

Integration Guide





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DOCUMENT OVERVIEW

Recognizing that you may be new to the Developer Portal, this guide provides step-by-step instructions on how to make requests using the Test Client within the Portal.

The Request Object section provides examples that you can use to make requests in the Developer Portal so that you can jump start your understanding of the VSS product.

The Response Object section provides a brief description of the VSS response object and informs you about where you can go to get more information about the response.

The final section directs you to where you can get more integration information once you are ready to start developing your own application.

Related Documentation

Document	Description
API Reference	The VSS API reference is available in a Swagger UI format within the Portal. It describes the service, each endpoint, each input attribute, and each output attribute.
Category ID to Feature ID Mapping Document	This document may be useful to any clients that have previously implemented the Automotive Description Service (ADS). The document contains mapping of Chrome Category IDs used by ADS to Feature IDs used by ChromeData VIN Descriptions (CVD).
Portal Guide	The Portal Orientation guide provides step-by-step instructions on how to navigate and use the Portal. For example, it explains how you can make requests using the Portal's Test Client. Once you understand how to find and use the Test Client, you can use the example requests in this guide within the Test Client to send requests.
Security Guide	The Shared Secret Security Protocol document describes how to build and integrate a security token protocol into the Authorization header of the request to the service. You would need this information after you have finished testing a service in the Portal and are ready to begin your development work.

CONTACTING CLIENT SUPPORT

Client Support is available by phone toll-free at (800) 937-3661, Monday through Friday, from 6:00 a.m. to 5:00 p.m. Pacific Time, or you can reach Client Support by email at support@chromedata.com. Our dedicated support team can help you with any product-related support or questions.

PRODUCT OVERVIEW

The ChromeData Vehicle Selector Service v1.0 is a RESTful service that helps you with the model walk capability. The following endpoints allow you to do just that and much more.

1. Years: Will return all years for a specific locale



- 2. Makes: Will return all makes and make codes for a specific locale + year
- 3. Models: Will return all models and YMMIds for a locale + year + make code
- 4. Styles: Will return a small number of attributes about all styles for a locale+Year+makecode+ model
- 5. StyleDetails: Will return a catalog view of a particular styleId + locale

Product Licensing

The following table describes the two VSS licenses.

License Type	Description
Selector	Allows user to implement a Year, Make, Model call, resulting in return of available style lds.
StyleDetails	Allows the user to retrieve style details for a unique StyleID

Note: Please refer to your Welcome Letter (from FulfillmentWelcomeTeam@autodata.net) that will describe your licensing, and contains information about your profiles such as profile names, profile keys, default profile, and billing type for each of your profiles. Your profile key is a unique identifier that distinguishes each of your profiles when making CVD calls. It is very important to review and understand your setup to avoid incurring higher transaction rates for Build Data when that is not desired. For more information regarding Profiles please see 'Using The Developer Portal To Make Request' section of this document.

BUILDING A VEHICLE SELECTION WORKFLOW

In some workflows, it may be desirable to allow a user to select a vehicle when the user does not have a VIN but to do so, requires a YMM Catalog license. Please validate with your contract what allowed use cases and cost models may be associated.

To support these cases, VSS includes operations that allows you to build a vehicle selector by year, make, model, style.

These selector methods include:

- getYears
- getMake
- getModel
- GetStyle
- GetStyleDetails



When building a vehicle selector, the output selected from the prior selection becomes the input for the subsequent call. For example, if the user selects a year as returned by getYears, the selected year becomes the input to getMake. That process continues for getModel until the user selects a style via getStyle.

That is, for a model selection, one would use getYears, getMake. For a Style selection, one would use: getYears, getMake, getModels.

The Style returned by the getStyles operation provides access to the style name as well as the style IDs. Using the style IDs returned and the GetStyleDetails operation, you can access the full description for that vehicle.

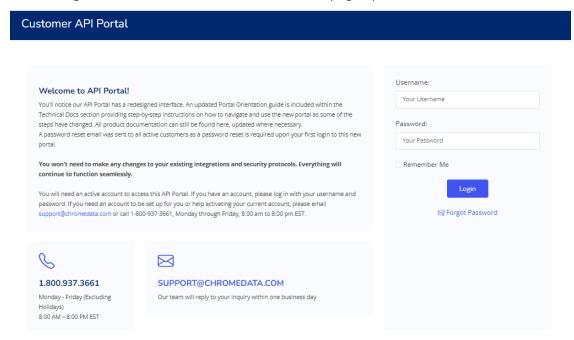
USING THE DEVELOPER PORTAL TO MAKE REQUESTS

You can access and use the VSS operations using the Developer Portal. You can access the swagger documentation and make a request from there or preferably you can use the Test Client. This section describes how to use the Test Client.

Executing a GET Request

The following provides step-by-step instructions on how to make a GET request.

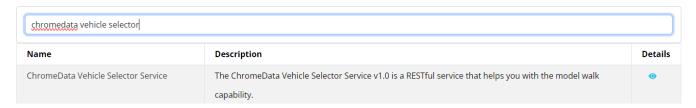
1. Log in to the J.D. Power API Portal. The APIs page opens.



