must have already been transferred from the Fleet Software to RoadLog via the Fleet Key. See Company Data Transfer.

To log in manually from the *Menu* screen tap Driver Login. RoadLog displays the *Driver Login* screen.

Tap the Driver ID field. RoadLog displays the *Keyboard* screen.

Enter your Driver ID and tap Go (note Driver ID is CAP/lowercase sensitive). RoadLog displays the *Driver Login* screen.

Check your entry and tap Login. RoadLog displays the *Preview Availability* screen. You can now follow the same log in steps you would had you logged in with a Driver Key. See: Automatic log in with the Driver Key.

> **Note:** If you select Personal Use from the *Initial Status* screen, and another Driver is already logged under Personal Use, RoadLog displays the *Force Personal Use Driver Logout* screen.

Tap Force Logout to continue log in under Personal Use. The current Personal Use Driver will be logged out from RoadLog.

> **Note:** If five Drivers are currently logged in, and a new Driver attempts to log in, RoadLog displays the *Maximum Logged In Drivers* screen.

Select a Driver to force log out and tap Force Logout to continue log in process. The selected Driver is now logged out.
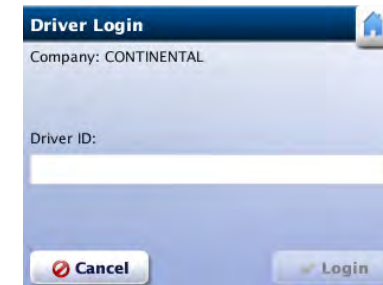
Driver Login

Preview Availability
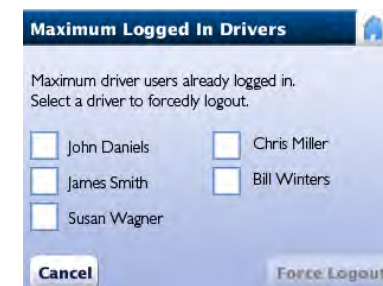
Maximum Logged In Drivers

Manual Location Entry

During log in, if RoadLog does not receive a sufficiently strong GPS signal, it displays the **Manual Location Entry** screen.

Tap on the <u>Location state</u> field to bring up the pop-up keyboard. Tap the first letter(s) of your current state (the auto complete feature suggests the first state that begins with the typed letters). Tap <u>Go</u> if the suggested state is where you are, or tap <u>List</u> to see other states matching the typed letters. Pick your current state from the list and tap <u>Go</u>.

In Location place, enter the city or town closest to your location, as you did your Location state. When complete, tap <u>Continue</u> to continue the log in process.

Location entry

Performing DVIRs at Log In and Log Out

At each log in or log out, RoadLog will prompt the Driver to perform a DVIR. In the DVIR process, you will:

Confirm location and odometer reading.

Confirm defects and/or repairs to defects on the vehicle and trailer(s).

Add any defects found during your inspection.

Confirm that there are no defects or need for repairs and that the vehicle and trailer(s) are in good working order.

When logging in, you will be prompted to begin a DVIR after confirming resources. When logging out, you will be prompted to begin a DVIR after viewing your logs.

During roadside inspections, you will be able to print DVIR reports directly from RoadLog's built-in thermal printer, or download and transfer DVIR records via USB.

<u>For procedures on creating and printing DVIRs see Creating DVIRs.</u>

Confirm DVIR Data

DVIR Defect Details

Driver Overview

The **Driver Overview** screen lets Drivers check the remaining time they're allowed to spend in On Duty or Driver status. Data displayed includes:
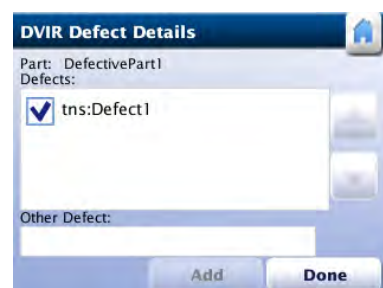
- Country used for HOS regulations.
- Driver: Name of the Driver.
- Status: Driver's current duty status.
- Driving time left: Progress bar indicating the remaining driving time allowed for this Driver. When the remaining allowed driving time is less than 30 minutes, the progress bar color will change to red.
- Daily duty availability: Available On Duty time remaining for the current day.
- Weekly duty availability: Available On Duty time remaining for the current week.
- Gain time in: Time the Driver must wait before driving the vehicle.

If there are other Drivers logged in, you can tap <u>Next Driver</u> to display the **Driver Overview** screen for other logged in Drivers.

To view more Driver overview options, tap <u>More</u>. RoadLog displays the **Driver Overview Options** screen.

Driver Overview

The Driver Overview Options Screen:

Menu choices from this screen include:

- Change Status: Choose from <u>Driver</u>, <u>On Duty</u>, <u>Sleeper Berth</u> or <u>Personal Use</u>.
- Driver Login: Allows additional Drivers to log in manually. If the fleet manager has entered Drivers in the RoadLog Fleet software and transferred the list into the RoadLog, each Driver entered can log in without their Driver Key by tapping the Driver Login button.
- View Logs: View, edit and print your log.
- Driver Options: Enter Exemptions and Pre-Trip and Post-trip activities.
- Resources: View and edit records for documents, trailers and assets.
- Status Lock: Allows you to disable the automatic switch from "Driving" to "On Duty" whenever t he vehicle stops (see details below).
- Driver Logout: Starts the log out process at the end of the trip.
- View DVIR: View and edit DVIRs.
- Menu: Shows the top-level navigation choices seen after company log in, including Driver Login, Driver Overview and Settings.
- Roadside Inspection: Allows Driver to provide authorized inspection personnel with HOS data, either as a print out or as a download to USB drive.

Driver Overview options

Company Data Transfer

The Fleet Key is used not only to run the Fleet Software but also to transfer company data to and from the RoadLog(s) installed in your vehicle(s). With your Fleet Key you can:

- Download company data from RoadLog to the Fleet Key.
- Update the company tractors and trailers files on the Fleet Key with the tractors and trailers data from RoadLog.
- Update the company assets file on the Fleet Key with assets parts list data from RoadLog.
- Upload the company support data from the Fleet Key to RoadLog.

To perform these transfer functions, insert your Fleet Key into RoadLog. The *Fleet Key Options* screen will be displayed.

Tap Company Data Transfer. RoadLog displays the *Fleet Key Data Transfer* screen.

Download Company Data

To download company data from RoadLog to the Fleet Key from the *Fleet Key Data Transfer* screen, tap Download. RoadLog displays the *Fleet Key Files Download* screen.

Use the up and down arrows to scroll through *Fleet Key Files Download* screens.

From the *Fleet Keys Files Download Company Files* and *Fleet Keys Files Download Driver Files* screens, select the files to be downloaded and tap Download. RoadLog displays the *Transfer in Progress* screen during data transfer and the *Data Download Completed* screen when data transfer is completed.

Update the Company Tractors File

To update the company tractors file on the Fleet Key with the tractor data from RoadLog device, tap Update Company Tractors File from the *Fleet Key Data Transfer* screen. RoadLog displays the *Transfer in Progress* screen during data transfer and the *Tractors List Update Completed* screen when the update is completed.

Tap OK. RoadLog displays the *Fleet Key Options* screen.

Fleet Key Data Transfer

Fleet Key Files Download

Tractors List Update Completed

Update the Company Assets File

To update the company Assets file on the Fleet Key with the Assets data from RoadLog, tap Update Company Assets File from the *Fleet Key Data Transfer* screen. RoadLog displays the *Transfer in Progress* screen during data transfer and the *Assets Parts List Update Completed* screen when the update is complete.

Tap OK. RoadLog displays the *Fleet Key Options* screen.

Assests Parts List Update Completed

Upload the Company Support Data Lists

To upload the company support data lists from the Fleet Key to RoadLog from the *Fleet Key Data Transfer* screen, tap Update Company Support Data. RoadLog displays the *Company Support Data Lists* screen.

Use the up and down arrows to scroll through the *Company Support Data Lists* screens.

Select the lists to be uploaded and tap Update. When the upload is completed, RoadLog displays the *Support Data Update Completed* screen.

When all data transfers are complete, remove the Fleet Key from USB port. RoadLog displays the *Menu* screen or *Driver Overview* screen, depending on the log in status.

Company Support Data Lists
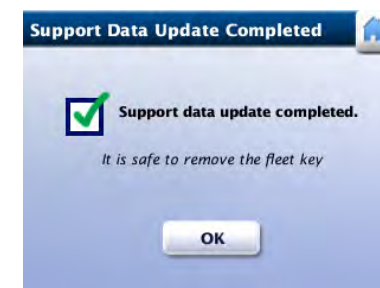
Support Data Update Completed

Data Download to a normal USB Flash Drive

You can download data from RoadLog to a Driver Key, Fleet Key or any regular USB flash drive that has been formatted in the FAT32 file system.

To download data to a normal USB flash drive, insert it into the USB port. RoadLog displays the *USB Flash Drive Options* screen.

Tap Data Download to display the *Download Files* screen.

Select the files to be downloaded by tapping on the corresponding check box. Tap Download to start the data transfer. RoadLog displays *Transfer in Progress* screen during data transfer and *Data Download Completed* screen when the data transfer is complete.

Download FIles

Unplug the USB key from the RoadLog and tap OK. RoadLog returns to the *Settings* screen.

> **Notes:** If the inserted USB flash drive is not formatted in FAT32, RoadLog will display the *Unknown USB Device* screen.

If the inserted USB flash drive contains too much data, RoadLog will display the *USB Flash Drive Full* screen.

If an error is detected during data transfer, RoadLog will display the *Data Transfer Failure* screen.

USB Flash Drive Full

Change Status

To change the duty status of a logged in Driver, tap Change Status from the *Driver Overview* options screen.

RoadLog displays the *Change Status* screen.

Tap on the button for the duty status selection. RoadLog assigns the new HOS duty status and goes to the *Driver Overview* screen.

Change Status

Status Lock

RoadLog detects when the vehicle stops and automatically changes the status of the logged in driver to "On Duty."

However, in some situations, such as severe traffic jams, the Driver may want to disable this feature by using the "Status Lock" function. When Status Lock is on, RoadLog will keep the current Driver status as "Driving," even when the vehicle has stopped and the ignition is off.

To enable Status Lock, Tap Status Lock from the *Driver Overview Options* screen.

To disable Status Lock, tap Status Lock again.

Status Lock is automatically disabled when the Driver logs out or RoadLog enters sleep mode.

Driver Overview Options

View Logs (Grid)

RoadLog allows the Driver to view recorded logs for the current as well as each of the past 14 days.

To review your logs from the *Driver Overview Options* screen, tap View Logs. RoadLog displays the *View Logs (Grid)* screen.

> **Note:** The *View Logs (Grid)* screen is displayed automatically when the Driver Key is inserted at log out.

Use the upper horizontal arrows to scroll through the selected day. Use the lower horizontal arrows to scroll through logs recorded for the current and past 14 days.

Use the + and - buttons to zoom in and out on the grid.

Check your logs: Use the arrow buttons at the bottom of the screen to change the selected date (the current and previous 14 days can be selected).

Check recorded logs. If they are correct and you want to complete log out, tap Submit to finish the viewing session. However, you can view additional log information before you log out. Tap More for further viewing options. RoadLog displays *View Logs (More)* screen.

View Logs (Grid)

View Logs (More)

The *View Logs (More)* screen provides access to other screens where you can view Log Details, Log Events and Details on the Company logged in. It also provides links to the *Driver Overview* screen and the *View Logs (Grid)* screen. You can also print Logs from the *View Logs (More)* screen.

View Logs (More)

View Logs (Details)

RoadLog records and displays details for the Driver's workday.

To view the details from the *View Logs (Details)* screen, highlight any item tap Details. RoadLog displays the *View Logs (Details)* screen.

To review log details, use the up and down arrows to scroll through the list of details. Use the left and right arrows to scroll through recorded logs from the last seven days. Details displayed include:

- Amount of On Duty time for the past 7 days.
- Total distance driven for the current day.
- Companies for which the Driver worked.

> **Note:** to view Company details, select any one of the Companies and tap Details. RoadLog displays the *Company Details* screen.

View Logs (Details)

- Names of Co-Drivers.
    - Vehicles used by the Driver.
        Note: to view vehicle details, select any one of the vehicle identification numbers and tap Details. RoadLog displays **Vehicle Details** screen.
    - Trailers used by the Driver.
    - Shipment Documents used by the Driver.

View Logs (Events)

RoadLog records a list of events, such as lunch, rest and fueling for the logged in Driver. You can view events and add annotations from the **View Logs (Events)** screen.

To see a list of recorded events from the **View Logs (More)** screen, tap Events View. RoadLog displays the **View Logs (Events)** screen.

From the **View Logs (Events)** screen check the duty status records and events recorded during your log in session.

Use the up and down arrows to view the list of recorded events for the selected day. Use the left and right arrows to scroll through the current and past 14 days' recorded events.

Note: If you want to see details for a highlighted event, tap Details to view the selected record's details. RoadLog displays the **Event Details** screen.

