Hours of Service Getting started with Matrack ELD



	Mate		
Username Password			
	Sign In		Í
Connect Bluetooth		Disconnect Bluetooth	
	Offline login		_

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Introduction

Matrack ELD solution for Hours Of Service was designed and developed according to FMCSA's ELD specification. The Matrack device connects with engine control module (ECM) of the vehicle and retrieves vehicle data including engine, speed, location using engine synchronization and Global Positioning System. Matrack ELD solution requires two components, an onboard device that connects with ECM and Matrack ELD mobile app. Refer Appendix section for device installation.

Login

Login to the app using valid username and password. User will continue to stay logged in till logout.

1

Select Login on the interface to login to the app



Important: Contact your Fleet manager for user credentials.

Enter the username and password to login. If you do not have an account, contact fleet manager.



After Login

2

1 Go to logs. Tap on the Current White to choose the vehicle from the list. Chosen vehicle will be set.

A	ft Logs							
Logged in user :	jayanttest							
Display user :	jayar	nttest			~			
Off line login :	No							
Vehicle Status Stationary	Select Vehicle No Vehicle	Ø	*	Ф	(Powered Down)	HOS Graph		
	Driver Status Bluetooth : Not Connected							
Bluetooth Quick	Bluetooth Quick connect			Bluet	ooth Disconnect			

2

Select a vehicle from the list of vehicles assigned for the driver by the fleet manager.

3:48 🔇 🚥 👗 🖿 🖾 管 🛙		() wate 💎 🖌 🗎	
	Vehicles	Ó	
Search Vehicles			
None		C	
prvehiclesim			
			0
		<	\Box

Important: If your vehicle selection list is empty , contact your fleet manager.

3

The current status of the vehicle will be displayed on the screen.

3:40 🔇 🚥 诺 🏲 🖾 👚					ڻ ا	WALTE	
A	Logs				Recap	Ó	
Logged in user :	prabo	otest					
Display user :	prab	ootest			<u></u>	~	
Off line login :	Yes	1					
Vehicle Status Stationary	Select Vehicle prvehiclesim	Ø	*	Ф	(Powered Up)	HOS Graph	
		Driver Stat	tus				0
	192	Off Duty	y 9				<
	Bluet	ooth : <mark>Not Co</mark>	nnected			-	7
Bluetooth Qui	ck connect			Bluet	ooth Disconnect		
	07	/13/2020 14::	39:30				

Important: The onboard device records data even when a driver was not associated with the vehicle. Before start driving, it is recommended for drivers to select the vehicle. Otherwise it will be added to the unidentified driver profile of that vehicle. Driver can claim that later. Unidentified driver profile will be displayed to the drivers associated with that vehicle in the subsequent login.

Power On

Matrack ELD device

Install the Matrack ELD device in the vehicle. Additional installation details were provided in the Appendix section. When the Matrack ELD device is fully powered up, solid green LEDs will appear



Matrack ELD App

In the Matrack ELD app, select a vehicle from the list of vehicles available under current vehicle drop down menu. Select the Bluetooth icon next to the select vehicle and connect ELD device via Bluetooth. ELD will be connected. The Matrack ELD app will display the device power up state in the logs screen. The power state will be displayed next to the selected vehicle. Green ignition icon indicates ELD in powered up state and red ignition icon indicates powered off state.

3:37 💿 🚥 诺 🕇	🗇 VALTE 🤛			
♠	Logs		Recap	\mathbf{O}
Logged in u	ser: p	rabootest		
Display use	er: p	orabootest		-
Off line log		'es		
rendere ottetto	Select Vehicle hiclesim 🧷	\$ ₺	(Powered) Up)	HOS Graph
ON (On Duty N SB (Sleeper Be PC (Personal C YM (Yard mov WW (Well wai Loading and U	rth) conveyance e - On Duty ting time -	uty 9) - Off Dut)	y)	
	Bluetooth : (Connected		
Bluetooth Quic	k connect	Bluetoo	th Disconi	nect
Las	st updated : 07/2	13/2020 14:36	:57	
<	1 0) (

Important: Tap on select vehicle to view the list of vehicles available and select a vehicle from the list that you are planning to drive

Record Hours of Service

After selecting the device, the driving status will be updated automatically.

