# Equipment Health View (EHV) Webinar

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## Equipment Health View (EHV)

#### Agenda

- What?
- Who?
- Where?
- High-level Walk-through
- Reporting Repairs and Remediations
- Equipment Owner Fleet Stats



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## What is Equipment Health View (EHV)?

- EHV was sponsored by the Equipment Health Monitoring Committee (EHMC)
- Consolidates health related information from Equipment Health Management System (EHMS), Umler, Early Warning (EW) and Damage Defective Car Tracking (DDCT)
- EHV was implemented in early 2012. Major enhancements were released in December 2012.
- Adheres to guidelines of the AAR Interchange Rules



#### Who is EHV for?

#### Repair Shops

- Viewing equipment health
- Reporting repairs and inspections

#### Equipment Owners

- Viewing fleet health
- Exporting fleet status data for offline analysis

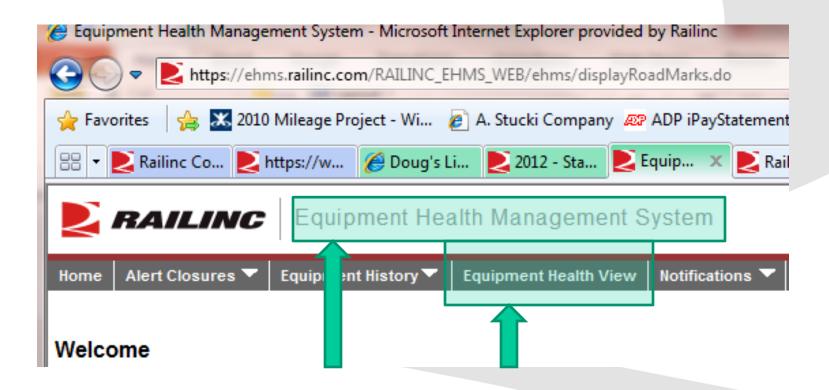
#### Railroads

- Viewing equipment health
- Viewing fleet health
- Exporting fleet status data for offline analysis



#### Where is EHV?

- EHV can be found in the EHMS Application
  - Equipment Health View tab is located on EHMS toolbar
  - Note: User must have EHMS Generic Access SSO permission





#### What does EHV do?

- EHV allows a user to <u>display</u>:
  - Asset health related information such as alerts, incidents, inspections and warnings and advisories
  - Last reported location and mileage (car owner only)
  - Umler characteristics (high level view)
- EHV allows a user to <u>report</u>:
  - EHMS alert repairs and inspections
  - EW/MA inspections
  - Inspections such as air brake test (ABT), car grades and other inspections reported in Umler
  - AAR Component ID (CID) associations
- Additionally, <u>Fleet Stats</u> are available to equipment owners to view global asset health information



#### What is required to access EHV?

- A Railinc SSO ID is required to access all Railinc applications
- Some EHV functions require specific SSO permissions:
  - Umler—Inspection permission to report inspections
  - EHMS—Generic Access & Car Repair History
  - DDCT—Handling Carrier or Car Owner
  - EW/MA—Inspection permission
- See your Company SSO and/or Umler Administrator to have required permissions or rights granted
- Confidential information is only available to equipment owner



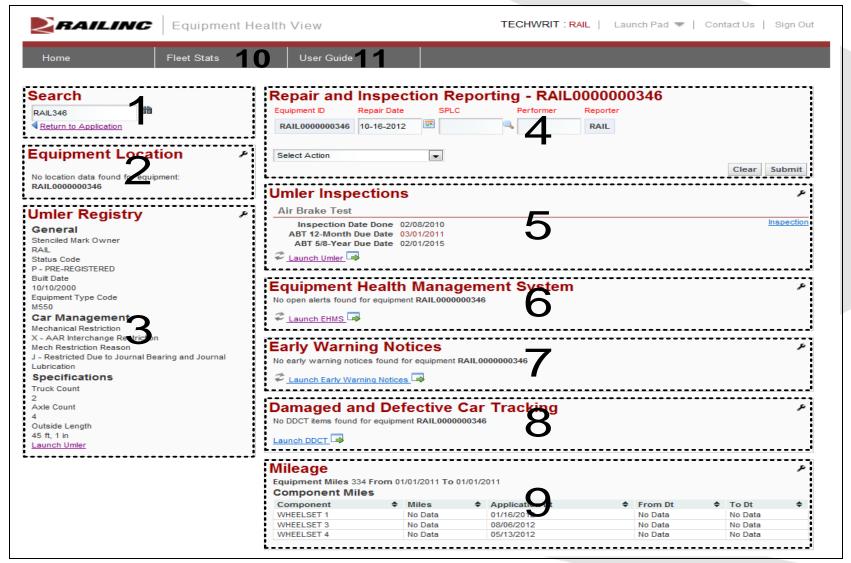
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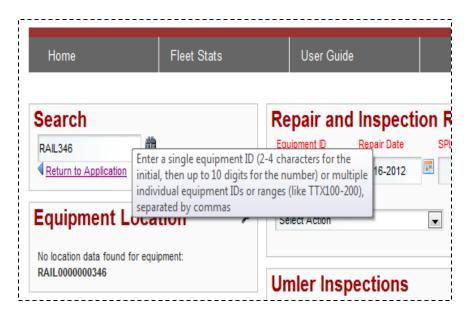


