

## VIN Precision+ Content Adjustment: API Enhancement

### Technical Documentation and examples:

VIN Precision+ functionality is now our standard VIN Valuation endpoints, providing not just Trim-specific valuation when the exact VIN is in our system, but also as-built valuation including factory-installed options (when available) rather than typically equipped valuations.

- **Current behavior:**
  - VIN pattern-based decode data
  - “Typically equipped” values based on vehicle and trim level only
  - When a VIN pattern is not trim specific, returns data and values for the vehicle chosen by our analysts as ‘most common’ or ‘best fit’ (Default VIN Value endpoint) or other business rule (highest valued, lowest valued, or MSRP fuzzy match VIN Value endpoints.)
- **Enhanced behavior**
  - Attempts to perform a VIN-specific valuation aka VIN Precision+
  - “As-built” values when available
  - If no “as-built” data is available, the updated endpoint will return the legacy (VIN pattern) typically equipped valuation per the legacy functionality.
  - Provides a “valuation type” field to indicate whether a VIN Precision+ or Standard valuation occurred.

## API Endpoint Updates

To enable the new VIN Precision+ Content Adjustment enhancement in the legacy VIN Valuation (and VIN Accessory Data) endpoints, the developer adds one additional parameter to the API call:

**&vpp=1**

*mnemonic: VIN Precision Plus = 1 (true)*

This will update a typical API call from

<https://cloud.jdpower.ai/data-api/valuationservices/valuation/defaultVehicleAndValuesByVin?period=0&vin=ZACNJBC11KPK04898&region=1&mileage=2140>

to

<https://cloud.jdpower.ai/data-api/valuationservices/valuation/defaultVehicleAndValuesByVin?period=0&vin=ZACNJBC11KPK04898&region=1&mileage=2140&vpp=1>

This will cause the endpoint to return an “as-built” valuation response when available or return the legacy “typically equipped” response if usable build data isn’t available.

There will also be an additional message field added to the response to verify which type of response you’re receiving. This field, **response.vinsource**, is outside the **result[]** (data) array, and will be either **Standard** for a legacy response, or **VIN Precision+** for an as-built response.

{

```

    "requestId": "5aftyt4ngexweubmser5f",
    "result": [
      {
        response fields
      }
    ],
    "vinsource": "VIN Precision+",
    "userinfo": "Default"
  }

```

This response field is not present if the user does not provide the **vpp=1** parameter in the API call but may be assumed to be **Standard**.

## Additional Enhancements Included:

Several things will be enhanced with this upcoming update, giving you more accurate valuations for many VINs:

- Improved alignment between the Values Online b2b website, our API's VIN decode API, and the legacy VIN valuation APIs being updated.
  - Currently, when we have access to VIN-specific data, only these legacy VIN valuation APIs don't make use of that data for vehicle selection and valuation.
- The update will include option value adjustments ("Content Adjustment") for any known factory-installed options ("as-built" valuations.)
- Users who currently check for Build Data availability then value using VIN Precision+ or Standard VIN Valuation endpoints can now use a single API call, improving application efficiency and greatly improving valuation response times.

## Example VIN: 1FT7W2B6XHED56786

- 2017 Ford F-250 Crew Cab 4WD
- vehiclesByVin (with Trim Reduction enhancement): Platinum trim
  - *legacy* VIN decode results: select from XLT, XL, Lariat, Platinum, King Ranch
- defaultVehicleAndValuesByVin
  - legacy behavior: XLT trim with typically equipped valuation
  - enhanced behavior: Platinum trim with as-built valuation
- Values Online: Platinum trim with as-built valuation
- The updated defaultVehicleAndValuesByVin endpoint includes +\$1,725 (trade) or +\$1,950 (retail) in the vinoptions value fields and in the final adjusted values fields due to the indicated options (below – items with values listed as N/A are included in the base values based on the upgraded trim level.)
  - Legacy Adjusted Retail (November Eastern, typical mileage): \$29,550 (XLT trim, no options)
  - New Adjusted Retail (November Eastern, typical mileage): \$43,775 (Platinum trim, with options as below)
- This aligns the defaultVehicleAndValues result with Values Online's results and content *when VIN Precision+ data is available*.