1

When the vehicle starts moving at the speed 5 mph or greater, current status for the driver will automatically change to Driving. It continues to remain Driving when the vehicle is in motion. Vehicle state will display vehicle status as motion when the vehicle speed is 5 mph or greater and vehicle status as stationary when speed is 0. Driver cannot make any other operation in the app screen while the vehicle is in motion. Drivers may change the status to Off Duty for personal conveyance which will be recorded as personal conveyance in the event record. Drivers may also change the status to On Duty for yard moves which will be recorded as yard move the event records.



2

Once the vehicle remains stationary(speed = 0) for 5 minutes, a new screen appears in the app asking, whether you want to change the status. Driver may select continue Driving status or change to different status. If no response was received within 60 seconds, driving status will automatically change to On Duty.



Record Additional On Duty Hours

Additional on duty hours are recorded for a selected day with annotation notes. The page contains options to add, delete, and edit events for the selected date. Select Add Event button to record additional on duty hours. The event record Origin value indicates whether it was recorded automatically by the ELD device or added/edited by driver or edited by another authenticated user other than driver as per FMCSA requirement, 7.22 in Appendix A Subpart B of Part 395.



Update Event Records for Accuracy

Drivers can add/modify an event for selected date with annotation for accuracy. The event changes along with the event time, location, ODO, engine hours, event type/status, and origin are displayed below the graph.

In the Today's Log screen, tap on the graph or choose a date to access data log of current day or the corresponding date respectively. This would lead driver to the Edit Log screen. The following figure provides a detailed view of Log for a particular day



2

1

Add start and end time, then select any of the events. If vehicle data for that selected period shows that the vehicle is moving, update has to be made with the annotation. Select save after the desired modifications.



Certify and Sign the Day's Log

End of the day or multiple times in the day drivers can certify and sign the logs for the day. Need to re-certify and sign again if the changes were made to past date after initial signing.



Tap on the Form tab in Data per Day page to fill in the form before approving the log.



GENERAL

Vehicles

None

Trailers

None

Distance

None

Shipping Documents

None

Driver

None

CARRIER	
Carrier Name	
None	
Main Office Address	
Address Line 1	
None	
Address Line 2	
None	
City	
None	
Zip Code	
None	
State	
None	
Country	
None	
Home Terminal Address	
Address Line 1	
None	
Address Line 2	
None	
City	
None	
Zip Code	
None	
State	
None	
Country	
None	

OTHER

Co-Driver

None

Drigin

None

Destination None

Notes

None

The driver gets the form data displayed on the screen. Form data can be edited by tapping any fields in the screen which would lead to the editable tabs-General, Carrier and Other.

GENERAL

Vehicles Vehicle A, Vehicle B

Trailers

Trailer #3

Distance

Shipping Documents

None

NOTIC

23

Driver

Larry Crown

CARRIER **Carrier** Name California Fleet Service Main Office Address Address Line 1 1234 Address Line 2 Broadwalk City San Ramon Zip Code 94583 State Calfornia Country USA Home Terminal Address Address Line 1 1234 Address Line 2 Broafmoor City San Ramon Zip Code 94583 State California Country USA

OTHER

Co-Driver

Ryan

Origin

San Ramon

Destination

Dublin

Notes

None

Tap on the Sign tab to certify the logs.

	L	og	Form	Review and sign				
	0	Log	for today	III (O				
or or or bit definition of the second sec								
Sr.	EventID	Time	Status	Loca				
1	E	05:29:13	On Duty	53mi NE CA				
2	11	05:35:42	Driving	98mi SE WA				
3	12	05:41:39	Off Duty	74mi NNE C				
4	13	05:42:04	Power Up	63mi ENE W				
5	14	05:42:05	On Duty	63mi ENE Wi				
6	15	05:42:13	Driving	65mi ESE W				



3

Add your signature, if not present, then certify and approve the log using Approve Log button.

