

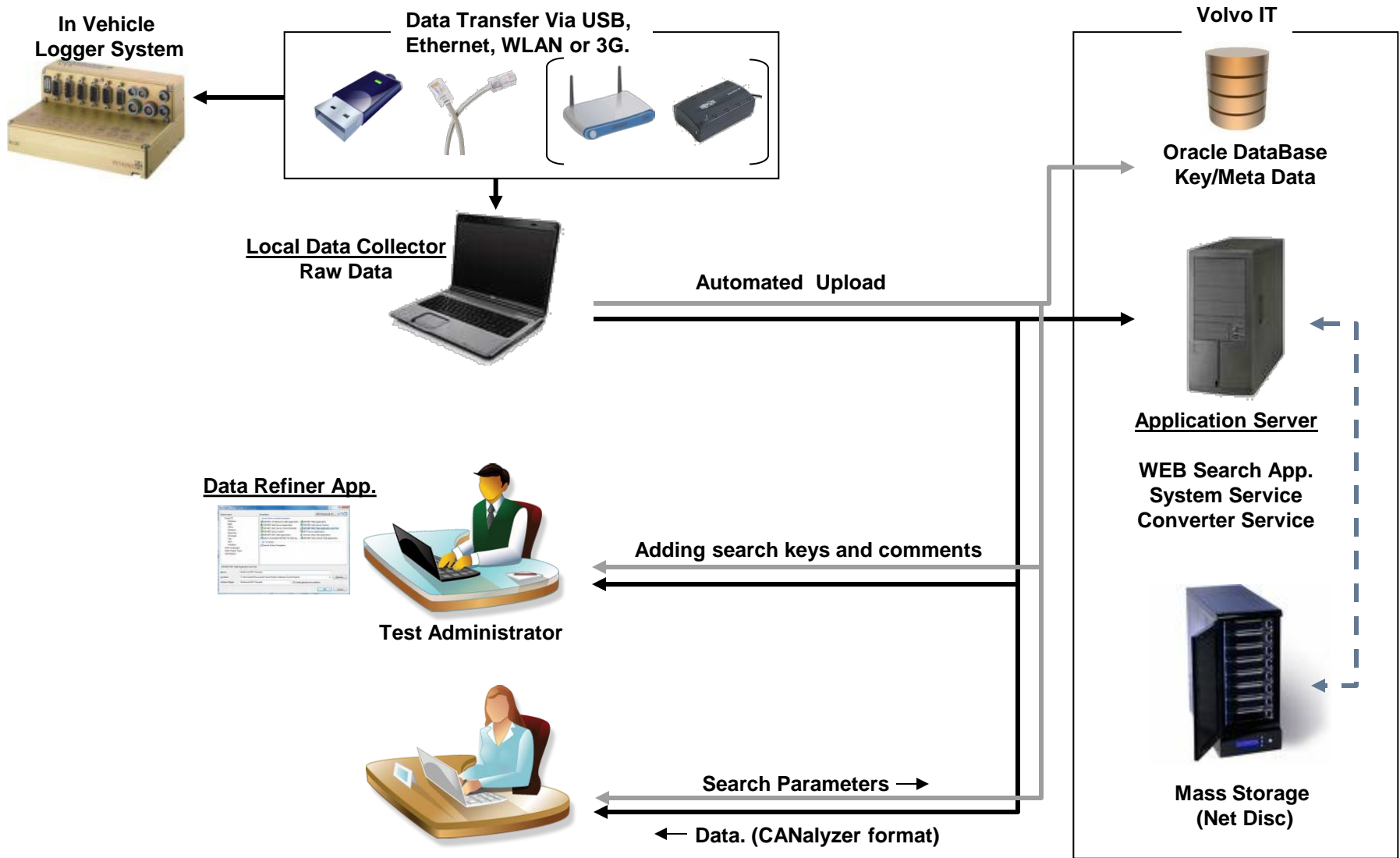


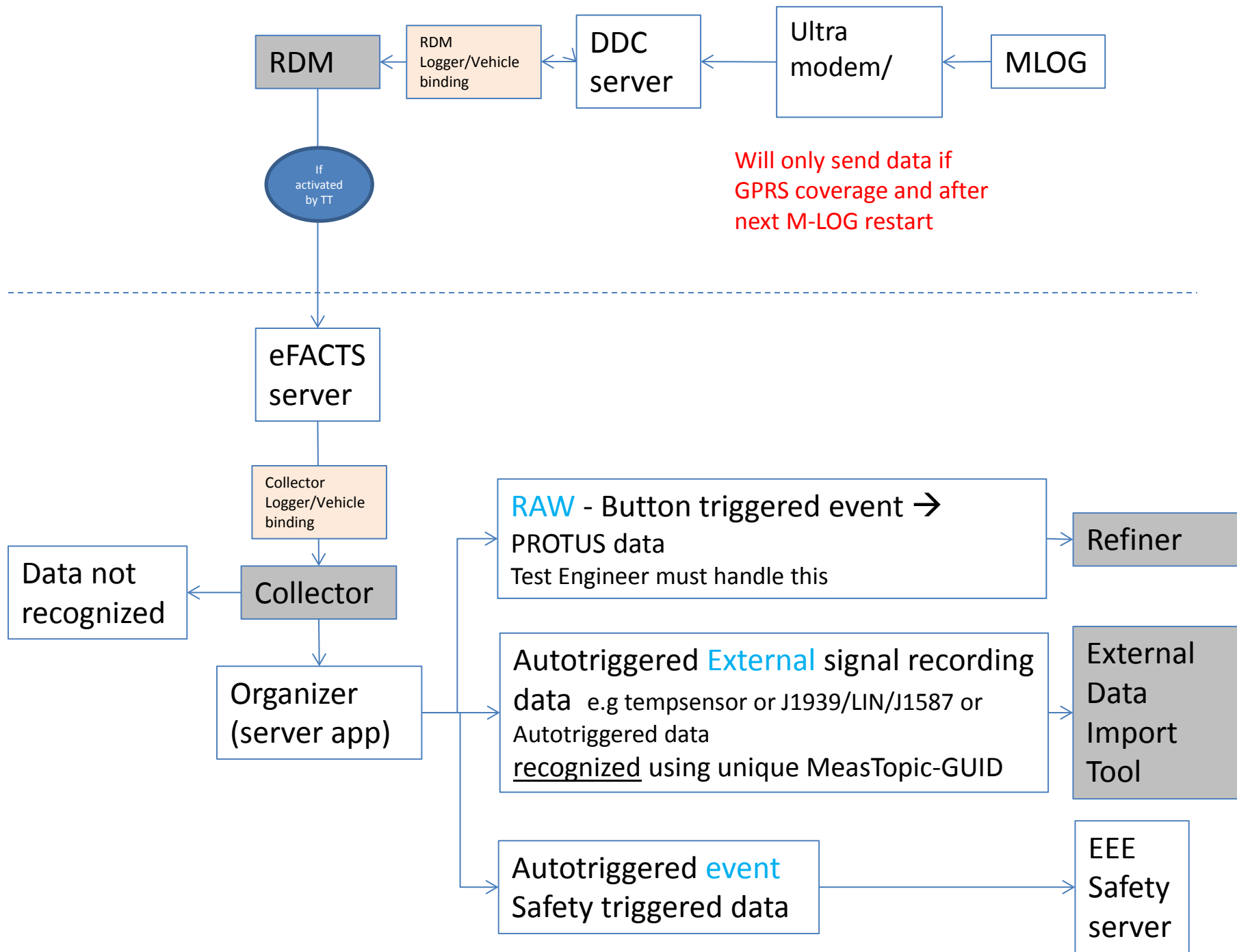
# **eFACTS Applications education**

## **2016-01-15**

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# Electronics FAults CapTuring System





# PC Prerequisites

- "Open Client" for MyPlace computers (FAROS)
  - GOT users
    - Send mail to Martin
    - When confirmed, use motivation sent by Martin
- Oracle SQLNet64 client (FAROS)
- Contact TFV team for installation and education => [support.efacts@volvo.com](mailto:support.efacts@volvo.com)
- USB stick for data retrieval