Based on Values Online, see the accessories valued for this VIN using VIN Precision+. Accessories with grey checkboxes are "typically equipped" options, with blue checkboxes are "as built" options.

	Trade-In / Loan	Retail		Trade-In / Loan	Retail		Trade-In / Loan	Retail
<input type="checkbox"/> Certified Pre-Owned-F250	N/A	\$1,975	<input checked="" type="checkbox"/> Adaptive Cruise Control	N/A	N/A	<input checked="" type="checkbox"/> Back Up Camera	N/A	N/A
<input checked="" type="checkbox"/> Blind Spot Monitor	N/A	N/A	<input checked="" type="checkbox"/> Bluetooth Connection	N/A	N/A	<input checked="" type="checkbox"/> Collision Avoidance System	\$75	\$75
<input checked="" type="checkbox"/> Lane Departure Warning	N/A	N/A	<input checked="" type="checkbox"/> Navigation System	N/A	N/A	<input checked="" type="checkbox"/> Passive Keyless Entry	N/A	N/A
<input checked="" type="checkbox"/> Rear Parking Sensors	N/A	N/A	<input checked="" type="checkbox"/> Univ Garage Door Opener	N/A	N/A	<input checked="" type="checkbox"/> Aluminum/Alloy Wheels	N/A	N/A
<input type="checkbox"/> Auxiliary Fuel Tank	\$50	\$50	<input type="checkbox"/> Bed Liner	\$50	\$50	<input checked="" type="checkbox"/> Cruise Control	N/A	N/A
<input type="checkbox"/> Fiberglass Cap	\$625	\$700	<input type="checkbox"/> Fixed Running Boards	\$50	\$50	<input checked="" type="checkbox"/> Fog Lights	N/A	N/A
<input checked="" type="checkbox"/> Heated Exterior Mirrors	N/A	N/A	<input checked="" type="checkbox"/> Power Adjustable Mirrors	N/A	N/A	<input checked="" type="checkbox"/> Power Door Locks	N/A	N/A
<input checked="" type="checkbox"/> Power Driver's Seat	N/A	N/A	<input checked="" type="checkbox"/> Power Running Boards	N/A	N/A	<input checked="" type="checkbox"/> Power Sunroof	N/A	N/A
<input checked="" type="checkbox"/> Power Windows	N/A	N/A	<input checked="" type="checkbox"/> Remote Engine Starter	N/A	N/A	<input type="checkbox"/> Roll Bar	\$200	\$225
<input type="checkbox"/> Snow Plow Pkg./Plow	\$2,200	\$2,450	<input type="checkbox"/> Winch	\$250	\$275	<input type="checkbox"/> FX4 Off-Road Pkg.	\$450	\$500
<input checked="" type="checkbox"/> Platinum Ultimate Pkg.	\$1,550	\$1,750	<input type="checkbox"/> Towing/Camper Pkg	\$300	\$325	<input checked="" type="checkbox"/> Cooled Front Seats	N/A	N/A
<input checked="" type="checkbox"/> Driver's Seat Memory	N/A	N/A	<input checked="" type="checkbox"/> Heated Front Seats	N/A	N/A	<input checked="" type="checkbox"/> Heated Rear Seats	N/A	N/A
<input checked="" type="checkbox"/> Locking/Limited Slip Differential	\$100	\$125						

