Daimler AG
MAN Truck & Bus AG

Scania
Volvo Truck Corporation

Iveco SpA
DAF Trucks N.V.
Renault Trucks

Technical Specification

remote Fleet Management System

rFMS

Vers. 1.0.0

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Document History

08.09.2014:

- **creation of the file**

1 Introduction

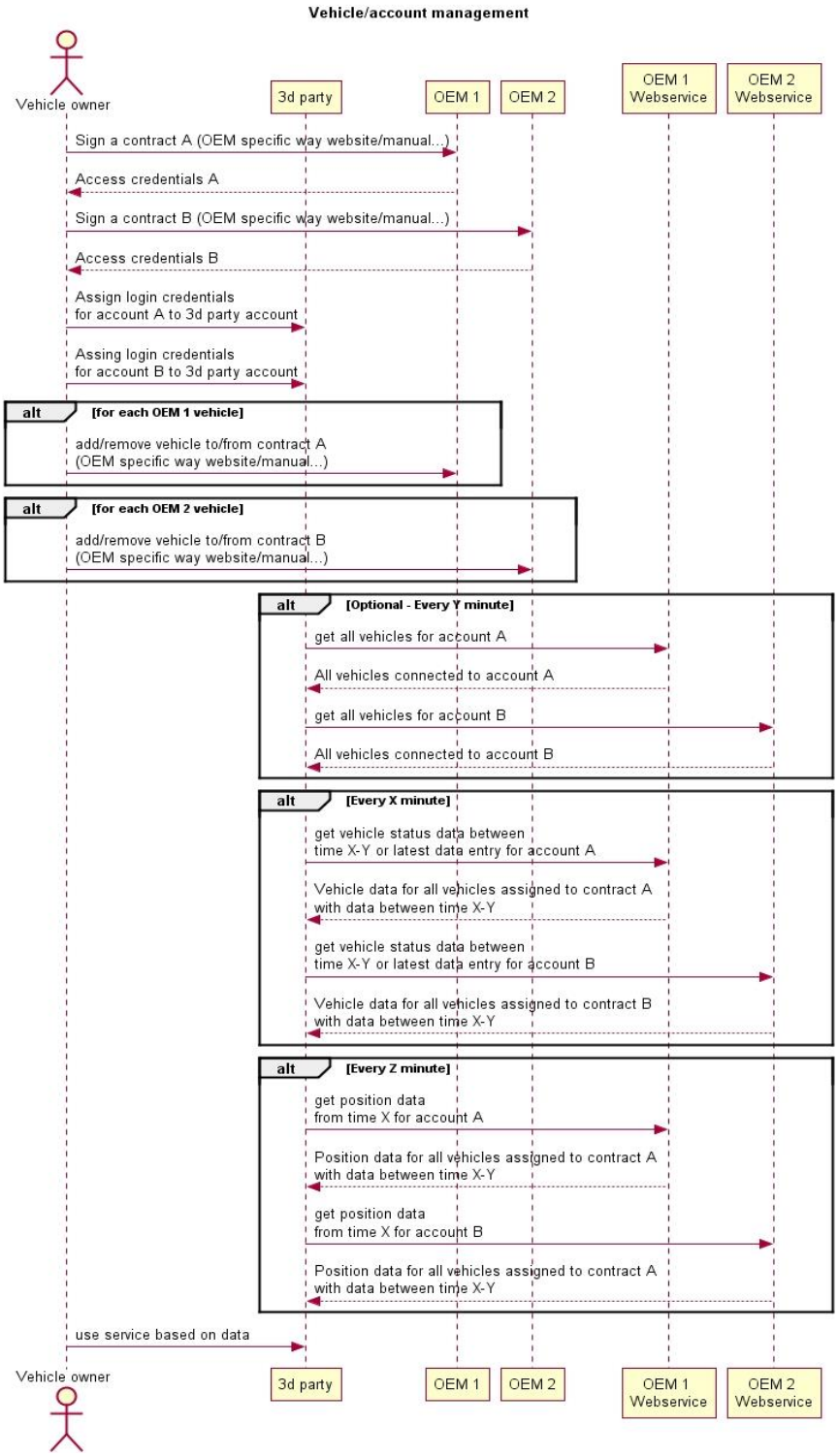
With rFMS API Version 1 it is possible to retrieve vehicle information and positions directly from the OEM server(s) in a standardized way.
This document describes the technical details how to use the API.
How the information is made available on the API is not in scope of this document.