Log	Form	Sign
Approv	ve Selected Day's Log	Ø
Curr	rent Date: 03/11/2018	
	$\cdot \frown$	
C	Y '	
	1	
Capture		Approve Log
	Approv Curr	Approve Selected Day's Log Current Date: 03/11/2018

Once you tap the Approve Log button, the "Driver's Certification popup" appears along with "agree" or "not ready" button. Tap agree button to approve the log. If you tap "not ready", your logs are not authenticated by driver and will appear unauthenticated to the concerned authority.



Alerts

Alerts provide the possible list of violations made by the driver in the current cycle.

🕇 Vi	olation Messages 👘 🚺						
DOT Violations for approved dates in current cycle							
	USA70hours Cycle						
	Violation: 14 hour duty rule 03/11/2018 23:00 Maximum 14 consecutive hours duty allowed						
V	Suggestion: 10 hour Break 03/11/2018 23:00 Minimum 10 consecutive hours break required						

DOT Inspection

DOT Inspection screen allows DOT inspectors to view Driver's RODS in the ELD display. The driver's RODS(ELD output file) can be sent to the DOT Inspector upon request as per FMCSA's data transfer requirements. Driver can use either Web service or Secure Email option to transfer ELD output files. FMCSA will make ELD output file available for the DOT inspector. The data transfer form will have an optional text field, comment, to enter any data/code provided by the DOT inspector.



1 Tap on the Inspection tab to generate the driver's RODS. The driver can choose the date for which report needs to be displayed. Use date navigator buttons to change date.

	Л	atrack			DOT INSPI	TION		0	
	Driver	a managaran (Harry D			ycle	USA 70 hours/8	· ·	
	Distance		10		Timezone		PST		
	Carrier	California Fleet se		envice	Resta	rt hours	34		
	Vehicles	OLR 471		3	n	aller	HP 3192		
	Codriver		Mich	el		pping Duc No.	doc.t	set.	
	Hours avai	lable in cycle		60:00		rt date Imoor dr-San Ramon	69(1),209	8-06:15	
-			цццц						
		4444444 • • • •			11 NOON 1 2	3 4 5 4			
	Time		4		n KON 1 2 De	a a a a			50
	2. v		2 I		n KON 1 2 De	nt List rs Ev	7 8 9 10	1 04	riq.
Şr.	Time	Locatio	2 I		n KON 1 2 De	nat List	ent Type/Status		
Sr. 1	Time 06:30:00	Locatio	2 I		T NON 1 2 Engine Hou	nat List	ent Type/Status	00 D	
\$ 2.	Time 06:30:00 06:30:00	Locatio	n rockfield	000	T NON 1 2 Engine Hou	nt List rs Ex Fi	7 8 9 10 ent Type/Status i-duty.not driving inst certification	1 01 01 01 01 01 01 01 01 01 01 01 01 01	
\$r. 1 2 3	Time 06:30:00 06:30:00	2 4 5 4	n rockfield	000	T NON 1 2 Engine Hou	nt List ent List or on-duty,not	ent Type/Status Induty.not driving Login	Dr Dr E hanged) Dr	
Sz. 1 2 3 4	Time 06:30:00 06:30:00 07:00:00	2 4 5 4	an rookfield	000	T NON 1 2 Engine Hou	ret List ret List or Price List Or Dric Dric	ent Type/Status eduty.not driving inst certification Login driving(Inactive-Cl	n or	
\$r. 1 2 3 4 5	Time 06:30:00 06:30:00 06:30:00 07:00:00 07:00:00	Locatio 2mi SW CA Br 2mi SW CA Br	an rookfield	000	T NON 1 2 Engine Hou	nt List ret List or or-duty.not i i i i i i i i i i i i i	ent Type/Status eduty.not driving inst certification Login driving(Inactive Cl cond certification	Critical Control Contr	rių rių tu tu
Sr. 1 2 3 4 5 6	Time 06:30:00 06:30:00 06:30:00 07:00:00 07:00:00 08:00:00	Locatio 2mi SW CA Br 2mi SW CA Br	an rookfield	000	T NON 1 2 Engine Hou	nt List ret List or or-duty.not i i i i i i i i i i i i i	ent Type/Status eduty.not driving inst certification Login driving(Inactive-Cl cond certification itermediate log	Critical Control Contr	rių rių tu tu
2 3 4 5 6 7	Time 06:30:00 06:30:00 06:30:00 07:00:00 07:00:00 08:00:00	Locatio 2mi SW CA Br 2mi SW CA Br	m rookfield rookfield	9 10 000 569,36	Engine Hou 23,722 Recap	nt List ret List or on-duty.not See In Th	ent Type/Status eduty.not driving inst certification Login driving(Inactive-Cl cond certification itermediate log	Critical Control Contr	19 19 10 10 10 10

Tap on the Mail option to send RODS directly to Fleet manager or other authorized person in the carrier.