#### **EHV Overview**





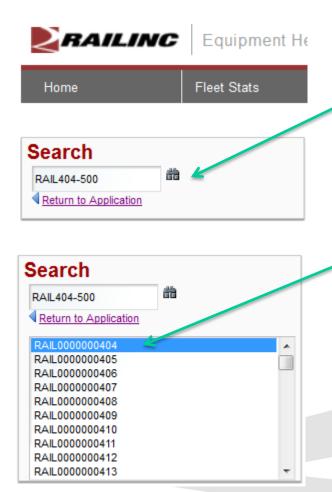
#### 1 - Search Window



- Allows search by single equipment or range of equipment
- Ability to search up to 200 equipment IDs
- Displays equipment IDs in numerical order
- Link to return to EHMS application



#### 1 - Search Window - continued



- Allows search by range or multiple equipment cut-and-paste
- EHV will parse the equipment ID's into a list with the first one selected by default
- When an equipment ID is clicked, the screen will refresh with its specific data



#### 2 - Equipment Location Window

#### **Equipment Location**

Loc: INTERBAY, WA

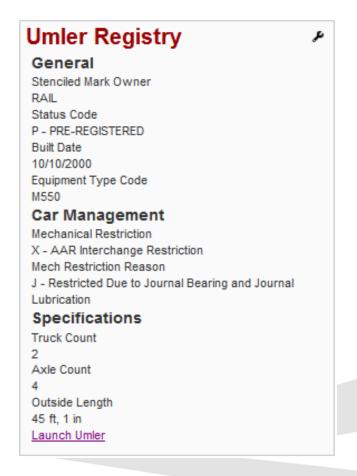
Last Move: 04/24/2009 08:24 (Empty)

Displays location city/state and last move information per Event Repository

- Available to car owner, parties to the waybill, handling carrier
- Load/Empty status



## 3 - Umler Registry Window



- Displays high level Umler info such as Equipment
   Type Code
- Visibility to Car
   Management info such as restrictions
- Equipment specifications such as truck and axle counts are shown



## 4 - Repair and Inspection Reporting



- Allows Repair and Inspection Reporting for the user's company mark
- Allows authorized users to submit various inspections and repairs
- Allows multiple entries to be submitted at the same time
- More on this later...



#### 5 – Umler Inspections



- Displays reported inspections for the searched equipment record
- Displays dates and details for each inspection (due dates, date done, etc.)



# 6 – Equipment Health Management System



- Displays open EHMS alerts:
  - Alert Type WILD, Truck Hunting, ABD
  - Location wheel, truck, bearing
  - Alert Level window open, opportunistic, condemnable, mandatory



## 7 – Early Warning Notices



- Displays open Early Warning and Maintenance Advisories:
  - Notice (notice type and number)
  - Severity Code
  - Expiration Date
  - Effective Date
  - Title of notice



## 8 – Damaged Defective Car Tracking



- Displays open DDCT incidents
- Requires specific DDCT SSO permissions
  - See your DDCT administrator for access



#### 9 – Mileage

1ileage									
quipment Miles 84		01/15/2010 T	o 06/16	6/2012					
Component	<b>\$</b>	Miles	<b>\$</b>	Application Dt	<b>\$</b>	From Dt	<b>\$</b>	To Dt	4
WHEELSET 1		No Data		10/04/2012		No Data		No Data	
WHEELSET 2		No Data		08/29/2012		No Data		No Data	
WHEELSET 3		No Data		12/01/2012		No Data		No Data	
WHEELSET 4		No Data		08/30/2012		No Data		No Data	

- Uses car movement events to calculate equipment mileage
  - Data available starting January 2010 to present
  - From/To date showing first move to most recent movement
- Displays mileage by wheelset
  - Shows date wheelset applied
  - From/To date showing date range for mileage calculation
- Only visible to equipment owner



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- EHV allows you to report:
  - Repairs using CRB Job Codes and Locations
    - Close EHMS alerts
- Associate components in Umler Component Registry (CEPM)
- EHMS Inspections for closing EHMS alerts
- EW/MA Inspections for Early Warning system
- Umler Inspections:
  - Air Brake Test

Door Lube

Autorack Cert

Car Grade

- Reflectorization
- Autorack Insp

- Vehicle Flat Car
- Autorack Repair





The Equipment Repairs window will be empty until an equipment search is performed.

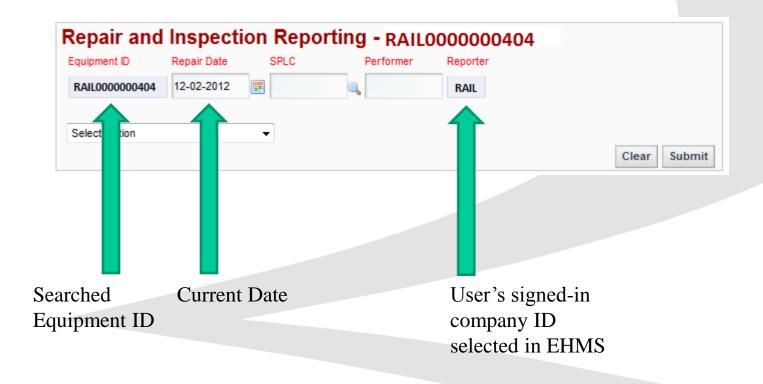




After a successful equipment search, the Repair and Inspection Reporting window will be pre-filled for Equipment ID, Repair Date, and Reporter