2 Abbreviations

API	Application Programming Interface
CAN	Controller Area Network
FMS	Fleet Management System
HTTPS	Hypertext Transfer Protocol Secure
HW	Hardware
IP	Internet Protocol
JSON	JavaScript Object Notation
OBD	On-Board Diagnostics
OEM	Original Equipment Manufacturer
OS	Operating System
REST	Representational State Transfer
rFMS	Remote Fleet Management System
SSL	Secure Sockets Layer
SW	Software
TF	Task Force
TLS	Transport Layer Security
VIN	Vehicle Identification Number
XML	Extensible Markup Language
XSD	XML Schema Definition

3 Contract and subscription

The contract and subscription is OEM specific. The following process is for Vers.1.0.0



4 Communication with rFMS API

The rFMS is implemented as RESTful API over https.

Header parameters: Username and Password is string and are mandatory

Only GET is used in this Version 1.0.0

Limitation

- Request interval maximum 1 minute (Request and IP based)
  E.g. Same request using the same user credential from the same IP address is only allowed every minute

4.1 HTTP Headers

The following standards are used for the HTTP headers of the rFMS.

Note: The format of the headers conforms to the RFC 2616 Standard.

4.1.1 Request

All incoming requests must have at least following headers:

- Authorization: Basic *username/password* encoded in Base64
- Accept: text/xml;

If an unsupported Accept parameter is supplied, a 406 error is returned.
All other headers will be ignored by the target service application.

Example Request
https://www.*oemname.com/...*/rfms/v1.0.0/vehicle/status/current/

4.1.2 Response

The response will have at least following headers:
Content-Type: *text/xml;charset=utf-8*

All other information which might be sent in addition is not part of the specification and shall conform to RFC 2616 Standard.

All Responses are sorted: oldest first

Note: it is up to the client to take heed of the Cache-Control and Expires headers.

Values defined as decimal are delivered with a "dot" (e.g. 42.234).

For all Error cases the Content-Type is text/xml

Example for Response

```
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
<VehicleStatusResponse xmlns:ns2=
    "http://fms-standard.com/rfms/v1.0.0/xsd/common/position"
    xmlns="http://fms-standard.com/rfms/v1.0.0/xsd/status">
<VehicleStatus>
     <VIN>VF254ANA735752628</VIN>
     <TriggerType>TIMER</TriggerType>
     <CreatedDateTime>2014-09-08T09:30:20</CreatedDateTime>
     <ReceivedDateTime>2014-09-08T09:30:57</ReceivedDateTime>
     <GNSSPosition>
         <ns2:Latitude>49.18557</ns2:Latitude>
         <ns2:Longitude>11.18557</ns2:Longitude>
         <ns2:Heading>33</ns2:Heading>
         <ns2:Altitude>500</ns2:Altitude>
         <ns2:Speed>16.4</ns2:Speed>
         <ns2:PositionDateTime>2014-09-08T09:30:20</ns2:PositionDateTime>
     </GNSSPosition>
     <WheelBasedSpeed>16.07</WheelBasedSpeed>
     <TachographSpeed>15.83</TachographSpeed>
     <HRTotalVehicleDistance>817.5</HRTotalVehicleDistance>
     <EngineTotalFuelUsed>575</EngineTotalFuelUsed>
     <FuelLevel1>83</FuelLevel1>
     <CatalystFuelLevel>88.48</CatalystFuelLevel>
     <GrossCombinationVehicleWeight>10000</GrossCombinationVehicleWeight>
     <Driver1>
        <DriverTachoIdentification>G__0000700111327001</DriverTachoIdentification>
            <DriverOemIdentification>NULL</DriverOemIdentification>
            <DriverWorkingState>Work</DriverWorkingState>
     </Driver1>
</VehicleStatus>
<MoreDataAvailable>false</MoreDataAvailable>
<RequestServerDateTime>2014-09-08T09:44:17</RequestServerDateTime>
</VehicleStatusResponse>
```

5 Services

The following Services are defined as standard in Vers. 1:

- Vehicle List
  Delivers information about the vehicles related to the user credentials in the system:
  - Vehicle Identification Number
  - Customer Vehicle Name
  - Plate number
  - Services supported