2



YM

LogOut Off Duty

9 PM

9:15 PM

DRIVER'S DAILY LOG

12-01-2017

_						-		
Driver		Smith, Plaza		Matrack Inc	Distance:	50	Vehicles	Mike121
Cycle	c	USA 60 hours/7 days	Main Office:	334 Clain St.Redding CA	Co-driver:	Ed Burrell	Trailor	1234 7654
Shipp No:	ing Doc	77568A	ELD Malfunction Indicators	No	Start-End Engine Hrs	758.2-760	US DOT#:	6657456
	Hours ed today	1 hr:0 mins			Start-End Odometer	39564-3957 6		
Driver		D0001344	Timezone:	CST	Driver License State:	CA	Driver ID:	124434
Co-Dr	fiver ID	D3444456	Data Diagnostic Indicators	Yes	ELD ID:	10001	ELD Manufacturer	Matrack ELD
Shipp	ing ID	BL1123444	24 Period Starting Time	Midnight	Truck Tracto ID:	or Unit#	Unidentified Driver Records:	No
Truck VIN	Tractor	1FUJGHDV 0CLBP8834	Exempt Driver Status	No	Record Date	: 1-Dec-17	Current Location:	Tracy,CA
File Comn	nents:				Print/Displa Date:	y 1-Dec-17		
								Recap
-	P : :			1 4004 1 2			- 25	11/24 00:30
OFF	mini	шшшш	minimini	minim	minimin		111111 23:00	11/25 01:30
99	ահետ	ա հանդես	ահանդեր	ահահահա	ահերհերի	ան ներել են	11111 60:00	11/26 00:00
8	de de la	սի սի սի սի	de la	de de la de la de	di di di di	1.	11 11 00:15	11/27 00:00
ON	delabel	h h h h h h	վեր հերհերի	de de de de	the heat of the second second		1.1.1. 00:45	11/28 00:0
	hadand		had a start and		hadanda		24:00	11/29 00:0
							24.00	11/30 00:15
S.No	Event Type/St	Start	Duration	Odometer	Eng Hours	Location	Notes	Origi
1	Off Duty	12 AM	4 20 hrs:0 mins	39564		2mi SW CA San Ramon	NA	ELD
2	Login	12 AM	4	39564	758.2		NA	Drive
3	On Duty driving	not 8 PM	0 hrs:30 mins	39570		4mi SW CA Castro Valley	NA	ELD
4	Driving	8:30 F	PM 0 hrs:15 mins	39572		3mi SW CA San Ramon	NA	ELD
5	First Certifical	8:30 F	PM				NA	Drive
6	PC	8:45 F	PM 0 hrs 15 mins	39574		1mi NW CA San Ramon	NA	Drive
7	Second	8:45 F	PM				NA	Drive

2mi SW San Ramon

2mi SW SanRamon

NA

NA

NA.

Driver

Driver ELD

0 hrs 15

mins

9:15 PM 2 hrs 45 mins

39576

39576

39576

760

Data Transfer

1

ELD output files can be transferred to the concerned authorities using ELD's Data Transfer Feature. Matrack ELD supports FMCSA's Option-1 Telematics for data transfer. Driver can select either Web Service or Email option for data transfer. During road side inspection, DOT Inspector may provide optional text to be sent alone with ELD output file. Enter the optional text in the comments.

Select Data transfer option in the Dot Inspection to initiate Date transfer to FMCSA using Web Service or Secure Email.

d Data T	ransfer	0
Comments		
Mode		
🔘 Web Service (Em	ail	
Return confirmation en	nail	
Save		

Settings

Settings allow the driver to view/ edit the driver details, carrier details, time zone and cycle rule and preferences. The driver can reset password from the settings page.