2. Find the ChromeData Vehicle Selector Service API and click the eye icon associated with it (under the Details column).

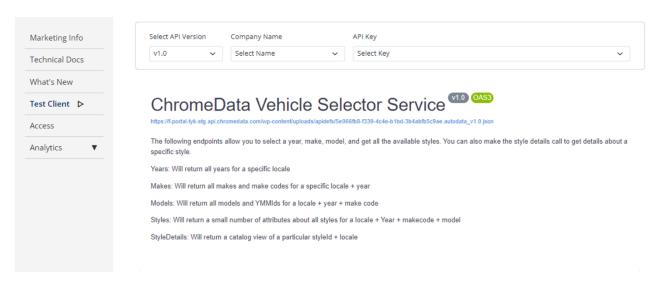


APIs



- 3. In the left navigation menu, click Test Client.
- 4. On the Test Client page, select the API Version, company name, and API Key.

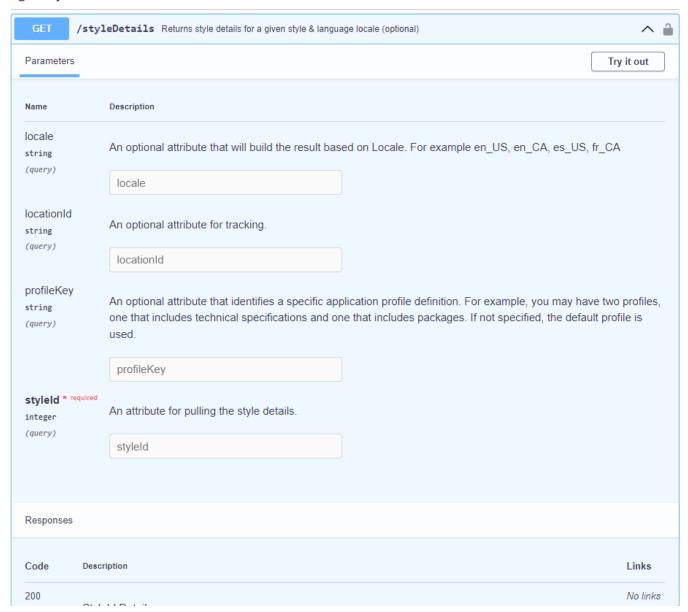
API: ChromeData Vehicle Selector Service



5. Click on a method (year, make, model, style, style detail), to expand the options.



getStyleDetails



- 6. Click Try it out. The text fields are now editable.
- 7. Enter the relevant information into the text fields. Note: Refer to the various Operation sections later in this guide for details on the parameters for each operation.
- 8. Click Execute.
- 9. The request is sent, and response details are returned below on the page.



Note- Recommendation is to include the following in the request:

Header Key: Accept-Encoding

Value: gzip

Method	Endpoint Path	Summary
GET	/years	Returns all available years for a given language locale

REQUEST OBJECT

The following table provides the query parameters that you can use to specify advance search criteria to fine tune scope of the search results.

Parameter	Required	Datatype	Description
locale	No	String Query	Specifies the response language locale. Valid values are en_US (United States, English), es_US (United States, Spanish), en_CA (Canada, English), fr_CA (Canada, French).
locationId	No	String Query	Location identifier, such as Store Number, for callers use only. This is returned in the response and does not impact Style description in response. This identifier will be reflected in monthly billing reports if provided. Example: 1A1A1A_ABC
profileKey	No	String Query	An optional attribute that identifies a specific application profile definition. When a user has more than one profile, one is designated the default and used for requests when a profile key is not sent in the request. For example, you may have two profiles, one that includes catalog data and one that includes Build Data. Example: 123ABC-ABC123

Sample GETYEAR request

/years?locale={String}&locationId={String}&profileKey={String}

RESPONSE OBJECT

The following table provides the attributes returned in the response.



Level	Elements	Data Type	Description
1	.error	Boolean	Contains a flag that when set to true indicates that an error occurred with the request. Example: true
1	.executionTimeMS	Integer	Contains the execution time in milliseconds to process the request. Example: 120
1	.copyright	String	Contains the copyright information. Example: Copyright 2021 Autodata, Inc. dba ChromeData. All rights reserved
1	.locationId	String	Location identifier, such as Store Number, for callers use only. This is returned in the response and does not impact Style description in response. This identifier will be reflected in monthly billing reports if provided. Example: 1A1A1A_ABC
1	.message	String	If there was an error while processing the request, then a user-friendly message will be returned: 1. Status Code: 400 Bad Request a. It indicates that the server cannot process the request due to something that is perceived to be a client error (for example, malformed request syntax, invalid request message framing, or deceptive request routing). 2. Status Code: 401 Unauthorized a. It indicates that the client request has not been completed because it lacks valid authentication credentials for the requested resource. 3. Status Code: 404 Not found a. Example - Years not found for provided locale 4. Status Code: 440 Invalid ProfileKey a. Example: Profile Key [test] is not active or not exists. Contact Support for assistance 5. Status Code: 503 Service Unavailable a. It indicates that the server is not ready to handle the request.
1	.result	Object	Contains the requested data.
2	years	Array	Contains the List of years. Example: 2023, 2022, 2021

GET LIST OF MAKES



Method	Endpoint URL	Summary
GET	/makes	Returns all available make for a given year & language locale

REQUEST OBJECT

The following table provides the query parameters that you can use to specify advance search criteria to fine tune scope of the search results.