- Vehicle Position (current and historical)
  Delivers information about the vehicle position:
  - Vehicle Identification number
  - Position
  - Speed

- Vehicle Status Version 1 (current and historical)
  Delivers information about the vehicle status:
  - Vehicle Identification Number
  - Position
  - Vehicle weight
  - Fuel information
  - Milage
  - Speed
  - Driver 1 information

Created = date and time (UTC) the message has been created in the vehicle
Received = date and time (UTC) the message has been received at the back office

5.1 Standard Service Vehicle List Vers. 1.0

Data	Description	Indication
vehicle identification number	acc ISO 3779 (17 characters)	mandatory
Customer Vehicle Name	String acc. Customer name for vehicles, e.g. Moby Dick, No.15, etc.	optional
License plate	String	optional
Services supported	List of all services (standard and OEM specific) supported by the vehicle and available to the user	Mandatory nullable
Server Date/Time (UTC) at Request	Time in UTC to be used to ask for historical data at customers (for startTime), to solve the problem of having different times at server and clients.	mandatory

Remark:
Mandatory = a must to deliver the defined information
Nullable = the information might not be present if it is not available at the generation time of the message

In "Services supported" is the information which services are supported by the vehicle and accessible by the client.
User will see all vehicles he has access rights to at least one service.
The vehicle might support more services than indicated if they are not available to the user.
Each supported service contains the following information:

- Service name
- rFMS-Version
- URL to the Service for this vehicle
- Source type

List of Services supported:

- Name for the Services (String):
  - VehicleCurrentStatus
  - VehicleHistoricalStatus
  - VehicleCurrentPosition
  - VehicleHistoricalPosition

- Versions (String)
  - v1.0

- URL:
  - https://api.oem.com/rfms/v1.0.0/vehicle/position/current
  - https://api.oem.com/rfms/v1.0.0/vehicle/position/historical
  - https://api.oem.com/rfms/v1.0.0/vehicle/status/current
  - https://api.oem.com/rfms/v1.0.0/vehicle/status/historical

- Service Type (String)
  - Standard
  - OEM specific services

5.1.1 Limitations

Limitations for parameters				
			VIN	All
VIN Parameter	ISO 3779		17 char.	
Frequency of requests	max. 1 minute			

5.2 Standard Service Vehicle Position Vers. 1.0

Data	Description	Indication
Trigger type	Indication of the trigger	mandatory (update), other types optional
Server Date/Time (UTC) at Request	Time to be used to ask for historical data at customers (for startTime), to solve the problem of having different times at server and clients.	mandatory
Server Date/Time (UTC) at reception of the message	Reception at Server To be used for handling of "more data available"	mandatory
Position	Long/Lat, Date and Time UTC (of Position determination), WGS84 based lat/long degrees floating	mandatory nullable
vehicle identification number	acc ISO 3779 (17 characters)	mandatory
optional attributes for position	GPS-Speed, Altitude, Heading	optional nullable
Date/Time UTC (creation of message)	creation in the vehicle	mandatory
Vehicle Speed	Wheel-Based Vehicle Speed in km/h (Speed of the vehicle as calculated from wheel or tailshaft speed) / Tachograph vehicle speed in km/h (Speed of the vehicle registered by the tachograph)	mandatory nullable/ optional nullable

Remark:
Mandatory = a must to deliver the defined information
Nullable = the information might not be present if it is not available at the generation time of the message

Comments:
Trigger Type:
Information why the information has been created.
Useful if there are trigger types beside time (e.g. change of driver)

Server Date Time (UTC) at Request received:
Date/Time (UTC) to be used to ask for historical data at customers (for startTime).
Purpose is to solve the problem of having different times at server and clients.

5.2.1 Limitations

Limitations for parameters				
			VIN	All
VIN Parameter	17 char.		ISO 3779	
StartTime	ISO 8601 (incl. seconds)	UTC	Starttime mandatory Stoptime optional No stoptime means equal now	Starttime mandatory Stoptime: optional No stoptime means equal now
StopTime	ISO 8601 (incl. seconds)	UTC	Stoptime > Starttime	Stoptime > Starttime
Date Type	Created / received	UTC	received	received
Frequency of requests	max. 1 minute			

5.2.2 Guaranties

Minimum update rate : 15 min

Storage period is min 2 weeks (time base is "received").
The last received position is always available for the current requests (not available for historical requests if it is outside the storage period)

