Fluids

API Reference

Version 1.4
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Contents

Data as a Service Development

Development Kits

To assist application developers in using Data as a Service, MOTOR created Development Kits. The Development Kits include documentation and developer resources that are necessary to develop applications using the MOTOR web services.

The typical development kit includes:

- Development Handbook - Provides information on the API configurations that are required to use the web services and global principles that are required for all web services. Topics covered in the Handbook include:

    - Authentication information

    - Rate limiting

    - HTTP authorization header

    - Correlation support

    - MOTOR and VCdb standards

    - Error Codes

- API References - There is an API Reference for each product offered as Data as a Service. The API Reference contains detailed informationabout the web services included in each product, including:

    - Request details

    - Resource URL

    - Route parameters

    - Query string parameters

    - Sample requests

    - Sample responses in XML

        Note: Examples of the XML responses are provided for reference. They are examples only and the data contained within the responses may have been changed since the publication of this document.

Intended Audience

The contents of this document and other documents included in the Development Kit are technical in nature and therefore intended for a developer. These documents are written for an audience that understands web programming and is familiar with consuming information via web services through HTTP Rest requests.

It is assumed that a developer is familiar with:

- RESTful web services

- Object oriented programming concepts

- HTTP verbs and how they are used (Create = POST, Retrieve = GET, Update= PUT, Delete = DELETE)
- HTTP message construction and general knowledge of HTTP headers and standards
- Stateless and cacheable programming
- Identifying the relationships between resources
- Secure Socket Layer (SSL) programming

Help and Support

For support with Data as a Service development, or to obtain your API key, contact the customer service team:

By email: accountservices@motor.com
By website: "support.motor.com"

An account is required to request support via the web. If you do not have an account, visit support.motor.com and create an account.

Fluids

Get Fluid Details By Application

Resource URL

/Information/Vehicles/Attributes/{AttributeType}/{AttributeID}/Content/Details/Of/Fluids/{ApplicationID}

Resource Verb

GET

Route Details

Returns the details of the fluids that match a specific application record.

Route Parameters

Parameter	Type	Description	Required
AttributeType	String	Describes the type of primary attribute ID supplied in the attributeID route variable.	Yes
AttributeID	Integer	The primary attribute ID of a valid vehicle.	Yes
ApplicationID	Integer	The application ID of an application record.	Yes

Query String Parameters

Parameter	Type	Description	Required	Default
Active	boolean		No	
AX	Integer	Axle Type ID	No	
BD	Integer	Bed Type ID	No	
BR	Integer	Brake Type ID	No	
BS	Integer	Body Style ID	No	
CB	Integer	Cab Type ID	No	
CO	Integer	Country ID	No	
DT	Integer	Drive Type ID	No	
EN	Integer	Engine ID	No	
MB	Integer	Manufacture Body Code ID	No	
SM	Integer	Sub-Model ID	No	
SP	Integer	Spring ID	No	
ST	Integer	Steering ID	No	
TR	Integer	Transmission ID	No	

Parameter	Type	Description	Required	Default
WB	Integer	Wheel Base ID	No	
AttributeStandard	String	The standard for the request and the response returned by the service.	No	MOTOR

Get Fluids Taxonomy

Resource URL

/Information/Vehicles/Attributes/{AttributeType}/{AttributeID}/Content/Taxonomies/Of/Fluids

Resource Verb

GET

Route Details

Returns the taxonomy for fluids.

Route Parameters

Parameter	Type	Description	Required
AttributeType	String	Describes the type of primary attribute ID supplied in the attributeID route variable.	Yes
AttributeID	Integer	The primary attribute ID of a valid vehicle.	Yes

Query String Parameters

Parameter	Type	Description	Required	Default
ContentSilos	String		No	
GroupID	Integer	Taxonomy groupID.	No	
ResultType	String	Determines the result type that the service will return. Valid values are DrillDown or List. When DrillDown is specified, the result will only contain the highest level of taxonomy, based on the supplied FilteredBy parameters.	No	DrillDown
SubGroupID	Integer	Taxonomy subgroupID.	No	
SystemID	Integer	Taxonomy systemID.	No	
AX	Integer	Axle Type ID	No	
BD	Integer	Bed Type ID	No	
BR	Integer	Brake Type ID	No	
BS	Integer	Body Style ID	No	
CB	Integer	Cab Type ID	No	
CO	Integer	Country ID	No	
DT	Integer	Drive Type ID	No	
EN	Integer	Engine ID	No	
MB	Integer	Manufacture Body Code ID	No	

Parameter	Type	Description	Required	Default
SM	Integer	Sub-Model ID	No	
SP	Integer	Spring ID	No	
ST	Integer	Steering ID	No	
TR	Integer	Transmission ID	No	
WB	Integer	Wheel Base ID	No	
AttributeStandard	String	The standard for the request and the response returned by the service.	No	MOTOR

Get Fluids Summary

Resource URL

/Information/Vehicles/Attributes/{AttributeType}/{AttributeID}/Content/Summaries/Of/Fluids

Resource Verb

GET

Route Details

Returns the summary information for fluid applications.