Enter/Edit driver name, license number, dot number, email and phone number.

Driver Details
First Name
Harry
Last Name
Jude
Driver ID
TestID
Driver License Number
B4 JNN
License Issuing State
California
License Issuing Country
USA
Email
harryjude@abctrucking.com
Phone Number
123456789
Save

Enter/Edit Carrier name, office and home terminal address.

Carrier Details	0
Carrier Name	•
US DOT Number	
US DOT Number	-
Main Office Address	
Address line 1 Address line 1	•
Address line 2	
Address line 2	-
City	.
City	-
Zip Code	
Zip	_
State	
Select state	.
Country	
Select Country	<u>/</u>

Home Terminal Address Address line 1	
Address line 1	*
Address line 2	
Address line 2	*
City	
City	*
Zip Code	
Zip	*
State	
Select state	*
Country	
Select Country	*
Save	



Home Terminal Address	
Address line 1	
1234	*
Address line 2	
Broafmoor	*
City	
San Ramon	*
Zip Code	
94583	*
State	
California	_
Country	
USA	1
Save	

Enter/Edit time zone, cycle, cargo type, restart hours, rest break mins.

TimeZone and Cycle	e Rule 🛛 🚺
Select Time Zone	
Pacific Standard Time (PST)	
Select Cycle Zone	
USA 70 hours/8 days	
Cargo Type	
Property Carrying	<u>,</u>
Restart (in Hours)	
34	_•
Rest Break (in Minutes)	
30	_•
Odometer Unit	
Miles	· ·
Save	

5

Reset the password.

•	Change Password	Ø
	Old Password	
	New Password	
	Confirm New Password	
	Change password	

Set preferences for the app.

◀	Preferences		0
	Fuel Warning %		
	10	update	
	Disable violations		
	Enable test server		
	Display old graph		
	Hide hours available in cycle		
	Disable Recap		
	BLE simulator		
	Test Datatransfer		
	Disable voice status		
	Auto Connect		

Device Malfunction

Malfunction and diagnostics events of the ELD device were visually indicated in the ELD display. Malfunction was indicated with red banner instead of regular green banner in the logs screen and red dot on the top right for all other screens. When a malfunction was found during the diagnostic event, the banner in the log screen will turn to red color with a text "Malfunction" including the malfunction code in parenthesis. For instance, Malfunction(P). The values of malfunction code contain values 'P', 'E', 'T', 'L', 'R', 'S', or 'O' as per FMCSA requirement. When clicked on the malfunction banner, it will take the driver to malfunction screen where additional details about the malfunction with malfunction code description highlighted. In the event of malfunction, drivers are required to maintain Driver's Daily Logs manually and report about the malfunction to the carrier within 24 hours. The problem should be resolved within 8 days. Contact your fleet manager and Matrack customer support for assistance. Customer support details are available at the end of this document and in app's Help and Support screen.

Alfunction(0)	Recap
Logged in user: prabootest	
Display user : prabootest	· · ·)
Off line login : No	
Vehicle Status Select Vehicle Stationary prvehiclesim	(Powered Hos Up)
Driver Status	
Me Off Duty 9	
ON (On Duty Not Driving)	
SB (Sleeper Berth)	
PC (Personal Conveyance - Off Duty)
YM (Yard move - On Duty)	
WW (Well waiting time - Off Duty)	
Loading and Unloading	
Bluetooth : Connected	
Billetooth : Connected	
Bluetooth Quick connect Bluetoot	h Disconnect
07/08/2020 00:07:41	
• •	



Important: Tap on the red banner for additional details about the malfunction. The malfunction screen will display the malfunction code and highlight the malfunction description.