5.3 Standard Services Vehicle Status Vers. 1.0

Data	Description	Indication
Trigger type	Indication of the trigger	mandatory (update), other types optional
Server Date/Time (UTC) at Request	Time to be used to ask for historical data at customers (for startTime), to solve the problem of having different times at server and clients.	mandatory
Server Date/Time (UTC) at reception of the message	Reception at Server To be used for handling of "more data available"	mandatory
Position	Long/Lat, Date and Time UTC (of Position determination), WGS84 based lat/long degrees floating	mandatory nullable
optional attributes for position	GPS-Speed, Altitude, Heading	optional nullable
Date/Time UTC (creation of message)	creation in the vehicle	mandatory
Gross combination vehicle weight	Total weight of the truck in Kg and all the trailers with on-board scales	optional nullable
Engine total fuel used	Accumulated amount of fuel used during vehicle operation in Liter	mandatory nullable
fuel level 1	Ratio of volume of fuel to the total volume of fuel storage container in per cent	mandatory nullable
Aftertreatment 1 Diesel Exhaust Fluid Tank 1 Information (AdBlue)	Ratio of volume of diesel exhaust fluid to the total volume of diesel exhaust fluid storage container in per cent	optional nullable
vehicle identification number	See ISO 3779 (17 characters)	mandatory
High resolution total vehicle distance	Accumulated distance traveled by the vehicle during its operation in km	mandatory nullable
Vehicle Speed	Wheel-Based Vehicle Speed in km/h (Speed of the vehicle as calculated from wheel or tailshaft speed) / Tachograph vehicle speed in km/h (Speed of the vehicle registered by the tachograph)	mandatory nullable/ optional nullable
Driver 1 Tacho Identification	Used to obtain the driver identity from EU legislated driver card (ASCII)	mandatory nullable
Driver 1 OEM Identification	Used to obtain the OEM unique driver identity	optional nullable
Driver 1 working state	State of work of the driver: * Rest, sleeping * Driver available; short break * Work, loading, unloading, working in an office * Drive, behind wheel	optional nullable

Remarks:
Mandatory = a must to deliver the defined information
Nullable = the information might not be present if it is not available at the generation time of the message
To get all fields filled there might be additional vehicle equipment needed (e.g. digital tachograph). The tachograph speed is optional as not always available.

Comment:
Trigger Type: information why the information has been created (see chapter 6).

Server Date Time (UTC) at Request received:
Date/Time (UTC) to be used to ask for historical data at customers (for startTime).
Purpose is to solve the problem of having different times at server and clients.

5.3.1 Limitations

Limitations for parameters				
			VIN	All
VIN Parameter	17 char.		ISO 3779	
StartTime	ISO 8601 (incl. seconds)	UTC	Starttime mandatory Stoptime optional No stoptime means equal now	Starttime mandatory Stoptime: optional No stoptime means equal now
StopTime	ISO 8601 (incl. seconds)	UTC	Stoptime > Starttime	Stoptime > Starttime
Date Type	Created / received	UTC	received	received
Frequency of requests	max. 1 minute			

5.3.2 Guaranties

Minimum update rate : 60 min

Storage period is min 2 weeks (received)
The last received status is always available for the current requests (not available for historical requests if it is outside the storage period)

6 Triggers

Name	used for	guaranties
Time	Vehicle Status	minimum: 60 minutes
	Vehicle Position	minimum: 15 minutes
Other	Vehicle Status	Not applicable
	Vehicle Position	Not applicable

Remark:
The update might be not possible during special conditions, e.g. ignition off, communication not possible, etc.

If the message is triggered by any other event not defined in the standard it is mentioned as "Other".

7 HTTPS Urls

Comment:
Request ID (optional)
To be used for tracing requests (support) in all URLs.
It is a customer generated ID unique for each customer and is optional.
This ID will be not sent in the answer.