Route Parameters

Parameter	Type	Description	Required
AttributeType	String	Describes the type of primary attribute ID supplied in the attributeID route variable.	Yes
AttributeID	Integer	The primary attribute ID of a valid vehicle.	Yes

Query String Parameters

Parameter	Type	Description	Required	Default
ContentSilos	String		No	
TaxonomyIDs	null integer (int32) Array		No	
GroupID	Integer	Taxonomy groupID.	No	
ItemsPerPage	Integer	The number of results to include in each page.	No	
PageIndex	Integer	The index of the page to return. Each page will contain a maximum of 30 items in each page.	No	
SearchTerm	String	Searching is performed against the taxonomy literal name field and supports partial and complete matches.	No	
SubGroupID	Integer	Taxonomy subgroupID.	No	
SystemID	Integer	Taxonomy systemID.	No	
AX	Integer	Axle Type ID	No	
BD	Integer	Bed Type ID	No	
BR	Integer	Brake Type ID	No	
BS	Integer	Body Style ID	No	

Parameter	Type	Description	Required	Default
CB	Integer	Cab Type ID	No	
CO	Integer	Country ID	No	
DT	Integer	Drive Type ID	No	
EN	Integer	Engine ID	No	
MB	Integer	Manufacture Body Code ID	No	
SM	Integer	Sub-Model ID	No	
SP	Integer	Spring ID	No	
ST	Integer	Steering ID	No	
TR	Integer	Transmission ID	No	
WB	Integer	Wheel Base ID	No	
AttributeStandard	String	The standard for the request and the response returned by the service.	No	MOTOR

Get Fluids Taxonomy With Relation

Resource URL

/Information/Vehicles/Attributes/{AttributeType}/{AttributeID}/Content/Taxonomies/Of/Fluids/Relat
edTo/{ContentType}/{ApplicationID}

Resource Verb

GET

Route Details

Returns a complete list or a filtered list of fluids taxonomy related to the supplied attributeID and
attributeType with relations to other applications.

Route Parameters

Parameter	Type	Description	Required
AttributeType	String	Describes the type of primary attribute ID supplied in the attributeID route variable.	Yes
AttributeID	Integer	The primary attribute ID of a valid vehicle.	Yes
ContentType	String	A content type describing the relation being specified.	Yes
ApplicationID	Integer	The application ID of an application record.	Yes

Query String Parameters

Parameter	Type	Description	Required	Default
AppRelTypes	String	A comma separated list of Application Relation Type IDs to filter the summary results.	No	
ContentSilos	String		No	
GroupID	Integer	Taxonomy groupID.	No	
ResultType	String	Determines the result type that the service will return. Valid values are DrillDown or List. When DrillDown is specified, the result will only contain the highest level of taxonomy, based on the supplied FilteredBy parameters.	No	DrillDown
SubGroupID	Integer	Taxonomy subgroupID.	No	
SystemID	Integer	Taxonomy systemID.	No	
AX	Integer	Axle Type ID	No	
BD	Integer	Bed Type ID	No	
BR	Integer	Brake Type ID	No	

Parameter	Type	Description	Required	Default
BS	Integer	Body Style ID	No	
CB	Integer	Cab Type ID	No	
CO	Integer	Country ID	No	
DT	Integer	Drive Type ID	No	
EN	Integer	Engine ID	No	
MB	Integer	Manufacture Body Code ID	No	
SM	Integer	Sub-Model ID	No	
SP	Integer	Spring ID	No	
ST	Integer	Steering ID	No	
TR	Integer	Transmission ID	No	
WB	Integer	Wheel Base ID	No	
AttributeStandard	String	The standard for the request and the response returned by the service.	No	MOTOR

Get Fluids Summary With Relation

Resource URL

/Information/Vehicles/Attributes/{AttributeType}/{AttributeID}/Content/Summaries/Of/Fluids/Related To/{ContentType}/{ApplicationID}

Resource Verb

GET

Route Details

Returns a paged list of summarized fluids for a specified attributeID and attributeType with relations to other applications.