Sl.No.	Malfunction Code	Malfunction Description
1	Р	Power compliance malfunction
2	E	Engine synchronization compliance malfunction
3	Т	Timing compliance malfunction
4	L	Positioning compliance malfunction
5	R	Data recording compliance malfunction
6	S	Data transfer compliance malfunction
7	Ο	Other ELD detected malfunction

Device Diagnostics

Matrack ELD software monitors power, engine synchronization, missing data and various internal data diagnostics periodically. During the diagnostics checks, visual indication is displayed in the ELD display. When a diagnostics event was found during the diagnostic check, the banner in the log screen will turn to yellow color with a text "Diagnostics" including the diagnostics event code in parenthesis. For instance, Diagnostics(4). The values of diagnostics code may contain values '1', '2', '3', '4', '5', '6' as per FMCSA requirement. When clicked on the diagnostics event yellow banner, it will take the driver to diagnostics details screen where additional details about the diagnostics event code will be displayed and description highlighted.

oved Date

Ę

DOT Inspectio

Alerts

0

Š

Inidentified Driving

•	Diagnostics	0	
	03/08/2018 10:02:15 <mark>Diagnostic Code #2</mark> Engine synchronization data diagnostic		Logs
	03/08/2018 19:20:13 Diagnostic Code #1 Power data diagnostic		
•	03/07/2018 01:10:45 Diagnostic Code #3 Missing required data elements data diagnostic		Unapproved Da

Important: Tap on the yellow banner for additional details about the diagnostic event. The diagnostic event screen will display the list diagnostic code. Select individual diagnostic event that will open new screen with diagnostic code description highlighted.

◀	Diagnostics 🛛 🕕
1	Power data diagnostic event Indicates that an ELD is not powered / fully functional within one minute of the vehicle's engine gets powered or does not remain powered when engine is powered on
2	Engine synchronization data diagnostic event Indicates that an ELD is unable to get updated values for the required ELD parameters within five seconds of the need
3	Missing required data elements data diagnostic event Indicates that at the time of recording some required data field is missing. Missing data details will be provided during the event
4	Data transfer data diagnostic event Indicates that the data transfer mechanism is not confirmed. Error details from FMCSA data transfer will be available in the event description
5	Unidentified driving records data diagnostic event Indicates that the driving time is recorded for an unidentified driver for more than 30 minutes
6	Other ELD identified diagnostic event Indicates the Other ELD identified diagnostic event

Sl.No	Diagnostic Code	Data Diagnostic Event
1	1	Power data diagnostic event
2	2	Engine synchronization data diagnostic event
3	3	Missing required data elements data diagnostic event
4	4	Data transfer data diagnostic event
5	5	Unidentified driving records data diagnostic event
6	6	Other ELD identified diagnostic event

Accept/ Reject fleet manager's suggestions

The driver can view the suggestions made by the fleet manger for accuracy. The driver can either accept or reject the suggestions. A popup will appear with the suggestions made by the fleet manager with Accept / Reject button. If the suggestion was accepted, then the driver should re-certify the logs for the suggested day.



Unidentified Driving Profile

DOT regulations require all the ELD Driving events in the ELD should be assigned to the drivers. If the vehicle is in motion and no driver was connected to the ELD then it will be recorded under Unidentified Driving events that can be claimed by the drivers later. The Unidentified driving events will be displayed to all drivers of that ELD after the login. Driver can view/claim Unidentified driving events selecting Unidentified driving icon in the home screen.

1

Tap on Unidentified driving icon to view/claim Unidentified driving events.



 2 The driver can view /claim the driving events from this screen.



Customer Support

If you have any queries, reach to the following mail: "support.gps@matrackinc.com". Drivers can reach customer support using App's Help and Support screen.

♠	Help a	and Supp	ort	-	0			
	Loggin	ig State			١Q			
Device Identifier: b7a85f28d1f6aac4								
Support Identifier: 98801012-b171-4647- aef8-5e9a98133271								
Build version info:								
Version N	1	1.1.0.115						
Version C		16						
Mail us (24/7)								
Email Support								
Send dump data								
		Dump						

Appendix

ELD Installation Guide:

- Connect the 9 pin T-Harness to the diagnostic port usually found.
 - 1. Under the dashboard.
 - 2. Underneath the steering wheel.
 - 3. Below the driver's seat.
 - 4. Near the driver's left kick panel.
- Connect the device to the other end of the cable.
- Turn on the ELD device.
- Turn on the ignition.
- Make sure the app is installed and logged in.
- Start the vehicle to track your hours of service.



Important: Install Matrack ELD app from Google play store for Android mobile and Apple app store for iPhone mobile.