All mentioned URLs are examples

7.1 Actual information

7.1.1 Vehicle Status

All vehicles:
https://api.oem.com/rfms/v1.0.0/vehicle/status/current/?requestID=String

Specific VIN:
https://api.oem.com/rfms /v1.0.0/
vehicle/status/current/?VIN=ISO3779&requestID=String

7.1.2 Vehicle Position

All vehicles:
https://api.oem.com/rfms /v1.0.0/vehicle/position/current/?requestID=String

Specific VIN:
https://api.oem.com/rfms /v1.0.0/
vehicle/position/current/?VIN=ISO3779&requestID=String

7.2 History information

7.2.1 Vehicle Status

All vehicles:
https://api.oem.com/rfms/v1.0.0/vehicle/status/history/?starttime=ISO8601&stoptime=ISO8601&datetype=created/received&requestID=String

Specific VIN:
https://api.oem.com/rfms/v1.0.0/vehicle/status/history/?VIN=ISO3779&starttime=ISO8601&stoptime=ISO8601&datetype=created/received&requestID=String

7.2.2 Vehicle Position

All vehicles:
https://api.oem.com/rfms/v1.0.0/vehicle/position/history/?starttime=ISO8601&stoptime=ISO8601&datetype=created/received&requestID=String

Specific VIN:
https://api.oem.com/rfms/v1.0.0/vehicle/position/history/?VIN=ISO3779&starttime=ISO8601&stoptime=ISO8601&datetype=created/received&requestID=String

7.2.3 Vehicle List

All vehicles:
https://api.oem.com/rfms/v1.0.0/vehicle/list/?requestID=String

8 Exception Handling

8.1 Successful

This class of status codes indicates the action requested by the client was received, understood, accepted and processed successfully

Standard response for successful HTTP requests.	200	OK	The actual response will depend on the request method used. In a GET request, the response will contain an entity corresponding to the requested resource.

8.2 Error Codes

8.2.1 Client Errors

The 4xx class of status code is intended for cases in which the client seems to have erred. Except when responding to a HEAD request, the server should include an entity containing an explanation of the error situation, and whether it is a temporary or permanent condition. These status codes are applicable to any request method. User agents should display any included entity to the user.

Code	Meaning	Possible Reason	Comment
401	Unauthorized	Wrong credentials Login credentials expired	Similar to 403 Forbidden, but specifically for use when authentication is required and has failed or has not yet been provided. The response must include a WWW-Authenticate header field containing a challenge applicable to the requested resource. See Basic access authentication and Digest access authentication.
403	Forbidden	Insufficient rights for the service no rights on any service of this vehicle	The request was a valid request, but the server is refusing to respond to it. Unlike a 401 Unauthorized response, authenticating will make no difference. On servers where authentication is required, this commonly means that the provided credentials were successfully authenticated but that the credentials still do not grant the client permission to access the resource (e.g. a recognized user attempting to access restricted content)
404	Not Found	vehicle unknown rFMS-Version not supported	The requested resource could not be found but may be available again in the future. Subsequent requests by the client are permissible
406	Not acceptable	unsupported Accept parameter sent	
412	Precondition Failed	mandatory field missing parameter format wrong	The server does not meet one of the preconditions that the requester put on the request

416	Requested Range Not satisfiable	Request parameter out of range	The client has asked for a portion of the file, but the server cannot supply that portion. For example, if the client asked for a part of the file that lies beyond the end of the file. This Error is sent if the requested Period is out of the range of allowed Period (overlapping is allowed)

429	Too Many Requests (approved Internet-Draft)	Request sent too often	per method and user (not credentials, etc.) tbd by OEM - is not related to update rates The user has sent too many requests in a given amount of time. Intended for use with rate limiting schemes
		Max concurrent calls	There is a limitation for requests per IP address and user credentials: max. 1 Minute frequency allowed

9 XML Schema Definition (XSD)

9.1 Common

9.1.1 Vehicle Type

Link: http://fms-standard.com/rfms/v1.0.0/xsd/common/vehicle/vehicletype_1.0.0.xsd

9.1.2 Trigger Type

Link: http://fms-standard.com/rfms/v1.0.0/xsd/common/trigger/triggertype_1.0.0.xsd

9.1.3 Position Type

Link: http://fms-standard.com/rfms/v1.0.0/xsd/common/position/positiontype_1.0.0.xsd

9.2 Position Response

Link: http://fms-standard.com/rfms/v1.0.0/xsd/position/positionresponse_1.0.0.xsd

9.3 Status Response

Link: http://fms-standard.com/rfms/v1.0.0/xsd/status/statusresponse_1.0.0.xsd

9.4 List Response

Link: http://www.fms-standard.com/rfms/v1.0.0/xsd/list/listresponse_1.0.0.xsd

10 Examples

10.1 XML Responses

10.1.1 Example Response Vehicle Position

Request:
https://www.rfms.com/rfms/v1.0.0/vehicle/position/current/?vin=VF254ANA735752628