View Logs (Events)

Event Details

To add a remark to a recorded event shown in the **View Logs (Events)** screen, highlight the event. Then tap Details. RoadLog displays the **View Logs (Details)** screen.

Tap on any detail to add a remark. Then tap Details. RoadLog displays the **Event Details** screen. Use the up and down arrows to scroll through the list of details for each event. Select the detail you want to annotate by highlighting and tapping it.

Then, tap in the remark field. RoadLog displays the popup keyboard.

Type in the remark, or annotation, you want to add.

Tap OK on the **Event Details** screen to save your remark. RoadLog returns to the **View Logs (Events)** screen.

When you have reviewed all events and completed all annotations, tap Submit to return to the **Driver Overview** screen.

View Logs (Details)

Event Details

View Logs (Office)

From the **View Logs (More)** screen, tap Office. RoadLog displays the **View Logs (Office)** screen showing details for the currently logged in company:
- Company ID number
- Company Name
- Company Address

Tap More to return to the **View Logs (More)** screen, or tap Submit to return to the **Driver Overview** screen.

View Logs (Office)

View Logs (More)

Driver Log Out

At the end of the working day, Drivers must log out from RoadLog. Drivers can log out automatically with their Driver Keys, or they can log out manually on screen.

When logging out automatically, recorded data will be automatically downloaded to the Driver Key. When logging out manually, recorded data is stored in the RoadLog.

Manual Log Out:

To log out manually from the **Driver Overview** screen, tap More.

Tap Driver Logout. RoadLog displays the **Insert Driver Key** screen.

Tap Continue. RoadLog displays the **View Logs (Grid)** screen. Check recorded logs. If they are correct and you want to complete log out, tap Submit to finish the viewing session. However, you can view additional log information before you log out. Tap More for further viewing options.

Automatic Log Out with the Driver Key:

To log out automatically with the Driver Key, insert the Driver Key into the USB port. RoadLog displays the **Driver Key Options** screen.

Tap Logout. RoadLog displays the **View Logs (Grid)** screen. Check recorded logs. If they are correct and you want to complete log out, tap Submit to finish the viewing session. However, you can view additional log information before you log out. Tap More for further viewing options.
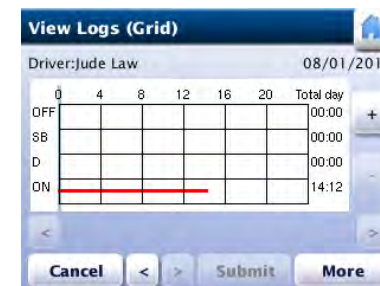

Insert Driver Key

View Logs (Grid)

Data Download at Driver Log Out

At Driver Log Out, RoadLog files are transferred automatically to the Driver Key.

If you are the last logged in Driver, when you log out, RoadLog displays the *Confirm DVIR Data* screen. If you are not the last logged in Driver, RoadLog displays the *Transfer In Progress* screen immediately after you tap Submit.

If you are the last logged in Driver, when you log out, you must perform the DVIR post-trip inspection for current assets assigned to the vehicle, confirming or editing defects. You can print a DVIR report at this time and / or download the data to the Driver Key. For the DVIR procedure see Creating DVIRs.

Data Download without Log Out

Driver data can also be downloaded to the Driver Key without logging out.

Insert the Driver Key. RoadLog displays the *Driver Key Options* screen.

Tap Download Data. RoadLog displays the *Driver Key Files* screen.

Use the Up ad Down arrows to scroll through the list of available files. Tap the check boxes to select the files you want to download.

When your selections are made, tap Download. Roadlog displays the *Confirm Review/Submit RODS* screen. Tap Yes to confirm your choices. RoadLog displays the *View Logs (Grid)* screen.

Tap Submit to initiate file download. RoadLog displays the *Transfer in Progress* screen while transferring the data and the *Data Download Completed* screen when it is finished.

Tap OK. RoadLog returns to the *Driver Overview* screen.

After the download the Driver will remain logged in to RoadLog.

Printing Logs

To print the current HOS Daily Log from the *View Logs (More)* screen, tap Print. When completed, RoadLog returns to the *View Logs (Grid)* screen.

Note: In addition to viewing logs as part of the log out, you can also view logs anytime from the *Driver Overview Options* screen. Tap View Logs. RoadLog displays *View Logs (Grid)* screen.

Confirm DVIR Data

Transfer in Progress

Driver Key Options

Driver Key Files

Confirm Review/Submit RODS

7.   Trailer management

Whenever a trailer is attached or detached from a vehicle, the Driver must add or remove it from RoadLog's database. RoadLog allows you to assign up to three trailers per vehicle.

When attaching a trailer, the Driver must perform a pre-trip inspection and DVIR.

When removing a trailer, the Driver must perform a post-trip inspection and create a DVIR.

For the DVIR procedure see Creating DVIRs.

Adding a Trailer

To add a trailer to RoadLog's database, tap More from the *Driver Overview* screen. RoadLog displays the *Driver Overview Options* screen.

Tap Resources. RoadLog displays the *Resources* screen.

Tap Trailers. RoadLog displays the *Current Trailers List* screen showing any previously attached trailers.

Tap Add button to add a new trailer. RoadLog displays the *Add Trailer* screen. From the *Add Trailer* screen, tap the Trailer ID field to bring up the Keyboard. Type the first digit(s) of the trailer number you want to add.

If a list of trailers has been entered from the Fleet Software, RoadLog suggests a trailer number matching the digits typed. If the trailer number you want to add is different than the suggested one, tap List to view other pre-stored trailer numbers matching the typed characters. Pick the correct trailer number from the list and tap Go.

If no list of trailers has been entered from Fleet /Software, or if the trailer you wish to add is not in the stored list, tap Add from the *Current Trailers* screen. RoadLog displays the *Keyboard* screen.

Type in the Trailer ID for the trailer you want to add, then tap Go. RoadLog displays the *Add Trailer* screen. If the ID is correct, tap Add. RoadLog displays the *Confirm DVIR* screen - each time you add a trailer, you must perform a DVIR.

Resources

Current Trailers

Add Trailer

When the DVIR is complete, tap Done. RoadLog displays the *Resources* screen.

Removing a Trailer

To remove a trailer from RoadLog's database, tap More from the *Driver Overview* screen. RoadLog displays the *Driver Overview Options* screen.

Tap Resources. RoadLog displays the *Resources* screen.

Tap Trailers. RoadLog displays the *Current Trailers* List screen showing the attached trailers.

Tap on the trailer you want to remove and then tap Remove. RoadLog displays the *Confirm DVIR Data* screen – before removing a trailer, you must perform a post-trip inspection and create a DVIR for it.

When the DVIR is complete, tap Finish. RoadLog displays the *Current Trailer List* screen, showing the newly added trailer in the Current trailers list.

For the DVIR procedure see Creating DVIRs.

8.   Shipment Documents management

RoadLog allows Drivers to include Shipping Documents such as Bills of Lading, Manifest Numbers, or Pro documents, as part of your data record. Whenever a Shipment Document is added or removed, the Driver must add or remove it from RoadLog's database. RoadLog allows you to assign up to five Shipment Documents per trip.

To add a shipment to RoadLog's database, tap More from the *Driver Overview* screen. RoadLog displays the *Driver Overview Options* screen.

Tap Resources. RoadLog displays the *Resources* screen. Tap Shipment Documents. RoadLog displays the *Current Documents List* screen.

Tap Add to add a new Shipment Document for the trip. RoadLog displays the *Add Shipment Document* screen.

Tap on the Shipment document number field. RoadLog displays the *Keyboard* screen. Type the first character(s) of the shipment document ID you want to add.

RoadLog uses its auto-complete feature to suggest a Shipment Document number from the available shipment documents in its memory. If the Shipment Document you want to add is different than the suggested one, tap List to view other pre-stored Shipment Document numbers matching the typed characters. Pick the correct Shipment Document ID and tap Go.

If no list of Shipment Documents has been entered from Fleet Software, or if the Shipment Document you wish to add is not in the stored list, tap Back to go to the *Keyboard* screen. Type in the complete document number and then tap Go to continue.

RoadLog displays the *Add Shipment Document* screen. If the ID is correct, tap Add. RoadLog displays the *Current Documents List* screen, showing the newly added shipment document.

When the Current Documents List is complete, tap Done. RoadLog returns to the *Resources* screen.

To remove a Shipment Document from the *Resources* screen, tap on Shipment Documents. Highlight the document you want to remove, and tap Remove. When finished, tap Done to return to the *Resources* screen.

Current Shipment Documents

Add Shipment Documents

Current Shipment Documents

9. Supporting Documents

RoadLog allows you to create different types of Supporting Documents such as fuel receipts, meal receipts and vehicle wash receipts. Predefined types of Supporting Documents can be created in the Fleet Software and transferred to RoadLog via data upload from the Fleet Key, other Supporting Document types can be created, as needed, in RoadLog.

Supporting Documents are created both automatically by RoadLog as well as manually by the Driver.

Supporting Documents are stored as data records in RoadLog and are also printed out from RoadLog's built-in thermal printer.

Whenever the Driver creates a Supporting Document for the trip, it must be added to RoadLog's database.

Generating a Supporting Document Automatically

RoadLog automatically generates Supporting Documents in the following circumstances:

The Driver performs a roadside inspection.

OR

The Driver performs a post-trip inspection DVIR and reports the defects found.

Generating a Supporting Document Manually

To manually generate a Supporting Document and add it to RoadLog's database, tap More from the **Driver Overview** screen. RoadLog displays the **Driver Overview Options** screen.

Tap Resources. RoadLog displays the **Resources** screen.

Tap Supporting Documents. RoadLog displays the **Supporting Documents** screen.

Tap Generate Supporting Documents. RoadLog displays the **Generate Supporting Document** screen.

Tap on the Activity Type field. RoadLog displays the **Keyboard** screen.

Type in the first character(s) of the Activity Type you wish to link to the supported document.

RoadLog uses its auto-complete feature to suggest an activity from the available Supporting Documents Activities List in its memory. If the activity you want to add is different than the suggested one, tap List to view other pre-stored Supporting Documents activities matching the typed characters.

Tap on the selected activity, and then tap Go.

If no list of Supporting Document activities has been entered from Fleet Software, or if the Supporting Document activity you wish to add is not in the stored list, tap Back to go to the **Keyboard** screen. Type in the complete Activity Type name and then tap Go to continue. RoadLog displays the **Generate Supporting Document** screen. If the Activity Type is correct, tap Generate.

The Supporting Document for the selected Activity Type is added to the RoadLog's database. RoadLog prints the Supporting Document while displaying the **Printing in Progress** screen. Once the printing is complete, the **SD Generation Completed** screen is displayed.

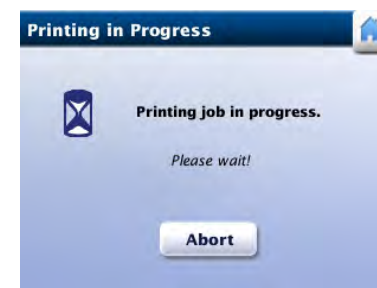Tap OK. RoadLog displays the **Supporting Documents** screen.

If you want to view the Supporting Documents generated, tap View Supporting Documents from the **Supporting Documents** screen. RoadLog displays **View Supporting Documents** screen.

Supporting Documents

Generate Supporting Documents

Printing in progress

View Supporting Documents

Select the Supporting Document you want to view by tapping it. Once a document is selected, tap View Details. RoadLog displays the **View SD Details** screen.

Tap Print to print the Supporting Document details or Back to return to the **Supporting Documents** screen.

Veiw SD Details

10. Vehicle Inspection Reports: Creating DVIRs

Performing DVIRs

RoadLog allows you to create the legally required Driver Vehicle Inspection Reports (DVIR) for the following vehicle assets:

- Tractor inspection

- Trailer inspection

Pre-trip and post-trip inspections can be performed. You can also view the recorded inspection reports.

RoadLog automatically prompts the Driver to perform a pre-trip inspection in the following circumstances:

- A Driver logs in

- A logged-in user changes duty status to Driver

- A trailer is attached to the vehicle

  The **Confirm DVIR Data** screen will appear automatically whenever any of the three actions above occurs.

Pre-trip Inspection

You are required to check the safety of the vehicle before driving and to check whether any defects recorded during the previous post-trip inspection have been fixed. You must then record the results of your inspection in a Pre-trip DVIR.

Creating a Pre-trip DVIR

When the Driver logs in and selects the Driving status, RoadLog prompts the user to perform a pre-trip DVIR for the vehicle and current trailer(s). At the start of the pre-trip DVIR, RoadLog displays the **Confirm DVIR Data** screen.

After checking the vehicle location and odometer reading, tap Next to continue with the DVIR pre-trip inspection. RoadLog displays the **DVIR Menu** screen.

Confrim DVIR Data

From the **DVIR Menu** screen, follow the DVIR procedure as described in [Creating a Post-trip DVIR](#), below.

Once all pre-trip DVIRs are submitted, the log in process is completed. RoadLog displays the **Login Completion** screen.