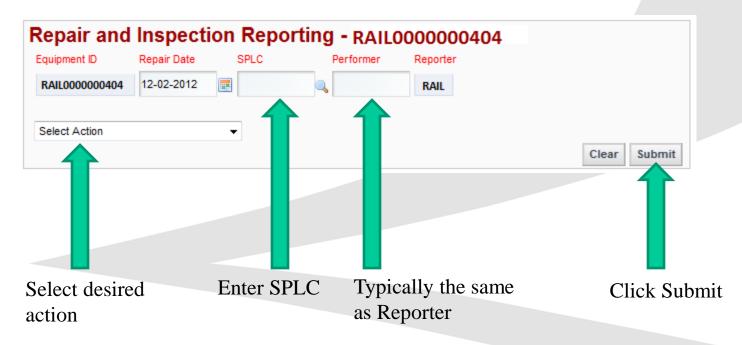


Pre-filling helps to reduce data entry



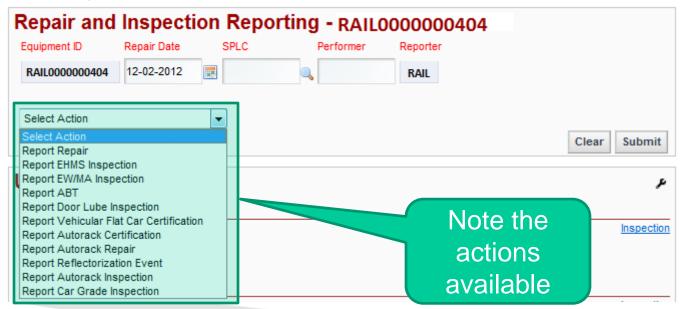


Customer only needs to enter repair/inspection specific data and click "Submit"





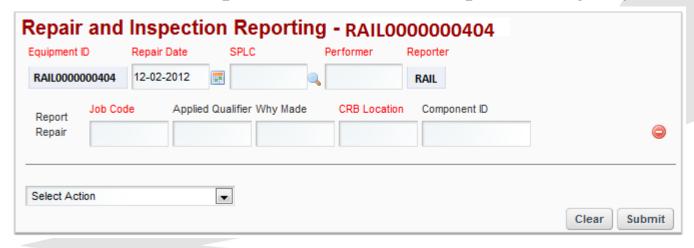
"Select Action" allows you to easily pick the type of action you wish to take.





Selecting "Report Repair" adds a simple repair line allowing user to report repairs that:

- Closes EHMS alerts
- Associates components in Umler Component Registry (CEPM)



**Note:** required fields are shown in **RED** 



Minimal information is required to report a wheelset replacement with a wheelset component at axle 3 (CRB Location)

Repair and	l Inspection	on Repor	rting - RAII	0000000404 Reporter	
RAIL0000000404	12-02-2012	<b>412750</b>	RAIL	RAIL	
Report Repair Job C	7,	d Qualifier Why N	Made CRB Local	RAIL7260	
Select Action		•			Clear Submit

**Note:** required fields are shown in **RED** 



Data errors are reported for each line to easily identify where fixes need to be made before resubmitting.

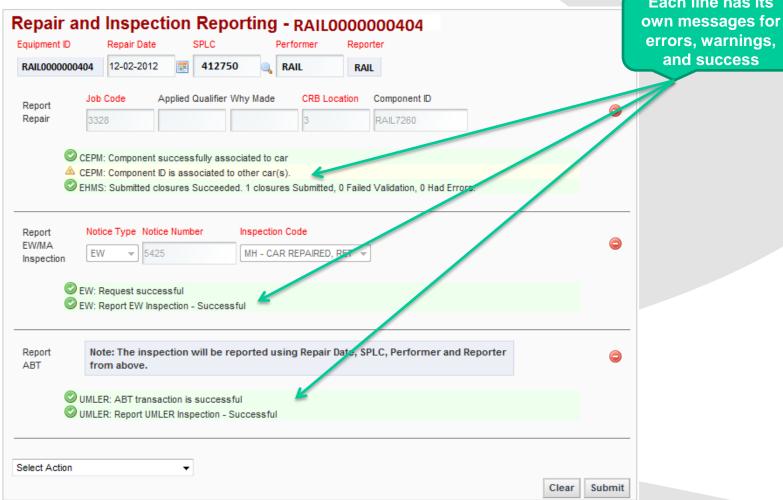
quipment ID	Repair Date	SPLC	Performer	Reporter	
RAIL0000000404	12-02-2012	iii.		RAIL	
UI: SP	LC is required and	must be 6 digits or	9 digits ending with 00	00	
Report Job Co	ode Applied	Qualifier Why Made	e CRB Location	Component ID	
Repair 3328				RAIL7260	
UI: CR	B Location is requ	ired and must be 1 c	or 2 alphanumeric cha	racters	



Users can enter more than one item at a time...

RAIL00000004	1404 12-02-2012 📰 RAIL
Report Repair	Job Code Applied Qualifier Why Made CRB Location Component ID  3328 RAIL7260
Report EW/MA Inspection	Notice Type Notice Number Inspection Code  EW ▼ 5425 MH - CAR REPAIRED, RET ▼
Report ABT	Note: The inspection will be reported using Repair Date, SPLC, Performer and Reporter from above.



