



ACES & PIES

What They Are and What They Are Not

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Introduction

The goal of this document is to inform, assist and provide information for subscribers to make better decisions regarding the ACES / PIES databases content, industry use and what's not included in an ACES / PIES subscription.

For the purposes of this document suppliers and receivers reference the following:

- Suppliers – manufacturers, suppliers, distributors, and 3rd party software providers
- Receivers – retailers, wholesalers, distributors, internet mail order stores, marketplaces and 3rd party electronic catalog companies

The scope of this document is focused solely on the content and use of ACES / PIES within the industry.

This document reflects the most current information that is available as of the date of the document.

ACES (Aftermarket Catalog Exchange Standard) is the North American industry standard for the management and exchange of automotive catalog applications data. With ACES, suppliers can publish automotive data using standardized vehicle attributes, parts classifications and qualifier statements. ACES also prescribe a machine-readable format (XML) for trading partners to use in exchanging vast amounts of catalog information electronically.

PIES (Product Information Exchange Standard) is the best practice for the management and exchange of product attribute information in the aftermarket industry. PIES also prescribe a machine-readable format (XML) for trading partners to use in exchanging vast amounts of catalog information electronically.

The use of the ACES / PIES standards reduces the number of formats needed to communicate application fitment and product information removing duplicative efforts to communicate and distribute data in various formats.

What's in ACES or PIES

ACES

<https://www.autocare.org/What-We-Do/Technology/Product-Areas/aces/>

PIES

<https://www.autocare.org/Technology/pies/>

Databases

Vehicle Configuration Database (VCdb)

<https://www.autocare.org/What-We-Do/Technology/Product-Areas/vcdb/>

The VCdb is subscribed by Vehicle Type, meaning your subscription provides access to a subset of the records in VCdb. You can purchase multiple subscriptions for access to the complete VCdb.

Product Classification Database (PCdb)

<https://www.autocare.org/What-We-Do/Technology/Product-Areas/pcdb/>

Qualifier Database (Qdb)

<https://www.autocare.org/technology/qdb/>

Brand Table

<https://www.autocare.org/What-We-Do/Technology/Product-Areas/brand-table/>

Product Attribute database (PAdb)

<https://www.autocare.org/What-We-Do/Technology/Product-Areas/padb/>

What vehicle types are included in the different VCdb subscription packages?

The VCdb has 2 subscription levels offered:

1. Light Duty / Powersports
 - a. Light Duty includes cars, trucks and vans in weight classes 1-3
 - b. Powersports includes ATV's, Off-Road Motorcycles, Street Motorcycles, Personal Watercraft, Scooters, Snowmobiles and Utility Vehicles
2. Medium/Heavy Trucks
 - a. Medium/Heavy Trucks includes trucks and vans in weight classes 4-8

What vehicles are included in each of the available vehicle type group VCdb subscriptions?

Each Vehicle Type Group includes vehicles from 1 or more regions with varying model year coverage. The coverage for each is as follows:

- Light Duty
 - United States model year 1896 to present
 - Canada model year 1942 to present
 - Mexico model year 1961 to present
- Powersports
 - United States model year 1920 to present
 - Mexico model year 2015 to present
- Medium/Heavy Trucks
 - United States model year 1981 to present (full coverage with some models dating back to model year 1956)
 - Canada model year 1981 to present (full coverage with some models dating back to model year 1978)
 - Mexico model year 1995 to present

What geographical regions of vehicles are included in the VCdb?

The VCdb, both Light Duty/Powersports, and Medium/Heavy Trucks subscriptions, contain vehicles intended for sale in North America:

- United States
- Canada
- Mexico

Grey market vehicles (vehicles intended for other regions, but independently imported into North America) are not included in the VCdb. Vehicles intended for other regions of the globe are not included in the VCdb.

What formats are the ACES / PIES standards available in?

The ACES / PIES databases (VCdb, PAdb, PCdb, Qdb, and Brand Table) are available for download in any of the following formats:

- Access 2007
- ASCII
- MySQL
- SQL Server 2008 R2

What's Not in ACES or PIES

There are a few misconceptions in the industry surrounding the ACES / PIES standards and the content contained as well as their use throughout the industry.

ACES and PIES are not an industry-wide online catalog lookup tool for catalog fitment data and competitor's applications and part numbers

The ACES databases will not provide an industry-wide data repository with your company's or your direct competitor's catalog application data and part numbers. Your company would maintain the vehicle applications that each part fits either through an internal catalog software system or created by one of the industry's service providers for you.