Remove the Driver Key and tap OK. RoadLog displays the **Driver Overview** screen.

DVIR Menu

Login Completion

Creating a Post-trip DVIR

A post-trip inspection requires that you check Assets (vehicle and current trailer(s)) and sub-assemblies at the end of a trip. If defects are noticed, they must be recorded manually in RoadLog.

RoadLog automatically prompts the Driver to perform a post-trip inspection when:

- A Driver logs out of the system

- Drivers change their status to either Personal Use or Sleeper Berth

- A Trailer is detached from the Vehicle

The post-trip DVIR inspection begins at the **Confirm DVIR Data** screen:

Check the Vehicle location and odometer. Edit the location if required.

> **Note:** If the system is not receiving a clear GPS signal, you may have to enter your location manually.

You can enter your location by tapping the Location field. When you tap the field, the Keyboard comes up. Type in the location and tap Go.

Confirm DVIR Data

Tap Next to continue. RoadLog displays the **DVIR Menu** screen that shows the assigned assets list (vehicle and current trailer(s)).

If you are not detaching any trailers and want to skip the post-trip inspection, tap Skip.

> **Note:** If you are detaching any trailer(s), you must perform a DVIR.

Tap Next to perform DVIR post-trip inspection. RoadLog displays the **DVIR Menu** screen.

DVIR Assets

The **DVIR Menu** screen provides a list of the assigned assets (tractor and current trailer(s)). The Assets in bold text have a viewable DVIR, indicating that a post-trip inspection was already performed.

Assets that are not in bold text do not have reviewable DVIRs. The Driver must select them and create a DVIR:

Use the up and down arrows to scroll through the Asset list.

Tap each unchecked Asset, one at a time, to confirm its status or create a DVIR.

Tap No Defects to create a DVIR with no defects for the selected Asset.

Tap Add Defects to create a DVIR with defects for the selected Asset.

Tap Edit Defects to edit existing DVIR defects previously recorded.

Tap Skip to skip the post-trip inspection of the selected Asset.

Tap Cancel to end the DVIR.

DVIR Assets

> **Note:** The **DVIR Carry Over** screen will appear if an Asset defect recorded in the previous post-trip inspection was not corrected during the most recent pre-trip inspection. Use the up and down arrows to scroll through the existing post-trip inspection reports, tap Next, and RoadLog will automatically add the previously recorded defects to the current report. RoadLog will then return to the **DVIR Menu** screen.

DVIR Carry Over

Assigning Defects to a Part in the DVIR

To create a new DVIR for the selected Asset **from the DVIR Menu screen**, tap Add Defects. RoadLog displays the **DVIR Creation** screen listing the predefined parts for this Asset.

Use the up and down arrows to scroll through the parts list. Select the defective part from the list and tap Edit to assign defects to it.

> **Note:** Part lists are created in the RoadLog Fleet Software, but you may add another part if it does not appear on your list.

DVIR Creation

To create a new part in the list, tap on the Other Part field. RoadLog displays the *Keyboard* screen. Enter the first letter(s) of the defective component and then tap List. A *Parts List* screen containing the predefined parts that match the typed characters will appear.

If the part you wish to add does not appear in the stored list, enter the part's name in its entirety, and then tap Go. The *DVIR Creation* screen is displayed, highlighting the newly added part.

Once you have selected or added the defective part, tap Edit. RoadLog displays the *DVIR Defect Details* screen.

Use the up and down arrows to scroll through the *DVIR Defects Details* list. Tap on and highlight the defect you want to assign to the selected part.

> **Note:** Defect lists are created in the RoadLog Fleet Software. You may select a defect from the list or add another defect if it does not appear on your list.

To create a new defect in the list, tap on the "Other Defect" field. RoadLog displays the *Keyboard* screen.

Enter the first letter(s) of the defect detail and then tap List. A *Defects List* screen containing the predefined defects for the part matching the typed characters will appear.

If the defect you wish to add is not in the stored list, enter the full name of the defect, and then tap Go. The *DVIR Defect Details* screen, with the "Other Defect" field complete, is displayed. Tap Add to add the new defect to the list.

Once you finish adding new defective part types to the list, tap Done.

RoadLog displays the *DVIR Menu* screen. Complete your DVIR using the new defect listing(s) you've created.

When all applicable defects for the part have been entered, tap Done. RoadLog displays the *DVIR Creation* screen. Defective parts are now in bold. Repeat these steps for any remaining defective parts.

Perform post-trip inspections for the remaining assets. Once all assets are checked and entries completed, tap Next.

New Part Added
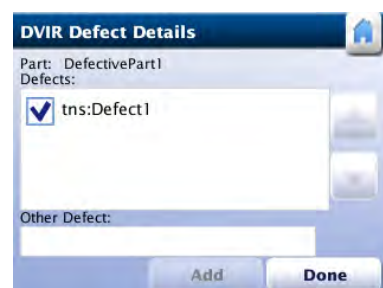
DVIR Defect Details

DVIR Creation

RoadLog displays the *DVIR Summary* screen where you can review each DVIR item. If editing is needed, tap Back to return to the *DVIR Menu* screen.

DVIR Summary

To view items listed in the *DVIR Summary* screen, use the up and down arrows to scroll through the assets.

Use the left and right arrows to scroll through the individual *DVIR Summary* for each asset.

Tap Next to continue. RoadLog displays *Submit DVIR* screen.

For each Asset, select the appropriate checkbox for Repaired, Repairs not necessary, Safe to operate, or Unsafe to operate.

You can add notes by tapping in the *Repair notes* and *Approval notes* fields. When you tap the field, RoadLog displays the *Keyboard* screen. Type in notes and tap Go.

Each time you complete a DVIR for an asset, tap Finish:

> **Note:** If there are more assets to be reviewed, RoadLog automatically displays the *DVIR Summary* screen for the next asset.

Printing a DVIR

To print a DVIR, tap More from the *DVIR Summary* screen, then tap Print from the *DVIR Summary (more)* screen.

Tap Report Defects from the *DVIR Summary (More)* screen to associate a Supporting Document with this DVIR.

To submit each DVIR from the *DVIR Summary* screen, tap Next, then tap Finish from the *Submit DVIR* screen.

RoadLog prints the DVIR, along with the Supporting Document for this activity. During printing, RoadLog displays the *Printing in Progress* screen. To cancel printing, tap Abort.
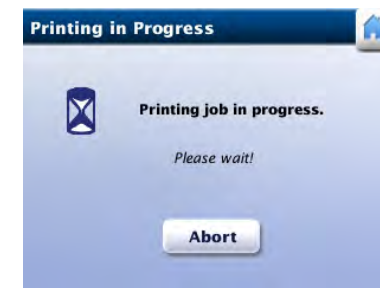

DVIR Summary
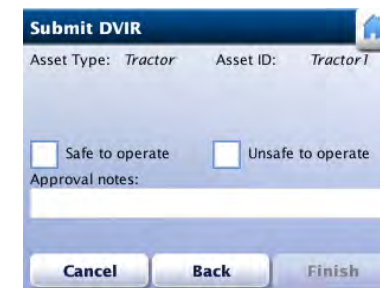
Submit DVIR

Repair Notes/Approval Notes

DVIR Summary (More)

Printing in Progress

Once the printing finishes, the **DVIR Summary** screen will appear.

Tap <u>Finish</u> to complete the DVIR.

Viewing Driver Vehicle Inspection Reports (DVIR)

RoadLog allows you to view the most recent Driver Vehicle Inspection Report for each of the assigned assets.

From the **Menu** screen, tap DVIR overview.

Or

From the or **Driver Overview** screen tap View DVIR.

RoadLog displays the **DVIR Summary** screen. To view, Print and Report Defects from the DVIR reports, follow the procedures from DVIR Summary and Printing a DVIR.

For the procedure on printing see <u>Printing a DVIR</u>.

Driver Overview

DVIR Summary

11. Enabling/Disabling Exemptions

According to the US HOS regulations, a Driver is permitted to take exemptions from HOS rules in the following circumstances:

- Emergency conditions

- Adverse driving conditions

- 16-hour extension (This exception is applicable only for property-carrying vehicles)

- 100 mile radius for CDL drivers

- 150 mile radius for non-CDL drivers

- Personal Use

Exemptions are stopped and started by the Driver and may also be automatically deactivated by RoadLog under specific conditions.

To enter an exemption in RoadLog, tap <u>Driver Options</u> from the **Driver Overview Options** screen. RoadLog displays the **Driver Options** screen.

Tap <u>Take Exemption</u>. RoadLog displays the **Exemptions** screen.

Select the exemption you wish to take from the radio button list.

To add a remark related to the selected exemption, tap on the remarks field. RoadLog displays the **Keyboard** screen.

Enter the remark and tap <u>Go</u>. RoadLog displays the **Exemption** screen with the typed remark.

Press <u>Start</u> to activate the exemption. RoadLog returns to the **Driver Options** screen.

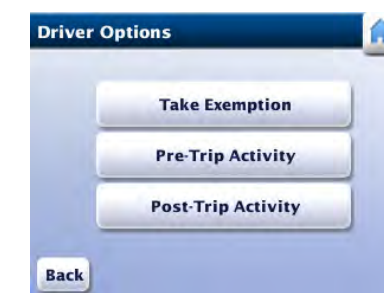If you wish to stop a current exemption, tap <u>Stop</u>.

Automatic deactivation of Exemptions

RoadLog will automatically deactivate the exemptions in the following instances:

The Emergency exemption will end when the Driver changes duty status to Off Duty or Sleeper Berth.

Driver Overview

Driver Options

Exemptions

The Adverse driving condition exemption will end when the Driver fulfills the HOS daily reset condition.

The 100 and 150 air-miles radius exemptions will end when the vehicle exceeds the prescribed radius, when the Driver logs out, or when the Driver changes duty status to Personal Use.

The 16-hour extension exemption will end when the Driver fulfills the HOS daily reset condition.

> **Note:** The 16-hour exemption is designed for one-day "duty tours." The duty tour is the interval between the time a Driver comes On Duty and is released from duty on a daily basis. This period begins and ends at the Driver's normal work reporting location and may only be used following 10 or more consecutive hours off-duty, 10 or more consecutive hours in the sleeper berth, or a combination of 10 or more consecutive hours Off Duty and Sleeper Berth time.

Disabling the 100 or 150 Air-miles Radius Exemptions

The 100 or 150 air-miles radius exemptions can only be disabled automatically by RoadLog in the following circumstances:

- The 100 or 150 air-miles radius is exceeded by the vehicle's distance traveled.
- The Driver logs out.
- The Driver changes status to Personal Use.

12. Adding a Pre-Trip or Post-Trip Activity

The Driver has the option of extending the On Duty time frame at the beginning of the current log in session by adding a pre-trip activity or at the end of the trip by adding a post-trip activity function.

To add a pre-trip or post-trip activity from the *Driver Overview Options* screen, tap Driver Options. RoadLog displays the *Driver Options* screen.

Depending on your choice, tap Pre-Trip Activity or Post-Trip Activity. RoadLog displays the appropriate screen.

Tap on the arrows for each field to select the Start Date and Start time Hour and Minutes for the Activity using the drop-down menus. Select AM or PM using the radio buttons.

Note: If the entered start time or end time overlaps with a preceding log in session, RoadLog displays the *Invalid Date/Time* screen. Tap OK. The *Pre-Trip* or *Post-Trip Activity* screen will be displayed again. Enter a valid start time and tap OK. RoadLog displays the *Confirm Pre-Trip* or *Confirm Post-Trip Activity* screen.
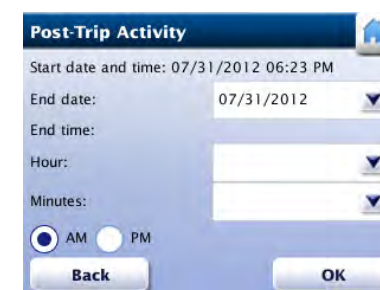
Tap Yes to confirm the pre-trip or post-trip activity. RoadLog displays the *Driver Options* screen.
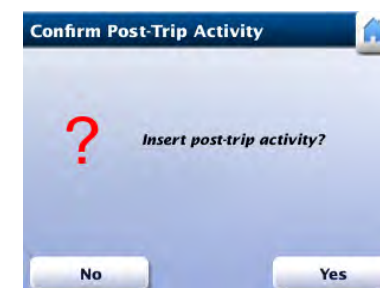

Driver Overview
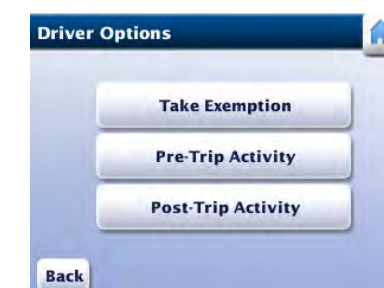
Driver Options

Post-Trip Activity

Pre-Trip Activity

Confirm Post-Trip Activity

Confirm Pre-Trip Activity

13. Performing a Roadside Inspection

RoadLog features a roadside inspection function that allows authorized inspection personnel to retrieve the recorded logbooks of the logged in Drivers' last 7 or 8 days schedule in print or electronic format.