Explanation:

Request at rFMS Webservice for current vehicle position
User credentials in Header:
User= USR
Password = 1234

Request for vehicle: VIN = VF254ANA735752628

XML Answer:

```
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
<VehiclePositionResponse xmlns:ns2=
    "http://fms-standard.com/rfms/v1.0.0/xsd/common/position"
     xmlns=" http://fms-standard.com/rfms/v1.0.0/xsd/position">
      <VehiclePosition>
            <VIN>VF254ANA735752628</VIN>
            <TriggerType>TIMER</TriggerType>
            <CreatedDateTime>2014-05-05T09:03:20</CreatedDateTime>
            <ReceivedDateTime>2014-05-05T09:04:19</ReceivedDateTime>
            <GNSSPosition>
                  <ns2:Latitude>51.771201</ns2:Latitude>
                  <ns2:Longitude>13.771201</ns2:Longitude>
                  <ns2:Heading>213</ns2:Heading>
                  <ns2:Altitude>500</ns2:Altitude>
                  <ns2:Speed>33</ns2:Speed>
                  <ns2:PositionDateTime>2014-05-05T09:03:20
                  </ns2:PositionDateTime>
            </GNSSPosition>
            <WheelBasedSpeed>33.68</WheelBasedSpeed>
            <TachographSpeed>33.24</TachographSpeed>
      </VehiclePosition>
      <MoreDataAvailable>false</MoreDataAvailable>
      <RequestServerDateTime>2014-05-05T09:13:45</RequestServerDateTime>
</VehiclePositionResponse>
```

Explanation:

VIN	**VF254ANA735752628**	**Vehicle Identification Number 17 Character**
TriggerType	**TIMER**	**Trigger type which has initiated the message in the vehicle**
CreatedDateTime	**2014-05-05T09:03:20**	**Date/Time (UTC) of creation of the message in the vehicle**
ReceivedDateTime	**2014-05-05T09:04:19**	**Date/Time (UTC) of reception of the message at the server**
GNSS Latitude	**51.771201**	**Degree**
GNSS Longitude	**13.771201**	**Degree**
GNSS Heading	**213**	**Degree**
GNSS Altitude	**500**	**Meter**
GNSS Speed	**33**	**From GNSS Km/h**
GNSS Position Date Time	**2014-05-05T09:03:20**	**Date/Time (UTC) of the creation of the position**
Wheel Based Speed	**33.68**	**From Wheel Km/h**
Tachograph Speed	**33.24**	**From Tacho Km/h**
MoreDataAvailable	**false**	**No more data**
RequestServerDateTime	**2014-05-05T09:13:45**	**Date/Time (UTC) when the request has been received at the Webserver**

10.1.2 Example Response Vehicle Status

Request:
https://www.rfms.com/rfms/v1.0.0/vehicle/status/current/?vin=VF254ANA735752628

Explanation:

Request at rFMS Test Webservice for current vehicle status
User credentials in Header:
User= USR
Password = 1234

Request for vehicle: VIN = VF254ANA735752628

XML Response:

```
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
<VehicleStatusResponse xmlns=
    http://fms-standard.com/rfms/v1.0.0/xsd/status
    xmlns:ns2="http://fms-standard.com/rfms/v1.0.0/xsd/common/position">
      <VehicleStatus>
      <VIN>VF254ANA735752628</VIN>
      <TriggerType>TIMER</TriggerType>
      <CreatedDateTime>2014-09-08T09:30:20</CreatedDateTime>
      <ReceivedDateTime>2014-09-08T09:30:57</ReceivedDateTime>
      <GNSSPosition>
            <ns2:Latitude>49.18557</ns2:Latitude>
            <ns2:Longitude>11.18557</ns2:Longitude>
            <ns2:Heading>33</ns2:Heading>
            <ns2:Altitude>500</ns2:Altitude>
            <ns2:Speed>16.4</ns2:Speed>
            <ns2:PositionDateTime>2014-09-08T09:30:20</ns2:PositionDateTime>
      </GNSSPosition>
      <WheelBasedSpeed>16.07</WheelBasedSpeed>
      <TachographSpeed>15.83</TachographSpeed>
      <HRTotalVehicleDistance>817.5</HRTotalVehicleDistance>
      <EngineTotalFuelUsed>575</EngineTotalFuelUsed>
      <FuelLevel1>83</FuelLevel1>
      <CatalystFuelLevel>88.48</CatalystFuelLevel>
      <GrossCombinationVehicleWeight>10000</GrossCombinationVehicleWeight>
      <Driver1>
            <DriverTachoIdentification>G__0000700111327001
            </DriverTachoIdentification>
            <DriverOemIdentification>NULL</DriverOemIdentification>
            <DriverWorkingState>Work</DriverWorkingState>
      </Driver1>
      </VehicleStatus>
      <MoreDataAvailable>false</MoreDataAvailable>
      <RequestServerDateTime>2014-09-08T09:44:17</RequestServerDateTime>
      </VehicleStatusResponse>
```

