Editing & Correcting Electronic Logs – Dos and Don'ts and info on Malfunctions

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ELD Mandate - Editing

Driver was given control of logs in the ELD Mandate

Under ELD, driver basically has last say in editing

Carrier Administrator suggest edits

This interaction – think about policies

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What You Can't DO!!

Reduce or Remove DRIVE TIME

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If there is a drive time mistake - ANNOTATE

Example: Driver leaves truck at stop without duty status change, taking mobile ELD along

Drive doesn't transition duty status, did immediate log off, stuck in drive - Annotate

Example: Meant to be a Yard Move or PC but was recorded as Drive segment - Annotate

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Drive Time – What you CAN do!!

You can extend Drive Time

You can turn a PC or Yard Move to Drive

Teams can correct Drive segments between each other, both need to accept this as edit

You can insert a drive segment into a log

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Administrative Edits - Policy

Edits by back office Administrator can only be suggested to Driver, pending until Driver acceptance

Be sure to review first – Driver may already have corrected

Assigning of unidentified Drive segments

       Consider policy for edits rejected by driver

       Rejected edits remain in file as inactive record

Remember Policies

       Need to be clear, and followed

       Consult legal when implementing

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Train Drivers to HELP AVOID EDITS

Have driver be sure to change duty status

    Don't abruptly log out – There is the 5 minute timer

    Can change duty status at 0 MPH for 3 seconds

Be sure to log in when moving vehicle – eliminates unidentified drive segments

If using manual termination of Yard Move be sure to terminate Yard Move – Complex edit

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Driver and Unidentified Drive Segments

If unidentified drive segments were recorded, next logged in driver has to accept or reject

- If rejected, they are sent to host – Carrier reconciles

- If accepted by driver, the drive events will be added to the driver's log

- UVA converted to anything else in a log is reduction in drive segment
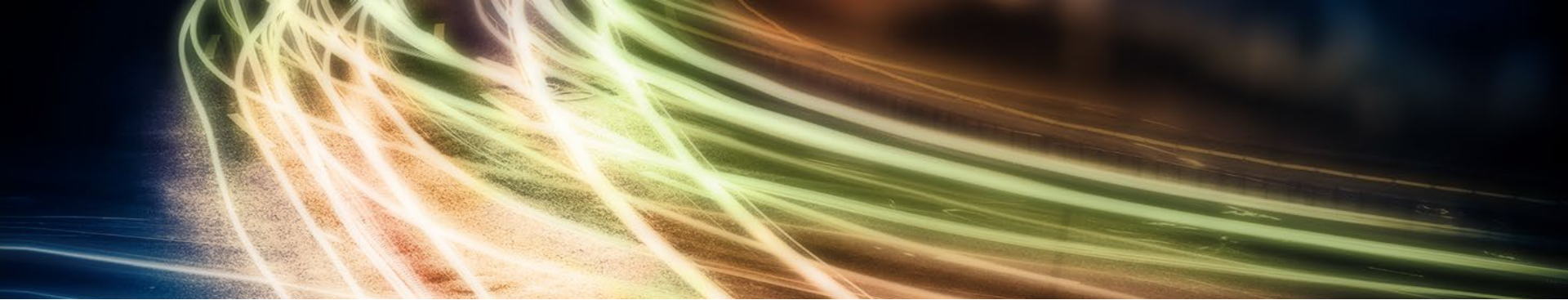
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Editing Logs - Cautions

Suppliers must capture time stamps on all activities

Be cautious about how much editing is being done

Taking out on duty after a drive segment and turning to off duty.

Editing while off duty – needs to be on duty action

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Malfunctions & Data Diagnostics

ELD Mandate - Malfunctions and Diagnostics

- ELD defined diagnostic events and malfunction events to indicate when there is a issue with the vehicle or with the Electronic Logging Device (ELD).

- Diagnostics and Malfunctions are "Logged" and "Cleared".

  - You won't always see a "Cleared" event.

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ELD Definition

Description	Purpose defined in ELD
Power Compliance	To indicate periods when the ELD is powered down while vehicle engine has power
Engine Synchronization	To monitor engine data to ensure ELD is getting engine power status, vehicle motion status, miles driven, and engine hours.
Timing	To ensure the ELD time is accurate to within 10 minutes of UTC
Position	To indicate periods when the ELD could not get a valid GPS location automatically
Data Recording	To indicate missing data in ELD events, and to monitor low storage on the ELD
Data Transfer	To monitor the eRODS data transfer process and indicate issues with transferring eRODS files
Other	Can be used by ELD vendor to indicate any other issues with the ELD
Unidentified Driving	To indicate periods of vehicle movement without a driver logged in

Malfunctions and Diagnostics

Reoccurring diagnostics trigger malfunctions

Description	How a malfunction is triggered
Power Compliance	30 minutes of drive lost
Engine Synchronization	30 minutes without data
Timing	10 minutes from UTC
Position	60 minutes without location while moving
Data Recording	ELD storage/memory full
Data Transfer	7 day test cycle
Other	Defined by supplier
Unidentified driving record	Diagnostic only

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Malfunctions and Diagnostics

Reoccurring diagnostics trigger malfunctions

- Once a malfunction is triggered it will remain in effect and cannot be manually cleared.

- Next few slides describe how each one gets automatically cleared.

- Driver will have to keep a paper log during that time.

- Entering the driver's logs into the website does not clear a malfunction/paper log mode

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Current D&M Issues

- We know there are issues with the current implementation.

- Certain year/make/model trucks behave differently

- Excessive diagnostic and malfunction examples should be escalated (include year/make/model or VIN).