Retrieving and Printing DVIR Reports

To retrieve logbook records from the *Driver Overview Options* screen, tap Roadside Inspection. RoadLog displays the *Roadside Inspection* screen.

Tap DVIR to display the *DVIR Roadside Inspection* screen.

Tap Print. RoadLog prints the last recorded DVIR report for each of the current assets while displaying the *Printing in Progress* screen.

> **Note:** For an explanation of the print out, see DVIR Report printout.

Driver Overview

Roadside Inspection

DVIR Roadside Inspection

Retrieving, Printing and Transferring HOS logs

To perform an inspection of the HOS Logs from the *Roadside Inspection* screen, tap HOS Logs. RoadLog displays the *HOS Logs Roadside Inspection* screen.

Using the radio buttons, select the name of the Driver that you'll perform a roadside inspection for.

Tap USB Transfer to transfer the HOS Log file to a USB flash drive.

RoadLog displays the *Insert USB Flash Drive* screen.

Insert a USB flash drive into the USB port to perform the RODS data transfer. After the transfer is complete, RoadLog displays the *Data Download Completed* screen.

> **Note:** To enable data transfer, the USB must be formatted in the FAT32 file system.

Tap OK, and remove the USB key from the slot.

> **Note:** The file that is transferred in the Roadside Inspection is the RODS data (Record Of Duty Status) text data file. No other data is transferred.

To print the chosen Driver's daily Log from the *HOS Logs Roadside Inspection* screen, Tap Print. RoadLog prints the logs for the last 7 or 8 days (based on the Driver's schedule), while displaying the *Printing in Progress* screen.
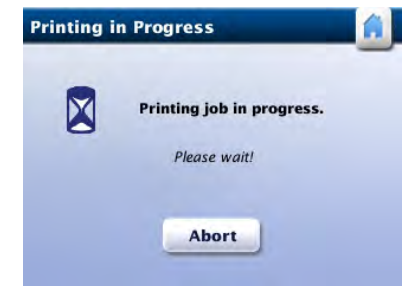

Roadside Inspection

HOS Logs Roadside Inspection

Insert USB Flash Drive

HOS Logs Roadside Inspection

Printing in progress

14. Company Log Out from RoadLog

When a company isn't using a RoadLog, the company should log out. RoadLog data recorded while the company was logged in is not available to other companies that log in afterwards.

> **Note:** Before going on to company log out, all logged-in Drivers must log out from RoadLog, in order to save their RODS data to their Driver Keys. After a company logs out from a RoadLog device, its Drivers can no longer save their RODS data from RoadLog to their Driver Keys.

To log out the company, insert the company's Fleet Key. RoadLog displays the *Fleet Key Options* screen.

Tap Logout. RoadLog displays the *Company Logout Options* screen.

Tap Logout with Data Download to save company data from RoadLog to the Fleet Key (If RoadLog detects the Fleet Key is full and unable to store additional data, you may only select Logout without Data Download). RoadLog displays the *Fleet Key Files Download* screen.

Use the up and down arrows to view the *Fleet Key Files Download* file choices. *It is recommended that you download all files.*

Select the files to be downloaded and tap Download. RoadLog displays the *Transfer in Progress* screen during data transfer and the *Data Download Completed* screen when data transfer is complete.

Remove the Fleet Key. RoadLog displays the *Successful Logout* screen.

Tap OK. RoadLog displays the *Settings* screen.

> **Notes**: If you try to log out the company while a Driver is still logged in, RoadLog displays the *Driver Logged In* screen.

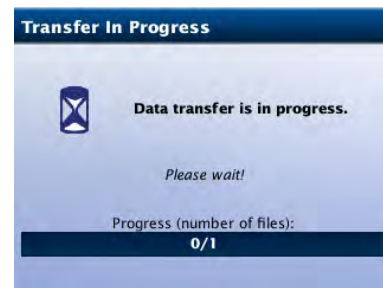Fleet Key Options

Company Logout Options

Fleet Key Files Download

Transfer in Progress

15. Software Updates

You can update RoadLog's software by transferring an update package from a Driver or Fleet key. See details on how to transfer the update package onto a Driver or Fleet Key in the RoadLog Fleet Software manual: Transferring an Update to RoadLog.

To perform a RoadLog software update, insert a Driver Key or Fleet Key that contains the software update package into the USB port. RoadLog displays the *SW Update* screen.

Tap Install to start the updating process. Once the installation is complete, RoadLog will automatically reboot and display the start up screen. After RoadLog completes the reboot, the software update becomes effective.

> **Note:** If a data transfer error is detected, RoadLog will display the *SW Update Error* screen. In this case, tap OK. If the inserted flash drive is the Driver Key, RoadLog will display the *Driver Key Options* screen. If the inserted flash drive is the Fleet Key, RoadLog will display the *Select Key Role* screen.

Tap the Home icon or remove the inserted Key to go to the *Driver Overview* screen.

Software Update
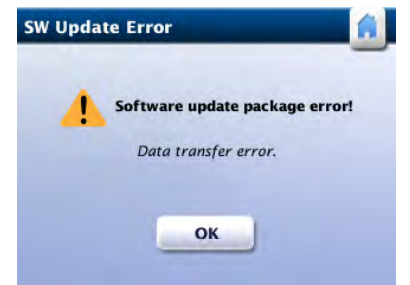
Software Update Error

Select Key Role

16. Diagnostic Warning Screens

RoadLog runs automatic diagnostic checks to detect and report failures that affect its performance. When failures are detected, RoadLog displays relevant warning screens.
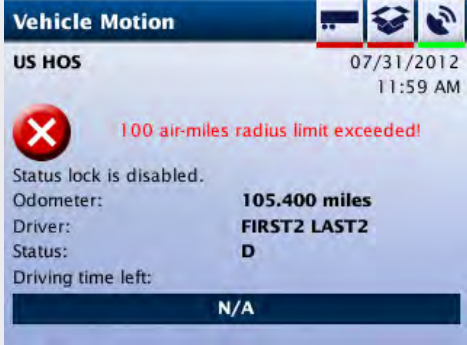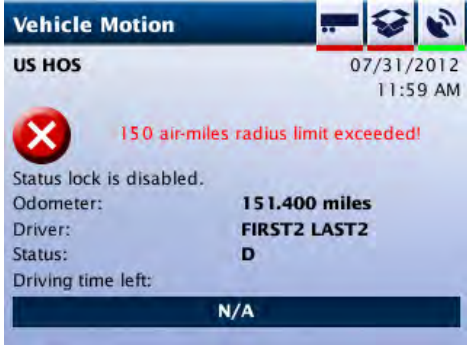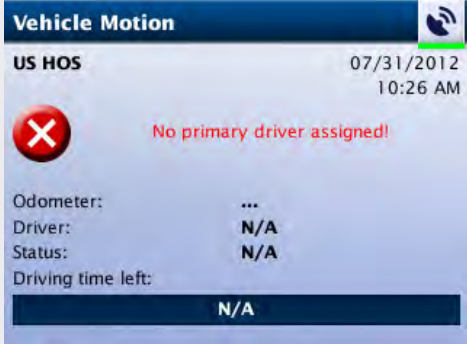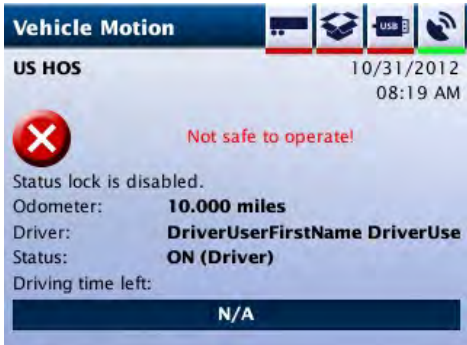
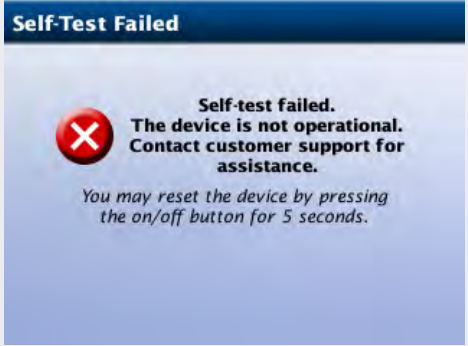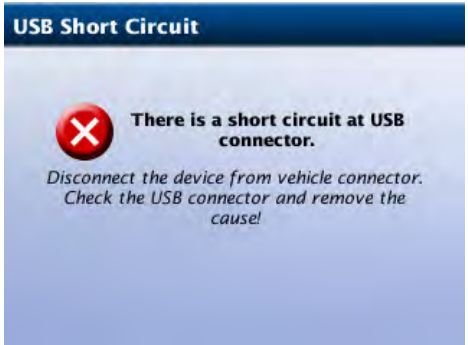The warnings RoadLog may issue regarding Driver compliance and device operations are described in the chart below.
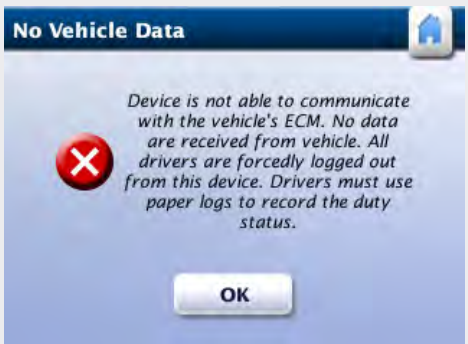
Steps you can take to resolve the problems detected are also provided.