# eFACTS Collector – Upload of logger data

# eFACTS Collector



## 2 Main objectives

- Binding between the datalogger serial number and the truck it is in



- Upload Data to the Server

Local Data Collector  
Raw Data



Automated Upload



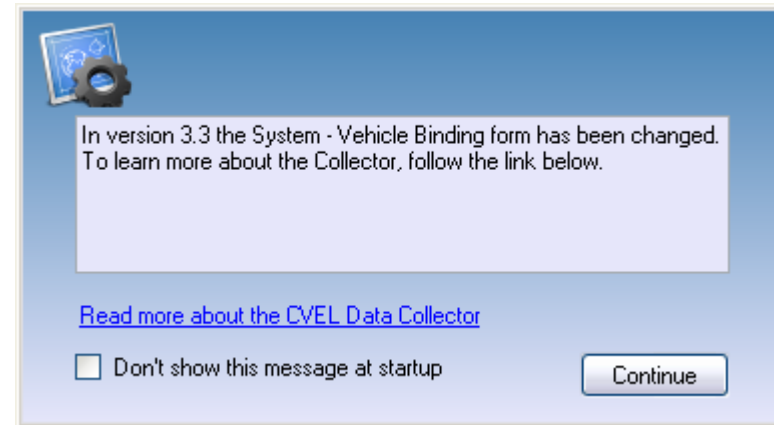
Oracle DataBase  
Key/Meta Data



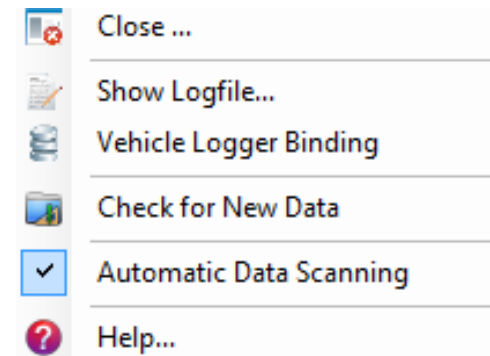
Mass Storage  
(Net Disc)

# eFACTS Collector

- When opened, a status window gives general information and a link to the application help:  
(this window can be deactivated if the checkbox is checked)

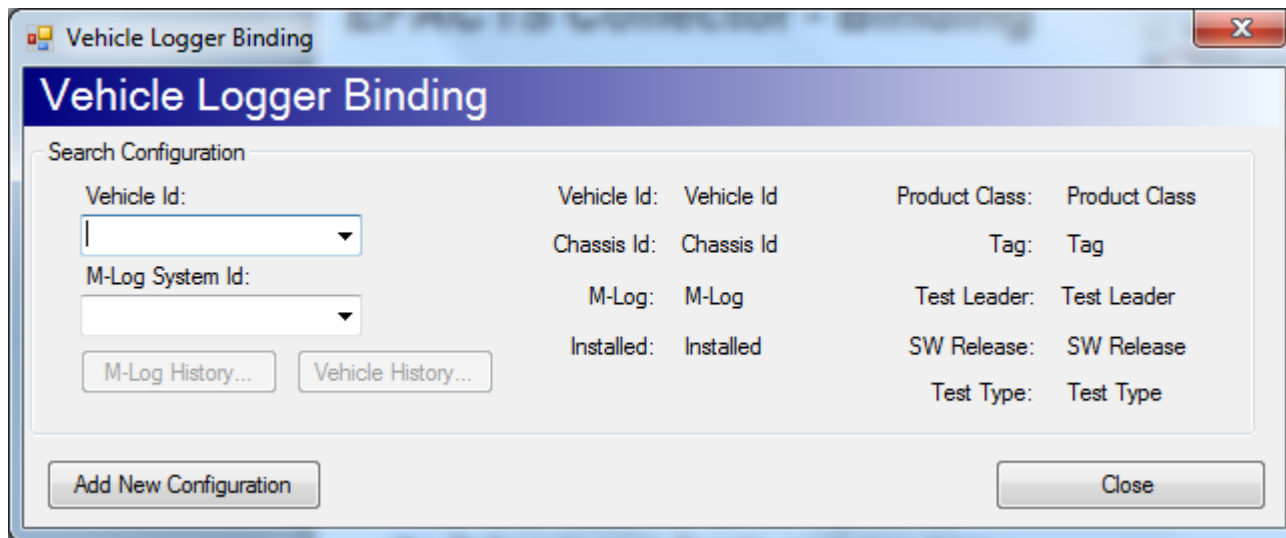


- Then, an icon appears in the Windows system tray next to the clock
- A right click in this icon opens a pop-up menu

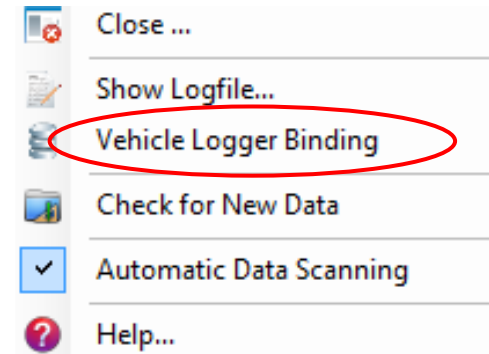


# eFACTS Collector - Binding

- Click on the ***Vehicle Logger Binding*** option



The screenshot shows the 'Vehicle Logger Binding' dialog box. It has a title bar with a close button. The main area is titled 'Vehicle Logger Binding' and contains a 'Search Configuration' section. This section has two dropdown menus: 'Vehicle Id:' and 'M-Log System Id:'. Below these are two buttons: 'M-Log History...' and 'Vehicle History...'. To the right of the dropdowns, there are labels for various parameters: 'Vehicle Id: Vehicle Id', 'Chassis Id: Chassis Id', 'Product Class: Product Class', 'Tag: Tag', 'M-Log: M-Log', 'Test Leader: Test Leader', 'Installed: Installed', 'SW Release: SW Release', and 'Test Type: Test Type'. At the bottom of the dialog are two buttons: 'Add New Configuration' and 'Close'.

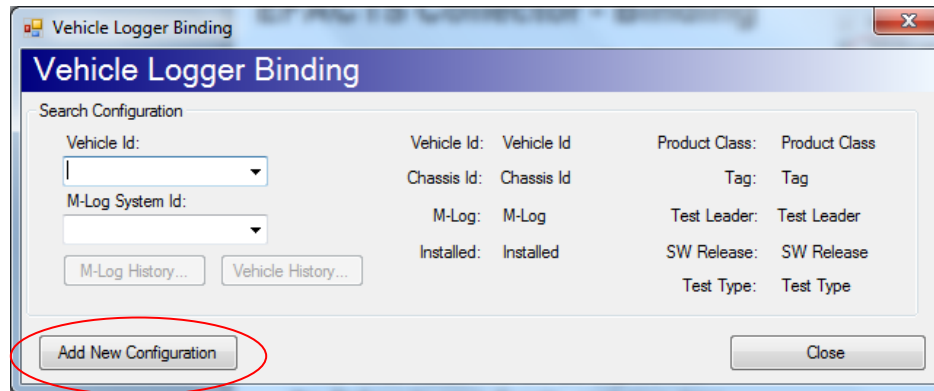


- You can either select a Logger ID or a Truck ID
  - The current binding parameters are displayed
  - Then you can have a look of the binding history for the selected item
- (Note! When adding a new Logger or Vehicle id, they will initially not be seen in the drop-down list, but you can enter the id manually to search for it).



# eFACTS Collector - Binding

- What if the binding has to be changed?
  - e.g. moved logger to new vehicle, new test type, new SW in the vehicle, etc-
- => Click on Add New Configuration



# eFACTS Collector – Add New Binding

- Select a truck
- Current binding should be displayed
- Choose a SW, a Test Leader, a Site (Tag), a test type and an installation date
- Chassis ID and M-LOG ID names are controlled and must NOT be displayed in **RED**

The screenshot shows a dialog box titled "Add New Configuration". It contains the following fields and controls:

- Vehicle Id:** [e.g FH-123] with a dropdown menu showing "FH-1027".
- Chassis Id:** [e.g A-123456] with a text field containing "A123456" in red.
- M-Log System Id:** with a dropdown menu showing "80001" in red.
- Installation Date:** with a date picker showing "18/12/2013".
- Time [h]:** with a spinner box showing "1".
- Product Class:** with a dropdown menu showing "24-HDV".
- Tag:** with a dropdown menu showing "GOT".
- Test Leader:** with a dropdown menu showing "Per Norder".
- SW Release:** with a dropdown menu showing "D0\_VT\_REL03\_1.0".
- Test Type:** with a dropdown menu.
- Buttons:** "Request New Items...", "Insert", and "Close".

# eFACTS Collector – Add New Binding

**Add New Configuration**

Vehicle Id: [e.g FH-123] B678	Chassis Id: [e.g A-123456] B13R-169204	M-Log System Id: 80002460	Installation Date: 2014-12-18	Time [h]: 1
Product Class: 13-BUS	Tag: BUS	Test Leader: Christer Hemmarö	SW Release: 10_VBC_REL01_1.2	
Test Type: Field Test		Request New Items... Insert		

Fields without a grey background can be entered by each user

(e.g. Vehicle id, Chassis id etc)

## Request New Items

Use if you can't find the correct values in the greyed drop down lists

## Insert

When you entered all value, you have to press "Insert" to upload the new binding to the database

# Collector – Binding - Recommendations

- Product Class is a critical field. Please check with PROTUS which Product Class the Truck belongs to.
  - The PC filters the Truck Functions that will be seen in Refiner.
- Product Class, TAG, SW and Test type lists are locked. Please contact support for more items.
- /!\ DO NOT try to add a configuration with an old Starting date or between 2 existing configurations, it will mess the database up!!  
=> Contact [support.efacts@volvo.com](mailto:support.efacts@volvo.com) if you did an incorrect binding.
- If you want to add or update (e.g. SW Package) for old vehicle binding configurations, ask support
  - (email or Click on the ***Request for New Items*** button in the Collector window)

# Collector DON'Ts

- Top part is for **SEARCH** →
- Bottom for **CHANGES** →
- The keys in the Collector end up as keys in Refiner. (SW, TL)
- If you update, **close and re-open windows**, as you might change for another truck.
- Installation date is the date when the system was INSTALLED or when the SW (all keys) was changed (in the truck).
- Avoid to send same MEA-data again, ask Support E-FACTS if you can't find your data. (Copy detected will be shown).
- When problem, send "Show Log file..." to Support E-FACTS.