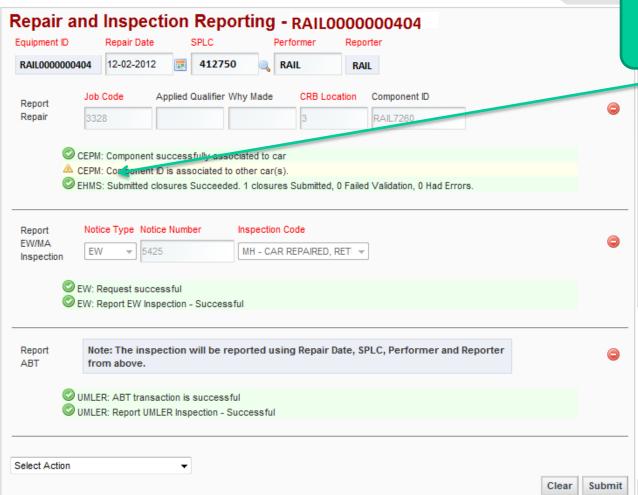




Each line has its

errors, warnings,

and success





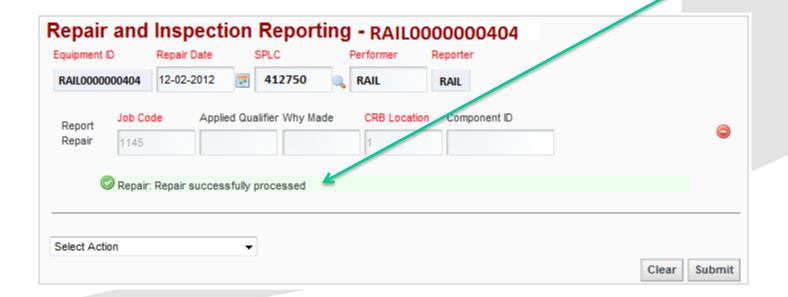
Messages are

system specific

(EHMS, CEPM)

Not all repairs go to EHMS or Umler Component Registry (CEPM). Some are just stored in the database.

Repair was saved to database but did not go to EHMS/CEPM

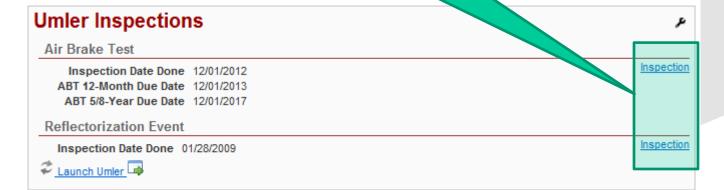




Remember this? Repair and Inspection Reporting 1L0000000404 Equipment ID Repair Date Reporter RAIL0000000404 12-02-2012 RAIL Select Action Clear Submit Report Repair Report EHMS Inspection Report EW/MA Inspection Report ABT Report Door Lube Inspection Report Vehicular Flat Car Certification Inspection Report Autorack Certification Report Autorack Repair Report Reflectorization Event Report Autorack Inspection Report Car Grade Inspection