Screen	Meaning	Action required
	The daily On Duty time rule has been broken.	Take the required rest time before coming back on duty. Check the *Driver Overview* screen for the remaining rest time available to you.
	The weekly On Duty time rule has been broken. The week refers to the preceding seven or eight days, depending on the schedule assigned for the Driver.	Take the required rest time before coming back on duty. Check the *Driver Overview* screen for the remaining rest time available to you.
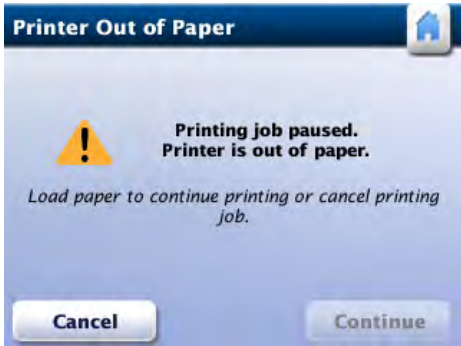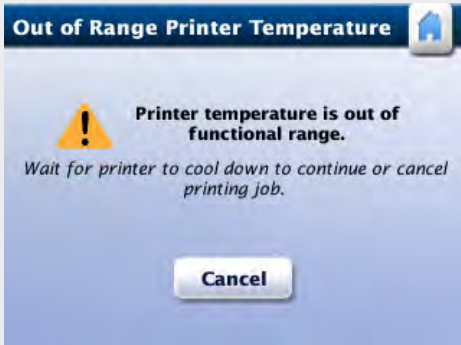
Screen	Meaning	Action required
	The Driving Time limit has been exceeded.	Take the required rest time. Check the *Driver Overview* screen for the rest time available to you before Driving again.
	Although the Driver has exceeded the Driving Time limit, the vehicle is still in motion.	Stop the vehicle as soon as possible and take the required rest time.
	RoadLog detects a daily On Duty time violation for this Driver while the vehicle is in motion, or RoadLog detects a weekly On Duty time violation for this Driver while the vehicle is in motion.	Stop the vehicle as soon as possible and take the required rest time.
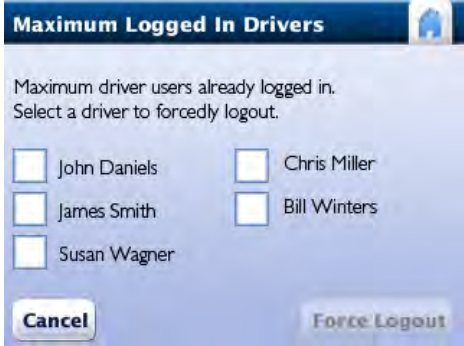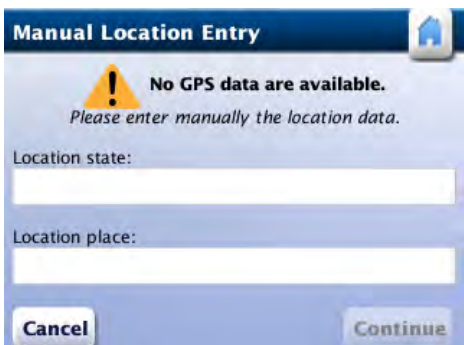
Screen	Meaning	Action required
	The Driver has crossed the border of the 100 air-miles radius zone. The 100 air-miles exemption is no longer active	Stop the vehicle as soon as possible and take the required rest time.
	The Driver has crossed the border of the 150 air-miles radius zone. The 150 air-miles exemption is no longer active	Stop the vehicle as soon as possible and take the required rest time.
	The vehicle is in motion although none of the logged in the Drivers has changed their status to Driver, or the vehicle is in motion and no Drivers are logged into the system.	Stop the vehicle and log in to RoadLog, or stop the vehicle and switch status to Driver.
	RoadLog detects that a pre-trip inspection was not performed on one or more current resources, but the vehicle is in motion, or a pre-trip inspection was performed for all resources, but at least one of those resources indicates that vehicle operation is not safe.	Stop the vehicle and perform the pre-trip inspection on the resource(s) in question.
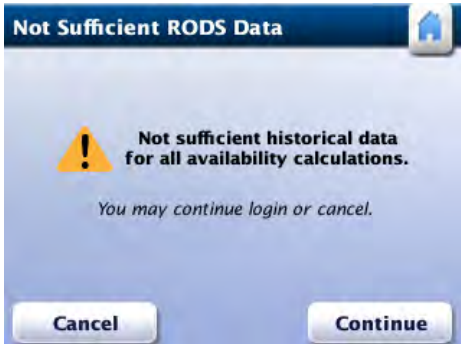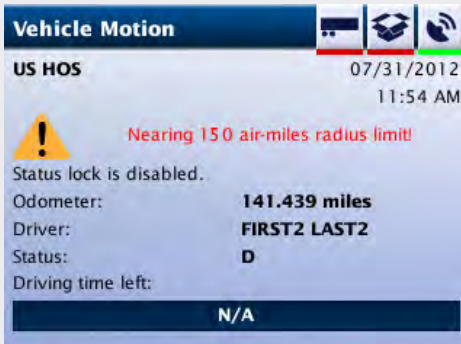
Screen	Meaning	Action required
	The *Self-Test Failed* screen is displayed.	Press the on/off button to restart the device. If the problem persists, contact Customer Assistance for support. **VDO Technical Support:** Tel: 855-ROADLOG or 855-762-3564 E-mail: roadlog-support@vdo.com
	The inserted USB device is defective and has caused the RoadLog USB port to short circuit.	Remove the USB device. Press the on/off button to restart the device. If the problem persists, contact Technical Support for assistance. **VDO Technical Support:** Tel: 855-ROADLOG or 855-762-3564 E-mail: roadlog-support@vdo.com
	RoadLog cannot communicate with the vehicle, and therefore HOS calculations cannot be performed.	Until the problem can be resolved, use paper logs to track Duty Status changes and activities.
	The internal battery has a low energy level.	Replace the battery. See Battery Installation.
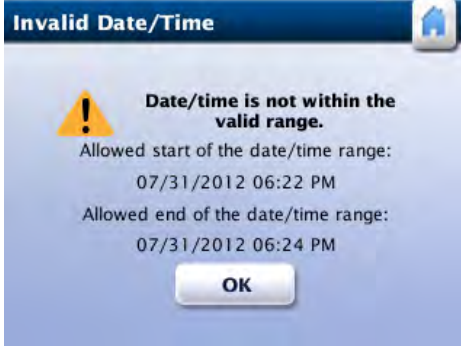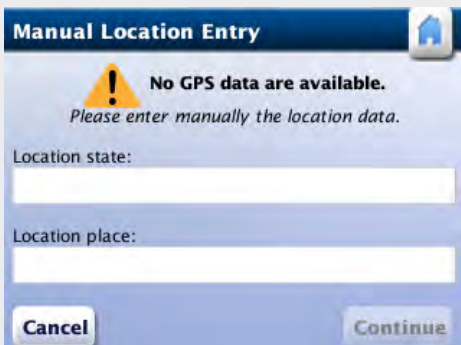
Screen	Meaning	Action required
	The vehicle started to move and RoadLog detects a USB device connected.	Remove the USB device. CAUTION! Driving with a USB device in the USB port can cause damage to RoadLog and / or the USB device.
	RoadLog has detected a USB device connected while a printing request was performed.	Remove the USB device and try printing again.
	During the printing process, a printer error was detected.	Try to print again. If the problem persists, contact Customer Support for assistance. **VDO Technical Support:** Tel: 855-ROADLOG or 855-762-3564 E-mail: roadlog-support@vdo.com
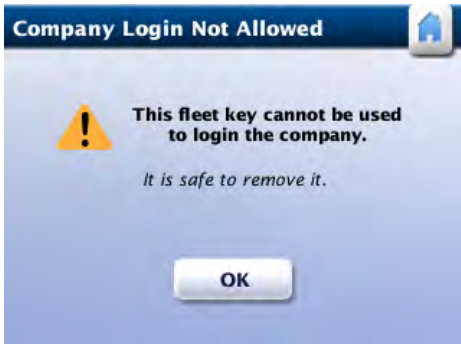
Screen	Meaning	Action required
	Printer paper has run out.	Insert a new paper roll and then tap Continue to resume printing. Tap Cancel to abort printing CAUTION! Do not touch printer head while replacing paper. It may be very hot!
	The printer overheated.	Wait for printer to cool down. The printing resumes automatically once the temperature is in the normal range. Tap Cancel if you want to abort the current printing.
	During Driver log out, RoadLog detects that there is not enough available memory on the Driver Key to download data.	Tap Continue to log out manually. The Driver RODS data will be stored on RoadLog. Tap Cancel to abort the log out. Download data to the Fleet Software as soon as possible to create more available memory on the Driver Key.

Screen	Meaning	Action required
Driver Key Error ⚠️ **Data transfer error has occurred.** *Select continue to logout without driver key or cancel.* Cancel Continue	A transfer error has been detected during data download to the Driver Key.	Tap Continue to log out manually. The Driver RODS data will be stored in RoadLog. Tap Cancel to abort the log out.
RODS Conflicts ⚠️ **Driver RODS data conflict detected! Device may not be able to calculate driver availability.** *You may continue login or cancel.* Cancel Continue	RoadLog detected data conflicts between RODS data on Driver Key and the RODS data in RoadLog device. Due to this conflict, merging the two sets of RODS data is not possible. As a result, RoadLog may not have enough data to calculate your HOS availability.	Tap Continue to continue log in. OR Tap Cancel to abort log in. OR Fix the conflicting RODS data using the RoadLog Fleet Software.
RODS Conflicts ⚠️ **Driver RODS data conflict detected! Device may not be able to calculate driver availability.** *You may continue login or cancel.* Cancel Continue	Conflicting RODS data has been downloaded to the Driver Key.	Fix the conflicting RODS data using the RoadLog Fleet Software.

Screen	Meaning	Action required
Maximum Logged In Drivers Maximum driver users already logged in. Select a driver to forcedly logout. ☐ John Daniels ☐ Chris Miller ☐ James Smith ☐ Bill Winters ☐ Susan Wagner Cancel Force Logout	The maximum number of Drivers (five) are already logged into this RoadLog device.	Select a Driver from the list and tap Force Logout to log that Driver out. Tap Cancel if you don't want to continue logging in.
Force Personal Use Driver Logout Driver Jude Law is already logged in with Personal Use status. Cancel Force Logout	There is another Driver logged into RoadLog under Personal Use status.	Tap Cancel if you want to cancel your log in. Select Force Logout to log out the Driver logged in under Personal Use status and continue your log in.
Manual Location Entry ⚠️ **No GPS data are available.** *Please enter manually the location data.* Location state: _____ Location place: _____ Cancel Continue	GPS signal is unavailable. The automatic localization feature does not work.	Enter your location state and place manually.

Screen	Meaning	Action required
Illegal Logout RoadLogs You are still logged in to the below vehicles: Tractor Number / Tractor VRPN 1111 / 111111111111111111 Cancel Recover RODS Continue Login	You performed an improper log out from the listed Vehicles. The RODS data found on Driver Key might be incomplete due to the improper log out.	Tap Continue Login to continue logging in. The RoadLog calculations may be incorrect due to the missing RODS data. Go to the listed vehicles and recover your RODS data by inserting your Driver Key and tap Recover RODS. Tap Cancel to abort the log in.
Not Sufficient RODS Data Not sufficient historical data for all availability calculations. You may continue login or cancel. Cancel Continue	There is insufficient historical data for RODS availability calculation. If you get this message while logging in with a Driver Key, it means the RODS data found on your Key merged with the RODS data found in RoadLog, and RoadLog does not have the complete duty status history for the last 15 days. If you get this message while logging in manually, it means that your RODS data found on this RoadLog does not have the complete duty status history for the last 15 days.	You may cancel log in and then use the RoadLog Fleet Software to reconstruct the missing parts of your RODS history on the Driver Key. You may continue the log in but RoadLog will not be able to accurately warn you when you are about to break HOS regulations.
Vehicle Motion US HOS 07/31/2012 11:54 AM Nearing 150 air-miles radius limit! Status lock is disabled. Odometer: 141.439 miles Driver: FIRST2 LAST2 Status: D Driving time left: N/A	Vehicle is in motion and you are approaching the limit of the 150 air-miles radius zone.	If you go beyond this limit, the 150 air-miles exemption will automatically be disabled
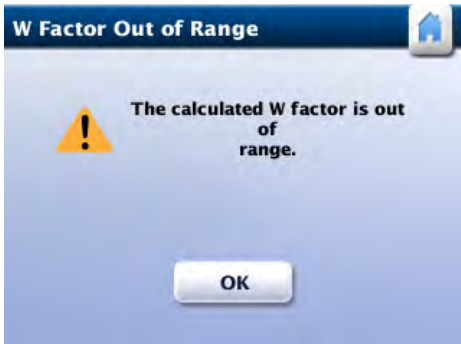
Screen	Meaning	Action required
Invalid Date/Time Date/time is not within the valid range. Allowed start of the date/time range: 07/31/2012 06:22 PM Allowed end of the date/time range: 07/31/2012 06:24 PM OK	The entered date and time for a pre-trip or post-trip activity is invalid, meaning it overlaps with an already recorded log session.	Tap OK and then type in a valid date for the activity you want to add. To view the available time frames for extending your on duty time, check your logs. See View Logs (Details).
Invalid Driver Key The inserted USB flash drive is not a valid driver key. You may use it as a regular USB flash drive. OK	The inserted USB device is not a valid Driver Key.	Tap OK to continue. Even thought the USB is not a valid Driver Key it can still be used for performing roadside inspections or for downloading the device related files.
Invalid Fleet Key The inserted fleet key is not valid. It is safe to remove it. OK	The inserted USB device is not a valid Fleet Key. Configuration cannot continue without having a valid Fleet key inserted in RoadLog. The tractor list may not contain the tractor created with the serial number of the RoadLog unit in this vehicle	Remove the USB device and insert a valid Fleet Key.
Manual Location Entry No GPS data are available. Please enter manually the location data. Location state: Location place: Cancel Continue	None of the downloadable files were selected and the Download button was tapped.	Select at least one file from the list before continuing to download.

Screen	Meaning	Action required
Data Transfer Failure ⚠ Data transfer failed. *It is safe to remove the USB key.* OK	Data download onto the USB key failed.	Retry data download.
USB Key Full ⚠ USB key memory is full. Data transfer is not possible. *It is safe to remove the USB key.* OK	The USB key memory is full.	Free up some memory from the USB key by downloading to the Fleet Software, and then retry the current function.
Company Login Not Allowed ⚠ This fleet key cannot be used to login the company. *It is safe to remove it.* OK	An invalid Fleet Key was inserted into the RoadLog connector.	Remove the USB key and insert a valid Fleet Key to continue.

Screen	Meaning	Action required
Unknown USB Device ⚠ Inserted USB device is unknown. *It is safe to remove it.* OK	The inserted USB device is not recognized by RoadLog.	Remove the USB device and insert a valid RoadLog USB Driver or Fleet Key.
Driver Login Not Allowed ⚠ Entered ID is not found in the drivers list. Login is not possible. OK	The entered Driver Identification is not found in RoadLog memory. You are not able to log in to this RoadLog.	Acknowledge the message and log in with valid Driver ID. Driver IDs are established in the Fleet Software.
Vehicle Position Change ⚠ Vehicle position changed while the device was OFF. OK	During system startup, RoadLog detects that the current vehicle position is not the same position recorded when the device was switched off.	Acknowledge the message. A record of the location conflict is stored in the RoadLog data.

Screen	Meaning	Action required
Driver Key Full — Driver key memory is full. It is safe to remove it. [OK]	Driver Key memory is full. No data download can be performed on this Key.	Free up some memory from the USB key by downloading to the Fleet Software, and retry download.
Driver Key Full — Driver key memory is full. Select continue to logout without driver key or cancel. [Cancel] [Continue]	Driver Key memory is full. The available recorded RODS cannot be downloaded on the Driver Key.	Tap Continue to continue to perform a manual log out. Your RODS history will be stored in RoadLog. Tap Cancel to abort the log out. Free up some memory from the USB key by downloading to the Fleet Software, and then try to log out again.
Driver Key Error — Data transfer error has occurred. Select continue to logout without driver key or cancel. [Cancel] [Continue]	Data transfer error occurred while transferring the Driver RODS file on the Driver Key.	Tap Continue to log out manually. Your RODS history will be stored in RoadLog (if there is sufficient internal memory available). Tap Cancel to abort the log out. Try to log out again.