System Configuration

### System - Vehicle Binding

Current Configuration

Vehicle Id:  Chassis Id:  Chassis Id:  SW Release:  Brand:

M-Log:  M-Log:  Brand:  Brand:

Installed:  Installed:  Tag:  Tag:

Test Leader:  Test Leader:

System History... Vehicle History...

Add New configuration

Vehicle Id: [e.g FH-123] Chassis Id: [e.g A-123456] M-Log System Id:  Installation Date:  Time [h]:

Brand:  Tag:  Test Leader:  SW Release:

Request New Items... Insert

Close

# eFACTS Collector – Upload Data

- You can get data from several loggers in the same way as one.
- The data structure on the USB-stick will be:
  - 8000xxxx
  - 8000yyyy
  - 8000zzzz  
(one folder per M-LOG datalogger serial number)

# eFACTS Collector – Upload Data

- Confirm that the binding in Collector is correct
- Copy all data from the logger (8000xxxx folder) to C:\MeasData

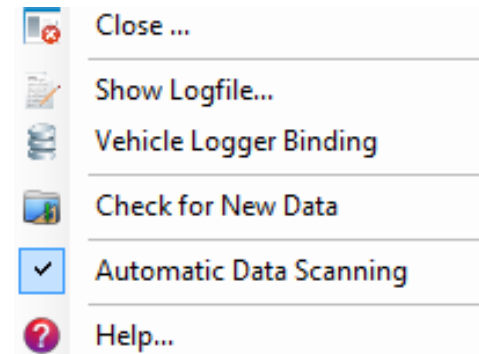
- This popup should appear



- **/!\ WAIT FOR THE COMPLETED COPY BEFORE CLICKING YES (USB Stick LED not flashing)**
- Once Yes button is clicked, data will be transferred to the server when a VCN connection is present.
- The data transfer rate to the server is dependent from the quality of the connection **/!\ In case of a MyAccess Connection /!\**

# eFACTS Collector – Upload Data

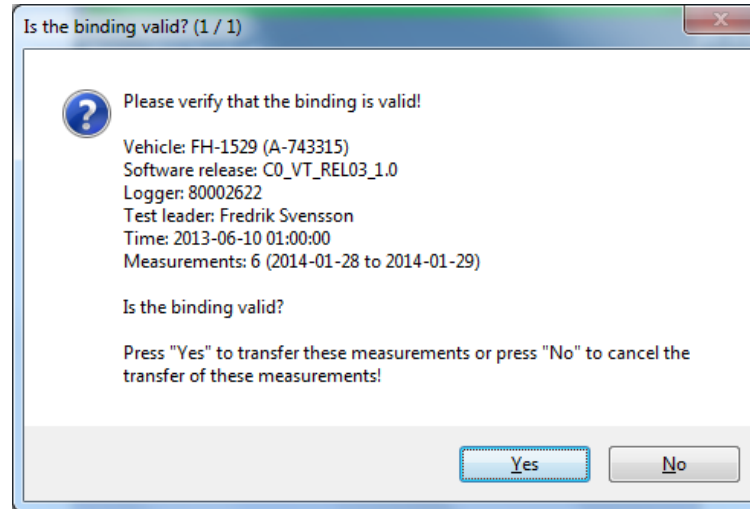
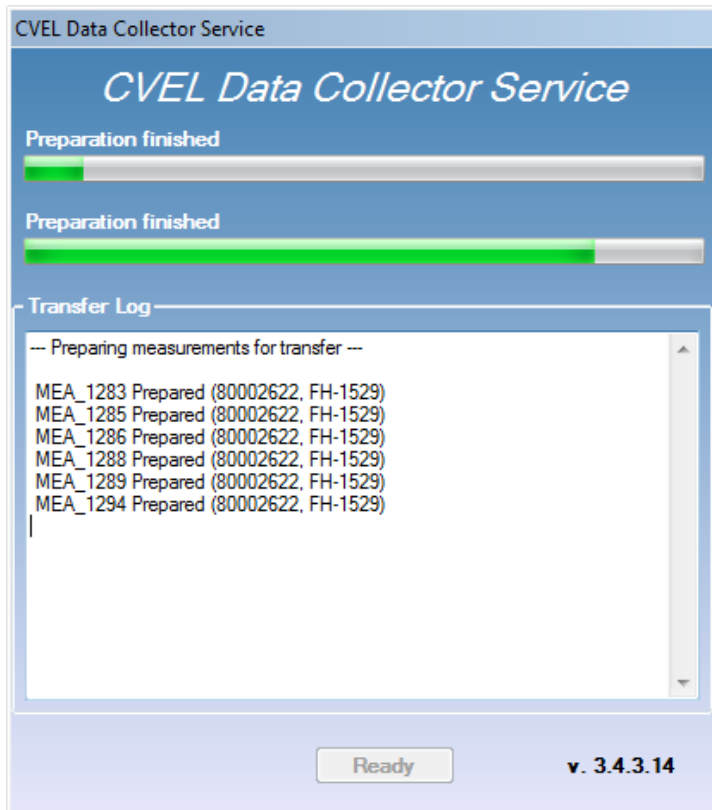
- If this window does not appear, you are in *Manual mode*
- Then Choose *Check for New Data* in the context menu of Collector icon (Notification area of the taskbar)
- You can check the ***Automatic Data Scanning*** option for next time if you want to



- Data that is not recognized by the server is rejected and will be moved to C:\eFACTS\Collector\Rejected and has to be handled manually by the user
- Upload and transfer procedure: see next slides



# eFACTS Collector – data upload

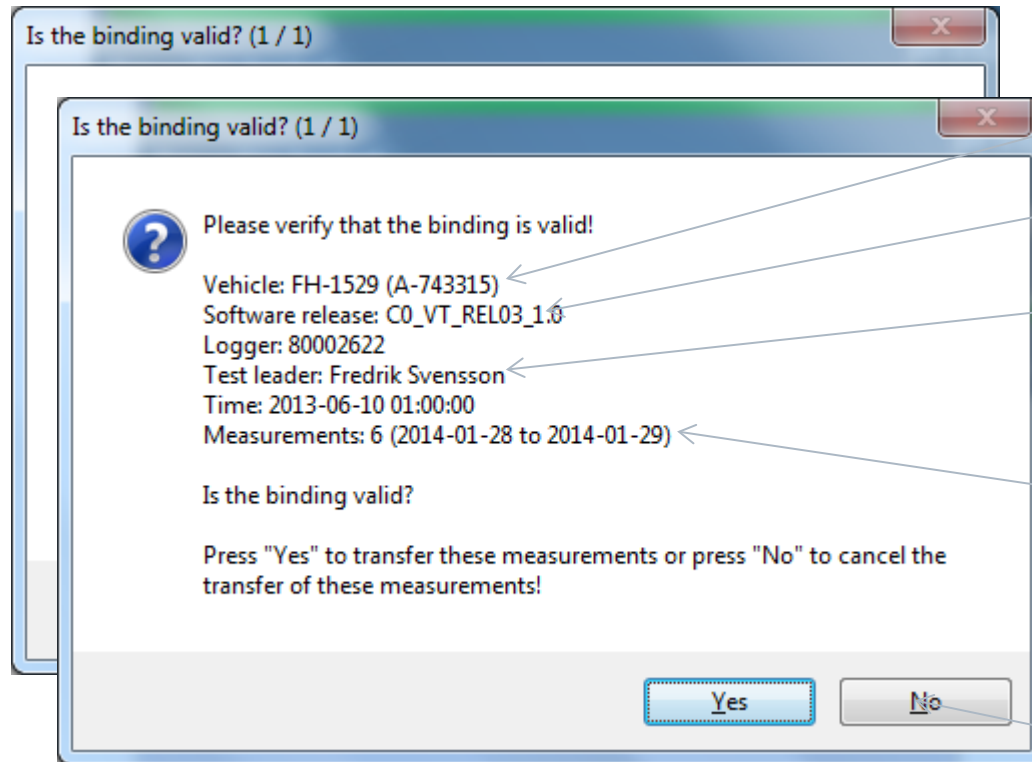


When the preparation of the MEA-packages is done, a pop-up window (like above) will show which truck the data will be sent to.