Route Parameters

Parameter	Type	Description	Required
AttributeType	String	Describes the type of primary attribute ID supplied in the attributeID route variable.	Yes
AttributeID	Integer	The primary attribute ID of a valid vehicle.	Yes
ContentType	String	A content type describing the relation being specified.	Yes
ApplicationID	Integer	The application ID of an application record.	Yes

Query String Parameters

Parameter	Type	Description	Required	Default
AppRelTypes	String	A comma separated list of Application Relation Type IDs to filter the summary results.	No	
ContentSilos	String		No	
TaxonomyIDs	null integer (int32) Array		No	
GroupID	Integer	Taxonomy groupID.	No	
ItemsPerPage	Integer	The number of results to include in each page.	No	
PageIndex	Integer	The index of the page to return. Each page will contain a maximum of 30 items in each page.	No	

Parameter	Type	Description	Required	Default
SearchTerm	String	Searching is performed against the taxonomy literal name field and supports partial and complete matches.	No	
SubGroupID	Integer	Taxonomy subgroupID.	No	
SystemID	Integer	Taxonomy systemID.	No	
AX	Integer	Axle Type ID	No	
BD	Integer	Bed Type ID	No	
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SM	Integer	Sub-Model ID	No	
SP	Integer	Spring ID	No	
ST	Integer	Steering ID	No	
TR	Integer	Transmission ID	No	
WB	Integer	Wheel Base ID	No	
AttributeStandard	String	The standard for the request and the response returned by the service.	No	MOTOR

Common Response Objects

ContentCategory

Parameter	Type	Description
Article	String	The third level categorization of the application by type of content.
ID	Integer	Unique identifier for a combination of Product Type, Product, and Article.
Product	String	The second level categorization of the application by type of content.
ProductType	String	The top level categorization of the application by type of content.

EngineInfo

Parameter	Type	Description
Aspiration	String	Aspiration or Boost Type name – Normal, Turbocharger, Supercharged, etc.
BlockType	String	Engine block type – V, In-line,Rotary, etc.
CID	String	Cubic inches of displacement represented as a whole number – 350, 400, etc.
CylinderCC	String	Cubic centimeters represented as a whole number – 2800, 3200, etc.
CylinderHeadType	String	Value of cylinder head name, SOHC, DOHC and OHV.
CylinderLiter	String	Number of engine liters to one decimal point of precision - 2.8, 3.0, etc
Cylinders	String	Number of engine cylinders represented as a whole number – 4, 6, 8, etc.
Description	String	
Designation	String	Manufacturer unique code, 2-TC, etc.
EngineBoreInch	String	Engine cylinder bore in inches to a minimum of two decimal points of precision – 1.14, 3.50, etc., or to a maximum of four decimal points of significant precision – eg. 1.233 not 1.2330.
EngineBoreMetric	String	Engine cylinder bore in millimeters to a minimum of one decimal point of precision – 28.0, 32.5, etc., or to a maximum of four decimal points of significant precision – eg. 2.093 not 2.0930.
EngineID	Integer	Unique, system generated identifier
EngineStrokeInch	String	Engine cylinder stroke in inches to a minimum of two decimal points of precision – 1.14, 3.50, etc., or to a maximum of four decimal points of significant precision – eg. 1.233 not 1.2330.

Parameter	Type	Description
EngineStrokeMetric	String	Engine cylinder stroke in millimeters to a minimum of one decimal point of precision – 54.0, 67.5, etc., to a maximum of four decimal points of significant precision – eg. 2.093 not 2.0930.
EngineVIN	String	Unique, system generated identifier from the EngineVIN table.
FuelDeliveryInfo	FuelDelivery	
FuelType	String	Fuel type - Diesel, Gas, etc.
HorsePower	String	
IgnitionSystem	String	Basic ignition system type - Distributor-Breaker, Distributorless, etc.
KilowattPower	String	Engine Power output expressed in Kilowatts, including a decimal point only when required to represent fractional values.
Manufacturer	String	Name of component manufacturer – Allison, Borg Warner, Ford, Toyota, etc.
ManufacturerType	String	
Valves	String	Total number of intake and exhaust vales in the engine – 8, 16, 24, etc.
Version	String	Engine version, i.e. "Windsor", "Cleveland", "Modified", etc.

