CAP Data Web Services

Explanations, examples and the typical response is shown for each web service on screen.

Developers familiar with web services would be able to write their own scripts to access/use these services to automate the operation.

The information below provides a few general notes regarding Web Services along guidance on how to *build* the vehicle description and use/interpretation of CAP data.

Please note - Vehicles Web Service is required with all data sets to identify vehicle.

General notes:

1) All web services require subscriber id, password and database to authenticate subscription.

    Database options:

    CAR
    LCV
    HGV
    BIKES
    GREY

2) Most *CAPVehicles* Web Service operations (CAR only) offer a ***BodyStyleFilter***. This gives the option to filter results by particular bodystyles.

    BodyStyleFilter options:

    1=4x4
    2=City-Car
    3=Coupe
    4=Estate
    5=Hatchback
    6=MPV
    7=Saloon
    8=Sports.

    This field can be left blank if not required

3) Most Web Service operations offer choice of returning ***JUSTCURRENT…..*** This gives the option to return only current information (i.e. latest).

    TRUE or FALSE is required.

4) If a date field is required, the format is YYYY/MM/DD (i.e. 2009/01/01)

CAPVehicles

Suggested process for building up vehicle description:

1. **GETCAPMAN** – Returns list of manufacturer codes.
   Example: **Audi**

2. **GETCAPRANGE –** Returns list of Range codes for any given manufacturer code.
   Example: AUDI **A4**

3. **GETCAPMOD** – Returns list of model ranges for any given manufacturer or range code
   Example: AUDI A4 **A4 SALOON**

   NOTE – this operation allows the option to use MANRANCODE as MAN.
   Requires True or False.

   This basically allows vehicle information to be built using 3 levels (MAN MOD DER) or 4 levels
   (MAN RANGE MOD DER). 4 levels provide an extra level of filtering.

4. **GETCAPDER** – Returns list of derivatives for any given model code.
   Example: AUDI A4 A4 SALOON **1.8T FSI 4dr**

   4a. **CAPGETDERfromRANGE** – Returns list of derivatives for any given range code.
   Example: AUDI A4 **1.8T FSI 4dr**

NOTE – The above options have the just current option. If true, this will return all results that do not
have an 'effective to' or 'discontinued' date. If this field is false, it returns **all** results.

Subsequently, we have added a number of web services which allow the inclusion of vehicles on run
out. (vehicles that have ceased production, but have an availability from stock).

All webservices with '**IncludeOnRunOut'** work in the same way as above however, if
JustCurrentDerivatives is true, it also includes vehicles on run out.

Once you have built the vehicle description to this level you will now have the CAPid which is required
to return Model Year information or CAPcode and any other data using New Vehicle Data, Used
Values, Future Values.

New Vehicle Data

There are a number of web services available under this subscription, which will allow you to return a variety of sets of information.

The most commonly used is **GETOPTIONSBUNDLE** which allows the user to return a full set of *standard* data for a give CAPid and date. The request returns the following items:
- Vehicle Description & Price
- Options
- Relationship items
- Pack Contents.
- Technical items.

The section below provides a brief explanation to the fields returned for these items:

Vehicle Description & Price
A breakdown of the vehicle description and its price.

CVehicle_ManText eg **BMW**
CVehicle_ShortModText eg **5 SERIES**
CVehicle_ModText eg **5 SERIES DIESEL SALOON**
CVehicle_DerText eg **530d SE 4dr**
CVehicle_ManTextCode eg **869**   (numerical code for the manufacturer)
CVehicle_ShortModID eg **71**   (numerical code for the range)
CVehicle_ModTextCode eg **49490**   (numerical code for the model)
CVehicle_ModIntroduced eg **2010**
CVehicle_ModDiscontinued eg **0**
CVehicle_DerIntroduced eg **2010-03-20T00:00:00+00:00**
Pr_Basic eg **31454.1667**
Pr_VAT eg **6290.8333**
Modelyear eg **2011**

Options
This returns a number of fields for each option available on the vehicle at the specified date.

Opt_OptionCode>**1**
Do_Description>**Delivery**   (option description)
Dc_Description>**On The Road**   (category description)
Opt_Basic>**617.02127659574467**
Opt_VAT>**107.97872340425533**
Opt_Default>**false**   (default on vehicle, but can be changed Y/N)
Opt_POA>**false**   (obsolete)

Relationship items
Option Relationships define any dependencies between possible option combinations on a vehicle. For example, clearly you can only choose one set of alloy wheels, but this dataset caters for more complex dependencies

RI_RuleCode – numerical code that links the items included within the code together. The rule code is unique to the applicable rule.