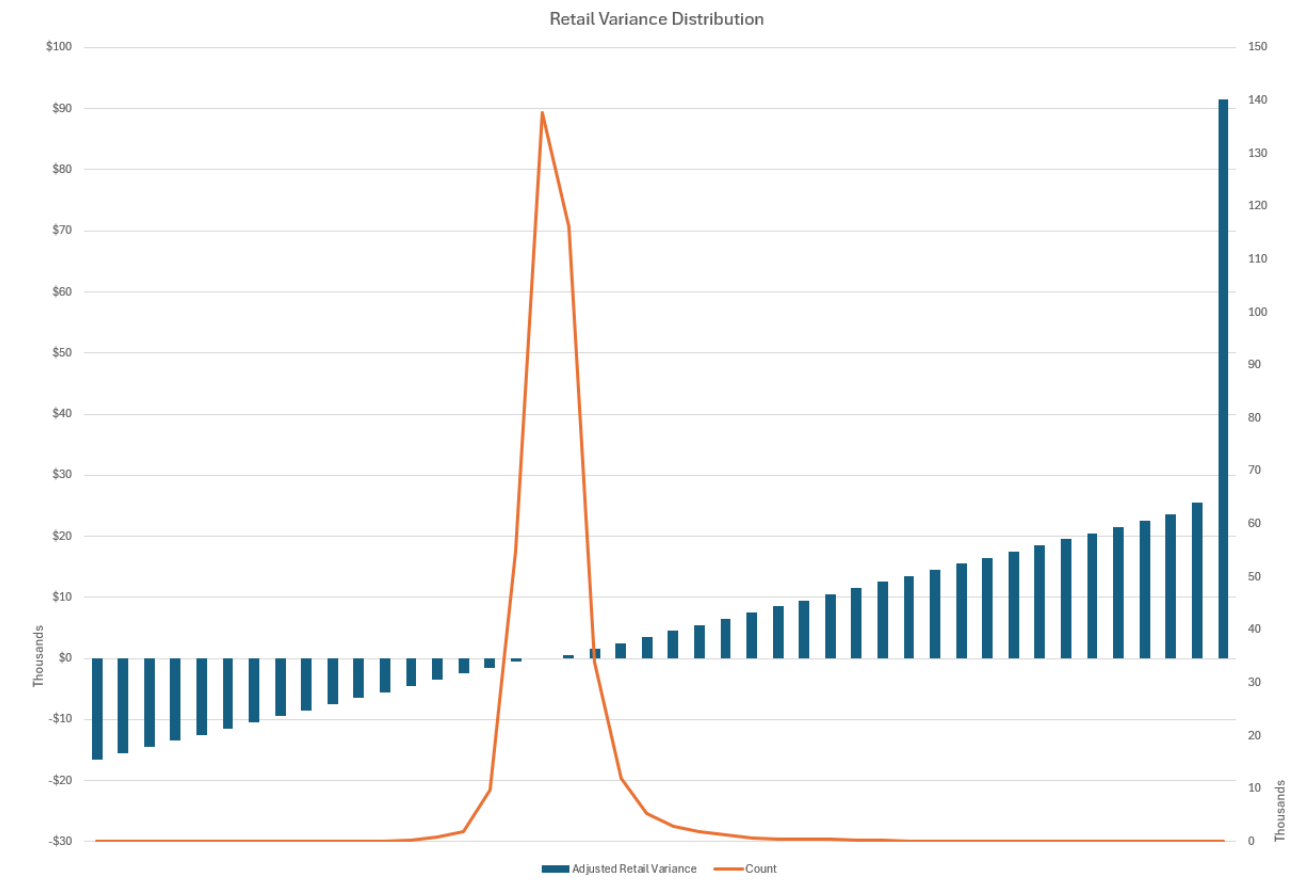
## Projected\* impact of this enhancement

\* based on recent VIN Precision+ valuations compared to the corresponding Default VIN valuation

*Expect to see ~35% fewer changes using only the Default Valuation endpoint due to no Build data*

VINs	382,511	
Changed vehicle	57,135	15%
Valued Options	211,632	55%
Changed Adjusted Value	244,766	64%
Avg Absolute Change (changed only)	\$ 1,018	4%
Avg Net Change (changed only)	\$ 667	3%
Absolute Change (all VINs)	\$ 652	3%
Net Change (all VINs)	\$ 427	2%
Value Increased	176,918	46%
Increased \$1000 or more	60,774	16%
Increased 10%+	23,505	6%
Value Decreased	67,848	18%
Decreased \$1000 or more	12,441	3%
Decreased 10%+	2,691	1%

*cont'd*



**J.D. POWER**