

Web Services

DataOne Software

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REST / XML delivery



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If you are looking for comprehensive automotive data there are two options. You may take the database tables in-house and create an engine to query, parse and deliver the data within your services, or you can utilize web services to retrieve just the information for the vehicles you choose.



Scope: US Market
destination consumer
and light duty
commercial vehicles
1981-Present.

The web services provide data on demand. You simply submit a VIN number, and then receive back a well formatted xml document to be imported into your database. **The service also supports batch decoding of up to 50 VINs submitted at one time.** If you have more than 50 VINs that you would like to submit for batch decoding, it is a simple matter to code the submittals into groups of up to 50 VINs.

The decoded data is provided in extensible markup language (XML). It contains the VIN pattern (VIN characters 1-8, 10 & 11) and the corresponding data. An XML document is one of the most common means of presenting complex information and is easy to parse and import into your database structure.



Motorcycles and
Scooter basic data are
available via the web
service. 2000-Present
VIN, Year, Make,
Model, Trim, Plant

The following groups of information are available with this service. A more detailed listing of categories and field level data is provided later in this brochure.

Basic identification, installed equipment, specifications, available optional equipment, available colors, EPA MPG, warranty, MSRP pricing, available options pricing, weights and dimensions, single and multiple stock photos, basic motorcycle data (2000-present)

Web services can be an ideal fit for an organization that requires rapid development and rollout of quality data within solutions and services. Because the web service engine provides the querying and matching in order to return the XML document – the task of using this data is made that much simpler. No decoding engine needs to be written.



Our automotive data supports over 14,000 dealerships in the United States, and is used to decode, promote and market inventory daily.

Our data is also used by global transportation companies who are responsible for the import of new vehicles to the US.

We have clients in just about every sector of the industry which also includes insurance, warranty, financial and local, state, and federal agencies.

+ Pros: Easy to use. Free fully functional production trial (15 days, 50 VINs). No need to write a decoding engine. Fast response time. No need to update databases, the data is always current. The web services provide quick and easy reference for photos and other materials. The web service scales from very low volumes to high volume discounted pricing.

- Cons: It is not possible to build out drop down lists, or search functionality, or develop tools based on data configurations. At a certain point the cost of using a web service will likely exceed the cost of bringing database tables in-house. There are key dependencies on the state of the network between your company and DataOne Software's servers.

Other data options

If you require comprehensive data in-house, we would be happy to discuss licensing requirements with you, and provide the opportunity for you to evaluate the data in-house before licensing. However – the web services are still a good way to preview this data, and we recommend that you start with the web services for a quick preview.

If you require less comprehensive data – our VIN basic file may be the best fit, and a sample file can be found on our website for you to review.

Compatibility and Programming Requirements / VIN Decoding / Checksum



Our services and delivery methods are designed to be platform independent. Our tables are in a common delimited format, XML documents are standard across all environments, and our REST services are also operating system and language independent. We provide links to common resources for XML parsing in various languages from the support section of our website and our technical guides as well as data dictionary are available as reference material as well.

We suggest that you download the code sample from our website support section which best suits your application, or a code sample which is close enough that you are comfortable porting code to your language of choice. Average development time to be able to send and receive a response is about 2 hours.

Requirements

A basic understanding of programming methodology is required in order to implement the XML VIN decoding service. DataOne Software will provide limited support via email relating only to the connection and transmission integration processes, as well as questions relating to data.

VIN Decoding Logistics

How to match up a 17 digit VIN number to our VIN pattern

Our VIN Pattern is digits 1-8, and 10-11. Examples:

JH4DA9359LS000340 = JH4DA935LS

JH4DA9457LS034985 = JH4DA945LS

JH4DA9451LS023870 = JH4DA945LS

How to run a checksum to ensure that you have a valid VIN number

The check digit for a VIN is obtained through a number of mathematical steps. Each letter used in a VIN has a corresponding number value, while numbers stay the same. The VIN becomes a string of 17 numbers with the ninth position being the checksum digit. Each position in the VIN has a weight which is the number of times that digit is multiplied. Example: the weight of position one is eight. A computer multiplies the number in position one by 8. Then multiply all 16 numbers by the appropriate weight for their position in the VIN. The results are added together that result is divided by 11. The remainder is the check digit. If the remainder is 10, the check digit is X.

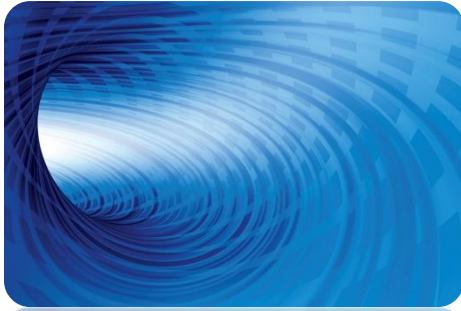
Why 17 Digit VINs?

The United States Department of Transportation created a consistent, unified VIN system in 1981.

Specifically, it included the VIN system in the Code of Federal Regulations, Title 49, Chapter V, Part 565 [ref]. Prior to 1981, auto manufacturers used their own numbering system to stamp cars with unique IDs.

The VIN system conforms to a standard developed by the International Organization for Standardization in 1977: ISO 3779.

Manufacturers use all letters and numbers, with the exception of the letters I, O and Q.



