

1. Integration with SAP Digital Vehicle Hub

1.1 General information / Preconditions

To start setup / to run integration with SAP Digital Vehicle Hub on your system, there are some preconditions required:

- SAP Digital Vehicle Hub is setup, see [Administration Guide for SAP Digital Vehicle Hub](#)
- SAP Cloud Integration is available
- VSS add- on is installed on the target system.

1.2 Technical Setup

The chapter **Technical Setup** describes all kinds of installation, configuration, and setup activities, which must be executed before customizing of the application can be started.

1.2.1 Cloud Integration

Select the package “Proaxia Vehicle Sales and Service Integration with SAP Digital Vehicle Hub” in discovery section and configure following artifacts:

1. Replicate Vehicles from SAP S4HANA
 - enter sender address

Configure "Replicate Vehicles from SAP S4HANA"

The screenshot shows the configuration interface for the 'Sender' tab. It includes the following fields and options:

- Sender:** SAP_S4HANA
- Adapter Type:** HTTPS
- Address:** /vss/vehicle
- Authorization:** User Role
- User Role:** ESBMessaging.send (with a 'Select' button)
- CSRF Protected:**
- Conditions:**
 - Body Size (in MB):** 40

- enter an AIR Key

Configure "Replicate Vehicles from SAP S4HANA"

The screenshot shows the configuration interface for the 'More' tab. It includes the following fields and options:

- Type:** Content Modifier
- Name [ID]:** AIR Header [CallActivity_31]
- Message Header:**

Action:	Name:	Source Type:	Source Value:	Data Type:	Default Value:
Create	Application-Interf...	Constant	saptest0		

2. Replicate Vehicles to SAP Digital Vehicle Hub

- Provide your AIN Address

Sender **Receiver** More

Connection

Receiver: SAP_DVH_VEHICLE_GET

Adapter Type: HTTP

Address: `{{AIN_Address}}/equipment?$filter= internalId eq '${property.S4HANAVehicleID}'`

AIN_Address: `https://api-gateway.saps4hana.com/s4hana/odata/v2`

Method: GET

Authentication: OAuth2 Client Credentials

Credential Name: AIN_API

Timeout (in ms): 240000

- Configure mail notification
Configure "Replicate Vehicles to SAP Digital Vehicle Hub"

Sender **Receiver** More

Connection

Receiver: Mail

Adapter Type: Mail

Address: SMTP:mail.sap.com

Proxy Type: On-Premise

Timeout (in ms): 30000

Protection: Off

Authentication: None

Processing

From: `Reniguna.Palanisetti@proton.com`

To: `Reniguna.Palanisetti@proton.com`

Subject: `The Vehicle with guid ${property.S4HANAVehicleID} failed in Cloud Integration`

Body Mime-Type: Text/Plain

Body Encoding: UTF-8

Add Message Attachments:

Content Transfer Encoding: Automatic

- Enter DVH Address

Configure "Replicate Vehicles to SAP Digital Vehicle Hub"

Sender **Receiver** More

Connection

Receiver: SAP_DVH_VEHICLE

Adapter Type: HTTP

Address: {{DVH_Address}}/dvh/api/v1/vehicle

DVH_Address: https://h1h1.hana.ondemand.com/

Query: \${property.dvhVehicleID}

Method: Dynamic

Expression: \${property.operation}

Authentication: OAuth2 Client Credentials

Credential Name: DVH_API

Timeout (in ms): 240000

Once configuration is done, the artifacts must be deployed.

1.2.2 Configuration of HTTP Services

HTTP-Connection

RFC Destination: DBEDVH

Connection Type: G HTTP Connection to External Server

Description

Description 1: DVH Integration

Description 2: https://h1h1.hana.ondemand.com/

Description 3:

Administration **Technical Settings** Logon & Security Special Options

Target System Settings

Host: https://h1h1.hana.ondemand.com/ Port:

Path Prefix: /http/vss/vehicle

Add prefix /http/ to your sender address from cloud integration artifact.

Access is granted via basic authentication and SSL Certificate provided by your cloud administrator.