Make sure that all the information is correct, if not select "No" and change vehicle/logger bindings in Collector

# eFACTS Collector – data transfer

## Check Vehicle Logger Binding



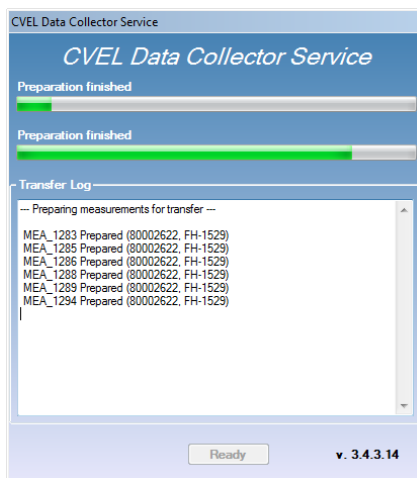
1. Check Vehicle
2. Check Software Release
3. Check Test Leader

Info MEA-packages  
- How many  
- Start date and End date

Press **No** if incorrect binding info  
Update the binding using Collector

If you have data from several loggers in C:\MeasData,  
you will get one window for each truck binding

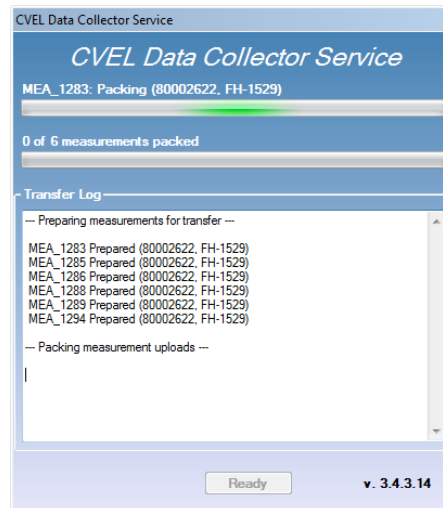
# eFACTS Collector – data upload



1

--- **Preparing measurements for transfer** ---

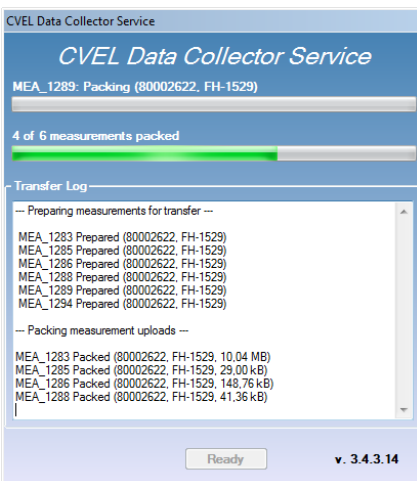
MEA\_1283 Prepared (80002622, FH-1529)  
 MEA\_1285 Prepared (80002622, FH-1529)  
 MEA\_1286 Prepared (80002622, FH-1529)  
 MEA\_1288 Prepared (80002622, FH-1529)  
 MEA\_1289 Prepared (80002622, FH-1529)  
 MEA\_1294 Prepared (80002622, FH-1529)



2

--- **Packing measurement uploads** ---

MEA\_1283 Packed (80002622, FH-1529, 10,04 MB)  
 MEA\_1285 Packed (80002622, FH-1529, 29,00 kB)  
 MEA\_1286 Packed (80002622, FH-1529, 148,76 kB)  
 MEA\_1288 Packed (80002622, FH-1529, 41,36 kB)  
 MEA\_1289 Packed (80002622, FH-1529, 6,46 MB)  
 MEA\_1294 Packed (80002622, FH-1529, 427,06 kB)

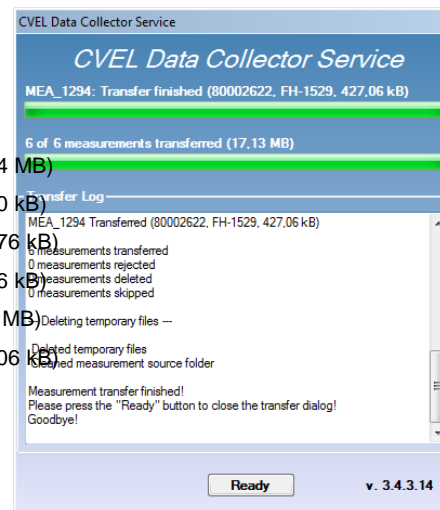


3

--- **Transferring measurement uploads** ---

MEA\_1283 Transferred (80002622, FH-1529, 10,04 MB)  
 MEA\_1285 Transferred (80002622, FH-1529, 29,00 kB)  
 MEA\_1286 Transferred (80002622, FH-1529, 148,76 kB)  
 MEA\_1288 Transferred (80002622, FH-1529, 41,36 kB)  
 MEA\_1289 Transferred (80002622, FH-1529, 6,46 MB)  
 MEA\_1294 Transferred (80002622, FH-1529, 427,06 kB)

6 measurements transferred  
 0 measurements rejected  
 0 measurements deleted  
 0 measurements skipped



4

--- **Deleting temporary files** ---

Deleted temporary files  
 Cleaned measurement source folder

Measurement transfer finished!  
 Please press the "Ready" button to close the transfer dialog!  
 Goodbye!

# eFACTS Collector - Transfer info

## Where data could be found if error/warning

### **Rejected** – C:\eFACTS\Collector\Rejected

- Unknown Traffic – The GUID of the CAN traffic recording is not in our list of known storage groups
- Unknown Storage Group– The GUID of the storage group is not in our list of known storage groups
- Event Files Mismatch – The number of different files does not match the number of events in the measurement
- Event file size error – The files size for the events are incorrect
- No Uploads – The measurement was not recognized
- Cannot extract split ZIP file – The MEA-package is split into several zip-files

### **Deleted** – Can only be restored from USB stick

- Copy Detected – A copy of the CAN traffic already exists in the database
- SG Copy Detected – A copy of the signal recording already exists in the database

### **Skipped** – C:\MeasData

- Ftp Upload Error– The FTP upload was unsuccessful
- Database Error – Data could not be written to database
- No Vehicle To Logger Binding – No binding could be found for the measurement
- Invalid Vehicle To Logger Binding – The transfer was aborted by user, due to incorrect binding
- Unknown Error – Unknown error during transfer (i.e. file read error or network error)

# eFACTS Refiner – Test Leader analysis

# eFACTS Data Refiner



CVEL\_Data\_Refiner

- Credentials needed:  
if no access, enter your ID and Outlook password then click on the request access link ([here](#))

/!\ Training required before access is granted /!\

**E-FACTS  
Data Refiner Log In**

User Id: (t0xxxxxx)

Password: (your Outlook pwd)

If you don't have access. Enter your credentials and press [here](#).

- When access is granted, an information window appears that displays new functional features

Click **Close** to continue



# eFACTS Data Refiner – Definitions

## *Measurement*

- A measurement starts automatically when the system starts.
- A measurement consists of one or several "*Events*".
- A saved measurement is represented in the logger by 2 files, MEA\_xxx.zip and LOG\_xxx.zip. (xxx=sequential number)

## *Event*

- An *Event* consists of one trigger start/stop activation.
- Every time the button is pressed an *Event* is started.

# eFACTS Data Refiner – Definitions

- An event status can be :
  - New / Unfinished
  - Discarded
  - Check-in Pending
  - Checked-in
  - Loaded from database
- New / Unfinished: Needs to be handled by the TL/TE, will be deleted after 30 days, from when the event was logged in the vehicle.
- Discarded:
  - by the system in case of Autotrafic measurements (e.g. Safety)
  - by the TE/TL if the event is considered as not relevant
- Check-in Pending: Handled by TE/TL, ready to be checked-in
- Checked-in: event has already been completely handled and downloaded into the database
- Loaded from database: event uploaded from the database



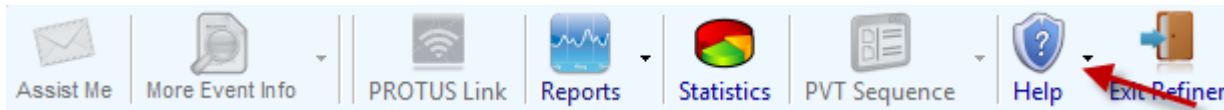
# eFACTS Data Refiner – Icon Bar



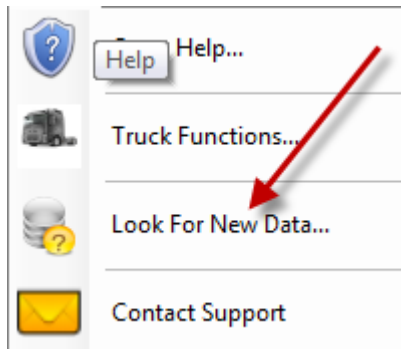
- **Load MEAs:** Look for a measurement on the server, before they are checked-in or discarded
- *Load From DB:* Load some already "Checked In" events
- *Pending Check In:* To Check In all pending events
- *UDS Viewer:* Will be used to check SW/HW versions of the truck
- *Assist Me:* To get some help from troubleshooters, sends data without using PROTUS.
- *More Event Info:* Specific Info about an event, like GPS map
- **PROTUS Link:** Link generation to be put into PROTUS reports
- *Reports:* For PVT team, PVT reports generation. May be used to get an overview of a specific truck and SW package.
- *Statistics:* Global info about eFACTS
- *Help:* Complete documentation + mail to eFACTS support