Explanation:

VIN	VF254ANA735752628	17 Character
TriggerType	TIMER	Trigger type which has initiated the message in the vehicle
CreatedDateTime	2014-09-08T09:30:20	Date/Time (UTC) of creation of the message in the vehicle
ReceivedDateTime	2014-09-08T09:30:57	Date/Time (UTC) of reception of the message at the server
GNSS Latitude	49.18557	Degree
GNSS Longitude	11.18557	Degree
GNSS Heading	33	Degree
GNSS Altitude	500	Meter
GNSS Speed	16.4	From GNSS Km/h
GNSS PositionDateTime	2014-09-08T09:30:20	Date/Time (UTC) of the creation of the position
WheelBasedSpeed	16.07	From Wheel Km/h
TachographSpeed	15.83	From Tacho Km/h
HRTotalVehicleDistance	554.17	meter
EngineTotalFuelUsed	575	Liter
FuelLevel1	83	Percent
CatalystFuelLevel	88.48	Percent
GrossCombinationVehicleWeight	10000	Kg
Driver1 Tacho ID	G__0000700111327001	Driver1 Tacho ID
Driver1 OEM ID	NULL	No Driver1 OEM ID
Driver1 WorkingState	Work	Driver1 State is WORK
MoreDataAvailable	false	No more data
RequestServerDateTime	2014-09-08T09:44:17	Date/Time (UTC) when the request has been received at the Webserver

10.1.3 Example Response Vehicle List

Request: List all vehicles for User USR
https://www.rfms.com/rfms/v1.0.0/vehicle/list/

XML Response:

```
<?xml version="1.0" encoding="UTF-8" standalone="true"?>
<VehicleListResponse xmlns="http://fms-standard.com/rfms/v1.0.0/xsd/list">
	<Vehicle>
	<VIN>VF254ANA735752628</VIN>
	<CustomerVehicleName>Moby Dick</CustomerVehicleName>
	<LicensePlate>R-EN 0001</LicensePlate>
	<SupportedService>
		<Name>position/current</Name>
		<Version>1.0</Version>
		<URL>https://www.oem.com/rfms/v1.0.0/vehicle/position/current/</URL>
		<SourceType>standard</SourceType>
	</SupportedService>
	<SupportedService>
		<Name>position/history</Name>
		<Version>1.0</Version>
		<URL>https://www.oem.com/rfms/v1.0.0/vehicle/position/history/</URL>
		<SourceType>standard</SourceType>
	</SupportedService>
	<SupportedService>
		<Name>status/current</Name>
		<Version>1.0</Version>
		<URL>https://www.oem.com/rfms/v1.0.0/vehicle/status/current/</URL>
		<SourceType>standard</SourceType>
	</SupportedService>
	<SupportedService>
		<Name>status/history</Name>
		<Version>1.0</Version>
		<URL>https://www.oem.com/rfms/v1.0.0/vehicle/status/history/</URL>
		<SourceType>standard</SourceType>
	</SupportedService>
	</Vehicle>
	<Vehicle>
	<VIN>VG654ANA735752629</VIN>
	<CustomerVehicleName>Pinoccio</CustomerVehicleName>
	<LicensePlate>R-EN 0002</LicensePlate>
	<SupportedService>
		<Name>position/current</Name>
		<Version>1.0</Version>
		<URL>https://www.oem.com/rfms/v1.0.0/vehicle/position/current/</URL>
		<SourceType>standard</SourceType>
	</SupportedService>
	<SupportedService>
		<Name>position/history</Name>
		<Version>1.0</Version>
		<URL>https://www.oem.com/rfms/v1.0.0/vehicle/position/history/</URL>
		<SourceType>standard</SourceType>
	</SupportedService>
	<SupportedService>
		<Name>status/current</Name>
```

```
            <Version>1.0</Version>
            <URL>https://www.oem.com/rfms/v1.0.0/vehicle/status/current/</URL>
            <SourceType>standard</SourceType>
      </SupportedService>
      <SupportedService>
            <Name>status/history</Name>
            <Version>1.0</Version>
            <URL>https://www.oem.com/rfms/v1.0.0/vehicle/status/history/</URL>
            <SourceType>standard</SourceType>
      </SupportedService>
      </Vehicle>
      <Vehicle>
      <VIN>XLRAEL3700L434543</VIN>
      <CustomerVehicleName>Peter Pan</CustomerVehicleName>
      <LicensePlate>D-AF 0002</LicensePlate>
      <SupportedService>
            <Name>position/current</Name>
            <Version>1.0</Version>
            <URL>https://www.oem.com/rfms/v1.0.0/vehicle/position/current/</URL>
            <SourceType>standard</SourceType>
      </SupportedService>
      <SupportedService>
            <Name>position/history</Name>
            <Version>1.0</Version>
            <URL>https://www.oem.com/rfms/v1.0.0/vehicle/position/history/</URL>
            <SourceType>standard</SourceType>
      </SupportedService>
      </Vehicle>
      <RequestServerDateTime>2014-09-08T10:05:27</RequestServerDateTime>
</VehicleListResponse>
```