Web services data (XML service version 6.0)

Basic Data

Year, Make, Model, Trim, Style, Vehicle Type, Body Type, Body Subtype, Doors, Model Number, Package Code, Country of Manufacturer, Plant

Engines

Engine Name, Block Type, Bore, Cam Type, Compression, Cylinders, Displacement, Fuel Induction, Fuel Quality, Fuel Type, Invoice Price, Marketing Name, Max HP, Max HP @, Max Payload, Max Torque, MSRP Price, Oil Capacity, Order Code, Redline, Stroke, Valve Timing, Valves

Transmissions

Type, Detail Type, Gears

Engine / Transmission / MPG Associations

Engine ID, Transmission ID, Order Code, Invoice Price, MSRP Price, EPA MPG City, EPA MPG Highway

Specifications

- **Driven Wheels:** Drive Type, Hub Type 4WD
- **Performance:** Acceleration to 100mph, Acceleration to 60mph, Aerodynamic Drag, Braking Distance, Turning Circle
- **Size and Shape Measurements:** Angle of Approach, Angle of Departure, Break over Angle, Front Track, Ground Clearance, Height, Length, Length No Bumpers, Rear Track, Wheelbase, Width, Width No Mirrors
- **Weight Measurements:** Curb Weight, Gross Combined Weight Rating, Gross Vehicle Weight Rating, Gross Vehicle Weight Range, Max Payload, Max Towing Capacity, Base Towing Capacity
- **Interior Dimensions:** Cargo Volume, Cargo Volume Rear Seats Down, Cargo Volume Row3 Down, Interior Volume, Passenger Volume, Passenger Volume Third Row
- **Seating:** Head Room Front, Head Room Rear, Head Room Third Row, Hip Room Front, Hip Room Rear, Hip Room Third Row, Leg Room Front, Leg Room Rear, Leg Room Third Row, Max Seating, Seating Rows, Shoulder Room Front, Shoulder Room Rear, Shoulder Room Third Row, Standard Seating
- **Truck Bed:** Bed Code, Bed Length
- **Wheels and Tires:** Rear Tire Type, Rear Wheel Diameter, Tire Type, Wheel Diameter
- **Fuel Storage:** Tank 1 Capacity, Tank 2 Capacity

Feature Categories

4th Row Seats, ABS Brakes, Air Conditioning, Airbags, Audio System, Brakes, Child Safety, Comfort Features, Convenience Features, Crash Test and Other Ratings, Dimensions, Doors , Driver Seat, Drive train, Engine, Exterior Features, Fleet, Front Row Seats, Fuel Features, Header, Headrests, Hybrid, In Car Entertainment, Instrumentation, Interior, Lights, Locks, Marketing Package, Memorized Settings, Mirrors, Other, Package, Passenger Seat, Power Features, Rear Seats, Roof, Roof and Glass, Safety, Seatbelts, Seats, Security, Spare Tire, Spare Wheel, Stability and Traction, Steering, Suspension, Telematics, Third Row Seat, Tires, Tires - Front if Different, Tires and Rims, Towing and Hauling, Transmission, Truck Features, Video System, Weights and Capacities, Wheels, Wheels - Front Size if Different, Windows

Option Categories

(Values for categories include Install Type, Invoice Price, MSRP Price, Order Code & Description)

4th Row Seats, ABS Brakes, Air Conditioning, Airbags, Audio System, Brakes, Child Safety, Comfort Features, Convenience Features, Crash Test and Other Ratings, Dimensions, Doors , Driver Seat, Drive train, Engine, Exterior Features, Fleet, Front Row Seats, Fuel Features, Header, Headrests, Hybrid, In Car Entertainment, Instrumentation, Interior, Lights, Locks, Marketing Package, Memorized Settings, Mirrors, Other, Package, Passenger Seat, Power Features, Rear Seats, Roof, Roof and Glass, Safety, Seatbelts, Seats, Security, Spare Tire, Spare Wheel, Stability and Traction, Steering, Suspension, Telematics, Third Row Seat, Tires, Tires - Front if Different, Tires and Rims, Towing and Hauling, Transmission, Truck Features, Video System, Weights and Capacities, Wheels, Wheels - Front Size if Different, Windows

Colors

- Interior Colors: Manufacturer Code, Basic Color Name, Manufacturer Color Name, Primary RGB Code, Secondary RGB Code, Is Two Tone, Fabric Type
- Exterior Colors: Manufacturer Code, Basic Color Name, Manufacturer Color Name, Primary RGB Code, Secondary RGB Code, Is Two Tone

Warranties

Warranty Type, Warranty Name, Months, Miles

Pricing

MSRP Price, Invoice Price, Destination Charge, Gas Guzzler Tax

Media

Single Stock photos

Multiple Stock photos

eVox materials ID

How to get started

Sign up for a 15 day trial from our website. Determine if the web service is the best fit for your solution. If you need less data than what is presented, explore the possibility of using our VINBasic file, which contains vehicle identification and basic descriptions.

If the web service is the best fit – contact our business development folks to discuss what data you need, and how you will need to use it within your product or service. Once we understand the usage of the data we can provide you with best pricing in a formal quote.

When you are ready to begin using the web services, your trial account becomes your production account. We remove the day/vin limits and you are all set to begin use under license. As your number of transactions increases or decreases and crosses pricing tiers, we will invoice for that tier each month as stated in your agreement with us.