# eFACTS Data Refiner – New Data

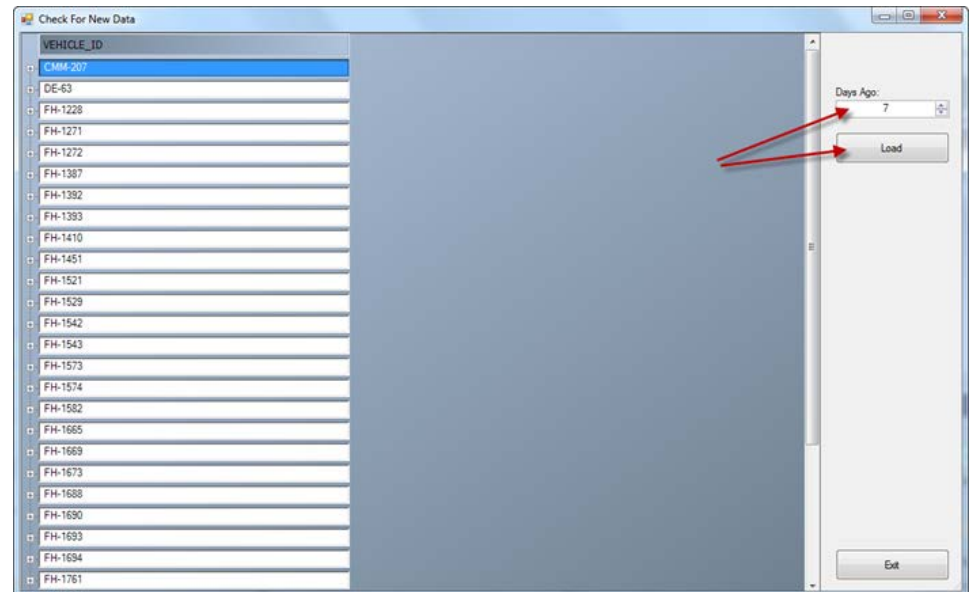
- This feature enable to see if any Remote or USB data has been uploaded
- If you can't find your data using the instruction below, contact "TT GOT"



Select "Look for New Data"



Select the number of "Days Ago" and press "Load"



# eFACTS Data Refiner – New Data

Example:

- Last data that was uploaded, was recorded 2014-11-27
- Button Trigger exists in MEA\_0303 and 0305.
  - 0303 – contains 48 events(BT and auto), only event 4+7 are button triggered
  - 0305 – contains 39 events, no 12 is BT triggered
- External data has been uploaded
  - E.g. P2540safety triggered data and FuelEco data

The screenshot shows the eFACTS Data Refiner interface. At the top, 'VEHICLE\_ID' is set to 'CMM-207' and 'DE-63'. Below this, there are two tables:

MEAS_NAME	START_DATE	NO_EVENTS	VALID_EVENTS
MEA_0305	2014-11-27 16:2	39	12
MEA_0303	2014-11-27 11:3	48	4:7

Below the 'Button Triggers' table is the 'Auto Triggers and External Data' table:

MEASFINGERPRINT	START_TIME
P2540SafetyD141127T162516	2014-11-27 16:2
P2953V211FuelEcoD141127T162516	2014-11-27 16:2
AutoTrafficD141127T161534	2014-11-27 16:1
P2540SafetyD141127T161534	2014-11-27 16:1
P2953V211FuelEcoD141127T161534	2014-11-27 16:1
P2540SafetyD141127T113214	2014-11-27 11:3
P2953V211FuelEcoD141127T113214	2014-11-27 11:3

At the bottom, there is a list of vehicle IDs:

VEHICLE_ID
FH-1228
FH-1271
FH-1272
FH-1387
FH-1392
FH-1393
FH-1410

# eFACTS Data Refiner – Loading MEAs



Select visible vehicle groups... View Unfinished Events...

Drag a column header here to group by that column.

Measurements						
VEHICLE_ID	MEAS_NAME	START_DATE	STOP_DATE	NO_EVENTS	FINGERPRINT	BLOCKED_BY
1 KM-10	MEA_0097	2012-05-13 17:20:12	2012-05-13 17:22:16	1	80002919D120513T172012	
2 RM-101	MEA_0036	2012-05-15 14:17:10	2012-05-23 15:31:32	32	80003078D120515T141710	
3 RM-44	MEA_0865	2012-05-05 01:59:55	2012-05-05 11:25:39	12	80002877D120505T015955	CVEL Organizer
4 RM-8	MEA_0436	2012-04-30 12:07:11	2012-04-30 12:09:20	1	80002801D120430T120711	
5 RM-8	MEA_0434	2012-04-30 09:23:18	2012-04-30 11:54:11	1	80002801D120430T092318	
6 RM-8	MEA_0441	2012-05-04 06:47:56	2012-05-04 06:58:15	2	80002801D120504T064756	
7 RM-90	MEA_0184	2012-05-09 09:18:25	2012-05-09 09:35:55	6	80003065D120509T091825	

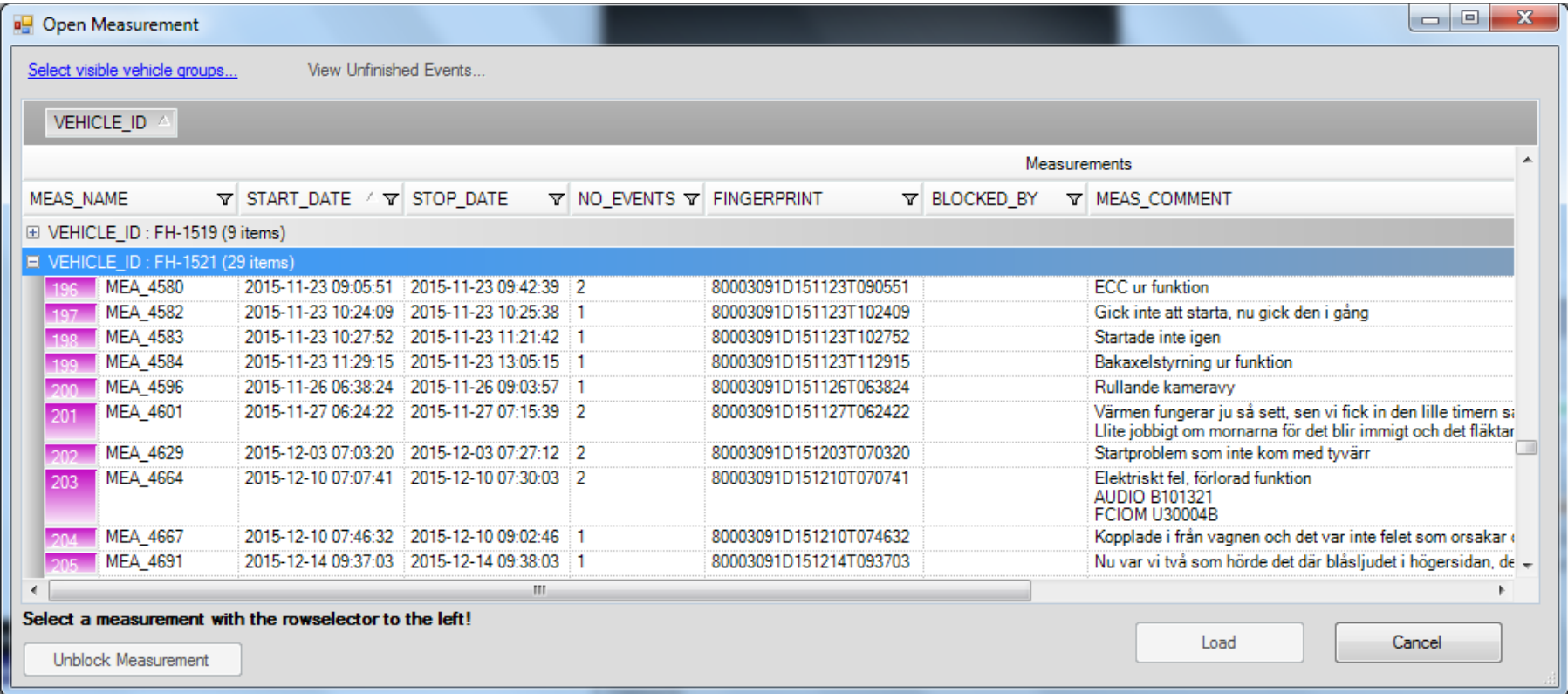
Select a measurement with the rowselector to the left!

Unlock Measurement Load Cancel

- Click on [Select Visible Group](#) to get your vehicles (LYS, GOT etc).
- [View Unfinished Events](#): Events which have not been handled yet, works when a MEA file is selected for a specific truck
- Unlock Measurements: Locked MEAs appear in **red** and can only be unlocked by their originator or the administrator.
- Select MEAs as told (rowselector) and Click **Load**  
NB: you can filter data by drag-and-dropping column headers.
- It can take time for your measurements to be available (up to 1h, depending on the system load). If longer, e-mail support.