Explanation:

VIN	VF254ANA735752628	17 Characters
CustomerVehicleName	Moby Dick	Vehicle name used by the customer
LicensePlate	R-EN 0001	License Plate Number of the vehicle
SupportedService	Name: position/current Version: 1.0 URL: https://www.oem.com/rfms/v1.0.0/vehicle/position/current/ SourceType: standard Name: position/history Version: 1.0 URL: https://www.oem.com/rfms/v1.0.0/vehicle/position/history/ SourceType: standard Name: status/current Version: 1.0 URL: https://www.oem.com/rfms/v1.0.0/vehicle/status/current/ SourceType: standard Name: status/history Version: 1.0 URL: https://www.oem.com/rfms/v1.0.0/vehicle/status/history SourceType: standard	The vehicle supports 4 Standard Services with URL's

VIN	VG654ANA735752629	17 Characters
CustomerVehicleName	Pinoccio	Vehicle name used by the customer
LicensePlate	R-EN 0002	License Plate Number of the vehicle
SupportedService	Name: position/current Version: 1.0 URL: https://www.oem.com/rfms/v1.0.0/vehicle/position/current/ SourceType: standard Name: position/history Version: 1.0 URL: https://www.oem.com/rfms/v1.0.0/vehicle/position/history/ SourceType: standard Name: status/current Version: 1.0 URL: https://www.oem.com/rfms/v1.0.0/vehicle/status/current/ SourceType: standard Name: status/history Version: 1.0 URL: https://www.oem.com/rfms/v1.0.0/vehicle/status/history/ SourceType: standard	The vehicle supports 4 Standard Services with URL's

VIN	XLRAEL3700L434543	17 Characters
CustomerVehicleName	Peter Pan	Vehicle name used by the customer
LicensePlate	D-AF 0002	License Plate Number of the vehicle
SupportedService	Name: position/current Version:1.0 URL: https://www.oem.com/rfms/v1.0.0/vehicle/position/current/ SourceType: standard Name: position/history Version: 1.0 URL: https://www.oem.com/rfms/v1.0.0/vehicle/position/history/ SourceType: standard	The vehicle supports 2 Standard Service with URL
RequestServerDateTime	2014-09-08T10:05:27	Date/Time (UTC) when the request has been received at the Webserver

User USR has access to the following vehicle ID's:

- VF254ANA735752628 with support of the standard Services:
  - Vehicle Position Current
  - Vehicle Position History
  - Vehicle Status Current
  - Vehicle Status History

- VG654ANA735752629 with support of the standard Services:
  - Vehicle Position Current
  - Vehicle Position History
  - Vehicle Status Current
  - Vehicle Status History

- XLRAEL3700L434543 with support of the standard Services:
  - Vehicle Position Current
  - Vehicle Position History