1.2.3 VSS Configuration

Following customizing must be maintained to activate integration in /dbe/spro

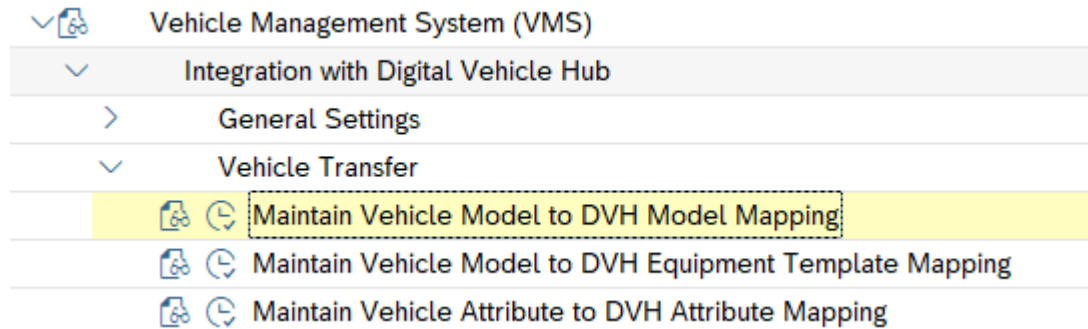
∨	Vehicle Sales and Service
>	Common Functions
>	Enterprise Structure
>	Framework Components
>	Order
>	Service
>	Part
∨	Vehicle
	Configure Vehicle Management System (VMS)
>	Define Control Values
>	General Data
>	Vehicle Model Master
>	Vehicle Master
>	Extension Sets
>	Business Add-Ins (BAIs)
>	Vehicle Goods Manager
∨	Integration with Digital Vehicle Hub
	Maintain Target System
	Activate VSS Integration
	Assign Order Types
∨	Business Add-Ins (BAIs)
	Vehicle Configuration

1. Maintain Target System – add RFC Destination
2. Activate VSS Integration – allows to update vehicle and Vehicle Service History, Vehicle Registration, Vehicle Warranty, Vehicle Planned Maintenance Interval and Vehicle Service Contract
3. Assign Order Types – assign DVH order types to VSS job types, if it's not maintained then default order type is set as "Inspections".
4. Vehicle Configuration – the following attributes of vehicle configuration can be overwritten by standard VSS implementation:

Attribute	Type	Description
DVH_INTERIOR_COLOR	CHAR70	Interior Color
DVH_EXTERIOR_COLOR	CHAR70	Exterior Color
DVH_UPHOLSTERY_COLOR	CHAR70	Upholstery Color
DVH_USED_VEHICLE	CHAR1	Flag That Indicates That the Vehicle Is a Used Vehicle
DVH_ODOMETER_READING	DEC6	Odometer Reading
DVH_ODOMETER_READING_UOM	UNIT3	Unit of Measurement
DVH_HOMOLOGATION_NUMBER	CHAR70	Homologation Number
DVH_RIM_SIZE	DEC4	Rim Size
DVH_RIM_SIZE_UOM	UNIT3	Unit of Measurement
DVH_WHEEL_TYPE	CHAR70	Wheel Type
DVH_TIRE_SIZE	CHAR70	Tire Size
INSTALLEDBASECOMPONENT	NUMC18	IB: Component (instance)
DVH_UPHOLSTERY_FABRIC	CHAR70	Upholstry Fabric

1.2.4 VMS Configuration

There is additional customizing in vehicle management system to provide mapping between VSS Vehicle Model and DVH Model



The vehicle model must be defined on DVH side and mapped on VMS side

Maintain Vehicle Model to Digital Vehicle Hub Model Mapping	
Vehicle Model	Digital Vehicle Hub Model
<input type="checkbox"/> 290:MB	963406

VSS Model - transaction /DBE/VMODEL

Ac Model Sales Code	Model Text 1	Material	Model Service Code
<input checked="" type="checkbox"/> 290689	Mercedes-AMG GT 63 S 4Matic+	290:MB	290689

At least one Attribute Mapping must be defined to keep integration active

Std Mappg of Veh. Attributes and SAP DVH Attribs				
SrcObjType	Source Object ...	Source Attribute	Target Attribute	
<input type="checkbox"/> VEH Vehicle	▼ VLCVEHICLE	USED_VEHICLE	DVH_USED_VEHICLE	