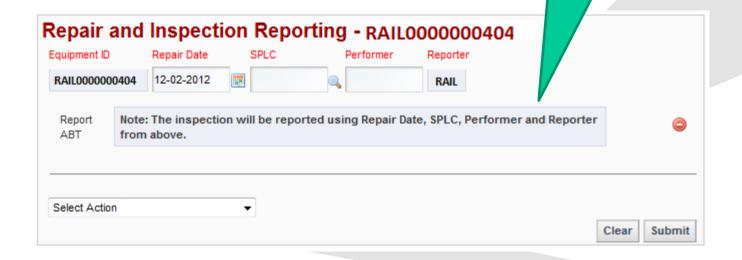


We added this to make it even easier

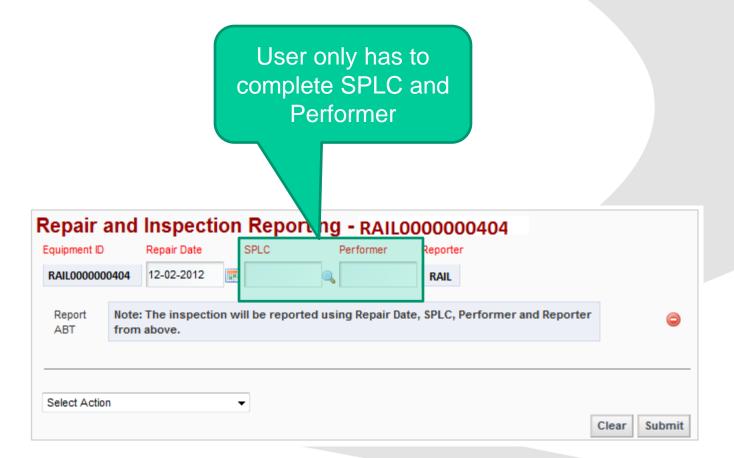




This line was added automatically by clicking the ABT Inspection link









The same thing was done for EHMS

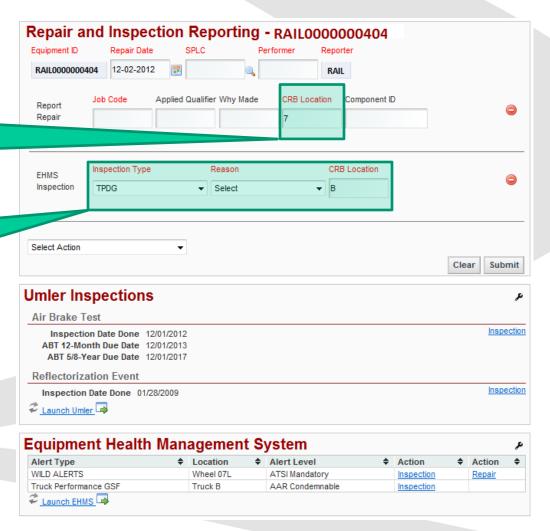


User can select
Repair or
Inspection

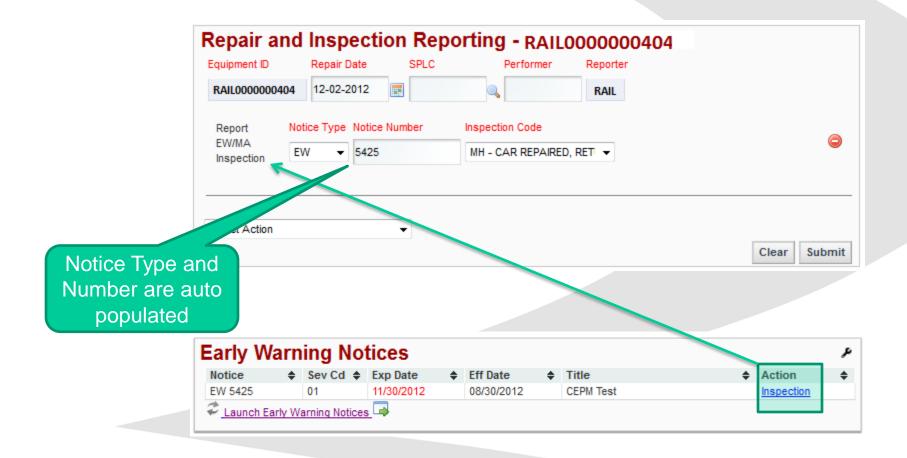


Note that CRB Location was auto-populated for WILD Alert Repair

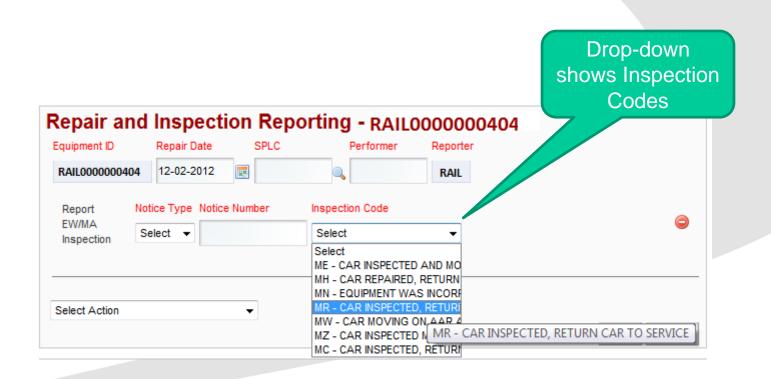
For TPDG the Inspection Type was auto-populated as well as the CRB Location





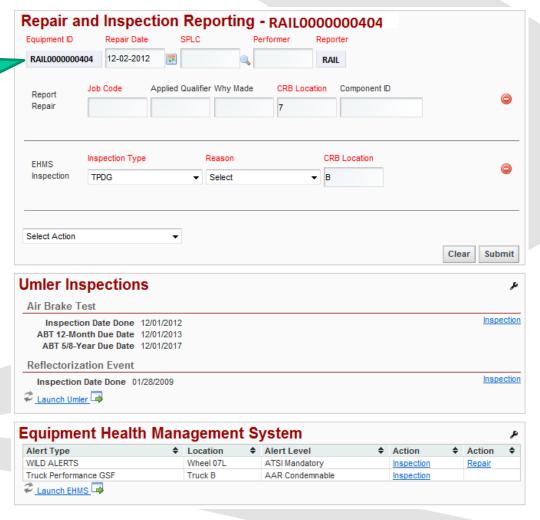








Note that actions apply to a single equipment, for a specified date, at a location (SPLC), as performed and reported by indicated companies





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- EHV Fleet Stats allows car owners to view:
  - Aggregate Railinc data, at the fleet level, for all owned equipment
  - This data can be used to help understand the overall health at a fleet level
  - High level stats based on Railinc data
  - Visible only to the car owner
  - Important note: The data contained on this screen is served by a data warehouse that is updated nightly. Changes will occur throughout the day. The report is intended to be used as a fleet-level tool and not for making individual equipment decisions.



### **EHV Fleet Stats Permissions**

- EHV Fleet Stats permission is required to view high level and detail info on fleet
  - User may request visibility to fleet by company id/mark
- EHV Billed Party permission is required to download reports that exceed equipment count of 200 cars
  - High level stats remain visible from Fleet Stats page

	EHV Billed Party (company required)  Company mark used to invoice for downloaded EHV Fleet Stats exports. This mark will be used for invoicing and is required for downloading exported data.
	EHV Fleet Stats (company required) Allows access to EHV Fleet Stats for specified company
* Company Id	Search