The VCdb, along with the other ACES standards provides the codes to transmit this data to your trading partners, electronic catalog companies, or retailers selling your parts. It is the combination of your researched catalog fitment data and the coded information from the ACES standards that then form the ACES XML delivery file that goes to your trading partners.

ACES and PIES do not include OEM applications and part numbers

The VCdb would supply the ID's for the vehicle as well as the valid vehicle attributes, however it would not supply the OEM part numbers and fitment notes for the parts on those vehicles.

There are service providers that provide OEM numbers and fitment notes linked to the ACES VCdb vehicles if your company subscribes to the VCdb.

Receiving this information coded to the VCdb would then facilitate merging it with your catalog application data and Vehicles in Operation (VIO) information.

ACES and PIES does not include product and part number specific populated attribute data

The Auto Care Association maintains the standards by which both ACES and PIES data is communicated between supplier and receiver. We do not maintain or have access to supplier's actual part number specific product attribute data for various products available in the industry.

Suppliers of the products (hard and collision parts) provide that information to the companies purchasing their products. This enables the receivers to display the products for sale to the end user.

If your company maintains an e-commerce platform, the supplier's products you sell would supply you with the ACES and PIES data, however your company would need an ACES and PIES subscription to translate the data submissions into information to display on your site.

ACES and PIES does not provide service and repair information, maintenance intervals, fluid capacities or alignment specifications

The VCdb does not contain the data elements listed above (engine oil capacity, maintenance group, wheel alignment or other automotive data; such as service and repair information, maintenance intervals, fluid capacities, alignment specifications, OE parts information, Vehicle PARC data and more), however it provides the vehicle information included by suppliers of these data sets and allows easier integration of this data with the catalog data you would produce.

ACES and PIES are not an online VIN lookup tool

While our ACES standards include many of the valid attributes for the vehicles on the road in North America, our data does not decode VIN numbers into vehicle listings, but there are many companies that offer a VIN decoding service that would then link to our VCdb tables. Some of these companies also offer a License Plate to VCdb look up as well.

ACES and PIES are not an online catalog lookup tool

The Auto Care Association maintains and publishes the ACES and PIES Industry standards which are utilized by suppliers and receivers who are transmitting and maintaining application and product data, but we are not a data repository for proprietary catalog fitment and product information.

The ACES standards are not a software program, but the standardized coded values for transmitting Product and Vehicle information to your trading partners. Both Product and Vehicle information are shared between supplier and receiver by way of an XML delivery file and we provide the ACES standards to translate the coded values to text for catalog systems utilized throughout the industry.

Appendix A – ACES XML Examples

XML Example – ACES XML Application Record

```
<App action="A" id="4">  
  <BaseVehicle id="8559"/> <!-- 1997 Cadillac Catera -->  
  <EngineBase id="389"/> <!-- V6 181ci 3.0L -->  
  <EngineVIN id="18"/> <!-- [R] -->  
  <Qual id="23">  
    <text>With Air Conditioning</text>  
  </Qual>  
  <Qual id="929">  
    <param value="90487546"/>  
    <text>w/Starter 90487546 (1st Design)</text>  
  </Qual>  
  <Qty>1</Qty>  
    <PartType id="4188"/> <!-- Electrical/Starter/Solenoid Switch -->  
  <Part>SS769</Part>  
</App>
```

Appendix B – PIES XML Examples

XML Example – PIES Attribute segment

<ProductAttributes>

<ProductAttribute MaintenanceType="A" AttributeID="California Proposition 65"
 PADBAttribute="N" RecordNumber="1">

Warning: This product contains a chemical known to the State of California to cause cancer.

</ProductAttribute>

</ProductAttributes>

XML Example – PIES 7.0 Digital Assets segment

<DigitalAssets>

<DigitalFileInformation MaintenanceType="A" AssetID="prop65_cancer" LanguageCode="EN">

<FileName>prop65_cancer.jpg</FileName>

<AssetType>RGL</AssetType>

<FileType>JPG</FileType>

<URI>CA/prop65/prop65_cancer.jpg</URI>

<AssetDescriptions>

<Description MaintenanceType="A" DescriptionCode="CAP" LanguageCode="EN">

Warning: This product contains a chemical known to the State of California to cause cancer.

</Description>

</AssetDescriptions>

<AssetDates>

<AssetDate assetDateType="EFF">2018-07-16</AssetDate>

</AssetDates>

</DigitalFileInformation>

</DigitalAssets>