RI_OptionCode – option code. For every option included in the rule code, the rule code is repeated to show each option coded

RI_IsPrimary – the first option the rule relates to. All options linked to this rule through an option are classed as secondary.

RR_RuleType – description of the rule code:
'OO' - One Of - From the marked options, a maximum of one may be selected. Example: You can only have one type of paintwork.

'RO' - Requires One Of - If the primary option is chosen, it must be accompanied by at least one of the non primary options in that rule. **Example**: If sports suspension is chosen, one set of 17 inch alloys must also be chosen.

'RA' - Requires All - If the primary option is chosen, it is accompanied by all the non primary options in that rule. **Example**: If TV and Teletext reception is chosen, it must be accompanied by 'Sat nav + Monitor + Driver Info System'.

'NW' - Not With - If the primary option is chosen, none of the other marked options may be chosen. **Example**: If Wood inlay is chosen, it cannot be accompanied by any cloth trim.

'IN' - Included In - The marked options are included in the price of the primary option, which is a pack. **Example**: If 'Sat nav + Monitor + Driver Info System' is chosen, the separate option of 'Drivers information system' is included in this option and price.

'IO' - Include One Of - If the primary option is chosen, it must be accompanied by one none primary options. The selected none primary option will be included at 0 cost. **Example** : If Convenience Pack is selected One Metallic Paint can also be selected at 0 cost.

Do_Description – Option description

Pack Contents
A pack is an option in its own right, but can contain items that are also options which can be ordered independently – these items would be flagged with the 'IN' rule described in the relationship items.

PP_PackCode – the option code for the 'PACK'

Do_Description - the description of each item included in the pack.
For every option included in the PACK, the pack code is repeated to show each option description

Technical Items
The GETOptionsbundle only returns basic technical fields and does not return the description of the technical items available for each vehicle. For more detailed technical data, use GetTechnicalData.

Tech_TechCode eg 67 – the technical code for each piece of technical data available at the specified date

Tech_Value_String eg 166 **-** the value of the technical item
(The example shown above shows the technical code and value for the CO_2 at the specified date.

Other NVD Web Services include:

GETColourHoodLinks / GETColourTrimLinks
Returns the Colour & Trim/Hood combinations available for a given CAPid and date.

GETGenericOptions
Returns a list generic option descriptions and generic category descriptions.
(e.g - DVD Satellite Navigation and HDD satellite navigation with MMI 3G - High – the generic description is quite simply *Navigation system*)

GETNVDChanges
Returns last date changed for Model Year (dt_my), Price (dt_pr), Options (dt_opt), SE (dt_se) and Technical (dt_tech) for a given CAPid.

GetP11DData
Returns the CO_2, CC, Euro Emissions, FuelType, and P11D percentages for 3 given tax years (eg 2011, 2012, 2013) for a CAPid.

GetStandardEquipment
Returns list of all items of standard equipment for a given CAPid and date.

Se_OptionCode eg 4792
Do_Description eg Digital clock
Dc_Description eg Driver Convenience   (category description)

GetTechnicalData
Returns list of all items of technical data for a given CAPid and date.

Tech_TechCode eg 67
DT_LongDescription eg CO_2 (g/km)
Dc_Description eg Emissions   (category description)
tech_value_string eg 130

Images

Image webservices can be accessed via http://images.capnetwork.co.uk/VehicleImage.aspx
(Please note this requires an additional subscription)

There are 3 different types of web service available to access Images.

Get Image for CAP Id and Date – returns an image for a specific CAPid and date.
Get Image for CAPId's Last Model Year – returns an image for a given CAPid's latest model year.
Get Image method returns an image for a given Image ID. (This is not the same as CAPid)

NOTE – An image id can be used against multiple CAPids.

P11D Calculations

CAP now have P11D calculations (car only) available in the form of a web service, which can be used alongside the New Vehicle Data web services. (Please note this requires an additional subscription)

http://webservices.capnetwork.co.uk/capp11d_webservice/capp11d.asmx

This Returns the CO_2, CC, Euro Emissions, FuelType, P11D valuation for an ID / Specification Date / Selected Options. The Selected Option Field can be either left blank or the Option Codes (OPT_OptionCode etc) with a comma's between each code. Please note, SelectedOptions should not include option codes for options which either are part of pack contents & 'IN' option relationship rules.

p11d_year1 eg 2010
p11d_year1_price eg 23025.00
p11d_year1_priceLimit eg 80000.00
p11d_year1_perc eg 18
p11d_year1_benefit eg 4144.50
p11d_year1_rate_basic eg 828.90
p11d_year1_rate_higher eg 1657.80