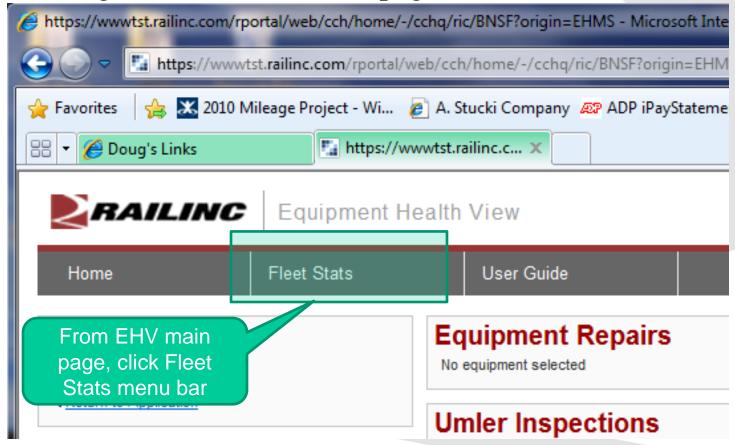


#### EHV Fleet Stats allows car owners to view:

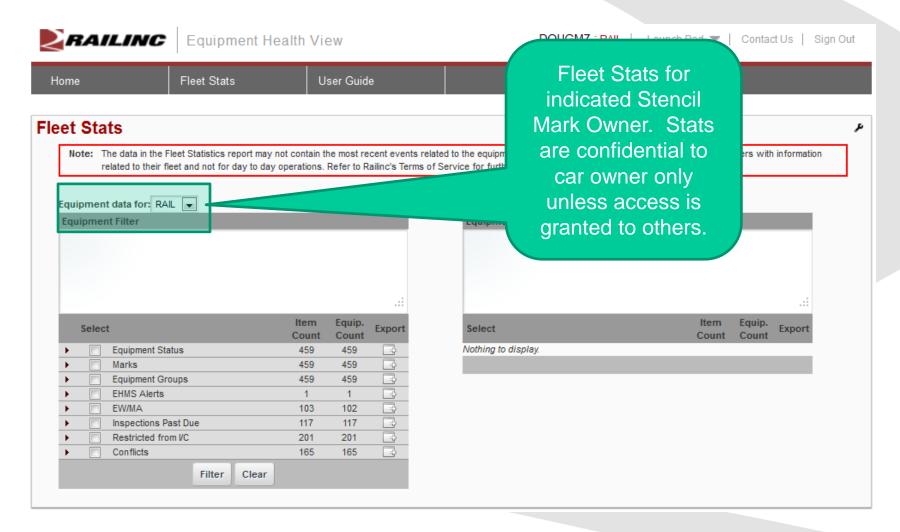
- Counts by Umler Equipment Status
- Counts by Mark for those that own more than one Mark
- Counts by Umler Equipment Groups
- Counts by EHMS Alert Type
- Counts by EW and MA
- Counts by DDCT Rule Number
- Umler Inspections Past Due
- Equipment Restricted from Interchange



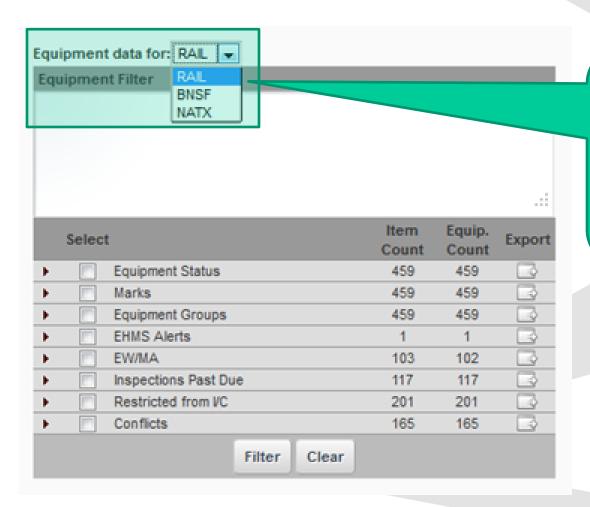
To navigate to the Fleet Stats page





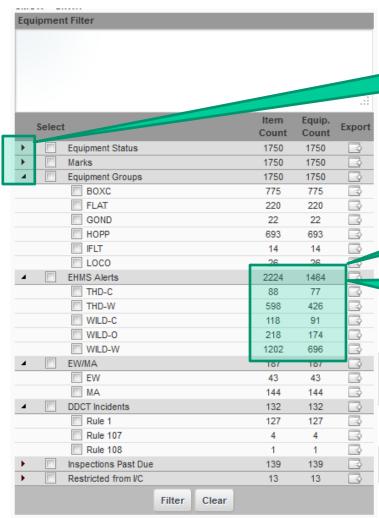






Fleet Stats access can be granted to 3<sup>rd</sup> party fleet managers using SSO Role "EHV Fleet Stats".



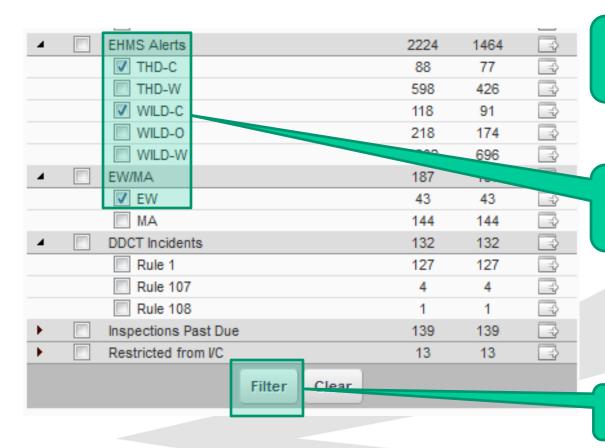


Click the arrows to expand the category

Item Count = line items
Equip Count = unique equipment

For some line items, Item Count may be greater than Equip Count.
A single equipment may have more than one EHMS alert





What if I want to see stats on a subset of data?