Parameter	Required	Datatype	Description
year	Yes	Integer Query	It determines the makes that get returned in the response.
locale	No	String Query	Specifies the response language locale. Valid values are en_US (United States, English), es_US (United States, Spanish), en_CA (Canada, English), fr_CA (Canada, French).
locationId	No	String Query	Location identifier, such as Store Number, for callers use only. This is returned in the response and does not impact Style description in response. This identifier will be reflected in monthly billing reports if provided. Example: 1A1A1A_ABC
profileKey	No	String Query	An optional attribute that identifies a specific application profile definition. For example, you may have two profiles, one that includes technical specifications and one that includes packages. If not specified, the default profile is used.

Sample GETMAKES request

/makes?year={Integer}&locale={String}&locationId={String}&profileKey={String}

RESPONSE OBJECT

The following table provides the attributes returned in the response.

Level	Elements	Data Type	Description
1	.error	Boolean	Contains a flag that when set to true indicates that an error occurred with the request. Example: true
1	.executionTimeMS	Integer	Contains the execution time in milliseconds to process the request.



Level	Elements	Data Type	Description
			Example: 120
1	.copyright	String	Contains the copyright information.
			Example: Copyright 2021 Autodata, Inc. dba ChromeData. All rights reserved
1	.executionTimeMS	Integer	Contains the execution time in milliseconds to process the request.
1	.locationId	String	Location identifier, such as Store Number, for callers use only. This is returned in the response and does not impact Style description in response. This identifier will be reflected in monthly billing reports if provided. Example: 1A1A1A_ABC
1	.message	String	If there was an error while processing the request, then a user- friendly message will be returned:
			 Status Code: 400 Bad Request a. It indicates that the server cannot process the request due to something that is perceived to be a client error (for example, malformed request syntax, invalid request message framing, or deceptive request routing). Status Code: 401 Unauthorized a. It indicates that the client request has not been completed because it lacks valid authentication credentials for the requested resource. Status Code: 404 Not found a. Example - No makes could be found for provided locale and year Status Code 406: Missing year a. Error Message: Missing required field: year Status Code 440: Invalid ProfileKey a. Error Message: Profile Key [test] is not active or not exists. Contact Support for assistance Status Code: 503 Service Unavailable a. It indicates that the server is not ready to handle the request.
1	.result	Object	Contains the requested data.
2	makes	Object	Contains a listing of make and make code.
3	make	String	Contains the brand of the Vehicle. Example: Acura
3	makeCode	String	Contains the code for each vehicle make. Example: AC



GET LIST OF MODELS

Method	Endpoint URL	Summary
GET	/models	Returns all available model for a given year, make code & language locale

REQUEST OBJECT

The following table provides the query parameters that you can use to specify advance search criteria to fine tune scope of the search results.

Parameter	Required	Datatype	Description
year	Yes	Integer <i>Query</i>	It determines the makes that get returned in the response.
makeCode	Yes	String <i>Query</i>	It determines the models that get returned in the response.
locale	No	String Query	Specifies the response language locale. Valid values are en_US (United States, English), es_US (United States, Spanish), en_CA (Canada, English), fr_CA (Canada, French).
locationId	No	String Query	Location identifier, such as Store Number, for callers use only. This is returned in the response and does not impact Style description in response. This identifier will be reflected in monthly billing reports if provided. Example: 1A1A1A_ABC
profileKey	No	String Query	An optional attribute that identifies a specific application profile definition. For example, you may have two profiles, one that includes technical specifications and one that includes packages. If not specified, the default profile is used.

Sample GETMODELS request

/models?year={Integer}&makeCode={String}&locale={String}&locationId={String}&profileKey={String}

RESPONSE OBJECT

The following table provides the attributes returned in the response.

Leve	el	Elements	Data Type	Description
	1	.executionTimeMS	Integer	Contains the execution time in milliseconds to process the request.