# eFACTS Data Refiner – Loading MEAs

- Every user can have their own filtering, for the vehicles you want to see. This filtering will be stored and re-used.



**Open Measurement**

Select visible vehicle groups... View Unfinished Events...

VEHICLE\_ID ▲

Measurements

MEAS_NAME	START_DATE	STOP_DATE	NO_EVENTS	FINGERPRINT	BLOCKED_BY	MEAS_COMMENT
+ VEHICLE_ID : FH-1519 (9 items)						
- VEHICLE_ID : FH-1521 (29 items)						
196 MEA_4580	2015-11-23 09:05:51	2015-11-23 09:42:39	2	80003091D151123T090551		ECC ur funktion
197 MEA_4582	2015-11-23 10:24:09	2015-11-23 10:25:38	1	80003091D151123T102409		Gick inte att starta, nu gick den i gång
198 MEA_4583	2015-11-23 10:27:52	2015-11-23 11:21:42	1	80003091D151123T102752		Startade inte igen
199 MEA_4584	2015-11-23 11:29:15	2015-11-23 13:05:15	1	80003091D151123T112915		Bakaxelstyrning ur funktion
200 MEA_4596	2015-11-26 06:38:24	2015-11-26 09:03:57	1	80003091D151126T063824		Rullande kameravy
201 MEA_4601	2015-11-27 06:24:22	2015-11-27 07:15:39	2	80003091D151127T062422		Värmen fungerar ju så sett, sen vi fick in den lille timern s
202 MEA_4629	2015-12-03 07:03:20	2015-12-03 07:27:12	2	80003091D151203T070320		Lite jobbigt om mornarna för det blir immigt och det fläktar
203 MEA_4664	2015-12-10 07:07:41	2015-12-10 07:30:03	2	80003091D151210T070741		Startproblem som inte kom med tyvärr
204 MEA_4667	2015-12-10 07:46:32	2015-12-10 09:02:46	1	80003091D151210T074632		Elektriskt fel, förlorad funktion AUDIO B101321 FCIOM U30004B
205 MEA_4691	2015-12-14 09:37:03	2015-12-14 09:38:03	1	80003091D151214T093703		Kopplade i från vagnen och det var inte felet som orsakar
						Nu var vi två som hörde det där blåsljudet i högersidan, de

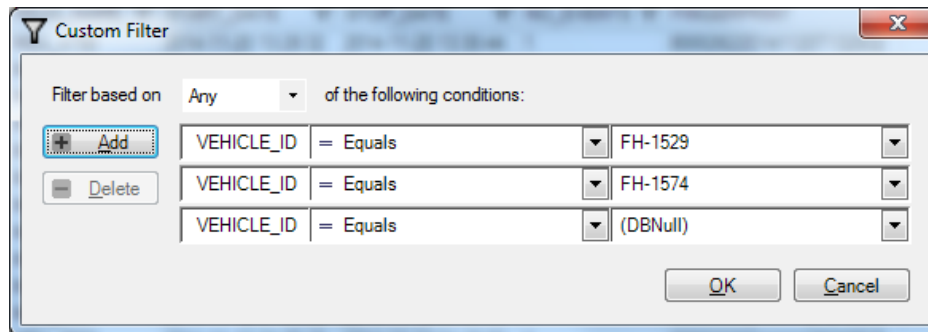
Select a measurement with the rowselector to the left!

Unblock Measurement

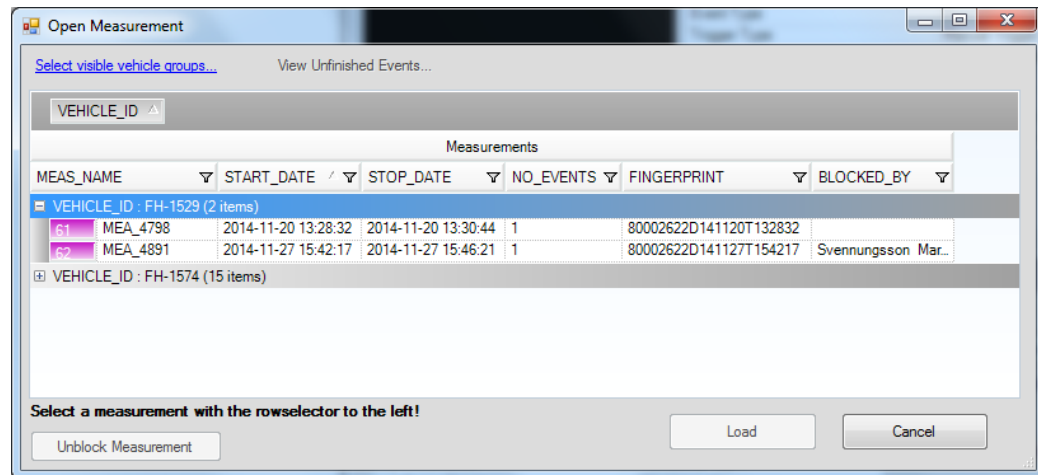
Load Cancel

# eFACTS Data Refiner – Loading MEAs

- Add condition: Any = OR, All = AND

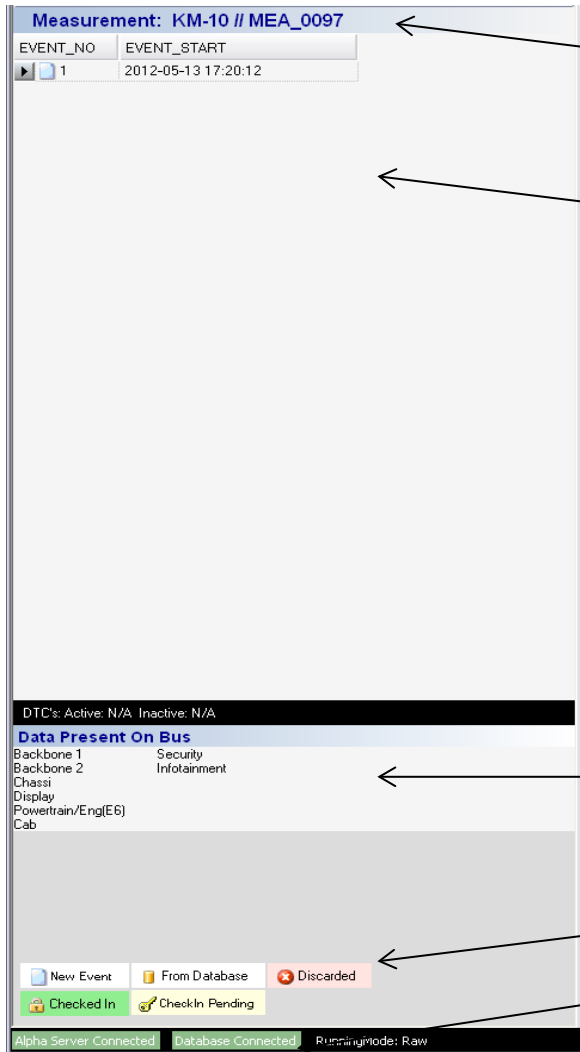


- To Delete filter, click on any field on that row and press Delete



Example after filtering  
and also by using  
"Vehicle\_ID" Grouping

# eFACTS Data Refiner – Events



Measurement name

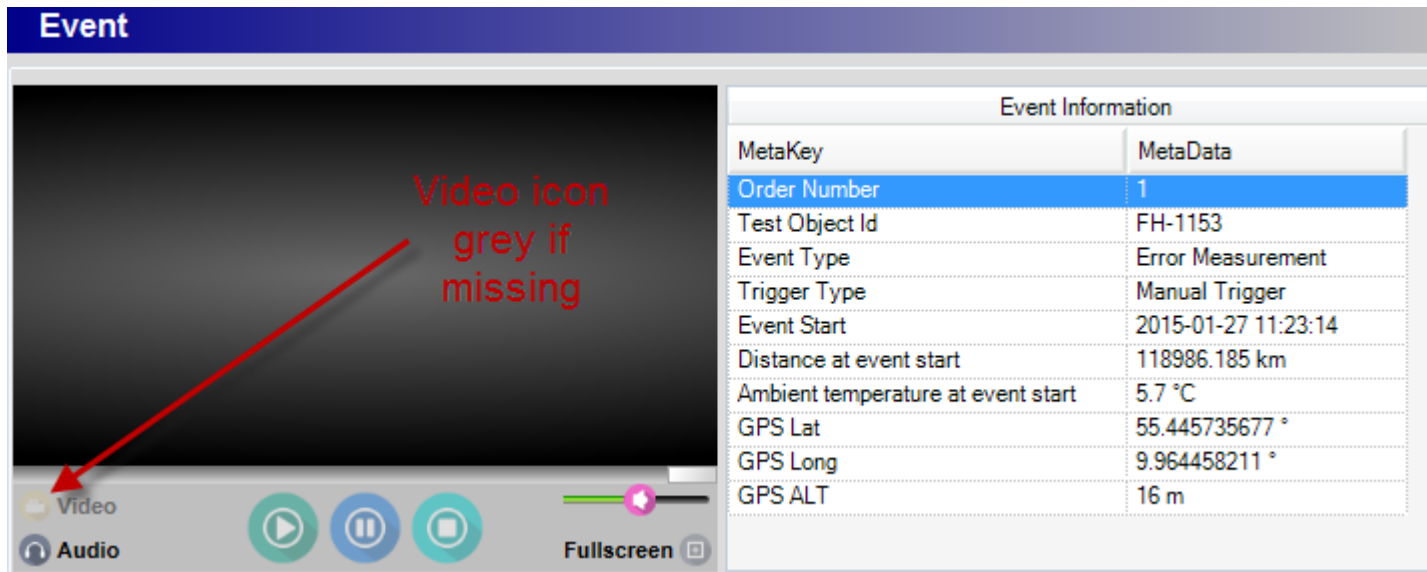
List of Events

Recorded CAN buses  
(extracted only from the first event in the MEA-package)