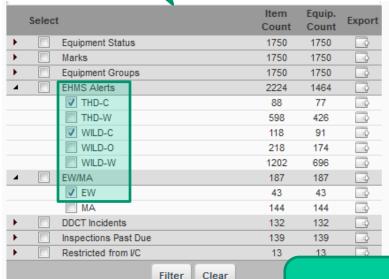
Check the box(es) of the items you are interested in

Click "Filter"



Original Fleet Stats remain in the left window

"Filtered" Fleet Stats are on shown in right side window

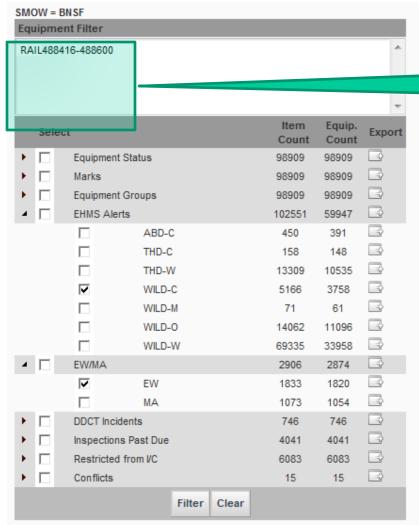


Selec		Item Count	Equip. Count	Export
	Equipment Status	205	205	₿
	Marks	205	205	- □
	Equipment Groups	205	205	- □
4	EHMS Alerts	497	365	3
	THD-C	88	77	
	THD-W	70	64	□ 3
	WILD-C	118	91	₿
	WILD-O	54	40	₿
	WILD-W	167	93	□ 3
4	EW/MA	75	75	₿
	EW	43	43	₿
	MA	32	32	□ 3
	DDCT Incidents	29	29	3
•	Inspect	54	54	- □
	rrom VC	3	3	- □

Selected filters are highlighted yellow

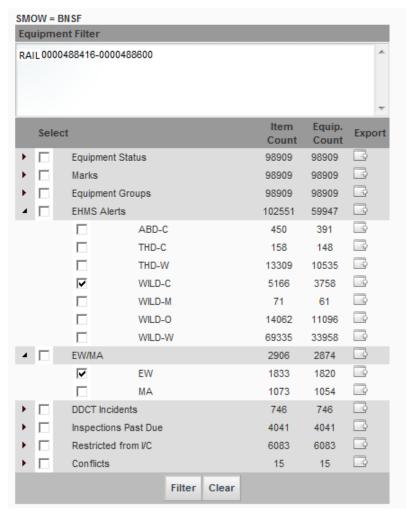
on selections on the left

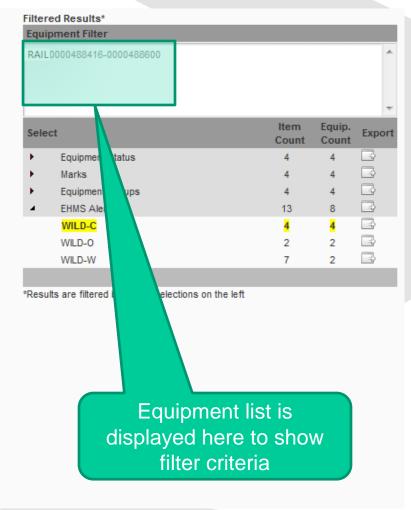




Additionally, you can enter a range or list of equipment ID's to filter by









Please refer to prior note regarding the use of a data warehouse

#### **EHV Fleet Stats**

How do I see the actual equipment?

By clicking the "Export" icon you will be able to download a CSV file listing the equipment counted on a the line

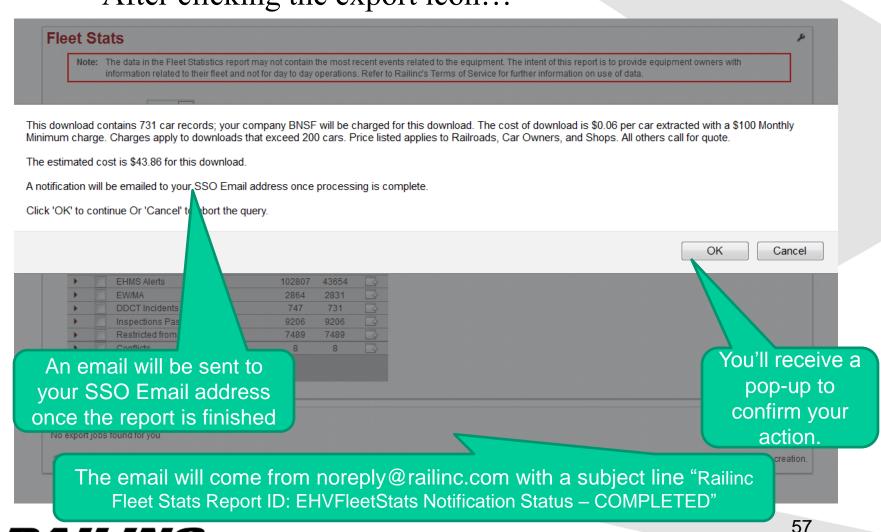
Select	t e	Item Count	Equip. Count	Export
<b>•</b>	Equipment Status	1750	1750	- □
<b>•</b>	Marks	1750	1750	3
<b>•</b>	Equipment Groups	1750	1750	3
4	EHMS Alerts	2224	1464	3
	▼ THD-C	88	77	<b>3</b>
	THD-W	598	426	3
	✓ WILD-C	118	91	3
	WILD-O	218	174	<b></b>
	WILD-W	1202	696	<b></b>
4	EW/MA	187	187	3
	✓ EW	43	43	
	MA	144	144	3
<b>•</b>	DDCT Incidents	132	132	3
<b>•</b>	Inspections Past Due	139	139	3
<b>•</b>	Restricted from VC	13	13	3
	Filter Clear			