Level	Elements	Data Type	Description
1	.locationId	String	Location identifier, such as Store Number, for callers use only. This is returned in the response and does not impact Style description in response. This identifier will be reflected in monthly billing reports if provided.
			Example: 1A1A1A_ABC
1	.message	String	If there was an error while processing the request, then a user-friendly message will be returned: 1. Status Code: 400 Bad Request a. It indicates that the server cannot process the request due to something that is perceived to be a client error (for example, malformed request syntax, invalid request message framing, or deceptive request routing). 2. Status Code: 401 Unauthorized a. It indicates that the client request has not been completed because it lacks valid authentication credentials for the requested resource. 3. Status Code: 404 Not found a. Example - No models could be found for provided locale, year and makeCode. 4. Status Code 406: Missing required field a. Example - Missing required field: {year/makeCode} 5. Status Code: 440 Invalid ProfileKey a. Example: Profile Key [test] is not active or not exists. Contact Support for assistance 6. Status Code: 503 Service Unavailable a. It indicates that the server is not ready to handle the request.
1	.result	Object	Contains the requested data.
2	models	Object	Contains a listing of model details such as modelYearid and related year, make code and description.
3	modelYearId	Integer	Contains the ld for the model Year Example: 10032
3	year	Integer	Contains the year for the related model.
3	makeCode	String	Example: 2022, 2023 Contains the code for each vehicle make. Example: AC
3	description	String	Contains the description for each model Example: AC

GET LIST OF STYLES



Method	Endpoint URL	Summary
GET	/styles	Returns all available style for a given year, make, model & language locale

REQUEST OBJECT

The following table provides the query parameters that you can use to specify advance search criteria to fine tune scope of the search results.

Parameter	Required	Datatype	Description
year	Yes	Integer Query	It determines the makes that get returned in the response.
makeCode	Yes	String <i>Query</i>	It determines the models that get returned in the response.
model	Yes	String <i>Query</i>	It determines the Styles that get returned in the response.
locale	No	String Query	Specifies the response language locale. Valid values are en_US (United States, English), es_US (United States, Spanish), en_CA (Canada, English), fr_CA (Canada, French).
locationId	No	String Query	Location identifier, such as Store Number, for callers use only. This is returned in the response and does not impact Style description in response. This identifier will be reflected in monthly billing reports if provided. Example: 1A1A1A_ABC
profileKey	No	String Query	An optional attribute that identifies a specific application profile definition. For example, you may have two profiles, one that includes technical specifications and one that includes packages. If not specified, the default profile is used.

Sample GETSTYLES request

/styles?year={Integer}&makeCode={String}&model={String}&locale={String}&locationId={String}&profileKey={String}

RESPONSE OBJECT

The following table provides the attributes returned in the response.



Level	Elements	Data Type	Description
1	.executionTimeMS	Integer	Contains the execution time in milliseconds to process the request.
1	locationId	String	Location identifier, such as Store Number, for callers use only. This is returned in the response and does not impact Style description in response. This identifier will be reflected in monthly billing reports if provided. Example: 1A1A1A_ABC
1	.message	String	If there was an error while processing the request, then a user-friendly message will be returned: 1. Status Code: 400 Bad Request a. It indicates that the server cannot process the request due to something that is perceived to be a client error (for example, malformed request syntax, invalid request message framing, or deceptive request routing). 2. Status Code: 401 Unauthorized a. It indicates that the client request has not been completed because it lacks valid authentication credentials for the requested resource. 3. Status Code: 404 Not found a. Example - No styles could be found for provided locale, year, model and makeCode. 4. Status Code 406 - Missing year/makeCode/model a. Error Message: Missing required fields: [list of missing fields goes here] 5. Status Code: 440: Invalid ProfileKey a. Error Message: Profile Key [test] is not active or not exists. Contact Support for assistance 6. Status Code: 503 Service Unavailable a. It indicates that the server is not ready to handle the request.
1	.result	Object	Contains the requested data.
2	styles	Object	Contains the style details.
3	styleId	Integer	Contains the Chrome StyleId of the vehicle. Example: 134888
3	year	Integer	Contains the model year Example: 1992
3	make	String	Contains the make. Example: Chrysler
3	model	String	Contains the model. Example: Imperial
3	trim	String	Contains the vehicle's trim description.
3	styleDescription	String	Contains the description of Chrome StyleId.



Level	Elements	Data Type	Description
3	modelld	Integer	Contains the Chrome YMMID

GET LIST OF STYLES DETAILS

Method	Endpoint URL	Summary
GET	/styleDetails	Returns style details for a given style & language locale

REQUEST OBJECT

The following table provides the query parameters that you can use to specify advance search criteria to fine tune scope of the search results.

Parameter	Required	Datatype	Description
styleId	Yes	Integer Query	It determines the Style details that get returned in the response.
locale	No	String Query	Specifies the response language locale. Valid values are en_US (United States, English), es_US (United States, Spanish), en_CA (Canada, English), fr_CA (Canada, French).
locationId	No	String Query	Location identifier, such as Store Number, for callers use only. This is returned in the response and does not impact Style description in response. This identifier will be reflected in monthly billing reports if provided. Example: 1A1A1A_ABC
profileKey	No	String Query	An optional attribute that identifies a specific application profile definition. For example, you may have two profiles, one that includes technical specifications and one that includes packages. If not specified, the default profile is used.

Sample GETSTYLEDETAILS request

/styleDetails?styleId={Integer}&locale={String}&locationId={String}&profileKey={String}



RESPONSE OBJECT

The following table provides the attributes returned in the response.