EstimatedWorkTimeSummary

Parameter	Type	Description
Notes	Note Array	Provides additional information about what is and is not included in the estimated time.
AdditionalLaborTime	number (double)	MOTOR estimated time to perform the operation on additional instances of the part.
AdditionalLaborTimeDescription	String	Description of the additional labor time, such as "Each Additional".
AdditionalWarrantyLaborTime	number (double)	OEM warranty time for performing the operation on additional instances of the part.
AllLaborTime	number (double)	Description of all labor time, such as "All", "Both", "Both Sides".
AllLaborTimeDescription	String	Description of all labor time, such as "All", "Both", "Both Sides".
AllWarrantyLaborTime	number (double)	OEM warranty time for performing the operation on all instances of the part.
BaseLaborTime	number (double)	MOTOR estimated time to perform the operation.
BaseLaborTimeDescription	String	
BaseWarrantyLaborTime	number (double)	OEM warranty time for performing the operation.
EstimatedWorkTimeID	Integer	Identifier of the labor time.
LaborTimeInterval	String	Unit of measure, will be either Minutes or Hours.

Parameter	Type	Description
RequiredSkill	Skill	
ServiceType	String	Grouping of types of service. Values are: Inspect or Service.

EstimatedWorkTimeApplicationSummary

Parameter	Type	Description
Category	ContentCategory	
IsMatch	boolean	
Items	EstimatedWorkTimeSummary Array	
OptionalWorkTimes	EstimatedWorkTimeApplicationSummary Array	
Taxonomy	TaxonomyInfo	
ApplicationID	Integer	Unique identifier which indexes the defining attributes of the data item.
AppRelationType	[ApplicationRelationType]	
AttributeMappings	MappedAttribute Array	
ContentSilos	[ContentSilo] Array	
DisplayName	String	The name of the application.
IsActive	boolean	If the IsActive flag is returned as 'true', the data associated with the flag is applicable. If the IsActive flag is returned as 'false', the data has been superseded.
Links	Link Array	
Position	PositionInfo	
Qualifiers	QualifierInfo Array	

FuelDelivery

Parameter	Type	Description
ControlType	String	Description of fuel delivery method - Carburetion, Fuel Injection, etc.
FuelDeliveryID	Integer	Unique, system generated identifier.
SubType	String	Unique, system generated identifier from the FuelDeliverySubType table.
SystemDesign	String	Unique, system generated identifier from the FuelSystemDesign table.
Type	String	

Link

Parameter	Type	Description
Href	String	Contains the URI to identify the location of additional information.
Rel	String	Rel describes the type of link. A self link is a link to the object itself. This is a RESTful good practice to include a self link so that the object can be easily retrieved or referenced later.

MappedAttribute

Parameter	Type	Description
ID	Integer	Unique identifier of the referenced attribute.
Type	String	A two character abbreviation of the attribute of the corresponding ID.

Note

Parameter	Type	Description
NoteID	Integer	Unique identifier of the note.
Text	String	Note text.

PCDBCategory

Parameter	Type	Description
ID	Integer	
Name	String	The common language name of the part.
SubCategory	[PCDBSubCategory]	

PCDBPartInfo

Parameter	Type	Description
Category	PCDBCategory	
PartTerminologyID	Integer	The identifier of the part.
PartTerminologyName	String	The common language name of the part.

PositionInfo

Parameter	Type	Description
Name	String	Textual description.
PCDBPositionID	Integer	

Parameter	Type	Description
PositionID	Integer	Unique identifier.
Type	String	MOTOR_Position is the default value.

QualifierInfo

Parameter	Type	Description
Description	String	Textual description of the qualifier, used for display.
Family	String	Categorization of the qualifier, the top level is Type, followed by Family.
IsActive	boolean	If true, this information is still applicable. If false, this data has been changed and should be queried again to retrieve the new data.
QualifierID	Integer	Unique identifier of the qualifier.
Sequence	Integer	Dictates the order in which the qualifiers are displayed within the group.
Type	String	Categorization of the qualifier, the top level is Type, followed by Family.

Skill

Parameter	Type	Description
Code	String	Unique code for each skill name and description.
Description	String	Description of the skills required for an application.
Name	String	Description of the skill.

TaxonomyInfo

Parameter	Type	Description
Action	String	
CommonName	String	
GroupID	Integer	The identifier of the taxonomy group.
GroupName	String	The name of the taxonomy group.
InfoObject	[InformationObject]	
LiteralName	String	The literal name of the maintenance schedule application, for example Brake Pad Inspection.
SubGroupID	Integer	The identifier of the taxonomy sub group.
SubGroupName	String	The name of the taxonomy sub group.
SystemID	Integer	The identifier of the taxonomy system.
SystemName	String	The name of the taxonomy system.
TaxonomyID	Integer	Unique identifier of the application's taxonomy record.