elect	Item Count	Equip. Count	Export
► Equipment Status	205	205	3
► Marks	205	205	3
► Equipment Groups	205	205	₿
▲ EHMS Alerts	497	365	₿
THD-C	88	77	<b></b>
THD-W	70	64	3
WILD-C	<mark>118</mark>	91	3
WILD-O	54	40	
WILD-W	167	93	3
■ EW/MA	75	75	3
EW	43	43	<b>3</b>
MA	32	32	3
▶ DDCT Incidents	29	29	3
Inspections Past Due	54	54	3
▶ Restricted from VC	3	3	<b>3</b>

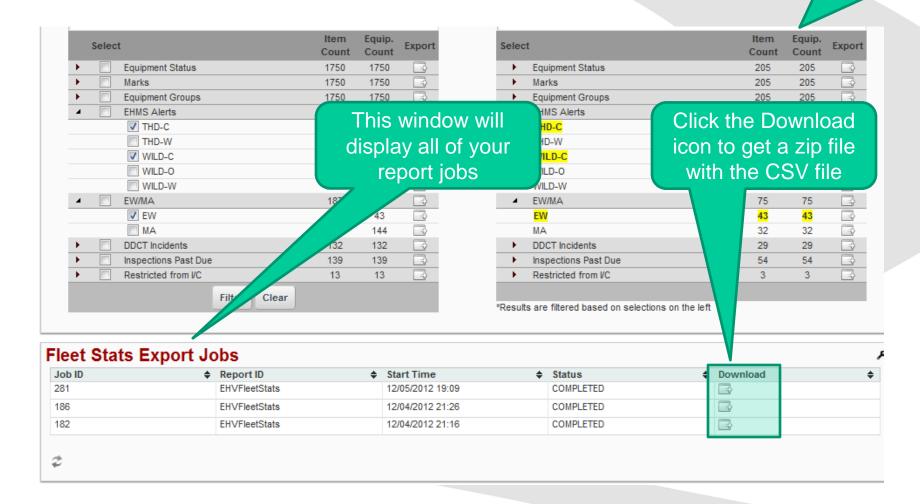
The CSV will contain the detailed data for the equipment count selected



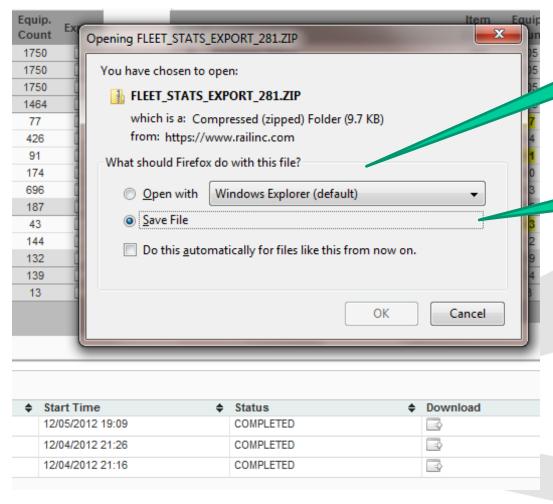
After clicking the export icon...



How do I get my file?







Your computer will prompt you to either open or save the file

Save it locally to easily work with it offline



#### What is in the file?

#### **EHV Fleet Stats**

1

Α	В	C D		E	F		
Equipment Initi	Equipment Numb	Umler Stat ▼	Umler SMO ▼	Umler Equip Type Code UME ▼	Umler Fauire		
RAIL	179676	Α	RAIL	H350			
RAIL	512170	Α _	DAIL	E534	GOND		
RAIL	8178	Α	RAIL	D126	LOCO		

AR	AS	AT	AU
EHMS Alert Type	EHMS Alert Level 💌	EHMS Alert Da ▼	EHMS Location
WILD ALERTS	ATSI Window Open	6/10/2012	vol
WILD ALERTS	AAR Opportunistic	-, 14/2011	WHEEL 05L
WILD ALERTS	ATSI Window Open	7/21/2010	WHEEL 04R
WILD ALERTS	ATSI Window Open	3/17/2011	WHEEL 04R
Truck Hunting	ATSI Window Open	3/8/2008	TRUCK E

	AV		AW		AX		AY		
	EW Notice Typ	EW N	otice Numb	EW Effe	ective Da	▼ EW Exp	irati	ar L	
	EW		5171		1/1/200		12/31/	9999	
	MA		125	7/21/2011 12			12/31/	9999	
	AZ		BA			ВВ			BC
j	DDCT Rule 1	-	DDCT Rule 95	~	DDCT Rul	e 107		T NUI	e 10

Note: this is a snapshot of the CSV opened in Excel

Key Umler data

EHMS data

EW/MA data

**DDCT Data** 

Additional data: Last Move Date Umler Restrictions



As for attending!

### Additional Information

- EHV User Guide, demos, webinar slides can be found here:
  - http://www.railinc.com/rportal/equipment-health-view

#### Contact CSC:

- Email: csc@railinc.com

- Phone: 1(877) 724-5462