Screen	Meaning	Action required
Driver Key Error — Data transfer error has occurred. Select continue to logout without driver key or cancel. [Cancel] [Continue]	A data transfer error occurred while performing the download to Driver Key.	Remove the Driver Key, and then reinsert Driver Key and retry download.
SW Update Error — Software update package error! Data transfer error. [OK]	During a software update, an error was detected.	Acknowledge the message. Try to install again. See Software Updates.
Configuration Data Not Available — Configuration data is not available on the fleet key. [OK]	The user attempts to perform an automatic configuration, but the Company Trailer List file is either damaged or cannot be found on the Fleet Key. Automatic configuration cannot be performed.	Acknowledge the message. Then, use the RoadLog Fleet Software to create or fix the Company Tractor List File on the Fleet Key. When complete, re-attempt automatic configuration.

Screen	Meaning	Action required
	RoadLog detects no speed pulses; therefore it cannot calculate the W factor.	Acknowledge the message. The connection between RoadLog and the Vehicle will need to be checked.
	RoadLog does not detect the relevant messages for the chosen synchronization interface. The wrong interface may have been selected.	Check which synchronization interface RoadLog is physically connected to in the Vehicle and then try to re-synchronize. Try changing the synchronization type between J1708 and J1939 or vice versa
	The calculated value of the W factor is beyond the valid range. W Factor value must have a value of between 2,400 and 25,000 pulses per kilometer.	Re-enter the measurement with a valid value.
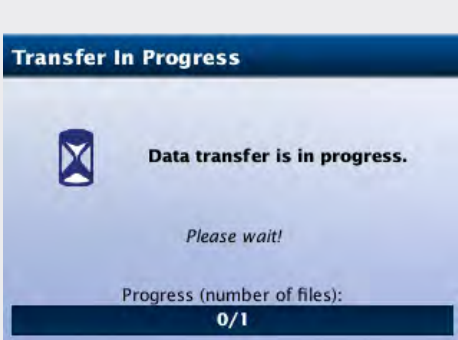
Screen	Meaning	Action required
	In 30 minutes, the On Duty time rule will be broken.	Stop the vehicle in 30 minutes or less and take the required rest time.
	In 30 minutes, the On Duty time rule for this week will be broken.	Stop the vehicle in 30 minutes or less and take the required rest time.
	In 15 minutes the On Duty time rule for this day will be broken.	Stop the vehicle in 15 minutes or less and take the required rest time.

Screen	Meaning	Action required
On-Duty Remaining Time There are 15 minutes until you break the off-duty time rule for this week. OK	In 15 minutes the On Duty time rule for this week will be broken.	Stop the vehicle in 15 minutes or less and take the required rest time.
Identical Drivers List The drivers list contains identical drivers and cannot be uploaded. OK	The Driver list from Company Support Data File contained on the Fleet Key has two or more identical sets of Driver data. In this case, the Driver list cannot be uploaded into RoadLog. Manual Driver log in for this RoadLog is not possible unless the Driver who wants to log in manually was previously logged in to this RoadLog unit using his or her Driver Key.	Use the RoadLog Fleet Software to remove the duplicate Driver from Company Support Data File.
Requested Data Unavailable The requested data is not available on the fleet key. OK	Company Support Data File is not found on the Fleet Key.	Use the RoadLog Fleet software to create the missing file on the Fleet Key.

Screen	Meaning	Action required
Data Download Reminder Driver FIRST2 LAST2 must download RODS file to avoid data loss. ☐ Do not show this message again OK	RoadLog has no more memory available to record the vehicle activities, data and DVIR data.	Download Company Vehicle Activities Data File and Company Vehicle DVIR Data File as soon as possible to avoid overwriting recorded activities.
Data Download Reminder You must download the vehicle data in the next 48 hours to prevent data loss. ☐ Do not show this message again OK	Company Vehicle Activities Data File or Company Vehicle DVIR Data File was not downloaded for more than 28 days.	Download Company Vehicle Activities Data File and Company Vehicle DVIR Data File in the next 48 hours to avoid overwriting recorded activities.
Data Download Reminder You must download the vehicle data in the next 24 hours to prevent data loss. ☐ Do not show this message again OK	Company Vehicle Activities Data File or Vehicle DVIR Data File has not been downloaded in 29 days In 24 hours, existing vehicle activities data will be overwritten if no download is performed.	Download Company Vehicle Activities Data File and Company Vehicle DVIR Data File in the next 24 hours to avoid overwriting recorded activities.

Screen	Meaning	Action required
	The maximum number of configuration sessions (100) were recorded in RoadLog memory.	Download Company Configuration Session File in order to perform the next configuration.
	There is no more memory available in RoadLog's internal memory to record this Driver's activities.	Download Driver RODS binary data file as soon as possible.
	It is safe to remove the inserted USB device.	Acknowledge the message. Remove the USB drive from the USB port.

Screen	Meaning	Action required
	The inserted Key contains a Software update package.	Tap Install to update RoadLog Software. See Software Updates. Tap Cancel if you don't want to perform the software update.
	RoadLog detects there is no USB flash drive inserted in the USB connector.	Insert a USB flash drive into the connector.
	Data transfer is in progress.	CAUTION! Do not remove the inserted USB flash drive until you are prompted to do so. Removal of the USB flash drive during data transfer might result in data loss.

17.   RoadLog Files

Data exchange between RoadLog and the Fleet Software is achieved through transfers using the Fleet Key, Driver Key or USB flash drive. Data exchanges involve uploading and downloading several different types of files, each type of file having its own purpose.

There are three types of files:

- Files related to the Company

- Files related to Driver use

- Files related to the RoadLog device

Company-Related Files (Fleet Management Software Files)

Company Files are files that are either used by RoadLog during company log in sessions or that contain data recorded by RoadLog during company log in.

COMPANY IDENTIFICATION FILE

The Company Identification File contains the company configuration data.

- The file is created during company registration and first set up.

- The file is uploaded in RoadLog memory during company log in.

- The file can be downloaded only on Fleet Keys belonging to the logged in company

The Company Identification File contains:

- Company identification.

- Company address.

- Time zone of the company's home terminal.

The Company Identification File name structure is:

- When created by the RoadLog: Carrier_ CompanyID. CID

- When created by RoadLogFleet: Carrier_CompanyID_ yymmddhhmmss.CID

- CompanyID: the USDOT number.

- yymmddhhmmss: the time the file is created.

COMPANY TRACTOR LIST FILE

The Company Tractor List File contains the list of RoadLog devices (up to 100) installed on the fleet's vehicles. The file is created by the RoadLog Fleet Software during company registration and first set up. The file can be updated by the RoadLog with the latest configuration upon the user's request.

The Company Tractor List File includes:

- Company identification.

- A list of the company's tractors.

- Configuration parameters for each of the tractors.

- The last DVIR record for each of the tractors.

The Company Tractor List File name structure is:

- When created by RoadLog: Carrier_ CompanyID_ TractorList.CTL

- When created by the RoadLog Fleet Software: Carrier_ CompanyID_TractorList_ yymmddhhmmss.CTL

- CompanyID: the USDOT number.

- yymmddhhmmss is the time when the file is created.

COMPANY SUPPORT DATA FILE

The Company Support Data File contains data used by RoadLog during company log in. The file is created by the RoadLog Fleet Software during company registration and first set up. The file is uploaded in RoadLog memory during company log in. The file is updated by RoadLog whenever a user requests its download.

The file can be downloaded only on the Fleet Key belonging to the logged in company. **The Company Support Data File includes:**

- List of the Driver/Users permitted to log in manually.

- List of predefined company trailers along with their latest DVIR report.

- List of predefined company annotations.

- List of predefined Supporting Documents activities.

- List of company Shipment Documents.

The Company Support Data File name structure is:

- When created by the RoadLog: Carrier_CompanyID_ SupportData.CSD

- When created by RoadLogFleet: Carrier_CompanyID_ SupportData _ yymmddhhmmss.CSD

- CompanyID: the USDOT number.

- yymmddhhmmss : time the file is created.

COMPANY VEHICLE ACTIVITIES DATA FILE

The Company Vehicle Activities Data File contains data recorded by RoadLog during company log sessions. The file is downloaded automatically onto the Driver Key upon Driver log out. The file is created by RoadLog whenever a user requests its download onto a Driver Key or Fleet Key

Company Vehicle Activities Data File includes:

- Vehicle reports recorded over the previous 30 days.

The Company Vehicle Activities Data File name structure is:

- Only created by the RoadLog: Carrier_CompanyID_ TractorNumber_yymmddhhmmss.CVD

- CompanyID: the USDOT number.

- Yymmddhhmmss: time the file is created.

COMPANY VEHICLE DVIR DATA FILE

The Company Vehicle DVIR Data file contains DVIR data reports recorded by RoadLog during company log sessions for the last 30 days. The file is created by RoadLog whenever a user requests its download on a Driver Key or Fleet Key belonging to the logged in company.

The Company Vehicle DVIR Data file includes:

- DVIR reports recorded no more than 30 days from the last download.

The Company Vehicle DVIR Data file name structure is:

- Only created by the RoadLog: Carrier_CompanyID_ TractorNumber_yymmddhhmmss.CVD

- CompanyID: the USDOT number.

- yymmddhhmmss: time the file is created.

COMPANY CONFIGURATION SESSION FILE

The Company Configuration Session file contains configuration session data recorded by RoadLog during company log sessions. The file is created by RoadLog whenever a user requests its download on a Driver Key or Fleet Key belonging to the logged in company.

The Company Configuration Session File includes:

- The last 100 calibration sessions records.

The Company Configuration Session File name structure is:

- Only created by RoadLog: Carrier_CompanyID_ TractorNumber_CalibrationData_yymmddhhmmss.CVD

- CompanyID: the USDOT number.

- TractorNumber is the number on which the RoadLog device is installed.

- yymmddhhmmss is the time when the file is created.

COMPANY ASSETS PARTS LIST FILE

The Company Assets Parts List file contains the list of predefined asset types used during RoadLog DVIR inspection. It is uploaded to RoadLog memory during company log in. The file is created by RoadLogFleet during activation of the Fleet Key. The file is downloaded, when requested by the user, only onto Fleet Keys belonging to the logged in company.

The Company Assets Parts List file includes:

- A predefined list of vehicle parts, along with the related possible defects for each part.

- A predefined list of trailer parts, along with the related possible defects for each part.

- Optional: The predefined list of other asset types, along with related defects. "Other assets" refers to any other asset (except trailers) that might be attached to the vehicle.

The Company Assets Parts List file name structure is:

- When created by RoadLog: Carrier_ CompanyID_ DVIRPartsList.DPL

- When created by RoadLogFleet: Carrier_CompanyID_ DVIRPartsList_yymmddhhmmss.DPL

- CompanyID: the USDOT number.

- yymmddhhmmss: time the file is created.

Device Related Files

Device-related files contain data recorded by RoadLog, or data related to the vehicle. These files are not recorded during company log in sessions. At the user's request, the files can be downloaded onto a Fleet Key, Driver Key or any USB flash drive formatted in FAT32, irrespective of a company's log in status.

DEVICE CONFIGURATION PARAMETERS DATA

The Device Configuration Parameters Data file contains RoadLog's original set up configuration.

The Device Configuration Parameters Data file includes:

- Configuration Parameters based on default values.

The Device Configuration Parameters Data file name structure is:

- Only created by RoadLog.

- EOBR_SerialNumber_Configuration Parameters_ yymmddhhmmss.CLB

- Serial Number is the device serial number.

- yymmddhhmmss is the time when the file is created.

DEVICE DIAGNOSTIC EVENTS DATA

The Device Diagnostic Events Data file contains the RoadLog diagnostic events that were recorded in the last 30 days, irrespective of whether the events occurred during a company log session or not.

The Device Diagnostic Events Data file includes:

- Diagnostic events recorded by RoadLog in the last 30 days.

The Device Diagnostic Events Data file name structure is:

- Only created by RoadLog: EOBR_SerialNumber_ DiagnosticData_yymmddhhmmss.EDD

- Serial Number is the device serial number.

- yymmddhhmmss is the time when the file is created.

VEHICLE DATA

The Vehicle Data file contains data recorded by RoadLog over the previous 30 days, during periods of time that companies were not logged into the system.

The Vehicle Data file includes:

- Vehicle travelling periods.

- Records of system time synchronization with GPS time.

The Device Diagnostic Events Data file name structure is:

- Only created by RoadLog: EOBR_SerialNumber_ VehicleData_yymmddhhmmss.EVD

- Serial Number is the device serial number.

- yymmddhhmmss is the time when the file is created.

DEVICE SOFTWARE UPDATE HISTORY FILE

The Device Software Update History file contains the list of software packages installed on a specific RoadLog.

The Device Software Update History file contains:

- Installed software packages in this RoadLog.

Driver Related Files

Driver-related files contain the following:

- Data recorded by RoadLog during Driver log in sessions.

- Driver identification data.

- Driver support data .

DRIVER IDENTIFICATION DATA FILE

The Driver Identification Data file includes the Driver's identification data as supplied by the Driver's employer. The file is created by the RoadLog Fleet Software and downloaded to the Driver Key. At the user's request, RoadLog downloads this data to the Driver Key or Fleet Key.