Legend for events icons

Connection status to the server

# eFACTS Data Refiner – Event Info



The screenshot shows the 'Event' window of the eFACTS Data Refiner. On the left is a video player with a dark screen. Below the screen are controls for 'Video' (a grey icon), 'Audio' (a blue icon), and playback buttons (play, pause, stop). A 'Fullscreen' button is also present. A red arrow points to the 'Video' icon, and a red text label 'Video icon grey if missing' is next to it. On the right is a table titled 'Event Information' with two columns: 'MetaKey' and 'MetaData'.

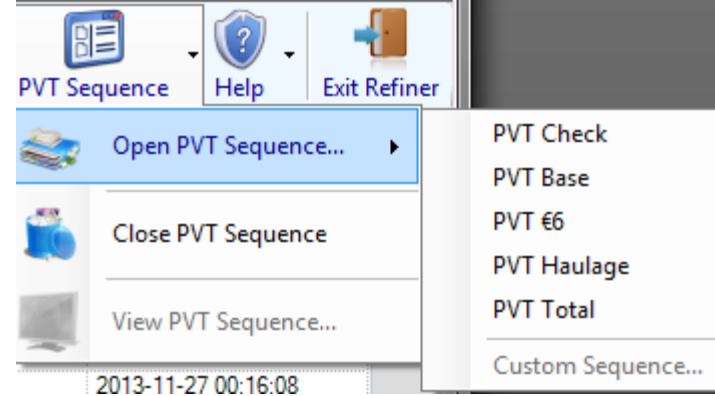
MetaKey	MetaData
Order Number	1
Test Object Id	FH-1153
Event Type	Error Measurement
Trigger Type	Manual Trigger
Event Start	2015-01-27 11:23:14
Distance at event start	118986.185 km
Ambient temperature at event start	5.7 °C
GPS Lat	55.445735677 °
GPS Long	9.964458211 °
GPS ALT	16 m

- Event metadata presentation for the selected event
- Video and audio will be played synchronized, if available
- Scrolling is possible, "Full screen" only if video available
- Manual Trigger = Button pressed



# eFACTS Data Refiner

## PVT Sequence (PVT Team)



- By Loading a pre-defined sequence or a Custom sequence, it is possible to bind a Test Case to the event.
- If no Test Case, then "OFD" can be selected
- The Test Case list will follow the selected sequence
- For each test case, you can access a list of typical errors and dedicated comments you can directly paste into the Refiner main window:

# eFACTS Data Refiner – Keys

**Keys**

Vehicle Identification Number	31KJ-000051
Test Object ID	KM-10
Event Start	2012-05-13 17:20:12
Protus ID	< Mandatory Key >
Test Leader	< Mandatory Key >
Test Type	< Mandatory Key >
Occurrence	< Mandatory Key >
Protus Points	< Mandatory Key >
SW_Release	5.2.RT9
Truck Function	< Mandatory Key >

Select As Check In Pending

Include: ☐ Audio ☐ Video

Discard Event

[Key Valid For All Events](#)

[Key Valid For Selected Events ...](#)

Add Key New Key

Comments:

Comments Valid For All Events

- Several mandatory keys
- Crucial part of the system, to find events and create reports
- Pending = ready for being checked-in in the database
- [Key Valid for ... Events](#) : copy/paste keys for the events in the MEA  
/!\ Everything added is recorded! Don't mess with data  
Keys are lost when leaving
- Comments: Always stored.

# eFACTS Data Refiner – Keys

## - Truck Function and Test Type

The screenshot shows the 'eFACTS Data Refiner' interface. At the top, there is a dropdown menu labeled 'TRUCK\_FUNCTION\_AREA' with a list of functions: Anti Theft, Battery Management, Bodybuilder, Cab, Chassis, Driving, Information And Control, Light, Powertrain, Safety, Telematics, and Unknown. A red arrow points from the 'Cab' function in this list to a text box. Below this is a section titled 'Keys' which contains a table of data. The table has columns for various fields and their values. A red arrow points from the 'Test Type' field in the table to another text box. At the bottom of the 'Keys' section, there are two buttons: 'Add Key...' and 'New Key'.

Keys	
Vehicle Identification Number	30CN-000054
Test Object ID	CM-47
Event Start	2013-12-05 10:37:49
Protus ID	L123456
Test Leader	Guillaume Cottin
Test Type	< Mandatory Key >
Occurrence	< Mandatory Key >
Protus Points	< Mandatory Key >
SW_Release	E0_RT_REL08_3.1
Truck Function	< Mandatory Key >

When creating Keys –  
The "Truck Function" list will now be  
filtered based on Product Class  
(Functions not available in the vehicle, will not be seen.)

"Test Type", "Test Leader" and "SW\_Release" data  
will come from the Collector Vehicle/Logger binding

# eFACTS Data Refiner – Keys

- PROTUS ID: report no where the link will be
  - name must be correct ! LXXX (not lxxx)
  - no spaces before or after the Lxxx number
  - no additional zeros...
  - several events can be linked to the same PROTUS
- You can Add and have several PROTUS to one Event.
- Test Type: Field Test, PVT, AET, RT...
- Occurrence: Rarely/ Once / Often / Every Time
- SW release: BaselineBranch\_PC\_week\_version  
(e.g. P0P1\_24\_w1623\_2.1)

# eFACTS Data Refiner – Keys

- PROTUS Points:

Points	Consequence for the customer
100	<p>The fault is very severe and will cause:</p> <ul style="list-style-type: none"> <li>• unplanned stop/breakdown</li> <li>• mission abort</li> <li>• a safety risk</li> <li>• inability to start</li> </ul>
25	The fault is severe and will demand actions before next planned service after mission.
5	All customers will notice the fault but accept that actions can wait until next planned service.
1	The fault is minor and only some customers will take notice.

- Follow PROTUS Guidelines + GDI 968-50:

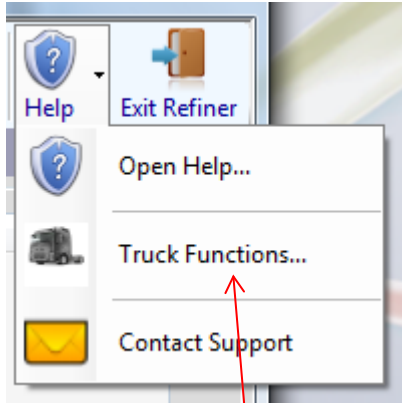
<http://violin.volvo.net/SiteCollectionDocuments/Powertrain/VPT%20G%C3%B6teborg/projects%20GDI968-50%5B1%5D.pdf>



# eFACTS Data Refiner – Keys

- The complete TF list can be found under *Help -> Truck Function* menu of the Refiner
- The Truck Function list you get when working on a particular event, will depend from the Product Class your test truck belongs to.
  - Notify "Support E-FACTS" if a Truck Function is missing.