Level	Elements	Data Type	Description
1	.locationId	String	Location identifier, such as Store Number, for callers use only. This is returned in the response and does not impact Style description in response. This identifier will be reflected in monthly billing reports if provided. Example: 1A1A1A_ABC
1	.message	String	If there was an error while processing the request, then a user-friendly message will be returned: 1. Status Code: 400 Bad Request a. It indicates that the server cannot process the request due to something that is perceived to be a client error (for example, malformed request syntax, invalid request message framing, or deceptive request routing). 2. Status Code: 401 Unauthorized a. It indicates that the client request has not been completed because it lacks valid authentication credentials for the requested resource. 3. Status Code: 404 Not found a. Example - No styles details could be found for provided locale and style id. 4. Status Code 406 - Style id a. Error Message: Missing required fields: [StyleId] 5. Status Code: 440: Invalid ProfileKey a. Error Message: Profile Key [test] is not active or not exists. Contact Support for assistance 6. Status Code: 503 Service Unavailable a. It indicates that the server is not ready to handle the request.
1	.result	Object	Contains the requested data.
1	.vehicle	Object	Contains information about the vehicle.
2	year	String	Contains the model year. Example: 2020
2	make	String	Contains the make. Example: Ford
2	model	String	Contains the model description. Example: F-150
2	modelID	Integer	Contains the Chrome YMMID. Example: 31214
2	styleId	Integer	Contains the Chrome StyleId of the vehicle. example: 403565
2	styleDescription	String	Contains the description for the Chrome StyleId. example: 403565
2	trim	String	Contains the vehicle's trim description. example: Limited
2	baseMSRP	double	Contains the MSRP of the base vehicle price before adding options. example: 70560
2	destinationCharge	double	Contains the destination charge (Freight) for the vehicle. example: 1695



2	driveType	String	Contains the vehicle's drive type. example: 4X4
2	bodyType	String	Contains the classification of the vehicle's body style. Example: Crew Cab for trucks, Sedan for cars. example: SuperCrew Cab Styleside
2	standardCurbWeight	Integer	Contains the standard curb weight. This does not include the installed options. example: 6950
2	standardPayload	Integer	Contains the standard payload capacity. This does not include the installed options. example: 7040
2	standardTowingCapac ity	Integer	Contains the standard conventional towing capacity. This does not include the installed options. example: 12100
2	country	String	Contains the target country of sale for the vehicle. This country could be different than WMI country. example: US
2	standardGVWR	Integer	Contains the standard gross vehicle weight rating. This does not include the installed options. example: 6750
2	mfrModelCode	String	Contains a unique identifier assigned by the manufacturer to identify a vehicle (MMC). example: W1E
2	doors	Integer	Contains the number of doors. example: 4
2	boxStyle	String	Contains the box style of a truck. Example: Regular Side
2	segment	Array	Contains the vehicle type classification(s).
2	wheelbase	String	Contains the vehicle wheelbase. Example: Truck
2	baseInvoice	Number (double)	Contains the base Invoice price of the vehicle before adding options.
2	modelDesignChangeD etails	Object	Contains the vehicle model design change details. (only available in English)
3	designChange	Boolean	If true, this indicates that the vehicle had design change.
3	designChangeReason	String	Example: New trim, Exterior appearance change, New model name, or New model design
1	.exteriorColors	Object	Contains exterior color information.
2	genericDesc	String	Contains a generic description. example: Red
2	description	String	Contains the manufacturer's description. example: Blue Jeans Metallic
2	colorCode	String	Contains the manufacturer option code. example: G1K
2	rgbValue	String	Contains the RGB values for the exterior color description. example: 17,41,59
2	rgbHexValue	String	Contains the RGB hex values for the exterior color description. example: #FFFFFF
2	type	Integer	Contains an identifier that indicates the categorization of the exterior color. Possible values: 1 for body, 2 for rooftop or 3 for stripe(s). example: 1
2	primary	Boolean	Contains a flag that when set to true indicates that the exterior color has a secondary exterior color. example: true
1	.interiorColors	Object	Contains interior color information.
			Note: When the exact installed color cannot be determined, all available colors