The Driver Identification Data file contains:

- Driver's first and last name.

- Driver's schedule (7 days or 8 days).

- Driver's starting time.

- Time zone at the driver's home terminal.

- Coordinates (latitude and longitude) of the vehicle location at the work-reporting location.

- Indication of whether or not the driver has been assigned a 100 or 150 air-miles radius exemption according to FMCSA regulations.

- Indication of whether or not the Driver is allowed to use the 34-hour restart provision as defined by FMCSA.

The Driver Identification Data file name structure is:

Device Software Update History file name structure is:

- Only created by RoadLog: EOBR_SerialNumber_ SWUpdates_yymmddhhmmss.EVD

- Serial Number is the RoadLog serial number.

- yymmddhhmmss is the time when the file is created.

- When created by RoadLog: Driver_DriverID_ yymmddhhmmss.DID

- When created by RoadLogFleet: Driver_DriverID.DID

- DriverID is the Driver identification number as it was assigned by the company.

- yymmddhhmmss is the time when the file is created.

DRIVER SUPPORT DATA FILE

The Driver Support Data file contains predefined data for use by the Driver user during log in sessions. The file is uploaded to RoadLog memory during Driver log in. The file is created by the RoadLog Fleet Software and downloaded to the Driver Key.

The Driver Support Data File contains:

- Predefined list of trailers assigned to the Driver by the RoadLog Fleet Software, along with each trailer's related DVIR record. Up to 20 DVIR records can be stored in the file. This data is available to the Driver during pre-trip or post-trip trailer inspection.

- List of Shipment Documents assigned to the Driver. Up to 20 Shipment Documents can be stored in the file. This data is available to the Driver during Shipment Documents management (whenever a Shipment Document is added or removed).

The Driver Support Data File name structure is:

- When created by RoadLog: Driver_DriverID_ SupportData_yymmddhhmmss.DSD

- When created by RoadLogFleet: Driver_DriverID_ SupportData.DSD

- DriverID is the Driver identification number as it was assigned by the company.

- yymmddhhmmss is the time when the file is created.

DRIVER RODS BINARY DATA FILE

The Driver RODS Binary Data file includes Driver duty status records for the current and the previous 15 calendar days.

The file is uploaded to RoadLog memory during the Driver's log in session.

The file is created by RoadLog at the user's request, and downloaded automatically onto the Driver Key during Driver log out.

The file can be downloaded only onto a Driver Key or Fleet Key belonging to the logged-in company.

The Driver RODS Binary Data file contains:

- Driver log in sessions.

- Change of duty status records.

- Positioning data(GPS) recorded during Driver log in session.

- Diagnostic events recorded by RoadLog during Driver log in session.

- Logged in co-drivers during Driver log in session.

- Assigned trailers during Driver log in session.

- Assigned shipment documents during Driver log in session.

- Supporting documents events generated during Driver log in session.

- Exemptions taken by the Driver.

- Adjustments of system time with the GPS time records.

- Time frame for the reviewed RODS.

The Driver RODS Binary Data file name structure is:

- Created only by RoadLog: RODS_CompanyID_ DriverID_yymmddhhmmss.RDS

- CompanyID is the company identification as assigned by FMCSA (USDOT number).

- DriverID is the driver identification number as it was assigned by the company

- yymmddhhmmss is the time when the file is created.

DRIVER RODS TEXT DATA FILE

The Driver RODS Text Data file includes Driver duty status records for the current and the previous 7 or 8 calendar days in FMCSA required format.

The file is created by RoadLog at the user's request, and downloaded automatically onto the inserted flash drive during roadside inspection.

The file can be downloaded onto a Driver Key, Fleet Key or any USB flash drive in the FAT32 format.

The Driver RODS Text Data file contains:

- Change of duty status events.

- Diagnostic events.

- Positioning data (GPS) recorded during Driver log in sessions.

The Driver RODS Text Data file name structure is:

- Created only by RoadLog: RODS_CompanyID_DriverID_yymmddhhmmss.TXT

- CompanyID is the company identification as assigned by FMCSA (USDOT number).

- DriverID is the Driver identification number as it was assigned by the company

- yymmddhhmmss is the time when the file is created.

    Note: This file is a text file in the CSV (Comma Separated Values) format. Therefore, it can be viewed with any text file editors.

Printouts

RoadLog provides the following types of printouts:

- Daily Log
- DVIR Report
- Supporting Document
- Diagnostic Events
- Configuration Parameters

Daily Log

1. VDO Logo
2. Title of the printout
3. Time and date of printing
4. Date log was recorded
5. Driver's home terminal time offset.
6. The name of the Driver whose log is printed.
7. Start time of the 24-hour period.
8. Total miles Driver travelled on the date the log was recorded per day.
9. Name and address of the primary company.
10. Carriers worked for: Companies for which the Driver worked on the day the log is or was printed, as well as:
    - USDOT number
    - Login time: Time the Driver started working for this company.
    - Logout time: Time the Driver finished working for this company.
    - Schedule: Type of schedule assigned to the Driver by the company (7 or 8 days).
    - 34-hours restart function: Indication of whether the 34-hour restart function is enabled or disabled.
    - Vehicle type: Type of vehicle assigned to the Driver (Passenger or Property-carrying).
11. Vehicles driven:
    - List of vehicles driven, along with ID numbers for attached trailers during the period covered by the printed log.
12. Co-Drivers: First and last names of Co-Drivers.
13. Shipment documents: List of shipment documents assigned to the vehicle during the period covered by the printed log.
14. Date of the printed log
15. Graphical representation of duty status changes
    - Format graph of the time spent by the driver in each duty status:
    - OFF (off duty status).
    - SB (time spent in sleeper berth).
    - ON DUTY (on duty time).
    - DRIVING (driving time).
16. Total hours: Total hours the Driver has spent in each duty status.
17. Change of duty status list: List all the duty status change events, along with the location of the duty status change.

Note: If the change of duty status was not recorded by the RoadLog device, but created/edited with the RoadLog Fleet Software, it will be marked as Edited.

18. No vehicle data periods (NO_ECM): Periods of time that vehicle data was not received by RoadLog. The start time for each of these periods is also listed.
19. No GPS signal periods: Periods of time during which RoadLog did not detect a GPS signal. The start and end times for each of these periods are also listed.
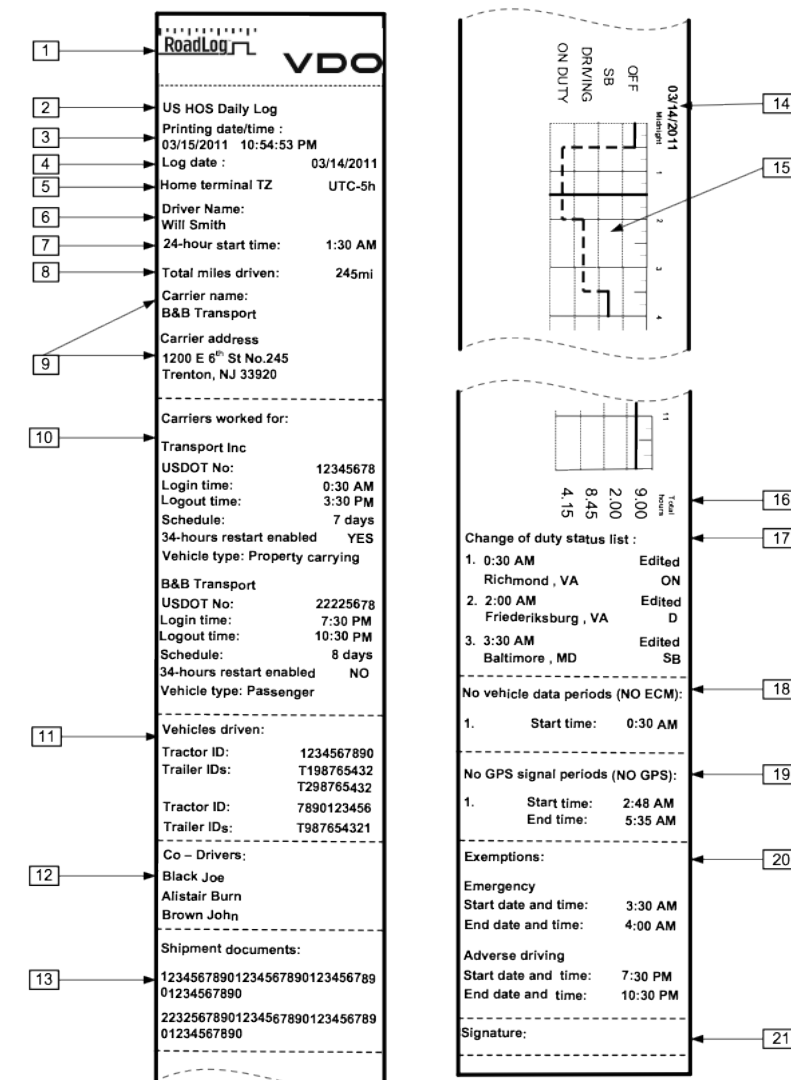
20. Exemptions: All the exemptions taken by the Driver on the day the log was completed. Possible exemptions are:
    - Emergency.
    - Adverse driving.
    - 16-hour extension.
    - 100 mile radius driver.
    - 150 mile radius driver.
    - Personal Use
    - The start and end times for each exemption taken are also printed.

21. Signature: Field for Driver's signature.

DVIR Report

1. VDO Logo.
2. Title of printout.
3. Date and time of printing.
4. Driver's home terminal time zone.
5. Vehicle registration plate number.
6. Type of asset for which DVIR inspection has been performed.
7. Asset identification number.
8. Post-trip inspection
   - Date/Time — Date and time the post-trip inspection was performed.
   - Driver ID — Identification of the Driver who performed the post-trip inspection.
   - Driver name — Name of the Driver who performed the post-trip inspection.
   - Location — Name of the location the post-trip inspection was performed.
   - Odometer — Vehicle odometer reading at the time of post-trip inspection.
   - Part: — List of defective part(s) and defect details recorded during the post-trip inspection. Safety-critical details are made explicit.
   - Signature — The signature field for the Driver who performed the inspection.

9. Repair
   - Date/Time — Date and time the repair certification is recorded in RoadLog.
   - Certifier ID — Identification of the Driver who certified the repairs.
   - Certifier Name — Name of the person who certified the repair.
   - Repair certification — Indication of whether or not the defects recorded during the post-trip inspection were repaired.
   - Safety certification — Indication of whether or not the vehicle is safe to operate.
   - Repair notes — List of repair notes, if any.
   - Signature — Signature field for the person who certified the repairs.

10. Pre-trip inspection
    - Date/Time — Date and time the pre-trip inspection is registered in RoadLog.
    - Certifier ID — Identification of the Driver who performed the pre-trip inspection.
    - Certifier name — Name of the Driver who performed the pre-trip inspection.
    - Safety certification — Indication of whether or not the defects recorded during post-trip inspection were repaired.
    - Safety notes — Indication of whether or not the vehicle is safe to operate
    - Signature — Signature field for the Driver who performed the pre-trip inspection.

Supporting Document

Company Log Out from RoadLog

No.	Explanation
1	VDO Logo.
2	Time of printing.
3	Vehicle's license plate registration number.
4	Number of the supporting document generated for the given activity.
5	Activity for which the supporting document was generated.
6	Time the supporting document was generated.
7	Nearest populated area at the time the supporting document was added.
8	Coordinates of the location at which the supporting document was generated.

Diagnostic Events

No.	Explanation
1	VDO Logo.
2	Title of printout.
3	Time and date of printing.
4	Vehicle's license plate registration number.
5	The most recent 100 diagnostic events recorded by RoadLog during the previous 30 days, along with the time of each occurrence and its event code. See Diagnostic Events list for a complete list of diagnostic events and their respective causes.
6	Signature field for the user who prints the Diagnostic Events.

Configuration Parameters

No.	Explanation
1	VDO Logo.
2	Title of printout.
3	Printing date and time.
4	Date and time the most recent configuration was performed.
5	Name of the person who performed the configuration.
6	List of calibration parameters and their value.
7	Signature field for the Driver who performed the configuration.

Diagnostic events list

Event Code	Occurrence / Condition
PWR_ON	RoadLog is powered up and the booting sequence is completed.
PWROFF	RoadLog is powered off.
TESTOK	Self-test result is OK.
SERVIC	Self-test failed.
MEMERR	Self-test failed.

