WHITEPAPER

AUTO DATA PRIMER

DATAONE SOFTWARE

Overview

Automotive data covers a broad scope of materials ranging from basic VIN decodes which may provide year, make, model, trim, to more extensive reference information that provides information such as engine and transmission information, vehicle dimensions, warranty information, to comprehensive VIN-referenced sets of data which describes the vehicle's installed and optional equipment and supply media and promotion material.

Some information is encoded directly into the VIN number by the vehicle manufacturer. This information always includes year, make, and model, and can sometimes extend to trim, engine, transmission, GVWR, and bed length.

Extracting this information from the VIN requires access to data that indicates that for a certain make/model in a certain limited year span, a certain alphanumeric combo has a specific value for that OEM.

When we move beyond the basics of Year / Make / Model / (sometimes) Trim / Engine / GVWR typically we refer to this info which is not truly decoded as "reference data" meaning that it has been compiled by a research team, and then matched to the VIN pattern.

Common Terms to describe the true process of decoding a VIN that are often confused with reference data: VIN Decode, VIN Explosion, VIN Breakout, VIN Translation

The last 6 digits of the VIN are specific to a single physical vehicle like a serial number. This portion of the VIN is not typically utilized by any kind of VIN reference (with few exceptions). Franchise (new car) dealers who have ordered the vehicle from their OEM may have direct access to obtain "as built" information from the manufacturer in certain cases. Information relating to those last 6 digits is not released anywhere in the industry by the manufacturers for distribution.

Automotive "reference" content can also include media such as photos, and colorized sets for various application requirements, vehicle promo videos, as well as rich descriptive materials such as accolades and awards, reviews, and editorial content. The list goes on to include pricing information related to MSRP, Retail value, Wholesale value and trade-in data.

Moving beyond these materials, there are niche sectors of the industry that use specific codes, and markers required for various standards and protocols, and as a result a bridge is required to support translation between standardized data and these specialized data sets. This is typically referred to as “Third party Integration” or “Mapping” or “schema” DataOne Software provides a flexible, yet powerful means to utilize this automotive content, and continues to expand products and services to meet a growing demand for automation, efficiencies and cost savings.

Business Solutions

Since 1999 DataOne Software has fulfilled unique content and data needs in the automotive marketplace, providing businesses with cost effective data solutions as well as support for rapid technology development. The company sources automotive content for several sectors of the automotive industry and was one of the first companies to make automotive content available by web service.

DataOne Software automotive content includes some of the data that has been described within this paper, including content that has been designed specifically to meet some of these needs from an integration and use standpoint.

Infosheet

2017 Nissan GT-R Premium Coupe 2dr AWD

Engine: 3.8L Twin Turbo V6 565hp 467ft. lbs.
Transmission: 6-Speed Double Clutch
Drive Type: AWD
Body Type: Coupe
MSRP: $109,990
Doors: 2
Fuel Type: Gas

Basic Identification
Year: 2017
Make: Nissan
Model: GT-R
Trim: Premium

Body Type: Coupe
Vehicle Type: Car
Doors: 2
Plant: Tochigi, Japan

Drive train
Drive Type: AWD

Fuel
Fuel Capacity: 19.5
Fuel Type: Gas

Decoded Engine
Stroke: 3.48
Engine Cylinders: 6
Engine Displacement: 3.8
Valve Timing: VVT
Engine Aspiration: TT

Decoded Transmission
Transmission Type: A
Gears: 6

Safety
Restraint Type: Driver and passenger front, side impact, and side curtain airbags with occupant sensing deactivation

Vehicle Specifications
Length: 185.4
Height: 53.9
Width: 74.6
Curb Weight: 3933
Wheelbase: 109.4

Exterior Colors:
Basic Exterior Colors: Black, Dk. Blue, Gray, Silver, White, Red, Orange
OEM Exterior Colors: Jet Black, Deep Blue Pearl, Gun Metallic, Super Silver, Pearl White, Solid Red, Blaze Metallic
Exterior Color Codes: GAG, RAY, KAD, KAB, QAB, A54, EBG

Interior Colors:
Basic Interior Colors: Off White, Red, Tan, Black
OEM Interior Colors: Ivory, Red Amber, Rakuda Tan, Black

The following are solutions that continue to meet the needs of the inventory marketing sector including classified listing sites year after year with concise, well formatted, industry standard descriptions. The collections available represent one of the largest within the US market place in terms of year range and depth.

Basic VIN explosion data

As a solution for feed normalization and building out drop down lists for search/filter as well as providing a basic VIN explosion with key reference fields appended – the VINBasic™ Autos file represents a clear advantage. Available fields include:

VIN Pattern, Vehicle ID, Year, Make, Model, Trim, Style, Vehicle Type (Car, Truck etc), Body Type (Sedan ,Coupe etc), Body Subtype (Crew Cab, King Cab etc), Doors, MSRP, Plant, Restraint Type, Length, Width, Height, Wheelbase, Curb Weight, GVW Rating, Wheel Dimensions, Fuel Tank, Fuel Capacity, Drive Type, Fuel Type, Engine Block Type, Cylinder Quantity, Engine Size, Engine Size UoM (Deprecated), Aspiration (Turbo, Supercharged), Transmission Type, Transmission # of Gears

This file has been referred to as “the Swiss army knife of VIN data products” due to the flexibility, ease of use and application across so many products and sectors.

Specification data

When there is a need for more data to provide a more robust vehicle listing AND this data is not being obtained in a full vehicle feed from a third party – DataOne Software Extended data via database or web services may be a good fit.

Web Services

Companies with a need to decode under 1500 vehicles per month may find the Web Services (XML VIN Decoder) to be a good fit from a cost as well as rapid development standpoint. The pricing scales according to the volume of lookups per month and this can be an excellent way to start off with a minimal investment.

Relational database

A relational database is the right solution when there will be a high volume of vehicle decodes or when there are technical specifications that require data to be used internally.

In either case – whether Web Services or Relational Table set is used – the data is the same and is updated on a daily basis.

These data products and more can be reviewed at www.dataonesoftware.com along with a host of other dealer marketing materials that may be useful for your solution as you continue to grow and compete. Editorial content, media, service related data are common additions to an established classified site where consumers can return for research and service needs on a regular basis.

In Review

Automotive data broad description

- The only fields able to be truly "decoded" from a VIN number are Year, Make, Model, (sometimes) Trim, Engine, and GVWR.

- Information which falls outside the scope of truly "decoded" is called reference data and must be compiled by a research team. The effectiveness / timeliness of this data and accuracy will require a data source to work with the OEM to source this information for any consistent value to business.

THANK YOU FOR READING

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