2	genericDesc	String	Contains a generic description. example: Gray
2	colorCode	String	Contains the manufacturer option code. example: AG
2	description	String	Contains the manufacturer's description. example: Medium Earth Gray
1	.features	Object	Contains features information.
2	id	String	Contains a unique classification for the vehicle content. example: 10276
2	key	String	Contains the key identifier for the vehicle content. example: 102760-BEP1002
2	sectionId	String	Contains a unique identifier for the feature section. example: 9
2	subSectionId	Integer	Contains a unique identifier for the feature sub-section. example: 1230
2	sectionName	String	Contains a user-friendly description of the feature section. example: Packages
2	name	String	Contains a user-friendly branded description of the feature. example: FordPass Connect smart device engine start control
2	nameNoBrand	String	Contains a user-friendly non-branded description of the feature. example: Smart device engine start control
2	description	String	Contains a category description of the feature. example: Fob remote engine controls
2	rankingValue	Integer	Contains a numerical value that represents the relevance of the feature. Note: Higher numerical value = More importance. These values are assigned by our automotive experts with lower values representing equipment or features/tech specs/packages that are commonly found on most vehicles. Higher values are assigned to equipment and features considered advanced or of a higher price point. Leverage the rankings to display relevancy of key features on vehicle details pages for shopper convenience.example: 110
			Note: Higher numerical value= More importance
2	featureKeyAnswers	String	Contains internal code identifiers for the feature. example: HAA02=02
2	styles	Object	Contains style information for the feature.
3	styleIds	Array	Contains the Chrome StyleId(s) of the vehicle. example: 403565
3	installCause	String	Contains an identifier for the data source used to install. Valid values are (S = Standard, R = Standard but changeable, A = Available) Example: S, R and A.
3	isStandard	Boolean	If true, this indicates that it is standard. Example: true
2	isHybridFeature	Boolean	If true, this indicates that it is Hybrid feature.
2	isEVFeature	Boolean	If true, this indicates that it is EV feature.
2	BenefitStatement	Object	Contains benefit statement information.
3	title	String	Contains the title for the benefit statement. example: Driver foot rest
3	definition	String	Contains the definition for the benefit statement. example: >- The driver's footrest, or dead pedal, is located on the left side of the driver's footwell.
3	statement	String	Contains the statement. example: > Driver foot rest - Put your foot up. Driver's foot rest - or dead pedal - is located on the left side of the footwell and provides the driver a solid place to brace themselves from movement as well as



			aiding in comfort on long trips. Sit back and relax with a driver foot rest.
2	adsCategorylds	String	Contains the ADS Category ID. Can be used by migrated ADS clients.
2	adsCategoryIdDescrip tions	String	Contains the ADS Category ID Description. Can be used by migrated ADS clients.
2	adsTypeIds	String	Contains the ADS Type ID. Can be used by migrated ADS clients.
2	adsTypeIdDescription s	String	Contains the ADS Type ID Description. Can be used by migrated ADS clients.
1	.techSpecs	Object	Contains technical specification information.
2	id	String	Contains a categorization ld for the tech spec. Example: id=17570, description=GVWR. example: '17570'
2	key	String	Contains the unique key identifier that defines the name attributes value. example: 102760-BEP1002
2	sectionId	String	Contains a unique identifier for the tech spec section. example: '9'
2	subSectionId	Integer	Contains a unique identifier for the tech spec sub-section. example: 1230
2	sectionName	String	Contains a user-friendly description of the tech spec section. example: Packages
2	name	String	Contains a user-friendly branded description of the tech spec example: FordPass Connect smart device engine start control
2	nameNoBrand	String	Contains a user-friendly non-branded description of the tech spec example: Smart device engine start control
2	description	String	Contains a category description of the tech spec example: Fob remote engine controls
2	rankingValue	Integer	Contains a numerical value that represents the relevance of the feature. Note: Higher numerical value = More importance. These values are assigned by our automotive experts with lower values representing equipment or features/tech specs/packages that are commonly found on most vehicles. Higher values are assigned to equipment and features considered advanced or of a higher price point. Leverage the rankings to display relevancy of key features on vehicle details pages for shopper convenience.example: 110
			Note: Higher numerical value= More importance
2	featureKeyAnswers	String	Contains internal code identifiers for the tech spec.
2	styles	Object	Contains style information for the feature.
3	stylelds	Array	Contains the Chrome StyleId(s) of the vehicle. example: 403565
3	installCause	String	Contains an identifier for the data source used to install. Valid values are (S = Standard, R = Standard but changeable, A = Available) Example: S, R and A.
3	isStandard	Boolean	If true, this indicates that it is standard. Example: true
2	isHybridFeature	Boolean	If true, this indicates that it is Hybrid feature.
2	isEVFeature	Boolean	If true, this indicates that it is EV feature.
2	BenefitStatement	Object	Contains benefit statement information.
3	title	String	Contains the title for the benefit statement. example: Driver foot rest
3	definition	String	Contains the definition for the benefit statement.