Event Code	Occurrence / Condition
LOWVLT	Low voltage detected.
BATLOW	Battery energy level is low.
CLKERR	A deviation of greater than 60 seconds between RoadLog time and the time received from the GPS has been detected.
CLKADJ	RoadLog has adjusted its system time to GPS time.
HIGHVT	High voltage detected.
IGN_ON	Ignition signal is ON.
IGNOFF	Ignition is OFF.
SWC_ON	RoadLog has woken up from sleep mode.
SWCOFF	RoadLog has entered sleep mode.
RESTRT	RoadLog is reset (the ON/OFF button has been pressed for 5 or more consecutive seconds).
BAT_OK	Battery condition OK.
ENG_ON	Vehicle engine is ON.
ENG_OFF	Vehicle engine is OFF.
FCT_ON	RoadLog is fully functional.
FCTOFF	RoadLog is not fully functional.
UPD_OK	RoadLog software update completed successfully.
UPDNOK	RoadLog software update failed.
INTFUL	RoadLog has recorded company Vehicle data and DVIR data for the past 29 days, but no data downloads have been performed. OR RoadLog has data for the previous 99 configuration sessions, but no data downloads have been performed. OR RoadLog has recorded RODS data for at least one logged in Driver for the past 14 days, but no data downloads have been performed.
DATACC	At Driver log in, RoadLog has used RODS data from the Driver Key to create the current Driver's RODS in its memory.
EXTFUL	The USB key memory is full. Data download cannot occur.
EXTERR	Communication error with the USB device.

Event Code	Occurrence / Condition
DLOADY	RoadLog has successfully downloaded data onto the USB key.
DLOADN	The inserted USB key is not authenticated as a valid Fleet Key or Driver Key.
FATERR	The inserted USB key is not formatted according FAT32 file system.
CLSERR	The inserted USB device is not recognized by RoadLog.
USPERR	USB power supply error.
USP_OK	USB power supply is OK.
NODRID	No Drivers have logged into RoadLog, but the vehicle is in motion.
PINERR	During manual log in, the Driver identification entered is not recognized by RoadLog.
DRIDRD	Driver log in with Driver Key successful.
DRIDNO	Driver log in with Driver Key failed.
DPYERR	Display error.
KEYERR	Touch panel error.
DPY_OK	The existing display error has been corrected.
KEY_OK	The existing key error has been corrected.
DPYTMP	The display temperature is out of working range.
PRTERR	Printer error.
PRT_OK	Existing printer error corrected.
PRTTMP	The printer temperature is out of working range.
PAPERR	Printer has run out of paper.
PRTDLY	Print job has been stopped by RoadLog.
PRTCNL	Print job has been canceled by RoadLog.
NOLTLN	RoadLog cannot obtain valid positioning data.
NOTSYC	RoadLog cannot synchronize its time with GPS time due to a poor or absent GPS signal.
NO_ECM	One of the diagnostic events listed below has been detected, indicating that the distance travelled according to GPS data conflicts with the distance travelled according to vehicle data. CDSTER CSPDER JDSTER JSPDER
ECM_ID	An ECU serial number mismatch has been detected during RoadLog's synchronization with vehicle data received from CAN interface. OR A MID mismatch has been detected during RoadLog's synchronization with vehicle data received from J1708 interface.
ECM_OK	The NO_ECM condition has been corrected.
FCTERR	RoadLog is configured to synchronize with the vehicle via speed pulses… AND During the timeframe of the GPS plausibility check, vehicle motion is detected... AND Distance travelled according to GPS data conflicts with distance travelled as measured by vehicle speed pulses.

Event Code	Occurrence / Condition
PLSERR	RoadLog is configured to synchronize with the vehicle via speed pulses… AND During the timeframe of the GPS plausibility check, no vehicle motion is detected.
CDSTER	RoadLog is calibrated to be synchronized with vehicle via CAN interface… AND Vehicle total distance data has not been received from CAN bus.
CSPERR	RoadLog is calibrated to be synchronized with vehicle via CAN interface… AND Vehicle speed data has not been received from CAN bus.
CRPMER	RoadLog is calibrated to be synchronized with vehicle via CAN interface... AND Engine speed data has not been received from CAN bus.
CRPMOK	RoadLog is calibrated to be synchronized with vehicle via CAN interface... AND CRPMER event is active... AND RoadLog has successfully received engine speed data from CAN bus.
JDSTER	RoadLog is calibrated to be synchronized with vehicle via J1708 interface... AND RoadLog has not received vehicle total distance data from J1708 interface.
JSPDER	RoadLog is calibrated to be synchronized with vehicle via J1708 interface... AND Vehicle speed data has not been received from J1708 interface.
JRPMER	RoadLog is calibrated to be synchronized with vehicle via J1708 interface... AND Engine speed data has not been received from J1708 interface.
JRPMOK	RoadLog is calibrated to be synchronized with vehicle via J1708 interface... AND JRPMER event is active... AND RoadLog has successfully received engine speed data from JRPMOK interface.
LTLNOK	Valid positioning data (GPS) obtained.
TSYCOK	GPS signal quality has improved and system time synchronization can occur.
GPSERR	GPS receiver error.
GPS_OK	The GPSERR condition has been corrected.
GPS_FF	RoadLog performs the first GPS position after entering Full Function State.
MOVOFF	The vehicle has changed positions since the last power OFF.
OVERLP	Driver RODS data found in RoadLog's memory REPAIR APPROVALs with driver RODS data found on the Driver Key. Data cannot be merged.

18. Support / Warranty

Access to support for VDO RoadLog and VDO RoadLog Fleet Management Software is available directly through the Fleet Software. Click the Support button for links to software updates, data backups, and "NetViewer" software that will allow RoadLog Technical Support personnel to share your computer screen online, to help diagnose problems and answer questions.

VDO RoadLog support is available at:

Technical Support

Email: RoadLog-support@vdo.com
Tel.: (855)-RoadLog, or (855) 762-3564

Customer Service

Fax: (800) 752-7224 or (610) 366-9837
Email: RoadLog-sales@vdo.com
www.vdoRoadLog.com

Warranty

Registered RoadLog users can find the complete VDO RoadLog Warranty at:

www.vdoroadlog.com/users

19. Glossary

Adverse driving conditions	Conditions that interfere with normal safe driving that were not known to the person dispatching the run at the time it began. Includes snow, sleet, fog, ice or unusual road or traffic conditions.
DVIR	Driver Vehicle Inspection Report. The report on vehicle functions, parts and accessories that must be completed by Drivers at the completion of each day and the beginning of the next day.
HOS	Hours of Service. The set of regulations issued by Federal Motor Carrier Safety Administration setting the maximum allowed working hours for Drivers operating a commercial motor vehicle in US.
RODS	Records of Duty Status. Records of a Driver's work activities for a day.
On Duty time (ON)	The time from when a Driver begins to work or is required to be in readiness to work until the time the Driver is relieved from work and all responsibility for performing work. On duty time includes: All time at a plant, terminal, facility or other property of a motor carrier or shipper, or on any public property, waiting to be dispatched, unless the Driver has been relieved from duty by the motor carrier. All time inspecting, servicing, or conditioning any commercial motor vehicle at any time. All driving time as defined in the term driving time. All time, other than driving time, in or upon any commercial motor vehicle except time spent resting in a sleeper berth. All time loading or unloading a commercial motor vehicle, supervising, or assisting in the loading or unloading, attending a commercial motor vehicle being loaded or unloaded, remaining in readiness to operate the commercial motor vehicle, or in giving or receiving receipts for shipments loaded or unloaded. All time repairing, obtaining assistance, or remaining in attendance upon a disabled commercial motor vehicle. All time spent providing a breath sample or urine specimen, including travel time to and from the collection site, in order to comply with the random, reasonable suspicion, post-accident or follow-up testing when directed by a motor carrier. Performing any other work in the capacity, employ or service of a motor carrier. Performing any compensated work for a person who is not a motor carrier.
Sleeper Berth time (SB)	All time spent by the Driver in the sleeper berth.
Driving time (D)	All time spent at the driving controls of a commercial motor vehicle in operation.
Off Duty time	All the remaining time for which the Driver is not in ON or SB.
Twenty-four hour period	Any 24 consecutive hour period beginning at the time designated by the motor carrier for the terminal from which the Driver is normally dispatched.
Seven consecutive days (7 days)	The period of 7 consecutive days beginning on any day at the time designated by the motor carrier for a 24-hour period.
Eight consecutive days (8 days)	The period of 8 consecutive days beginning on any day at the time designated by the motor carrier for a 24-hour period.
SD	Supporting Documents.

FMCSA	Federal Motor Carrier Safety Administration.
Sleep mode	RoadLog's low power consumption mode. RoadLog functionalities are not available in this mode and the display is turned off.
Active mode	Operation mode in which RoadLog has all functionalities available.
Deactivated mode	RoadLog is not connected to power supply.
Download	Data transfer from RoadLog to a flash drive, usually a RoadLog Driver Key or Fleet Key.
Upload	Data transfer from a USB flash driver to RoadLog.
GPS	Global Positioning System.
GPRS GSM	General Packet Radio Service. Global System for Mobile Communications
USB	Universal Serial Bus – serial bus interface standard for connecting electronic devices.
Driver Key	Special USB flash drive used by the Driver to transfer logbook data.
Fleet Key	Special USB flash drive used by the Company to configure the RoadLog device and download/upload data to/from RoadLog and the Fleet Management Software. Also used to authenticate software licensing when starting the RoadLog Fleet Software.
Daily reset condition	The time of the day when the Driver accumulates the required off duty time for that day, according to FMCSA HOS rules. Once the daily reset condition is reached, the duty calculations are reset.

20. Legal Notices

This product may contain software available under open source licenses.

Some of this software in source code, object code or other forms may be available at www.vdoroadlog.com/oss5_2012 or upon request to:

Technical Support

Continental

6755 Snowdrift Rd

Allentown PA, 18106

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To the extent permissible under the law, Continental reserves the right to charge for the costs of research, duplication, shipping and handling associated with such requests.

VDO RoadLog™

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This product includes software developed by Paul Mackerras

This product includes software developed by Computing Services at Carnegie Mellon University (http://www.cmu.edu/computing/).

This product includes software developed by Tommi Komulainen

This product includes software developed by Pedro Roque Marques

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)

This product includes software written by Tim Hudson (tjh@cryptsoft.com)

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CONTINENTAL AUTOMOTIVE SYSTEMS US, INC. , A DELAWARE CORPORATION, CERTIFIES THAT THIS VDO ROADLOG™ DEVICE COMPLIES WITH ALL REQUIREMENTS OF 49 CFR 395.15 (AUTOMATIC ON-BOARD RECORDING DEVICES) WHEN MAINTAINED IN PROPER WORKING ORDER AND OPERATED AS INSTRUCTED IN THIS OWNER'S MANUAL. NEITHER CONTINENTAL AUTOMOTIVE SYSTEMS US, INC. NOR ITS PARENT, SUBSIDIARIES OR AFFILIATES ARE RESPONSIBLE FOR ANY DRIVER ERROR OR FOR SYSTEMS NOT MAINTAINED IN PROPER WORKING ORDER.

Legal Foundation

United States federal motor carrier safety regulations permit a motor carrier to require a Driver to use an automatic on-board recording device to record the Driver's hours of service. The use of automatic on-board recording devices is regulated by 49 CFR 395.15. The regulations require the operator of a vehicle and the company who employs the operator to conform to a number of obligations and responsibilities. The following list is not guaranteed to be complete or legally valid.

Requirements of the Automatic On-Board Recording Device
- The device shall produce, upon demand, a Driver's hours of service chart, electronic display, or printout showing the time and sequence of duty status changes, including the Drivers' starting time at the beginning of each day.

- The device shall have a means by which authorized federal, state, or local officials can immediately check the status of a Driver's hours of service.

Obligations of the Driver
- The Driver must use the automatic on-board recording device if required to do so by his or her employer.

- The Driver shall have in his or her possession and available for inspection while on duty records of duty status for the previous seven (7) or eight (8) consecutive days.

- All hard copies of the Driver's record of duty status must be signed by the Driver.

- Entries must be made by the Driver only.

- Drivers must note any failure of automatic on-board recording devices and reconstruct his or her record of duty status for the current day and the past seven days and continue to prepare handwritten records until the device is operational again.

- Drivers must review and verify that all entries are accurate prior to submission to the employer motor carrier.

Obligations of the Company
- Motor carriers must ensure that a certificate is obtained from the manufacturer of the on-board recording device certifying that the device has been sufficiently tested to meet the requirements of 49 CFR 395.15.

- The motor carrier must ensure that the on-board recording device permits duty statuses to be updated only when the vehicle is at rest, except when registering the time a vehicle crosses a state boundary.

- The motor carrier must ensure that the device and associated support systems are, to the maximum extent possible, tamperproof and do not permit alterations of the information concerning the Driver's hours of service.

- The motor carrier must ensure that the device warns the Driver visually or audibly that the device has ceased to function.

- The motor carrier must ensure that the device is maintained and recalibrated in accordance with the manufacturer's specifications.

- The motor carrier must ensure that Drivers are adequately trained in proper operation of the device.

- The motor carrier must maintain a second, back-up copy of the electronic hours-of-service files in a different physical location than where the original data is stored.

FCC part 15.105

- **Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC part 15.21

- **Warning:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radiofrequency radiation exposure Information:

- This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment.

- This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiofréquence exposition aux rayonnements Information :

- Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé.

- Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

- Ce transmetteur ne doit pas etre place au meme endroit ou utilise simultanement avec un autre transmetteur ou antenne.

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