- There can be need to "tweak" implementation

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Power Compliance

- Diagnostic occurs when
  - Detection of engine running time gap while being powered down
  - mobile detects that there was distance accumulated (using relay odometer data) while being powered down.
- The check will be performed when the device is powered back up.
- If the ELD detects that there was vehicle activity while the ELD was powered down, the power compliance data diagnostic is created.
- The "logged" event has a timestamp of the time the device was powered down, and the "cleared" event will have a timestamp of when the device was powered back up.

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Power Compliance – Cont.

- Possible Cause
  - This could occur if the device was unplugged for a period of time, or the lost power due to poor cabling, weak vehicle battery, or cold cranking.
  - It could also occur if the ELD mobile device battery died and needs re-charging or the mobile device is turned off.

- Suggested Action to Prevent
  - To prevent issues going forward, train drivers to keep mobile device on and ELD plugged in while vehicle is in motion.
  - Maintenance: ensure cable is secure at connector and at vehicle connection point, follow recommended mounting procedures, check vehicle battery voltage.

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Engine Synchronization

- ## Possible Cause
  - Sensor failure, eg. speed sensor, ECM or other controller on the vehicle network may need troubleshooting.
  - Cabling problem or incorrect cabling used.
  - Vehicle prior to year 2000 and may not have a vehicle networks.
  - Vehicle may be non-class 8 and unable to produce the required parameters.

- ## Suggested Action to Prevent
  - Check the fault code report for any related issues.
  - Maintenance: use a diagnostic tool to further examine fault codes or troubleshoot the vehicle network, and examine sensors.
  - Check cabling is secure, that there is no damage to the pins.
  - Ensure that the correct cable is used for the vehicle type.
  - Support to escalate if none of these steps reveal an issue

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Timing Compliance

- No Diagnostic

- Malfunction occurs when
  - the ELD's time deviates from its reference UTC source (either the host, or mobile device GPS time) by more than 10 minutes.
  - The driver will remain in paper log mode until the time deviation falls below 10 minutes.

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Timing Compliance

- Possible Cause

  - No network and GPS connectivity simultaneously

- Suggested Action to Resolve

  - Log out of ELD and log back in again.

  - Enable location services.

  - Restore cell network connectivity.

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Position Compliance

- No Diagnostic

- Malfunction occurs when

  - the ELD GPS fails to acquire a valid position within 5 miles of the vehicle moving

  - 60 minutes of movement has been recorded during the current log day without a valid location.

  - The driver will remain in paper log mode until the end of the log day.

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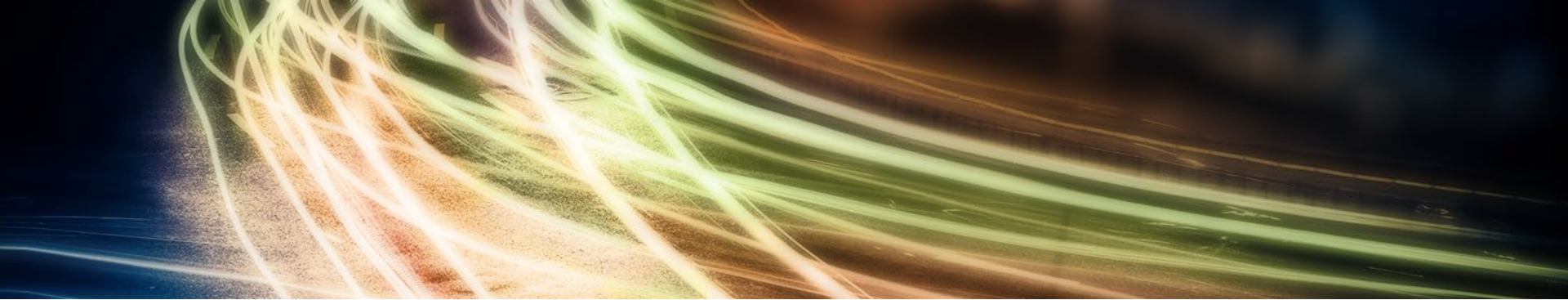
Data Recording

- Diagnostic
  - A missing required data elements data diagnostic event occurs when the ELD attempts to create an event, but one or more of the required data fields is missing at the time of its recording. The missing data element is displayed as "N/A" in the driver's log event list.

- Malfunction is <u>not triggered by diagnostic</u> in this case
  - A data recording compliance malfunction occurs when the available memory on the ELD device falls below the 15% threshold, or available storage space is less than 100MB.
  - The driver will be in paper log mode until the available memory on the mobile is above 30%, or the available storage space is more than 200MB.

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Data Transfer

- Diagnostic occurs when
  - the eRODS file generation automatic self test fails to generate a file.
  - Occurs every 7 days,
  - When a diagnostic is created, the self test frequency increases to once every 24 hours (as long as a driver is logged in).
  - The test process will not attempt to transfer a file to FMCSA.
- Malfunction occurs when
  - A data transfer compliance malfunction occurs when the eRODS file generation automatic self test, that occurs every 24 hours, fails to generate a file 3 times in succession.
  - The malfunction is cleared when the eRODS file generation automatic self test can generate a valid eRODS file.

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Unidentified Driving

- Diagnostic occurs when
  - more than 30 minutes of driving time for an unidentified driver is recorded for the current vehicle within the current log day or during any of the previous 7 days.
  - The diagnostic is cleared when the driving time recorded for an unidentified driver for the current vehicle falls below 15 minutes within the current log day and any of the previous 7 days.
- There is no Malfunction

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Questions

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