			example: >-The driver's foot rest, or dead pedal, is located on the left side of the driver's footwell.
3	statement	String	Contains the statement. example: >-Driver foot rest - Put your foot up. Driver's foot rest - or dead pedal - is located on the left side of the footwell and provides the driver a solid place to brace themselves from movement as well as aiding in comfort on long trips. Sit back and relax with a driver foot rest.
2	UnitsOfMeasureAndVal ues	Array	Contains a list of unit of measure and value.
3	unitOfMeasure	String	Contains unit of measure. example: lbs.
3	value	String	Contains value. example: 6065.
2	adsCategorylds	String	Contains the ADS Category ID. Can be used by migrated ADS clients.
2	adsCategoryIdDescrip tions	String	Contains the ADS Category ID Description. Can be used by migrated ADS clients.
2	adsTypelds	String	Contains the ADS Type ID. Can be used by migrated ADS clients.
2	adsTypeIdDescription s	String	Contains the ADS Type ID Description. Can be used by migrated ADS clients.
1	.package	Object	Contains package information.
2	id	String	Contains an id for the package example: 10276
2	key	String	Contains the key identifier for the package. example: 102760-BEP1002
2	sectionId	String	Contains a unique identifier for the package section. example: 9
2	subSectionId	Integer	Contains a unique identifier for the package sub-section. example: 1230
2	sectionName	String	Contains a user-friendly description of the package section. Example: Packages
2	name	String	Contains a user-friendly branded description of the package. Example: XLT Chrome Appearance Package
2	nameNoBrand	String	Contains a user-friendly non-branded description of the package. Example: XLT Chrome Appearance Package
2	description	String	Contains a category description of the package. Example: XLT Chrome Appearance Package
2	rankingValue	Integer	Contains a numerical value that represents the relevance of the feature. Note: Higher numerical value = More importance. These values are assigned by our automotive experts with lower values representing equipment or features/tech specs/packages that are commonly found on most vehicles. Higher values are assigned to equipment and features considered advanced or of a higher price point.
			Leverage the rankings to display relevancy of key features/tech specs/packages on vehicle details pages for shopper convenience. Note: Higher numerical value= More importance
2	featureKeyAnswers	Array	Contains internal code identifiers for the package.
2	styles	Object	Contains style information for the feature.
3	styleIds	String	Contains the Chrome StyleId(s) of the vehicle. example: 403565
3	installCause	String	Contains an identifier for the data source used to install. Valid values are (S = Standard, R = Standard but changeable, A = Available) Example: S, R and A.



3	isStandard	Boolean	If true, this indicates that it is standard. Example: true
2	BenefitStatement	Object	Contains benefit statement information.
3	title	String	Contains the title for the benefit statement.
3	definition	String	example: Driver foot rest Contains the definition for the benefit statement. example: >-The driver's foot rest, or dead pedal, is located on the left side of the driver's footwell.
3	statement	String	Contains the statement. example: >-Driver foot rest - Put your foot up. Driver's foot rest - or dead pedal - is located on the left side of the footwell and provides the driver a solid place to brace themselves from movement as well as aiding in comfort on long trips. Sit back and relax with a driver foot rest.
2	msrpMin	Integer	Contains the Minimum MSRP for the package. example: 575
2	msrpMax	Integer	Contains the Maximum MSRP for the package. example: 575
2	invoiceMin	Number (Double)	Contains the Minimum Invoice for the package. example: 11003
2	invoiceMax	Number (Double)	Contains the Maximum MSRP for the package. example: 11003
2	adsCategoryIds	String	Contains the ADS Category ID. Can be used by migrated ADS clients.
2	adsCategoryIdDescrip tions	String	Contains the ADS Category ID Description. Can be used by migrated ADS clients.
2	adsTypelds	String	Contains the ADS Type ID. Can be used by migrated ADS clients.
2	adsTypeldDescription s	String	Contains the ADS Type ID Description. Can be used by migrated ADS clients.
1	.safetyInfo	Object	Contains safety information (only available in English)
2	source	String	Contains the safety info source Example: NHTSA Crash Data
2	value	String	Contains the safety info value Example: 5 Star
2	description	String	Contains the safety info description
2	note	String	Contains the safety info note
2	condition	String	Contains safety info condition
2	styles	Array	Example: Female Contains style information for the safety info
_			
1	.recallInfo	Object	Contains recall information (only available in English)
2	recallId	String	Contains a unique identifier for the recall info
2	campaignNo	String	Contains recall campaign number
2	mfgCampaignNo	String	Contains recall manufacturing recall info
2	component	String	Contains recall component
			Example: Electrical System: Instrument Cluster/panel



2	recallType	String	Contains recall type
			V= Vehicle T=Tire E=Equipment
2	reportedDate	String	Contains recall reported date
2	styles	Array	Contains style information for the recall info
2	summaryDescription	String	Contains recall summary description
2	consequenceDescripti	String	Contains recall consequence description
2	correctiveDescription	String	Contains recall corrective description
1	.optionCodeContent	Object	Contains detailed information about the Package. Example: Option code, content option codes, msrp.
2	featureKeys	String	Contains a list of related key identifiers Example: "20070-FEB0702", "10810-FEE013310", "22160-RBA0150160"
2	optionCode	String	Contains the associated option code. example: XL3
2	altOptionCode	String	Contains separate code for the option. Example: 50S
2	group	String	Contains the group name for the option code. Valid values are: Additional Options, Suspension, Exterior, Emissions, Engine, Entertainment, Fuel, Interior, Mechanical, Paint, Safety, Seating, Tires & Wheels, Trailering, Transmission, Warranty
2	isStandard	String	If true, this indicates that it is standard. Example: true
2	isChromeCode	String	If true, it indicates that the code returned is Chrome code if not, it is an OEM code Example: true
2	optionDescription	String	Contains the description of the option code. example: Electronic Locking with 3.31 Axle Ratio
2	msrpMin	Integer	Contains the Minimum MSRP. example: 610
2	msrpMax	Integer	Contains the Maximum MSRP. example: 610
2	invoiceMin	Number (Double)	Contains the Minimum Invoice. example: 11003
2	invoiceMax	Number (Double)	Contains the Maximum MSRP. example: 11003

RESPONSE STATUS CODES

The following table describes response status codes returned by the Vehicle Selector service.