# eFACTS Data Refiner – Truck Function List



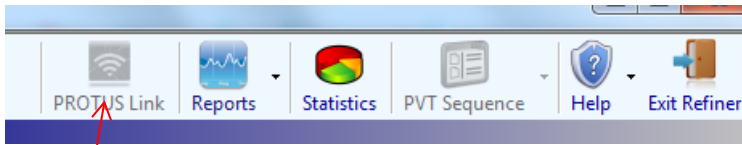
## All Truck Functions

Drag header to  
organize

Possible to use filter by clicking on  
filtersymbol

Truck Functions			
Drag a column header here to group by that column.			
TF AREA	TRUCK FUNCTION	DESCRIPTION	TF_PRODUCTCL
AntiTheft	Panic Alarm	This function should prevent threats and dangerous situations for driver. Driver get in touch with callcenter and through alarm attention sounds also light flashing.	04-TLV\$24-HDV\$23-HDV\$06-MDV\$28-HDV\$29-HDV
AntiTheft	Steering Lock Control	This function should protect the vehicle from theft by making it impossible to turn the steering wheel when the vehicle is parked	24-HDV\$23-HDV
AntiTheft	Door Lock Control	This function is responsible for locking and unlocking of the doors from all possible sources keyfob, WRC, mechanical key and LECM also Cab flexible switch	04-TLV\$24-HDV\$23-HDV\$06-MDV\$28-HDV\$29-HDV
AntiTheft	Approach Lights	This function allows the driver to approach or leave the vehicle safely after dark by using some of exterior lights. The activation is requested by the driver through the keyfob	24-HDV\$23-HDV\$06-MDV\$29-HDV
AntiTheft	Alarm Service Mode	This function should prevent / delay truck thefts, attract driver attention in case of theft attempt in Service Mode. (workshop visit or repairs) Alarm is deactivated.	24-HDV\$23-HDV
AntiTheft	Alarm Normal Mode	This function should prevent / delay truck thefts, attract driver attention in case of theft attempt in Normal Mode. All alarm sensors is on.	04-TLV\$24-HDV\$23-HDV\$06-MDV\$28-HDV\$29-HDV
AntiTheft	Antitheft Performance	This function is responsible for validating and verification for functionality regarding antitheft usability, feeling, impressions and if function lagging.	24-HDV\$23-HDV\$06-MDV\$28-HDV\$29-HDV
AntiTheft	Antitheft Related Fault Messages	This function is responsible for all fault that not can be derived to any of the other function regarding to Antitheft. Ex pop-up "alarm malfunction" and other fault behaviour	24-HDV\$23-HDV
AntiTheft	Immobilizer	This function manages driver identification through a transponder chip in key. Used for enable engine start, switching vehicle modes and steering column lock.	04-TLV\$24-HDV\$23-HDV\$06-MDV\$A1-MDV\$A2

# eFACTS Data Refiner – PROTUS Key



PROTUS link not available at startup

## Work flow:

Load Measurement

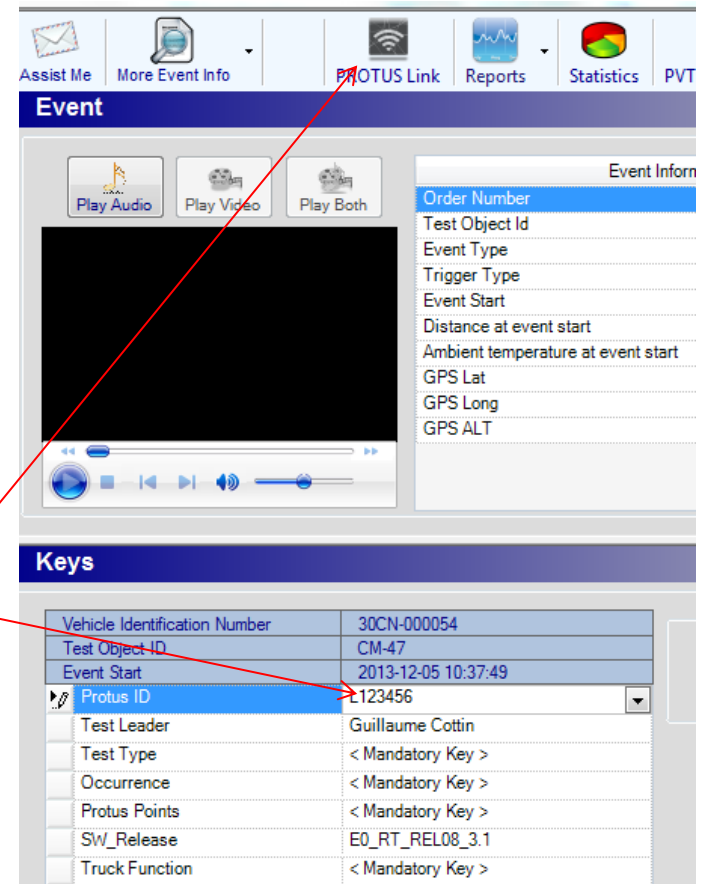
Listen to events

If PROTUS - create PROTUS first

Enter the PROTUS-id as key

Press "PROTUS Link" -->

(Link will be created based on value entered in PROTUS-id key)

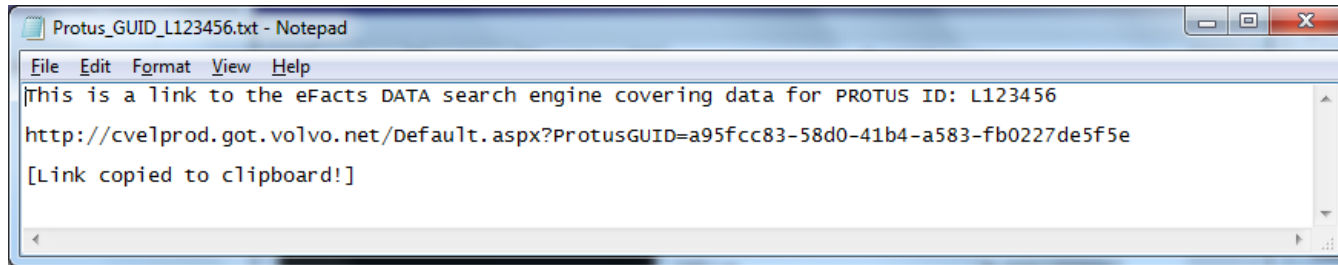




# eFACTS Data Refiner – PROTUS Link



- The PROTUS link created will be based on the PROTUS ID that was entered as the PROTUS key value.



- The http link is already in the clipboard and can now be paste into the url-link (folder Documents) in PROTUS (see next slide).
- The link needs to be created only once for each PROTUS report. If the same issue has already been detected in the truck, just select the correct report number in the *PROTUS ID* Key.  
(When engineering later clicks on the link, all the different logged events for that PROTUS will appear.)
- The PROTUS link will not work until you have "Checked In" the pending events to the database and could take some minutes (try the link).

# PROTUS link

Give same "Link name" as PROTUS no

Link name:  Link:

Uploaded By	Uploaded Date ↓	Link Name
Thommy Karlsson	2010-10-12	<a href="#">L112078</a>

Result after "Upload Link"

Paste http-link

<http://cveldata.got.volvo.net/Default.aspx?PROTUSGUID=7d521104-a737-4e68-9f74-924d098b0a4b>

Encrypted PROTUS Id

Number of Links: 1

Example, if clicking on Link above

**CVEL Data System**  
Volvo 3P

■ About ■ Help ■ Close

### Measurement data

<input type="checkbox"/>	Path name	Comments	Audio	Video
<input type="checkbox"/>	FH-318\FH-318D101012T085825		N	N
<input checked="" type="checkbox"/>	FH-318\FH-318D101012T085925	Several functions running, ignition off key out	N	N

Files to download: Zip file structure  
☒ CANalyzer: ☒ With subfolder for each event   
☐ Audio: ☐ All files in same folder   
☐ Video:

Path name	Keys																
FH-318\FH-318D101012T085925	<table border="1"><tr><td>Vehicle Identification Number</td><td>A-699931</td></tr><tr><td>Test Object ID</td><td>FH-318</td></tr><tr><td>Event Start</td><td>2010-10-12 08:59:25</td></tr><tr><td>Protus ID</td><td>L112078</td></tr><tr><td>Test Leader</td><td>Thommy Karlsson</td></tr><tr><td>Test Type</td><td>PVT</td></tr><tr><td>E2E Function</td><td>Vehicle Modes Application</td></tr><tr><td>Occurrence</td><td>Often</td></tr></table>	Vehicle Identification Number	A-699931	Test Object ID	FH-318	Event Start	2010-10-12 08:59:25	Protus ID	L112078	Test Leader	Thommy Karlsson	Test Type	PVT	E2E Function	Vehicle Modes Application	Occurrence	Often
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Test Type	PVT																
E2E Function	Vehicle Modes Application																
Occurrence	Often																

Vehicle Identification Number
Test Object ID
Event Start
Protus ID
Test Leader
Test Type
E2E Function
Occurrence


# My responsibilities as TE/TL

1. Check/update - logger/vehicle binding in Collector
2. Transfer the data from the logger to the server.
3. Check-in *Events* to the database with appropriate keys attached, **within 30 days after the log event was taken** in the vehicle.
4. **Discard** invalid events!
5. Link the data to a PROTUS report.

# eFACTS – Checklist - 1

1. Log the problems about the truck by pressing the button AND giving an audio feedback
2. Retrieve data from the M-LOG datalogger with the USB stick.
3. In the Collector service, check the correct binding between the M-LOG and the Truck no.
4. Copy data (8000xxxx folder) to the C:\MeasData folder .
5. Thanks to the eFACTS Collector service, upload data to the server.

# eFACTS – Checklist - 2

6. Open the eFACTS Data Refiner and:
  - Wait for the database to be updated with latest data (can take up to 1h).
  - Check-in or Discard each event
  - In the same time, create the PROTUS report for checked-in events.
7. Generate the PROTUS Link and put it into the *Documents* tab of the PROTUS report
8. Don't forget to Click  to check-in your pending events (could take time)