Code	Description
200	OK [Success]
206	The request was successfully processed, and a partial response is returned.
400	The request is improperly formed. The server cannot process the request due to something that is perceived to be a client error (e.g., malformed request syntax, invalid request message framing, or deceptive request routing).



Code	Description
401	The request has not been applied because it lacks valid authentication credentials for the target resource.
404	Not Found status code indicates that the server cannot find the requested resource.
440	Invalid product key or Chrome app ID
500	Internal Server Error - The server encountered an unexpected condition that prevented it from fulfilling the request.
503	Service Unavailable

INTEGRATING WITH THE SERVICE

Once you are ready to start developing your application, you must properly secure your usage of services by integrating a security token protocol into the Authorization header of the request to the service. The Shared Secret Security Protocol guide describes how to do this.

To access the Shared Secret Security Protocol guide:

- 1. Once you have registered, as described in the next section, sign into the portal.
- 2. On the Dashboard, click the **APIs** button.
- 3. On the APIs page, click the hyperlink name for an API.
- 4. On the web service page, in the left navigation menu, click **Documentation**.
- 5. On the Documentation page, click the **Shared Secret Security Protocol.pdf** link to open the guide.



APPENDIX

To clarify all possible returns for the body type, fuel type, drive type, and warranty see below:

1- Segmentation

Please note that CVD returns EPA Segmentation by default. Only one segmentation type can be returned in the response. Please contact support if you wish to change to another segmentation type.

Segmentation Type	All possible returns	Example VIN 2022 Lincoln Corsair 5LMCJ1C98NUL29127
EPA Segmentation (Default):	Two Seaters	"Small SUV 2WD"
	Minicompact Cars	
Environmental Protection Agency car	Standard Pickup Trucks 2WD	
classification method.	Small Pickup Trucks 4WD	
	Standard Pickup Trucks 4WD	
	Cargo Van	
	Passenger Van	
	Special Purpose Vehicle 2WD	
	Minivans 2WD	
	Minivans 4WD Small SUV 2WD	
	Small SUV 4WD	
	Small Pickup Trucks 2WD	
	Special Purpose Vehicle 4WD	
	Unclassified*	
	Standard SUV 2WD	
	Standard SUV 4WD	
	Sport Utility Vehicle 2WD	
	Sport Utility Vehicle 4WD	
	Compact Cars	
	Midsize Cars	
	Large Cars	
	Small Station Wagons	
	Midsize Station Wagons	
	Small Pickup Trucks 2WD	
Marketing Segmentation:	Sedan	"SUV",
	Coupe	"Crossover"
Multiple segments can be assigned to	Convertible	
each vehicle. In this method, a vehicle	Truck	
with multiple segmentation would	SUV	
appear in multiple search results. As an	Minivan	
example, 2022 Lincoln Corsair,	Wagon	
5LMCJ1C98NUL29127 is classified as	Hatchback	
both SUV and Crossover.	Crossover	
Single Marketing Securentation	Van	"Coort tility \/o =:= ="
Single Marketing Segmentation:	Sedan	"Sport Utility Vehicle"
Only one segment is assigned to each	Coupe Convertible	
vehicle.	Pickup	
vernere.	Sport Utility Vehicle	
	Minivan	
	Full size van	
	Wagon	
	Hatchback	
	Chassis	





*EPA does not classify vehicles with GVWR higher than certain limits. As a result, for those VINs, CVD returns "unclassified". Please see https://www.fueleconomy.gov/feg/findacarhelp.shtml#epaSizeClass for more details.

2- Fuel Type

	All possible returns
Fuel Type	Regular Unleaded
(Feature ID: 10030)	Premium Unleaded
	Diesel
	Natural Gas
	Propane
	Gaseous
	Electric
	Ethanol
	Methanol
	Flex Fuel
	Gas/CNG
	Gas/Propane

3- Drive Type

Please note that "Drive Type" appears in both feature ID 10750 and the vehicle object section and these two come from different data. But we recommend using feature ID 10750.

	All possible returns	
Drive Type	Front-wheel drive	
(Feature ID: 10750)- Recommended	Rear-wheel drive	
	Four-wheel drive	
	All-wheel drive	
	6x4 drive	
	6x6 drive	
	8x6 drive	
	8x8 drive	
Drive Type	4x2	
(Vehicle Object)	4x4	
	AWD	
	RWD	
	FWD	
	4WD	

4- Warranty

FeatureID	featureIDName
19010	Basic warranty
19020	Powertrain warranty
19030	Corrosion perforation warranty
19040	Roadside warranty
19050	Maintenance warranty



22290	Hybrid/electric components warranty
22310	Traction battery warranty
22730	Transmission Warranty

5- Install cause

To clarify what each installCause value means see below:

- S = Standard
- R = Standard but changeable
- A = Available